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Multimodal

Interstate freight in Australia

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Interstate freight in Australia

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GPO Box 501, Canberra ACT 2601, Australia
Telephone (international) +61 2 6274 7210
Fax +61 2 6274 6816
Email: bitre@infrastructure.gov.au
Internet: http://www.bitre.gov.au

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Forward

This report provides estimates and forecasts of interstate freight moving between 56 state-to-state origin-destination pairs, for example, South Australia–Queensland.

Estimates cover the period 1972 to 2007 and forecasts from 2008 to 2030 (including estimates of the effect of global financial crisis).

The figures cover all three major interstate freight modes: road, rail and coastal shipping.

This report was prepared by Afzal Hossain and David Gargett, with the assistance of Mark Cregan.

Gary Dolman
Head of Bureau
Bureau of Infrastructure, Transport and Regional Economics
April 2010

At a glance

- Total (all modes and all 56 OD routes) interstate freight grew from 17.8 billion tkm in 1972 to 96.8 billion tkm in 2007, averaging 5.0 per cent growth per annum and is forecast to grow from 104.6 billion tkm in 2008 to 228.4 billion tkm in 2030—equivalent to average annual growth of 3.4 per cent. 'All modes' include road, rail and coastal shipping, but excludes air.
- Although the global financial crisis will dampen interstate freight growth (total as well as by each mode) in the early years of the forecast period, there will be a substantial rate of interstate freight growth between 2008 and 2030.
- Based on past trends, interstate road is forecast to slightly increase its mode share of interstate freight, while rail and coastal shipping are forecast to slightly decrease their mode shares.
- Total interstate road freight is forecast to grow from 70.4 billion tkm in 2008 to 159.1 billion tkm in 2030—averaging 3.8 per cent growth per year. It is projected to grow fastest on the Northern Territory–South Australia OD route between 2008 and 2030.
- Total interstate rail freight is forecast to grow at an average annual growth rate of 3.5 per cent, from 27.1 billion tkm in 2008 to 57.4 billion tkm in 2030. It is forecast to grow faster on some routes (e.g. VIC–NSW and QLD–VIC), while several routes (e.g. NSW–SA, SA–NSW, QLD–SA and SA–QLD) are projected to decline substantially.
- The total interstate coastal shipping freight task is forecast to grow from 7.1 billion tkm in 2008 to 11.9 billion tkm in 2030, averaging 2.4 per cent per annum. Between 2008 and 2030, NSW–NT is projected to decline by 0.6 per cent per annum.
- Between 2008 and 2030, the freight task on the North–South corridor is projected to grow faster than that on the East–West corridor.
- Road freight has been the dominant mode on the North–South corridor, while interstate rail freight has been the main transport mode on the East–West corridor.
- Overall, the total interstate freight task in Australia is forecast to grow much faster (3.61 per cent per year from 2008 to 2030) than the rate of population growth (1.58 per cent per year) and also faster than the average national GDP growth (2.79 per cent per year), although with freight growth beginning to saturate with respect to GDP, the differential will be reducing over time.

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Executive summary

The main objective of this study was to estimate the interstate freight task by transport mode (i.e. road, rail and coastal shipping) in Australia from 1971–72 to 2006–07 (hereafter 1972 to 2007) and produce long-term forecasts from 2007–08 to 2029–30 (hereafter 2008 to 2030), based on 56 origin–destination (OD) routes. The forecasts start from 2008, because the Survey of Motor Vehicle Use (SMVU) road freight data is available until 2007. The next SMVU (for 2009–10) will be published in late 2011. In this study, interstate air freight was excluded from the analysis.

Although air freight is significant for the movement of some goods which are usually highly time sensitive and high value per unit mass, such as newspapers, overnight parcels and mails, air freight is less than 0.1 per cent of total freight volumes (BITRE 2009). Moreover, only very partial air freight data is available.

The interstate freight task (total and by transport modes) carried on the North–South and East–West corridors between 1972 and 2007 (trends) as well as forecasts (projected freight demand) from 2008 to 2030 are also presented in this report.

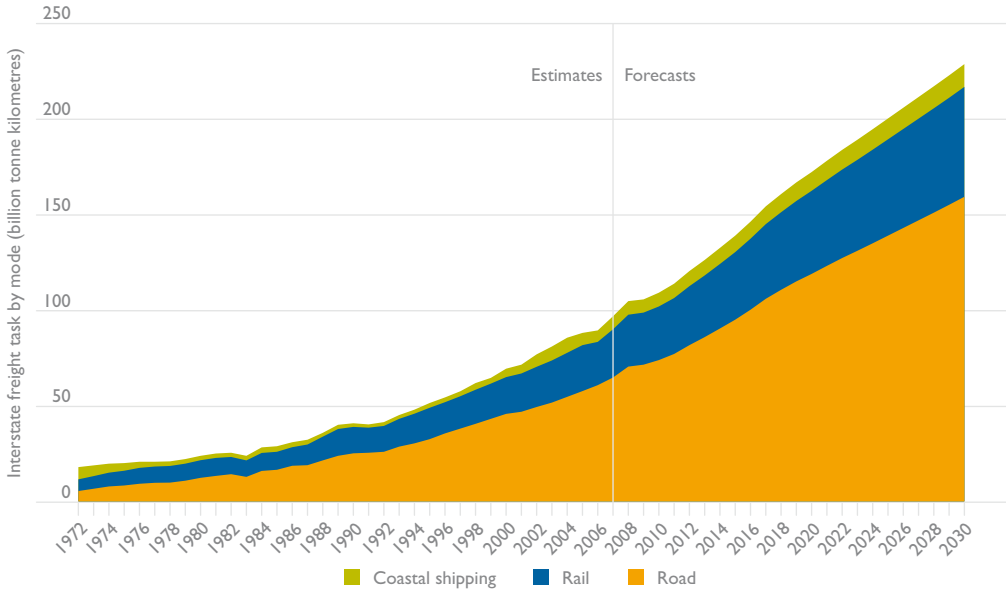
Total interstate freight estimates and forecasts

- Between 1972 and 2007, the total interstate (sum of all 56 OD routes) freight task by all transport modes (i.e. road, rail and coastal shipping) increased at an average annual growth of 5.0 per cent, from 17.8 billion tkm to 96.8 billion tkm.
- Between 2008 and 2030, total interstate freight task is projected to grow from 104.6 billion tkm to 228.4 billion tkm—equivalent to average annual growth of 3.6 per cent. The combination of lower GDP growth and reducing responsiveness to this growth (saturation in per person freight) results in the lower interstate freight growth rates in the forecast period compared to the period of the historical estimates.
- Overall, the total interstate freight task is projected to grow much faster (3.61 per cent per year from 2008 to 2030) than the rate of population growth in Australia (1.58 per cent per year) and also faster than the average national GDP growth (2.79 per cent per year) (see Table 2.5), although with freight growth beginning to saturate with respect to GDP, the differential will be reducing over time.

Interstate road freight estimates and forecasts

- Between 1972 and 2007, interstate road freight estimates increased at an average annual rate of 7.4 per cent, from 5.4 billion tkm to 64.7 billion tkm (Figure ES.1).

FES.1 Total interstate (sum of all 56 OD routes) freight estimates and forecasts by transport mode, 1972–2030



Note: From 1972 to 2007 are estimates; while from 2008 to 2030 are forecasts.

Source: BITRE estimates.

- Between 2008 and 2030, the total interstate road freight task is projected to grow from 70.4 billion tkm to 159.1 billion tkm—equivalent to average annual growth of 3.8 per cent (Figure ES.1).
- Between 1972 and 2007, road freight traffic on 34 OD routes experienced positive growth. The highest average annual growth rates were on the Western Australia–South Australia, South Australia–Western Australia and the Queensland–Victoria routes. Although Victoria–Northern Territory grew substantially, the interstate road freight task only started in the mid-1980s.
- Generally, due to different levels of responsiveness to economic activity, some routes are forecast to grow faster than other routes during the 22 years from 2008 to 2030. Interstate road freight is projected to grow fastest on the Northern Territory–South Australia OD route. However, several OD routes are forecast to grow negatively. On the other hand, some OD routes and routes which are linked with Tasmania do not have any road freight traffic.

Interstate rail freight estimates and forecasts

- Between 1972 and 2007, the interstate rail freight estimates increased at an average annual rate of 4.2 per cent, from 6.1 billion tkm to 25.2 billion tkm (Figure ES.1).
- Between 2008 and 2030, the total interstate rail freight task is projected to grow from 27.1 billion tkm to 57.4 billion tkm—equivalent to average annual growth rate of 3.5 per cent (Figure ES.1).
- Between 1972 and 2007, interstate rail freight traffic grew positively on several OD routes. The largest growth of interstate rail freight traffic was on the routes from Western Australia to the three major eastern states (New South Wales, Victoria and Queensland). Although interstate rail freight task on the Victoria–Northern Territory route grew substantially, the rail freight task only started in mid-1980s.
- Due to different levels of responsiveness to economic activity, over the next 22 years (2008 to 2030), interstate rail freight tasks on several routes (e.g. NSW–SA, SA–NSW, QLD–SA and SA–QLD) are projected to decline substantially, while interstate rail freight tasks on some routes (e.g. VIC–NSW and QLD–VIC) are expected to grow faster.

Interstate coastal shipping freight estimates and forecasts

- Between 1972 and 2007, the interstate coastal shipping freight task grew marginally, at an average annual growth of only 0.2 per cent, from 6.4 billion tkm to 6.8 billion tkm (Figure ES.1).
- Between 2008 and 2030, the interstate coastal shipping freight task is projected to grow from 7.1 billion tkm to 11.9 billion tkm—equivalent to average annual growth of 2.4 per cent (Figure ES.1)
- Due to different levels of responsiveness to economic activity, during 1972 to 2007, interstate coastal shipping freight tasks grew substantially (more than 8.0 per cent per annum) on the VIC–SA, TAS–WA and WA–TAS routes, while it declined on 20 OD routes. Among these 20 OD routes, interstate coastal shipping freight task on the SA–TAS, QLD–VIC and QLD–NSW OD routes declined by more than 7.0 per cent per annum during this period.
- Interstate coastal shipping freight tasks are forecast to grow positively over the next 22 years (2008–2030) on many of the interstate OD routes, while NSW–NT is projected to decline by 0.6 per cent per annum.

Interstate freight estimates and forecasts on the North–South and East–West corridors

North–South corridor

- Between 1972 and 2007, the total interstate freight task on the North–South corridor (sum of road, rail and coastal shipping freight) increased at an average annual growth rate of 5.5 per cent, from 9.9 tkm to 65.4 billion tkm, while it is projected to grow at an average annual rate of 3.9 per cent between 2008 and 2030 (from 71.7 billion tkm to 165.9 billion tkm).
- The interstate road freight task on the North–South corridor increased at an average annual growth rate of 7.3 per cent, from 4.7 billion tkm in 2007 to 56.2 billion tkm in 2007, while it is expected to grow in the future at an average growth rate of 3.8 per cent, from 61.4 billion tkm in 2008 to 139.2 billion tkm in 2030. Again, much of the explanation for the lower forecast growth rate lies in assumed lower economic growth, plus the growing saturation effect.
- The interstate rail freight task on the North–South corridor has increased slowly, from 3.5 billion tkm in 1972 to 8.0 million tkm in 2007, an average annual growth of 2.4 per cent. Between 2008 and 2030, it is projected to grow at an average annual rate of 4.7 per cent, from 8.8 billion tkm to 23.9 billion tkm.
- Between 1972 and 2007, the interstate coastal shipping freight task showed an irregular pattern and overall showed a decline, averaging –1.0 per cent per year, falling from 1.7 billion tkm in 1972 to 1.2 billion tkm in 2007. Between 2008 and 2030, the interstate coastal shipping freight task is, however, expected to grow at an average annual growth of 2.7 per cent, from 1.5 billion tkm to 2.8 billion tkm.
- Interstate road freight mode share on the North–South corridor has increased significantly over the past 35 years, from 47 per cent in 1972 to 86 per cent in 2007 due to duplication and improvements to the highway and vast improvements in truck productivity (i.e. 6 axle articulated trucks, B-doubles etc.). It is forecast to decrease slightly to 84 per cent in 2030.
- Interstate rail freight mode share has declined significantly, from 35 per cent in 1972 to 12 per cent in 2007 as competition from road became more intense. This was specially the case on the short North–South routes where rail fixed costs at either end weighted heavily against it. It is forecast to increase slightly until 2030 (14 per cent).
- Between 1972 and 2007, the interstate coastal shipping freight mode share declined sharply to a low in 1988. Even more than road, coastal shipping cost effectiveness is limited for the short North–South routes by the high fixed costs of going through the ports at either end. Interstate coastal shipping freight mode share is expected to remain the same until 2030.

East–West corridor

- Between 1972 and 2007, the total interstate freight tasks on the East–West corridor (all transport modes) has grown significantly, from 3.3 billion tkm to 18.3 billion tkm—equivalent to average annual growth rate of 5.0 per cent. Between 2008 and 2030, it is projected to increase from 19.1 billion tkm to 38.6 billion tkm, an average annual growth rate of 3.3 per cent.

- Historically, rail has been the main mode of interstate freight transport and it is expected to continue to dominate on the East–West corridor, due to the long distances. Between 1972 and 2007, the East–West interstate rail freight task has increased from 1.3 billion tkm to 10.7 million tkm, at an average annual growth of 6.1 per cent. Between 2008 and 2030, it is projected to grow at an average annual rate of 3.1 per cent, from 11.3 billion tkm to 22.3 billion tkm.
- Although the East–West interstate road freight task grew 9.3 per cent per annum between 1972 and 2007, the initial value was very low (0.2 billion tkm in 1972 which increased to 5.3 billion tkm in 2007). By 2030, the East–West interstate road freight task is expected to grow to reach 13.0 billion tkm, an average growth rate of 3.8 per cent per year.
- Between 1972 and 2007, the East–West interstate coastal shipping freight task showed an irregular pattern, resulting in an overall increase of just 0.7 per cent per year, from 1.8 billion tkm to 2.3 billion tkm. Between 2008 and 2030, East–West coastal shipping is expected to increase from 2.0 billion tkm to 3.4 billion tkm, an average annual growth of 2.3 per cent.
- Between 1972 and 1976, the interstate coastal shipping freight mode share declined sharply due to cessation of the uneconomic service. Thereafter it remained stable until the advent of the single and continuous voyage permit system in the late 1990s. However, the interstate coastal shipping freight share on the corridor is expected to decline slowly until 2030 under current arrangements.
- The rail freight share increased sharply to 1977 as coastal shipping collapsed and then decreased gradually until 1998 as road became competitive. It then increased slowly to 2007, as infrastructure improvements lowered costs and improved service. The forecast rail mode share is expected to remain relatively stable.
- The road freight share of East–West traffic increased from 7 per cent in 1972 to 45 per cent in 1996 due to the sealing of the highway and vast improvements in truck productivity (i.e. 6 axle articulated trucks, B-doubles etc.), and then dropped to 29 per cent in 2007 as coastal shipping was resurrected. Between 2008 and 2030, road freight share is projected increase to 34 per cent.

Comparison between corridors

- Between 1972 and 2007, the total interstate freight task (tkm) by all modes grew faster on the North–South corridor than on the East–West corridor.
- Between 2008 and 2030, the total interstate freight task on the North–South corridor is projected to grow slightly faster compared to the East–West corridor.
- Interstate road freight has dominated on the North–South corridor, while interstate rail freight has been the main transport mode on the East–West corridor.

CHAPTER 1
Introduction

1.1 Background to the study

Freight transport has a major role to play in the transport system, and in the economy in general, being a key element in the process of economic development.

Freight is moved across vast distances in Australia due to the size of the country and the dispersed locations of its agricultural, mining, production and population centres. Australia's transport infrastructure is a valuable asset that makes a significant contribution towards the nation's economic performance and its international competitiveness. It is well documented that freight movements play an important part in the Australian economy.

The total domestic freight task increased by more than 75 per cent over the two decades between 1979–80 and 1999–2000, from 217 billion tonne-kilometres (tkm) to 378 billion tkm, an average annual growth rate of 2.8 per cent (BTRE 2006, p.8). This total domestic freight task was forecast to almost double by 2020 to 683 billion tkm or 3.0 per cent per annum (BTRE 2006, p.8). This assumed increases in exports and domestic production, along with improvements in transport efficiency. The Australian domestic freight task measured 521 billion tkm in 2007, with 35 per cent carried by road, 40 per cent by rail and 25 per cent by coastal shipping (BITRE 2009). A very small volume (less than 0.1 per cent), of generally high value freight, is carried by air (BTRE 2006, p.2).

The domestic freight transport task covers a wide range of different types of freight transport operations, ranging from long-distance movements of bulk commodities (such as minerals and petroleum) to short-distance local deliveries of non-bulk goods.

Road freight is essential to the urban freight task and carries the majority of interurban freight. Road transport (together with air) has captured from rail and coastal shipping a major part of the market for priority delivery of non-bulk freight over longer distances, especially in the interstate (IS) freight sector.

Rail transport in Australia is a crucial aspect of the national transport network, and an enabler of the wider Australian economy. Rail is a smarter economic choice for freight haulage for Australia, because it is the most cost effective mode of transport for intercapital containerised freight movements. Moreover, rail is considerably more energy efficient than road transport; therefore, reducing Australia's dependence on oil imports.

On the other hand, 'there is growing recognition across the economy that sea transport is an essential mode in the development of a surface transport strategy for the nation. The greenhouse effect alone demands that sea transport play a greater role in interstate freight transport' (Speech by the Hon Peter Morris, cited in: Commonwealth of Australia 2007).

This study concentrates on the interstate component of the national freight task. The three main modes (road, rail and coastal shipping) are estimated separately using 56 separate state-to-state origin–destination (OD) pairs. Air freight was excluded in the analysis. Although air freight is significant for the movement of some goods which are usually highly time sensitive and high value per unit mass. Interstate newspapers, overnight parcels and mail are typical air freight cargoes. Air freight is less than 0.1 per cent of total freight volumes (BITRE 2009). Moreover, only very partial air freight data is available.

1.2 Context of the study

Total interstate freight task estimates, as well as estimates by transport mode (i.e. road, rail and coastal shipping), were presented at the Australasian Transport Research Forum (ATRF) conference in 2007, which covered estimates from 1972–2005 and forecasts from 2006–2031.

This paper updates to 2006–07 (hereafter 2007) the state-to-state modal OD pair freight series and derives new OD pair interstate freight forecasts to 2029–30 (hereafter 2030). The forecasts start from 2008, because the Survey of Motor Vehicle Use (SMVU) road freight data is available until 2007. The next SMVU (for 2009–10) will be published in late 2011.

It also presents interstate freight tasks (total and by transport modes) carried on the North–South and East–West corridors between 1972 and 2007 (trends) as well as forecasts (projected freight demand) from 2008 to 2030.

1.3 Objectives of the study

The major objective of this study is to estimate interstate freight tasks by transport mode (road, rail and coastal shipping) in Australia from 1971–72 to 2006–07 and long-term forecasts of these estimates from 2007–08 to 2029–30.

The specific aims of the research project were to answer two important questions:

1. What are the long-term historical trends between 1971–72 and 2006–07 in interstate road, rail and coastal shipping freight estimates?
2. What growth is to be expected between 2007–08 and 2030–31 in interstate road, rail and coastal shipping freight?

1.4 Structure of the report

This report is structured as follows:

- Chapter 2 presents total (sum of road, rail and coastal shipping) interstate freight estimates (1972–2007) and forecasts (2008–2030), based on individual origin–destination (OD) pairs. It also provides interstate freight flow forecast equations.
- Chapter 3 presents interstate road freight estimates and forecasts.
- Chapter 4 provides interstate rail freight estimates and forecasts.
- Chapter 5 presents interstate coastal shipping freight estimates and forecasts

- Chapter 6 provides interstate freight estimates and forecasts (total as well as by transport mode) on the North–South and the East–West corridors.
- Discussions and concluding remarks are presented in Chapter 7.

Appendices provide more detail on various aspects relevant to the overall report.

- Appendix A provides interstate freight flows in kilotonnes and the interstate freight task in million tonne-kilometres (tkm) between states and territories, 56 origin–destination (OD) routes, by transport modes between 1972–2007 (estimates) and 2008–2030 (forecasts). It also provides total interstate freight tasks (in billion tkm) and mode share (per cent) in Australia (sum of 56 OD routes) between 1972–2007 (estimates) and 2008–2030 (forecasts).
- Appendix B provides estimates and forecasts of Gross Domestic Product (GDP) and changes between 1972 and 2030.
- Appendix C provides the road freight estimates of eastern states–Western Australia between 1972 and 2007.
- Appendix D shows the aggregate transport mode share trends for 56 interstate OD routes between 1972 and 2030 which were used to separate the forecast all modes interstate freight tasks into separate road, rail and coastal shipping freight tasks.
- Appendix E provides interstate freight task estimates and forecasts as well as transport mode shares on the North–South and East–West corridors.
- Appendix F contains a glossary of terms.

CHAPTER 2

Total interstate freight estimates and forecasts, 1972–2030

2.1 Background

This chapter provides freight data on total, sum of 56 origin–destination (OD)[1] routes, interstate[2] freight estimates (1972–2007) and forecasts (2008–2030) as well as by transport mode (i.e. road, rail and coastal shipping or coastal shipping) and also transport mode shares estimates and forecasts. This chapter also provides data for total interstate freight estimates (1972–2007) and forecasts (2008–2030) by all 56 individual OD routes. Interstate freight flow forecast equations for individual OD are also provided.

2.2 Interstate freight flow forecast equations for individual origin–destination (OD) routes

The forecasts were made using regression analysis. Regressions were done on total (all modes) interstate freight flows (tonnes) for each of the 56 origin–destination (OD) routes. Note that distances between ODs are shown in Appendix A (see Tables A.1 to A.28 at the end of each table). Tables A.1 to A.28 also show the estimated freight flows in kilotonnes for all 56 OD routes.

The interstate freight tasks (billion tonne-kilometres) between states and territories (all 56 OD routes) by transport modes from 1972 to 2030 are also presented in Appendix A (see Table A.29 to Table A.56). Table A.57 shows the total interstate freight task in Australia (sum of all 56 OD routes) as well as by transport mode between 1972 and 2030.

Previous BITRE research (see Soames et al 2007) outlined how road, rail and coastal shipping data were estimated for each OD route. For the all-modes OD regression analyses, non-farm national Gross Domestic Product (GDP) and change in GDP (see Appendix B, Table B.1) were the major explanators. Minor variables were a dummy variable for the period 1979 to 1988 and some route-specific dummy variables.

The assumptions about future GDP growth were drawn by the BITRE from the 2009–2010 Treasury *Mid-Year Economic and Fiscal Outlook* (2008–09 to 2016–17), Access Economics April

1 Pertaining to a transport route between an origin region and a destination region.

2 The ABS definition of this is 'that freight task carried out by a state's trucks in other States'. In other word, the ABS definition corresponds really to what could be termed as 'out-of-state' road freight task. The definition adopted in this report is broader, encompassing that part of an interstate OD trip done within the state.

2009 (2017–18 to 2019–20) and Treasury's long-term projections (2020–21 to 2029–30). The assumed rates of economic growth taper off over the years.

Two changes have been made to the route forecasts. Firstly, after 2010, the maximum income elasticity[3] has been set to 1.9. Some of the origin–destination (OD) routes (i.e. QLD–NSW, QLD–VIC, VIC–SA, WA–QLD, SA–WA and WA–SA routes) have huge elasticities (more than 2.0) and unless these OD routes are constrained they unduly inflate the forecasts. For example, QLD–VIC route has an income elasticity of 2.816 (see Table 2.2). After 2010, this has been set to 1.90 in deriving the route forecasts. This assumes that the anomalous outliers will converge on more normal growth rates. If the origin–destination elasticities were not constrained, the resulting summed interstate freight forecast would be 10 per cent higher, and no longer agree with a model using the aggregate interstate freight task itself (which has proven robust in the past).

Secondly, the raw forecasts coming out of the regression equations have been progressively reduced in volume over the years to match an assumed 'saturating effect' in per person non-bulk freight in Australia. Figure 2.1 shows that per person non-bulk freight is assumed to proceed toward saturation by about 2050. This effect does not mean 'no growth' in the freight task, or even that freight will grow more slowly than income over the next 22 years. It simply means a steady reduction in the responsiveness of freight growth to income growth. The net result is that interstate freight is still expected to grow faster than GDP, but less so than in the historical period.

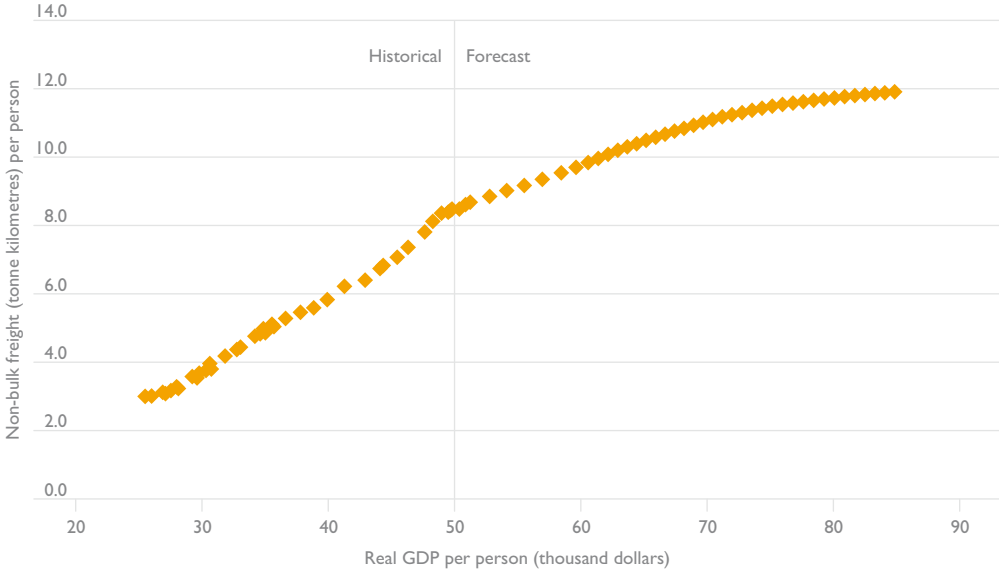
In 2030, at the end of the forecast period for this report, there is assumed to have been a substantial shallowing of the curve. Table 2.1 gives the correction factors that, when applied to the unconstrained freight forecasts (all modes interstate), give freight forecasts that conform to this shallowing trend.

Two sets of forecasting equations were derived for total (all transport modes, i.e. road, rail and coastal shipping) freight flows (in tonnes). First, forecasting equations were derived on 48 individual OD routes and these are presented in Table 2.2.

Secondly, sets of forecasting equations were derived on eight OD routes from and to eastern states (NSW, VIC, QLD and SA) and Western Australia and these are presented in Table 2.3. The methodology for estimating road freight task between eastern states and Western Australia is described in Appendix C.

3 'Responsiveness to'. That is, an income elasticity for freight of 2.0 would imply that a 10 per cent increase in income would produce a 20 per cent increase in freight moved.

F2.1 Relationship of per capita non-bulk freight to per capita income between 1972 and 2050



Source: BITRE estimates.

T2.1 Correction factors

Year	Correction factor
2008	1.000
2009	1.002
2010	1.010
2011	1.007
2012	0.998
2013	0.982
2014	0.968
2015	0.953
2016	0.941
2017	0.931
2018	0.921
2019	0.913
2020	0.905
2021	0.898
2022	0.890
2023	0.881
2024	0.872
2025	0.862
2026	0.853
2027	0.844
2028	0.834
2029	0.824
2030	0.815

Source: BITRE estimates.

T2.2 Equations for the log of all modes tonnages for 48 individual origin–destination (OD) routes.

Route	Years	Constant	GDP	Change GDP	Dummy 1979–88	Dummy 2	Dummy 2 defined as:
NSW–VIC	72–07	–12.530	1.605	0.007	–0.036		
VIC–NSW	72–07	–14.028	1.716	–0.003	0.041	–0.071	99–02=1.0; 03–07=1.5
NSW–QLD	72–07	–17.206	1.925	–0.003	0.044	–0.068	00–01=1.0; 03–07=1.5
QLD–NSW	72–07	–21.425	2.225	–0.009	0.078	–0.088	99–02=1.0; 03–04=1.5; 05–07=2.0
NSW–SA	72–96	–19.375	1.994	0.005	–0.021		
	97–07	–3.698	0.839	–0.005		0.019	06–07=1.0
SA–NSW	72–96	–15.494	1.694	0.000	0.079		
	97–07	–7.649	1.105	–0.004		0.017	07=1.0
NSW–ACT	72–00	–9.624	1.252	0.019	–0.106		
	01–07	–11.656	1.413	–0.009			
ACT–NSW	72–00	–23.554	2.202	–0.009	0.085		
	01–07	–16.454	1.674	–0.005			
NSW–NT	72–88	20.312	–1.293	0.010	–0.095		
	89–07	1.177	0.158	0.026			
NT–NSW	72–07	–3.374	0.401	0.014	–0.163		
NSW–TAS	72–07	Set to 40					
TAS–NSW	72–07	Set to 100					
VIC–QLD	72–07	–12.821	1.503	0.007	–0.112	0.102	07=1.0
QLD–VIC	72–07	–30.895	2.816	0.003	–0.045	–0.050	03–07=1.0
VIC–SA	72–07	–20.539	2.138	–0.004	0.037	–0.092	03–07=1.0
SA–VIC	72–07	–18.202	1.968	0.004	0.022	–0.012	03–07=1.0
VIC–ACT	72–07	14.671	–0.762	–0.001	0.082		
ACT–VIC	72–07	–14.778	1.388	–0.006	0.185		
VIC–NT	72–07	Set to 14					
NT–VIC	72–07	14.236	–0.954	0.015	–0.636	0.872	01–07=1.0
VIC–TAS	72–07	3.049	0.276	0.042	–0.479	0.651	00–02=0.3; 03=0.4; 04=0.65; 05–07=0.8
TAS–VIC	72–07	–14.379	1.595	0.016	–0.106	0.052	04–07=1.0
QLD–SA	72–89	–28.001	2.508	0.012	–0.086		
	90–07	–15.713	1.595	–0.013			
SA–QLD	72–90	–15.738	1.626	0.006	0.040		
	91–07	–3.999	0.747	0.022			
QLD–ACT	72–07	Set to 0					
ACT–QLD	72–07	Set to 0					
QLD–NT	72–07	–16.433	1.597	–0.002	0.054	–0.167	85–95=1.0; 03–07=1.0
NT–QLD	72–07	–10.420	1.138	–0.010	0.084	–0.202	00–04=1.0; 05–07=2.0
QLD–TAS	72–07	Set to 6					
TAS–QLD	72–07	Set to 10					
SA–ACT	72–07	Set to 0					
ACT–SA	72–07	Set to 0					
SA–NT	72–07	–13.576	1.454	0.013	–0.062		
NT–SA	72–07	–18.940	1.820	0.010	–0.074	–1.505	03–05=0.2; 06–07=.0.5
SA–TAS	72–07	Set to 0					
TAS–SA	72–07	Set to 10					
WA–ACT	72–07	Set to 0					
ACT–WA	72–07	Set to 0					
WA–NT	72–07	–16.405	1.550	0.013	0.000		
NT–WA	72–07	–10.995	1.127	–0.015	–0.170	0.790	98=0.5; 04=1.0
WA–TAS	72–07	Set to 8					
TAS–WA	72–07	Set to 50					
ACT–NT	72–07	Set to 0					
NT–ACT	72–07	Set to 0					
ACT–TAS	72–07	Set to 0					
TAS–ACT	72–07	Set to 0					
NT–TAS	72–07	Set to 0					
TAS–NT	72–07	Set to 0					

T2.3 Equations for the log of all modes tonnages for eastern states (NSW, VIC, QLD and SA) to Western Australia individual origin–destination (OD) routes.

Route	Years	Constant	GDP	Change GDP	Dummy 1979–88	Dummy 2	Dummy 2 defined as:
NSW–WA	72–94	–14.875	1.598	0.019	–0.074		
	95–07	–2.640	0.698	–0.010		–0.092	99–07=1.0
WA–NSW	72–07	–12.989	1.387	0.009	–0.252	0.338	03–07=1.0
VIC–WA	72–91	–10.043	1.251	0.019	–0.133		
	92–07	–11.924	1.386	0.000			
WA–VIC	72–07	–10.727	1.222	–0.002	–0.221	0.470	03–07=1.0
QLD–WA	72–07	–14.955	1.436	0.044	–0.555	0.536	93=0.25; 94=0.5; 95=0.75; 96–06=1.0; 07=1.25
WA–QLD	72–07	–29.681	2.561	0.005	–0.740	–0.132	00–07=1.0
SA–WA	72–07	–27.453	2.582	–0.005	–0.221	–0.833	99=0.3; 00=0.6; 01–04=0.9; 05=1.2; 06–07=1.5
WA–SA	72–07	–27.372	2.495	0.010	–0.144	–0.029	97=0.25; 98=0.5; 99–01=0.75; 02–05=1.0; 06–07=1.5

After deriving forecasts for each of the 56 OD routes, these all-modes interstate freight forecasts were separated into mode forecasts using 'business-as-usual' transport mode share trends for each OD route (see Appendix D, Table D.1).

2.3 All-modes interstate freight tasks by origin–destination: estimates and forecasts

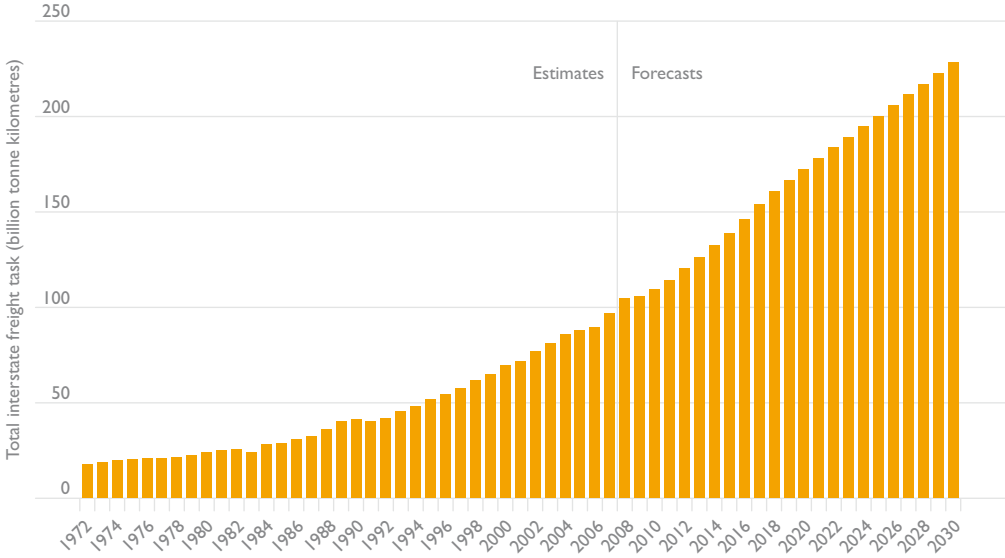
This section provides results on total interstate (sum of 56 origin–destination routes as listed in Tables 2.2 and 2.3) freight estimates (1972–2007) and forecasts (2008–2030) in Australia by all transport modes (i.e. road, rail and coastal shipping, but excluding air) as well as by individual transport mode and modal shares.

2.3.1 Total interstate freight tasks: all transport modes

Total interstate freight tasks from 1972 to 2007 by all transport modes (i.e. road, rail and coastal shipping) increased from 17.8 billion tkm to 96.8 billion tkm (Figure 2.2). Between 2008 and 2030, the total interstate freight task is expected to increase from 104.6 billion tkm to 228.4 billion tkm. (Data underlying this figure can be found in Appendix A, Table A.57).

Figure 2.2 also shows that there were two plateaus during the early 1980s and 1990s, which were primarily due to economic slowdowns during those periods. Between 2008 and 2030, the total interstate freight task is expected to plateau temporarily early in the forecast period (i.e. 2008 to 2010) due to the effects of the global financial crisis of 2008–2009. It is expected that growth will resume from 2010 until the end of forecast period (i.e. 2030), as shown in Figure 2.2.

F2.2 Total interstate freight estimates (1972–2007) and forecasts (2008–2030) (all modes)



Source: BITRE estimates.

For Australia as a whole, the total interstate freight task by all transport modes grew at an average rate of 5.0 per cent per annum between 1972 and 2007, while the total interstate freight task is forecast to grow at an average annual rate of 3.6 per cent from 2008 to 2030 (Table 2.4).

There are two major reasons for this slowdown in the forecast growth rate of interstate freight. The first is the Treasury assumptions contained in their intergenerational report (Treasury 2007) that posit a continual lowering of economic growth rates over the years to 2030. And as GDP drives freight, a slowdown in rates of economic growth lead to a a forecast slowdown in rates of freight growth.

Secondly, the BITRE has assumed in its forecasting that there will be a developing saturation in the resposiveness of freight per person to increases in GDP per person (see Figure 2.1), in a similar way to the already completed saturation of per person car travel with respect to increases in GDP per person.

The combination of both these factors (i.e. lower GDP growth and reducing responsiveness to this growth) results in the lower growth rates in the forecast period compared to the period of the historical estimates.

T2.4 Average annual growth rate (per cent) of interstate road freight estimates (1972–2007) and forecasts (2008–2030), total and by transport mode

Period	Transport modes			
	All modes	Road	Rail	Coastal shipping
1972–2007 (estimates)	5.0	7.4	4.2	0.2
2008–2030 (forecasts)	3.6	3.8	3.5	2.4

Source: BITRE estimates.

The overall tonne-kilometre total freight task in Australia is projected to grow much faster (3.61 per cent per annum) than the rate of national population growth (1.58 per cent per annum) and also faster than the average GDP growth in Australia (2.79 per cent per annum) (Table 2.5), although with freight beginning to saturate with respect to GDP, the differential will be reducing over time.

T2.5 Comparison of projected average annual growth rate of total freight task in Australia, national average real GDP growth and national population growth

Parameters	Period	Per cent
Average annual growth rate of freight tasks in Australia	2008–30	3.61
Average real GDP growth in Australia	2008–30	2.79
National population growth	2006–26	1.58

Sources: ABS (2008a), BITRE estimates, estimates from the Treasury and Access Economy.

2.3.2 All modes interstate freight estimates/forecasts by individual origin–destination (OD) routes

Table 2.6 shows the average annual growth rate of total interstate freight (all modes) estimates (1972–2007) and forecasts (2008–2030) by all individual 56 OD routes, while Table 2.7 provides the estimated and forecast freight data underlying these average annual growth rates.

Between 1972 and 2007, most of the OD routes (35 out of 56 OD routes) experienced positive annual growth in the total freight task, 10 OD routes experienced negative growth, and another 11 OD routes had no freight. Among the OD routes where the total freight task grew positively, four of them (QLD–VIC, WA–QLD, WA–TAS and TAS–WA) grew, on average, more than 8 per cent per annum during 1972 to 2007.

During the next 22 years (between 2008 and 2030), nine OD routes are forecast to grow, on average, more than 4 per cent per annum. Several OD routes are forecast to grow negatively during this period. This variation is due to different levels of responsiveness to economic activity.

T2.6 Average annual growth rates (per cent) of total (sum of all 56 OD routes) interstate freight (all modes) estimates (1972–2007) and forecasts (2008–2030)

OD routes	Average annual growth rate (per cent)	
	1972–2007	2008–2030
NSW–VIC	5.2	3.5
VIC–NSW	5.4	3.9
NSW–QLD	6.0	4.4
QLD–NSW	6.7	4.4
NSW–SA	5.7	1.9
SA–NSW	4.3	2.0
NSW–WA	4.4	1.1
WA–NSW	3.8	2.9
NSW–ACT	3.4	3.0
ACT–NSW	6.9	3.7
NSW–NT	–1.3	–0.7
NT–NSW	1.2	0.1
NSW–TAS	–3.4	–0.9
TAS–NSW	–2.3	–0.9
VIC–QLD	4.3	3.3
QLD–VIC	8.8	4.3
VIC–SA	6.7	4.4
SA–VIC	5.8	4.5
VIC–WA	3.5	2.9
WA–VIC	3.8	2.5
VIC–ACT	–2.8	–3.0
ACT–VIC	4.2	3.0
VIC–NT	–0.4	–0.9
NT–VIC	–1.9	–3.2
VIC–TAS	1.7	–0.4
TAS–VIC	1.7	3.4
QLD–SA	6.9	3.5
SA–QLD	4.2	0.6
QLD–WA	5.3	2.8
WA–QLD	8.3	4.3
QLD–ACT	0.0	–0.9
ACT–QLD	2.0	–0.9
QLD–NT	5.0	3.5
NT–QLD	2.6	2.3
QLD–TAS	–2.8	–0.9
TAS–QLD	–3.9	–0.9
SA–WA	5.5	4.4
WA–SA	6.9	4.2
SA–ACT	–2.2	–0.9
ACT–SA	0.0	–0.9
SA–NT	4.1	3.0
NT–SA	3.5	4.5
SA–TAS	nd	–0.9
TAS–SA	nd	–0.9
WA–ACT	–2.0	–0.9
ACT–WA	0.0	–0.9
WA–NT	4.7	3.3
NT–WA	3.6	2.3
WA–TAS	8.0	–0.9
TAS–WA	9.6	–0.9
ACT–NT	0.0	–0.9
NT–ACT	0.0	–0.9
ACT–TAS	nd	nd
TAS–ACT	nd	nd
NT–TAS	0.0	–0.9
TAS–NT	0.0	–0.9
All 56 OD routes	5.0	3.6

Note: nd – not determined due to no data.

Source: Table 2.7.

T2.7 Total interstate freight estimates and forecasts (million tkm) by 56 OD routes and toal Australia, 1972–2030

Year	NSW–VIC	VIC–NSW	NSW–QLD	QLD–NSW	NSW–SA	SA–NSW	NSW–WA	WA–NSW	NSW–ACT	ACT–NSW	NSW–NT	NT–NSW
Estimates												
1972	1 777	1 461	1 299	783	379	646	1 007	746	220	19	195	28
1973	1 901	1 693	1 486	898	429	701	1 120	712	210	22	189	30
1974	2 009	1 905	1 665	1 006	474	750	1 237	677	198	26	181	32
1975	2 060	1 982	1 751	1 047	494	768	1 308	695	180	27	173	29
1976	2 196	2 145	1 900	1 143	536	813	1 347	683	168	31	166	27
1977	2 266	2 150	1 985	1 216	568	888	1 397	488	172	32	158	23
1978	2 286	2 176	2 031	1 255	587	949	1 438	450	172	33	149	23
1979	2 428	2 327	2 173	1 376	636	1 043	1 496	424	182	36	141	24
1980	2 627	2 534	2 361	1 539	700	1 152	1 565	406	196	40	134	25
1981	2 760	2 674	2 540	1 623	721	1 234	1 559	427	204	43	127	25
1982	2 742	2 809	2 543	1 758	740	1 214	1 485	555	209	45	119	26
1983	2 395	2 617	2 278	1 661	694	1 137	1 344	640	190	41	108	24
1984	2 902	2 995	2 721	1 876	799	1 316	1 749	626	230	50	98	25
1985	2 960	3 119	2 781	1 915	820	1 316	1 835	690	237	51	94	26
1986	3 253	3 343	3 136	2 246	842	1 327	2 113	723	243	57	96	26
1987	3 433	3 396	3 190	2 314	948	1 340	1 929	672	248	58	96	27
1988	3 691	3 775	3 586	2 505	1 050	1 574	2 431	705	274	64	98	29
1989	4 063	4 129	4 068	2 734	1 146	1 729	2 796	794	295	70	100	29
1990	4 214	4 226	4 146	2 886	1 234	1 745	2 473	814	306	73	101	30
1991	4 177	4 246	3 974	2 849	1 210	1 595	2 393	766	308	74	101	30
1992	4 214	4 133	3 922	2 898	1 144	1 647	2 611	846	309	75	101	30
1993	4 567	4 433	4 209	3 108	1 310	1 836	2 856	1 018	327	81	102	31
1994	4 875	4 707	4 462	3 284	1 452	1 939	3 060	1 115	341	86	122	35
1995	5 184	4 920	4 713	3 469	1 597	2 042	3 418	1 268	355	91	105	36
1996	5 752	5 295	5 118	3 798	1 747	2 012	3 447	974	389	100	134	37
1997	6 179	5 661	5 325	4 070	1 851	1 990	3 547	1 185	421	108	148	33
1998	6 616	6 000	5 756	4 544	1 893	2 029	3 693	1 386	453	116	134	35
1999	6 975	6 336	6 177	4 790	2 000	2 090	3 407	1 702	488	126	126	37
2000	7 562	6 754	6 549	5 218	2 083	2 195	3 654	2 005	524	135	150	36
2001	7 810	6 956	6 653	5 619	2 185	2 245	3 744	1 941	542	139	134	36
2002	8 204	7 278	6 998	5 731	2 209	2 358	3 747	2 356	561	145	120	37
2003	8 653	7 686	7 546	6 113	2 313	2 427	3 853	2 776	585	154	132	44
2004	8 997	8 055	8 083	6 705	2 383	2 517	3 823	2 440	617	163	115	45
2005	9 376	8 398	8 423	6 884	2 464	2 595	3 896	2 829	646	171	130	46
2006	9 515	8 753	8 947	7 277	2 548	2 684	3 880	3 286	678	180	121	42
2007	10 325	9 239	9 909	7 461	2 680	2 803	4 507	2 765	720	192	122	43
Forecasts												
2008	11 088	10 016	10 245	8 310	2 735	2 907	4 272	3 193	744	209	125	42
2009	10 992	10 253	10 465	8 658	2 811	2 962	4 431	3 141	773	209	116	41
2010	11 414	10 570	10 812	8 971	2 868	3 018	4 470	3 257	778	216	120	42
2011	11 988	10 998	11 306	9 410	2 920	3 078	4 485	3 409	796	227	124	43
2012	12 763	11 614	12 030	10 034	2 986	3 164	4 511	3 608	824	242	128	44
2013	13 377	12 232	12 755	10 625	3 051	3 246	4 563	3 749	857	254	127	44
2014	14 042	12 901	13 544	11 266	3 122	3 334	4 622	3 902	893	268	125	44
2015	14 723	13 592	14 365	11 934	3 192	3 421	4 676	4 056	929	281	124	44
2016	15 493	14 372	15 292	12 686	3 274	3 523	4 749	4 231	970	297	124	44
2017	16 317	15 209	16 292	13 498	3 361	3 632	4 826	4 418	1 014	313	123	45
2018	16 940	15 968	17 188	14 201	3 448	3 730	4 923	4 547	1 058	326	120	44
2019	17 523	16 647	17 995	14 844	3 522	3 813	4 995	4 670	1 096	339	118	44
2020	18 063	17 270	18 737	15 439	3 588	3 885	5 056	4 784	1 130	350	117	44
2021	18 642	17 898	19 490	16 051	3 655	3 957	5 111	4 909	1 162	362	116	44
2022	19 230	18 522	20 243	16 668	3 716	4 024	5 155	5 037	1 193	374	115	44
2023	19 764	19 114	20 962	17 252	3 771	4 083	5 193	5 148	1 222	385	114	44
2024	20 312	19 705	21 685	17 845	3 823	4 138	5 224	5 263	1 251	396	114	44
2025	20 871	20 310	22 429	18 454	3 874	4 194	5 253	5 380	1 279	408	113	44
2026	21 438	20 925	23 189	19 076	3 924	4 248	5 280	5 497	1 308	419	112	44
2027	21 983	21 544	23 951	19 696	3 977	4 303	5 313	5 607	1 337	431	111	44
2028	22 542	22 157	24 713	20 321	4 025	4 354	5 336	5 721	1 365	442	110	44
2029	23 107	22 780	25 491	20 959	4 072	4 404	5 358	5 835	1 393	454	109	43
2030	23 689	23 423	26 297	21 620	4 120	4 454	5 380	5 952	1 422	466	108	43

continued

T2.7 Total interstate freight estimates and forecasts (million tkm) by 56 OD routes and toal Australia, 1972–2030 (continued)

Year	NSW–TAS	TAS–NSW	VIC–QLD	QLD–VIC	VIC–SA	SA–VIC	VIC–WA	WA–VIC	VIC–ACT	ACT–VIC	VIC–NT	NT–VIC
Estimates												
1972	168	255	1 238	311	536	560	1 135	872	90	9	71	42
1973	175	171	1 272	351	594	608	1 292	916	89	10	66	40
1974	182	87	1 296	390	650	651	1 459	958	87	10	62	37
1975	192	75	1 282	401	689	662	1 439	768	86	11	66	35
1976	203	63	1 306	437	755	697	1 320	555	84	11	70	33
1977	186	94	1 337	405	784	737	1 310	300	83	11	75	30
1978	169	125	1 345	415	796	763	1 269	314	82	12	79	27
1979	153	156	1 407	462	849	825	1 280	339	80	12	83	24
1980	136	187	1 494	531	922	905	1 324	369	79	13	87	22
1981	119	218	1 519	567	1 005	976	1 470	479	78	13	92	19
1982	102	249	1 492	621	1 059	976	1 515	574	77	14	96	16
1983	86	281	1 325	559	1 000	876	1 376	637	76	15	99	13
1984	121	331	1 546	802	1 214	1 081	1 614	667	76	15	33	8
1985	117	318	1 564	777	1 262	1 085	1 813	612	76	16	24	3
1986	139	271	1 719	870	1 285	1 155	1 872	580	72	17	21	3
1987	129	341	1 681	890	1 298	1 198	1 925	673	68	17	25	6
1988	120	190	1 873	1 022	1 474	1 374	2 220	680	65	18	28	9
1989	105	306	2 094	1 203	1 663	1 530	2 518	774	63	19	31	9
1990	97	147	2 152	1 312	1 740	1 492	2 389	753	61	20	31	9
1991	101	170	2 236	1 353	1 788	1 472	2 208	783	58	20	34	9
1992	147	210	2 502	1 457	1 828	1 517	2 155	893	56	21	34	9
1993	97	186	2 667	1 750	1 947	1 685	2 257	998	48	22	38	12
1994	107	147	2 819	1 773	1 988	1 842	2 400	1 031	47	23	42	13
1995	76	206	2 951	1 906	2 027	1 993	2 660	1 108	46	24	46	14
1996	54	122	3 072	2 098	2 246	2 173	2 640	955	45	25	68	19
1997	37	1	3 314	2 387	2 538	2 246	2 690	919	43	26	50	12
1998	16	12	3 531	2 711	2 986	2 477	2 723	1 088	42	27	50	4
1999	13	3	3 957	2 938	3 146	2 517	2 899	1 158	41	28	63	10
2000	43	222	4 264	3 302	3 370	2 738	3 095	1 410	40	30	60	11
2001	62	77	4 259	3 582	3 511	2 934	3 111	1 692	39	31	55	13
2002	35	54	4 502	3 838	3 734	3 070	3 339	2 008	38	32	59	13
2003	38	46	4 777	4 228	3 956	3 299	3 699	2 406	37	33	49	21
2004	36	55	5 187	4 591	4 194	3 520	3 798	2 228	36	35	53	21
2005	44	392	5 269	4 939	4 443	3 729	3 924	2 504	35	36	56	21
2006	64	40	5 370	5 634	4 760	3 783	3 225	2 802	34	38	60	21
2007	50	113	5 443	5 950	5 104	4 091	3 774	3 224	33	39	61	22
Forecasts												
2008	43	105	6 662	7 344	5 358	4 551	4 489	2 909	37	55	64	14
2009	44	105	6 594	7 425	5 505	4 553	4 542	2 951	37	56	64	14
2010	44	106	6 842	7 697	5 707	4 739	4 670	3 023	36	58	64	14
2011	44	106	7 173	8 077	5 989	5 008	4 831	3 109	36	59	64	14
2012	43	105	7 612	8 617	6 389	5 387	5 052	3 227	34	61	63	13
2013	43	103	7 950	9 129	6 768	5 724	5 250	3 331	33	64	62	12
2014	42	102	8 315	9 684	7 181	6 090	5 463	3 444	31	66	62	12
2015	41	100	8 686	10 263	7 610	6 473	5 678	3 557	30	69	61	11
2016	41	99	9 108	10 915	8 094	6 905	5 924	3 688	29	72	60	11
2017	40	98	9 557	11 619	8 615	7 372	6 185	3 825	27	75	59	10
2018	40	97	9 890	12 230	9 069	7 753	6 407	3 945	27	78	59	10
2019	40	96	10 203	12 790	9 484	8 107	6 605	4 050	26	81	58	9
2020	39	95	10 492	13 308	9 869	8 437	6 785	4 144	25	83	58	9
2021	39	94	10 804	13 842	10 265	8 782	6 969	4 240	24	85	57	9
2022	39	94	11 121	14 381	10 665	9 136	7 149	4 332	24	88	57	8
2023	38	93	11 406	14 892	11 044	9 467	7 314	4 415	23	90	56	8
2024	38	92	11 698	15 411	11 429	9 809	7 478	4 497	22	92	55	8
2025	38	91	11 996	15 944	11 825	10 160	7 643	4 578	22	94	55	8
2026	37	90	12 296	16 489	12 230	10 520	7 809	4 659	21	96	54	7
2027	37	89	12 584	17 033	12 633	10 874	7 973	4 740	21	98	54	7
2028	36	88	12 878	17 582	13 040	11 236	8 135	4 818	20	100	53	7
2029	36	87	13 175	18 142	13 456	11 607	8 296	4 896	19	102	52	7
2030	35	86	13 481	18 723	13 887	11 991	8 462	4 975	19	104	52	7

continued

T2.7 Total interstate freight estimates and forecasts (million tkm) by 56 OD routes and toal Australia, 1972–2030 (continued)

Year	VIC–TAS	TAS–VIC	QLD–SA	SA–QLD	QLD–WA	WA–QLD	QLD–ACT	ACT–QLD	QLD–NT	NT–QLD	QLD–TAS	TAS–QLD
Estimates												
1972	675	559	118	347	274	79	1	1	107	123	36	10
1973	576	369	134	354	266	116	1	1	143	137	18	13
1974	477	179	149	357	259	151	1	1	178	148	1	16
1975	520	154	150	349	211	182	1	1	171	153	4	17
1976	563	129	157	348	147	206	1	1	171	162	6	18
1977	519	152	162	407	88	164	1	1	176	167	8	35
1978	475	175	163	461	95	124	1	1	178	168	10	53
1979	432	198	175	529	110	87	1	1	188	176	12	71
1980	388	220	193	603	131	51	1	1	202	187	14	89
1981	344	243	208	552	127	60	1	1	211	193	16	107
1982	301	266	213	545	136	77	1	1	221	200	18	125
1983	262	288	187	504	113	84	1	1	208	223	21	143
1984	307	339	243	585	150	120	1	1	274	280	26	140
1985	323	333	289	593	148	123	1	1	202	214	2	125
1986	354	331	286	587	175	172	1	1	220	234	17	120
1987	419	439	303	596	180	201	1	1	219	227	28	155
1988	430	430	364	689	265	254	1	1	230	240	2	68
1989	524	494	436	798	305	333	1	1	239	251	9	10
1990	544	536	545	906	306	220	1	1	253	257	2	28
1991	479	593	521	837	357	345	1	1	253	259	2	3
1992	513	520	493	863	433	596	1	1	256	260	2	3
1993	536	513	572	943	563	459	1	1	278	271	7	5
1994	559	614	552	1 018	693	507	1	1	290	282	5	3
1995	615	589	562	1 093	789	571	1	1	313	287	12	3
1996	670	621	594	1 059	923	678	1	1	375	302	3	0
1997	702	685	655	1 093	954	733	1	1	446	313	2	3
1998	684	677	703	1 123	1 026	827	1	1	490	325	1	0
1999	690	685	710	1 204	1 047	851	1	1	450	338	3	10
2000	795	708	796	1 220	1 015	841	1	1	540	352	1	0
2001	682	725	846	1 226	1 075	858	1	1	551	363	15	4
2002	814	885	893	1 235	926	961	1	1	583	375	12	41
2003	921	1 054	950	1 238	1 109	1 141	1	1	519	285	14	8
2004	1 062	1 218	1 003	1 240	1 351	1 222	1	1	538	317	2	65
2005	1 149	1 252	1 056	1 236	1 063	1 271	1	1	548	291	13	35
2006	1 158	1 021	1 134	1 242	1 138	1 705	1	1	563	298	13	10
2007	1 207	1 006	1 224	1 478	1 660	1 260	1	1	591	308	13	3
Forecasts												
2008	1 207	1 281	1 225	1 410	1 994	1 647	1	1	793	330	14	25
2009	1 067	1 235	1 289	1 302	1 765	1 653	1	1	806	343	14	25
2010	1 121	1 293	1 313	1 349	1 891	1 713	1	1	831	348	14	25
2011	1 187	1 373	1 344	1 406	2 072	1 797	1	1	863	353	14	25
2012	1 254	1 479	1 394	1 471	2 295	1 916	1	1	909	362	14	25
2013	1 248	1 549	1 460	1 486	2 390	2 029	1	1	952	372	14	25
2014	1 243	1 625	1 531	1 504	2 492	2 152	1	1	999	384	14	24
2015	1 237	1 704	1 604	1 520	2 595	2 279	1	1	1 047	395	14	24
2016	1 236	1 792	1 686	1 542	2 713	2 423	1	1	1 101	408	13	24
2017	1 235	1 886	1 774	1 565	2 838	2 578	1	1	1 160	422	13	23
2018	1 198	1 945	1 866	1 559	2 854	2 713	1	1	1 211	436	13	23
2019	1 176	2 003	1 944	1 559	2 895	2 836	1	1	1 256	449	13	23
2020	1 159	2 058	2 014	1 560	2 938	2 949	1	1	1 298	459	13	23
2021	1 153	2 122	2 081	1 569	3 008	3 067	1	1	1 340	469	13	22
2022	1 151	2 188	2 144	1 579	3 089	3 184	1	1	1 382	478	13	22
2023	1 142	2 246	2 207	1 583	3 150	3 296	1	1	1 421	487	13	22
2024	1 138	2 308	2 266	1 589	3 225	3 410	1	1	1 461	495	12	22
2025	1 132	2 370	2 326	1 595	3 300	3 526	1	1	1 500	503	12	22
2026	1 127	2 434	2 387	1 600	3 376	3 645	1	1	1 541	511	12	21
2027	1 117	2 493	2 451	1 602	3 435	3 764	1	1	1 581	519	12	21
2028	1 111	2 555	2 511	1 606	3 509	3 884	1	1	1 621	527	12	21
2029	1 105	2 619	2 572	1 609	3 583	4 006	1	1	1 661	534	12	21
2030	1 099	2 684	2 635	1 612	3 659	4 132	1	1	1 702	542	12	20

continued

T2.7 Total interstate freight estimates and forecasts (million tkm) by 56 OD routes and toal Australia, 1972–2030 (continued)

Year	SA–WA	WA–SA	SA–ACT	ACT–SA	SA–NT	NT–SA	SA–TAS	TAS–SA	WA–ACT	ACT–WA	WA–NT	NT–WA
Estimates												
1972	486	288	1	1	321	155	97	65	4	2	97	75
1973	606	273	2	1	301	152	81	42	6	2	103	84
1974	729	258	2	1	282	150	66	19	8	2	109	92
1975	850	260	2	1	265	142	88	25	10	2	111	109
1976	955	247	3	1	256	140	110	31	13	2	117	127
1977	966	249	3	1	285	156	100	41	12	2	119	123
1978	983	252	3	1	310	169	89	50	10	2	119	119
1979	1 008	261	3	1	345	190	79	60	9	2	125	116
1980	1 038	275	3	1	386	214	68	70	8	2	133	116
1981	993	351	3	1	394	223	58	80	8	2	138	112
1982	927	349	3	1	394	221	47	90	7	2	143	109
1983	850	326	2	1	365	197	38	101	7	2	133	98
1984	1 075	407	2	1	421	245	113	94	8	2	159	80
1985	1 081	462	2	1	420	244	94	40	10	2	155	78
1986	1 103	566	2	1	433	252	72	2	12	2	185	86
1987	1 536	559	2	1	469	277	62	40	8	2	187	84
1988	1 754	606	1	1	535	320	62	47	4	2	184	92
1989	2 038	734	1	1	575	353	2	28	4	2	205	103
1990	2 409	757	1	1	604	374	2	2	4	2	244	99
1991	2 312	750	1	1	621	388	2	7	4	2	180	103
1992	2 411	807	1	1	641	403	2	28	4	2	186	113
1993	2 822	929	1	1	710	439	2	21	2	2	203	115
1994	2 940	1 002	1	1	776	472	2	3	2	2	250	125
1995	3 229	1 190	1	1	842	505	2	30	2	2	252	126
1996	3 548	1 215	1	1	889	556	2	2	2	2	272	136
1997	3 678	1 161	1	1	998	559	19	2	2	2	230	123
1998	3 817	1 219	1	1	916	669	0	2	2	2	305	266
1999	3 664	1 306	1	1	936	676	1	8	2	2	342	160
2000	3 258	1 823	1	1	1 008	748	1	3	2	2	335	170
2001	3 028	2 073	1	1	1 062	799	2	2	2	2	350	185
2002	3 026	2 234	1	1	1 147	866	4	28	2	2	369	196
2003	3 119	2 331	1	1	1 050	560	0	69	2	2	401	214
2004	3 244	2 566	1	1	1 111	603	2	10	2	2	433	470
2005	3 435	2 786	1	1	1 170	616	0	16	2	2	429	231
2006	2 100	2 594	1	1	955	447	2	16	2	2	447	260
2007	3 119	2 969	1	1	1 320	524	2	16	2	2	485	262
Forecasts												
2008	3 033	3 273	1	1	1 397	523	2	17	4	4	496	219
2009	3 134	3 233	1	1	1 357	517	2	17	4	4	483	231
2010	3 248	3 350	1	1	1 413	542	2	18	4	4	503	234
2011	3 407	3 514	1	1	1 489	577	2	18	4	4	531	236
2012	3 633	3 747	1	1	1 587	624	2	17	4	4	569	240
2013	3 847	3 968	1	1	1 653	663	2	17	4	4	595	247
2014	4 079	4 208	1	1	1 724	704	2	17	4	4	623	254
2015	4 321	4 457	1	1	1 796	748	2	17	4	4	651	262
2016	4 594	4 739	1	1	1 878	797	2	16	4	4	684	270
2017	4 888	5 042	1	1	1 965	850	2	16	4	4	718	279
2018	5 143	5 305	1	1	2 020	890	2	16	4	4	741	290
2019	5 376	5 545	1	1	2 074	929	2	16	4	4	764	298
2020	5 592	5 768	1	1	2 124	966	2	16	4	4	785	306
2021	5 814	5 997	1	1	2 182	1 006	2	16	4	4	808	312
2022	6 037	6 228	1	1	2 241	1 048	2	16	4	4	832	319
2023	6 249	6 446	1	1	2 292	1 086	2	15	4	4	854	324
2024	6 465	6 668	1	1	2 346	1 127	1	15	4	4	876	330
2025	6 685	6 896	1	1	2 401	1 168	1	15	4	4	899	335
2026	6 911	7 129	1	1	2 456	1 211	1	15	4	4	922	340
2027	7 136	7 361	1	1	2 506	1 252	1	15	3	3	943	346
2028	7 363	7 595	1	1	2 560	1 295	1	15	3	3	966	351
2029	7 595	7 834	1	1	2 614	1 339	1	14	3	3	989	355
2030	7 834	8 081	1	1	2 669	1 385	1	14	3	3	1 012	360

continued

T2.7 Total interstate freight estimates and forecasts (million tkm) by 56 OD routes and toal Australia, 1972–2030 (continued)

Year	WA–TAS	TAS–WA	ACT–NT	NT–ACT	ACT–TAS	TAS–ACT	NT–TAS	TAS–NT	Total Australia
Estimates									
1972	3	24	2	2	0	0	5	6	17 814
1973	3	24	2	2	0	0	5	6	18 800
1974	3	24	2	2	0	0	5	6	19 708
1975	3	17	2	2	0	0	5	6	20 034
1976	3	10	2	2	0	0	5	6	20 624
1977	3	3	2	2	0	0	5	6	20 654
1978	3	3	2	2	0	0	5	6	20 978
1979	3	3	2	2	0	0	5	6	22 156
1980	3	3	2	2	0	0	5	6	23 763
1981	3	3	2	2	0	0	5	6	24 938
1982	3	3	2	2	0	0	5	6	25 454
1983	29	177	2	2	0	0	5	6	23 846
1984	58	184	2	2	0	0	5	17	28 239
1985	71	243	2	2	0	0	5	6	28 781
1986	61	205	2	2	0	0	5	6	30 903
1987	74	243	2	2	0	0	5	6	32 228
1988	125	205	2	2	0	0	5	6	35 781
1989	116	191	2	2	0	0	5	6	40 036
1990	132	163	2	2	0	0	5	6	40 859
1991	67	156	2	2	0	0	5	6	40 215
1992	39	62	2	2	0	0	5	6	41 415
1993	3	104	2	2	0	0	5	6	45 105
1994	22	87	2	2	0	0	5	6	47 931
1995	42	80	2	2	0	0	5	6	51 407
1996	26	173	2	2	0	0	5	6	54 386
1997	3	201	2	2	0	0	5	6	57 365
1998	110	282	2	2	0	0	5	10	61 791
1999	58	380	2	2	0	0	5	0	64 561
2000	41	215	2	2	0	0	5	12	69 351
2001	22	128	2	2	0	0	5	4	71 385
2002	1 024	723	2	2	0	0	5	6	76 832
2003	30	961	2	2	0	0	5	6	80 870
2004	15	1 391	2	2	0	0	5	6	85 580
2005	26	41	2	2	0	0	5	72	88 002
2006	22	468	2	2	0	0	5	6	89 360
2007	48	600	2	2	0	0	5	6	96 789
Forecasts									
2008	26	173	5	5	0	0	5	6	104 636
2009	26	174	5	5	0	0	5	6	105 445
2010	26	175	5	5	0	0	5	6	108 980
2011	26	175	5	5	0	0	5	6	113 737
2012	26	173	5	5	0	0	5	6	120 323
2013	25	170	5	5	0	0	5	6	126 093
2014	25	168	4	4	0	0	5	6	132 357
2015	24	165	4	4	0	0	5	6	138 810
2016	24	163	4	4	0	0	5	5	146 135
2017	24	161	4	4	0	0	5	5	154 003
2018	24	160	4	4	0	0	5	5	160 536
2019	23	158	4	4	0	0	5	5	166 524
2020	23	157	4	4	0	0	5	5	172 045
2021	23	156	4	4	0	0	5	5	177 797
2022	23	154	4	4	0	0	4	5	183 572
2023	23	153	4	4	0	0	4	5	188 941
2024	22	151	4	4	0	0	4	5	194 383
2025	22	150	4	4	0	0	4	5	199 945
2026	22	148	4	4	0	0	4	5	205 606
2027	22	146	4	4	0	0	4	5	211 191
2028	21	145	4	4	0	0	4	5	216 820
2029	21	143	4	4	0	0	4	5	222 535
2030	21	141	4	4	0	0	4	5	228 439

Source: BITRE estimates.

2.3.3 Total interstate freight tasks by transport mode

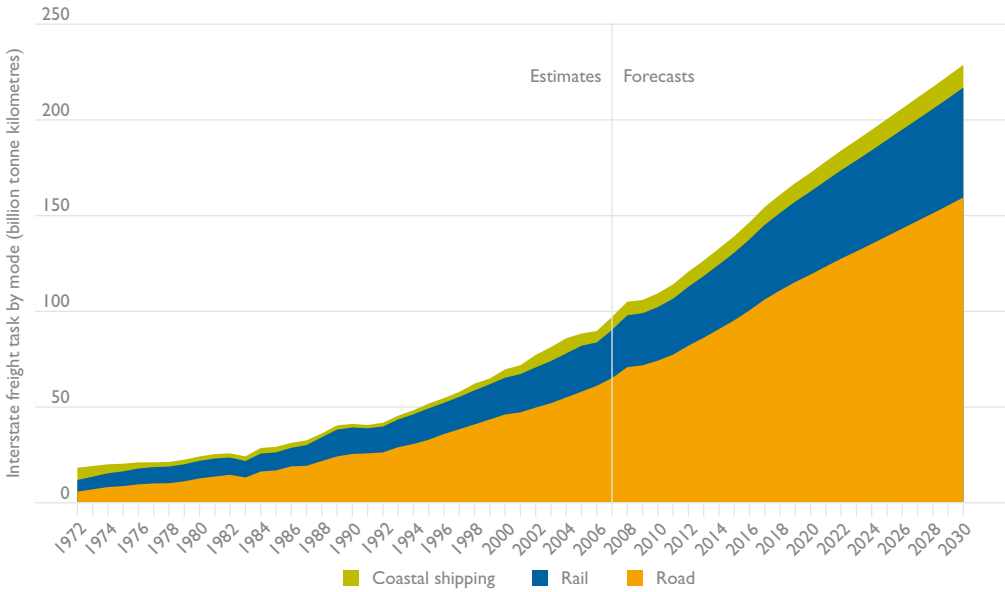
Figure 2.3 shows the total interstate freight estimates (1972–2007) and forecasts (2008–2030) by transport mode. Data underlying this figure can be found in Appendix A (see Table A.57).

In 1972, total interstate road freight in Australia was 5.4 billion tonne-kilometres (tkm) and this estimate increased to 64.7 billion tkm in 2007. Similarly, the total interstate rail freight task increased from 6.1 billion tkm in 1972 to 25.2 billion tkm in 2007. The total coastal shipping freight task increased from 6.4 billion tkm to 6.8 billion tkm during this past period (Figure 2.2).

Over the projection period (2008–2030), the total interstate road freight task is projected to increase from 70.4 billion tkm to 159.1 billion tkm. The interstate rail freight task is forecast to increase from 27.1 billion tkm to 57.4 billion tkm, while the interstate coastal shipping freight is forecast to increase from 7.1 billion tkm to 11.9 billion tkm.

In a recent study, BITRE has noted that domestic demand for manufactured goods underpins much of interstate freight's future growth in Australia (BITRE 2009).

F2.3 Total interstate (sum of all 56 OD routes) freight estimates and forecasts by transport mode, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimates.

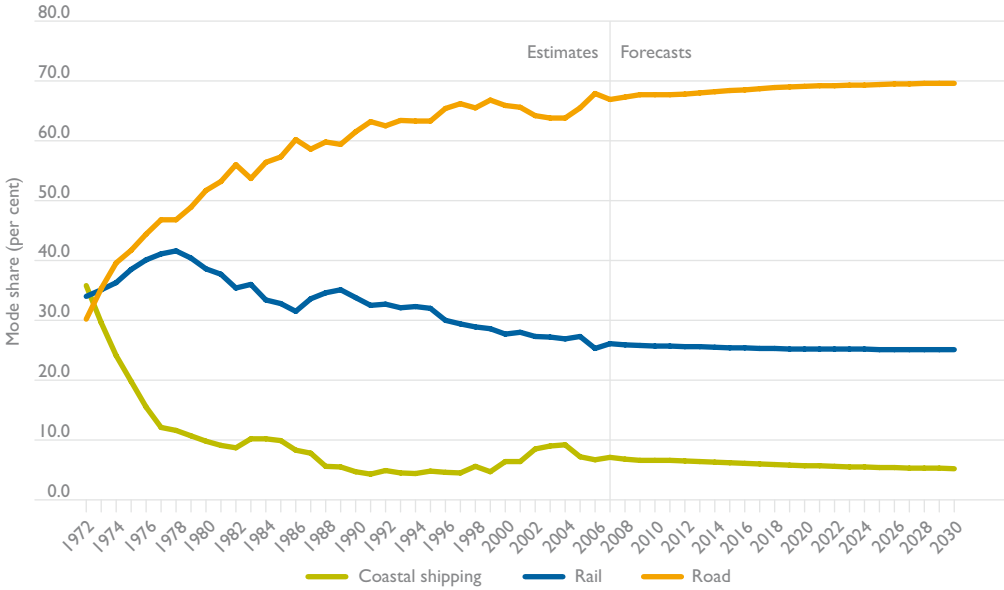
2.3.4 Modal split of interstate freight transport tasks

Modal split of interstate freight transport is defined as the percentage share of each mode of transport (e.g. road, rail and coastal shipping) in total transport (expressed in tonne-kilometres).

Figure 2.4 shows the transport mode splits derived from the 'sum of routes' forecasts. Between 1972 and 2007, road freight's share increased from 30.2 per cent to 66.9 per cent, and is expected to continue to increase up to 69.6 per cent by 2030. By contrast, rail freight's share during 1972 to 2007 increased until 1977 and then decreased gradually. This is because of improving road and truck design, congestion on the tracks, and the time and cost of local pickup and delivery (Ernst & Young 2006). This declining trend is expected to ease during the forecast period. The decrease in share of the coastal shipping freight task should be steeper than for the rail freight during 2008–2030.

The Productivity Commission has also reported that over the 40 years from 1961 to 2001, intercapital non-bulk road freight rapidly increased its share at the expense of rail and coastal shipping (Productivity Commission 2006). However, the trend for interstate rail to lose mode share could be reversed by significant improvements in rail's quality of service (BTR 2000) and by rail infrastructure development which is now underway.

F2.4 Transport mode shares of total interstate freight estimates and forecasts, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.
Source: BITRE estimates.

In 2007, the interstate freight task measured 96.8 billion tkm (Figure 2.2), with 66.9 per cent carried by road, 26.1 per cent by rail and 7.1 per cent by coastal shipping (Figure 2.4). These shares are, however, very different from the shares of the Australian total domestic freight task (including both bulk and non-bulk), especially for road and coastal shipping freight. The transport mode shares of the Australian domestic freight task were 35 per cent by road, 40 per cent by rail and 25 per cent by coastal shipping (BITRE 2009).

Modal shares on various routes reflect the relative strengths of the different transport modes for the carriage of different freight types over different distances. Road transport currently dominates the market for freight that is either express or sensitive to reliability and availability—typically manufactured goods. However, the choice of transport mode generally involves a trade-off between cost and several service quality factors. The nature of the freight and the requirements of shippers influence the relative importance of cost and service quality—perishable and high value commodities tend to be more time and reliability sensitive than other freight. For any freight, it is the 'door-to-door' service, rather than just the 'line-haul' component, that matters to shippers. For intercapital origin–destination freight, road can provide a single-mode door-to-door service, whereas conveying non-bulk goods by rail typically involves transhipment between road and rail, adding to total freight costs and transit times.

BITRE (2009) listed three major factors which influence freight mode choice. These are:

- freight transport service requirements (i.e. transit time, reliability and service availability/frequency),
- freight transport costs versus service attributes and
- market structure and competition.

A literature review conducted by the Center for Urban Transportation Research at the University of South Florida (USA) for Florida Department of Transportation Rail Planning and Safety, produced a report[4] which found that many factors affect freight mode choice. These include freight demand characteristics, cross elasticities, freight costs, commodity characteristics, modal characteristics and customer characteristics. The review also highlighted that trucks dominate short trip lengths and higher value goods, while rail dominates long trip lengths with bulky, low-value products. The authors concluded that cost benefits often have to be weighed against customer service and satisfaction for many commodities where time constraints exist. For commodities with time constraints and/or service guarantees, it is typical that truck is the preferred mode of transportation due to speed, flexibility and reliability.

2.4 Summary

The total interstate freight task increased substantially over the last 35 years—averaging growth of 5.0 per cent per annum. This trend is forecast to continue, albeit with slower growth into the future, interstate freight growing by 3.6 per cent per annum between 2008 and 2030. Interstate road freight is expected to grow faster than rail and coastal shipping freight over the next 22 years. However, the global financial crisis has dampened interstate freight growth in the short term.

The total interstate freight task by all transport modes grew from 17.8 billion tkm in 1972 to 96.8 billion tkm in 2007, while it is forecast to grow from 106.9 billion tkm in 2008 to 228.4 billion tkm in 2030.

During the forecast period (2008–2030), the share of interstate road freight is expected to grow, while shares of interstate rail and coastal shipping freight should both decline somewhat. Although road freight is often more expensive, it offers quicker and more reliable door-to-door delivery than rail freight.

4 Analysis of Freight Movement Mode Choice Factors. A report produced by the Center for Urban Transportation Research at the University of South Florida (USA).

The total tonne-kilometre interstate freight task in Australia is projected to grow much faster than the rate of national population growth and also faster than the average GDP growth in Australia.

The following three chapters (Chapters 3 to 5) provide data on freight estimates (1972–2007) and forecasts (2008–2030) by individual transport mode (i.e. road, rail and coastal shipping) by 56 origin–destination routes.

CHAPTER 3

Interstate road freight estimates and forecasts, 1972–2030

3.1 Background

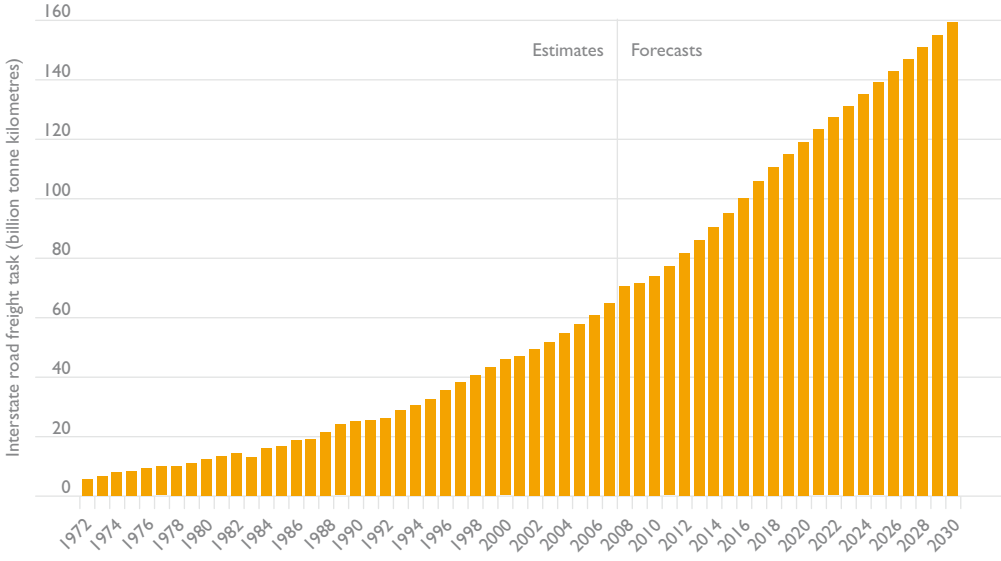
In the preceding chapter (Chapter 2), total interstate freight estimates (1972–2007) and forecasts (2008–2030) were presented. This chapter provides aggregate interstate road freight estimates and forecasts, as well as interstate road freight tasks by 56 individual origin–destination (OD) routes. It also provides road mode share estimates and forecasts on four major both ways traffic routes between 1972 and 2030.

3.2 Interstate road freight tasks

3.2.1 Total (sum of all 56 OD routes)

The total (sum of all 56 OD routes) interstate road freight estimates increased at an average annual growth rate of 7.4 per cent, from 5.4 billion tonne–kilometres (tkm) in 1972 to 64.7 billion tkm in 2007 (Figure 3.1).

F3.1 Total (sum all 56 OD routes) interstate road freight tasks, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimates.

Over the 22 years from 2008 to 2030, the total interstate road freight task is forecast to grow at an average annual growth rate of 3.8 per cent, from 70.4 billion tkm in 2008 to 159.1 billion tkm in 2030. However, the global financial crisis will dampen road freight growth in the early years of forecast period (i.e. 2008–2010), as shown in Figure 3.1. Much of the explanation for the lower interstate road freight forecast growth rate compared to the past road freight growth lies in assumed lower economic growth, the growing saturating effect, and fact that road will no longer be rapidly growing mode share.

3.2.2 Individual OD routes

Table 3.1 shows the average annual growth rate of interstate road freight estimates (1972–2007) and forecasts (2008–2030) by individual origin–destination (OD) routes (all 56), while Table 3.2 provides the data on underlying interstate road freight estimates and forecasts.

Between 1972 and 2007, road freight traffic on 34 OD routes experienced positive growth; the highest average annual growth rates were on the Western Australia–South Australia route (12.8 per cent per annum); the South Australia–Western Australia route (12.7 per cent per annum); and Queensland–Victoria (11.1 per cent per annum). Although Victoria–Northern Territory grew substantially, the interstate road freight task only started in mid-1980s.

Generally, due to different levels of responsiveness to economic activity, some routes are forecast to grow faster than other routes during the 22 years from 2008 to 2030. Interstate road freight is projected to grow fastest on the Northern Territory–South Australia OD route (6.2 per cent per annum) between 2008 and 2030. However, several OD routes are forecast to grow negatively. On the other hand, some OD routes and routes which are linked with Tasmania do not have any road freight traffic.

T3.1 Average annual growth rate (per cent) of interstate road freight tasks by all 56 OD routes, 1972–2030

OD routes	Average annual growth rate (per cent)	
	1972–2007	2008–2030
NSW–VIC	7.2	3.7
VIC–NSW	6.5	3.3
NSW–QLD	8.6	4.8
QLD–NSW	8.5	4.5
NSW–SA	6.1	2.8
SA–NSW	6.1	2.5
NSW–WA	7.6	1.1
WA–NSW	8.4	2.9
NSW–ACT	7.2	3.1
ACT–NSW	7.3	3.7
NSW–NT	1.2	–0.6
NT–NSW	2.9	0.1
NSW–TAS	nd	nd
TAS–NSW	nd	nd
VIC–QLD	5.9	2.4
QLD–VIC	11.1	3.3
VIC–SA	8.6	4.2
SA–VIC	9.0	4.7
VIC–WA	3.5	2.9
WA–VIC	6.5	2.5
VIC–ACT	–2.6	–3.0
ACT–VIC	4.2	3.0
VIC–NT	24.6	–0.9
NT–VIC	5.5	–3.6
VIC–TAS	nd	nd
TAS–VIC	nd	nd
QLD–SA	8.0	4.2
SA–QLD	4.6	2.2
QLD–WA	7.6	2.8
WA–QLD	9.9	4.3
QLD–ACT	0.0	–0.9
ACT–QLD	2.0	–0.9
QLD–NT	6.0	3.5
NT–QLD	2.6	2.3
QLD–TAS	nd	nd
TAS–QLD	nd	nd
SA–WA	12.7	4.4
WA–SA	12.8	4.2
SA–ACT	nd	–0.9
ACT–SA	0.0	–0.9
SA–NT	5.8	2.6
NT–SA	6.3	6.2
SA–TAS	nd	nd
TAS–SA	nd	nd
WA–ACT	nd	–0.9
ACT–WA	0.0	–0.9
WA–NT	8.3	3.4
NT–WA	9.0	2.3
WA–TAS	nd	nd
TAS–WA	nd	nd
ACT–NT	0.0	–0.9
NT–ACT	0.0	–0.9
ACT–TAS	nd	nd
TAS–ACT	nd	nd
NT–TAS	nd	nd
TAS–NT	nd	nd
All 56 OD routes	7.4	3.8

nd not determined due to no data.

Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: Table 3.2.

T3.2 Interstate road freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030

Year	NSW–VIC	VIC–NSW	NSW–QLD	QLD–NSW	NSW–SA	SA–NSW	NSW–WA	WA–NSW	NSW–ACT	ACT–NSW	NSW–NT	NT–NSW
Estimates												
1972	813	976	468	420	266	292	37	53	63	16	63	16
1973	997	1 173	597	533	317	347	58	74	77	20	65	17
1974	1 164	1 351	718	639	362	395	84	94	90	23	68	18
1975	1 241	1 431	775	688	382	417	99	98	96	25	69	18
1976	1 401	1 597	895	793	423	463	83	71	109	28	71	19
1977	1 475	1 674	952	843	442	483	95	71	114	29	71	19
1978	1 498	1 698	970	858	448	490	98	73	116	30	72	19
1979	1 643	1 846	1 083	956	485	530	119	88	127	33	73	20
1980	1 845	2 050	1 243	1 095	535	585	150	111	143	37	75	21
1981	1 981	2 187	1 353	1 190	569	621	173	128	153	40	76	21
1982	2 114	2 320	1 462	1 285	601	657	202	146	163	43	77	22
1983	1 919	2 125	1 302	1 147	553	605	167	120	148	39	76	21
1984	2 338	2 541	1 648	1 445	655	715	249	178	181	47	79	23
1985	2 412	2 614	1 711	1 499	672	734	265	190	186	49	79	23
1986	2 684	2 880	1 943	1 699	736	804	329	230	207	54	81	24
1987	2 720	2 915	1 974	1 725	745	813	339	230	210	55	82	24
1988	3 037	3 220	2 250	1 962	818	893	423	279	234	62	83	25
1989	3 324	3 495	2 506	2 181	883	964	508	325	256	67	85	26
1990	3 483	3 647	2 650	2 304	919	1 003	560	347	269	71	86	26
1991	3 526	3 687	2 688	2 337	929	1 014	565	340	272	72	86	26
1992	3 570	3 728	2 728	2 371	939	1 025	593	345	275	73	86	26
1993	3 857	4 000	2 992	2 596	1 003	1 094	730	410	297	79	88	27
1994	4 100	4 227	3 218	2 789	1 056	1 152	760	412	316	84	89	27
1995	4 344	4 454	3 447	2 984	1 109	1 210	855	447	335	89	90	28
1996	4 783	4 860	3 866	3 340	1 204	1 314	884	444	368	98	92	29
1997	5 151	5 198	4 223	3 643	1 283	1 399	886	427	396	105	94	30
1998	5 530	5 544	4 596	3 958	1 363	1 486	894	413	425	113	95	30
1999	5 980	5 951	5 045	4 338	1 456	1 588	839	388	460	123	97	31
2000	6 424	6 350	5 494	4 718	1 548	1 688	645	538	494	132	98	32
2001	6 646	6 548	5 721	4 909	1 593	1 737	501	627	511	137	99	32
2002	7 037	6 896	6 124	5 248	1 673	1 824	489	611	540	145	100	33
2003	7 484	7 292	6 590	5 640	1 763	1 922	485	606	575	154	90	40
2004	7 898	7 657	7 027	6 008	1 846	2 012	512	640	606	163	91	41
2005	8 278	7 990	7 431	6 347	1 921	2 094	555	694	635	171	92	42
2006	8 695	8 354	7 880	6 723	2 003	2 183	467	876	667	180	93	42
2007	9 255	8 841	8 488	7 233	2 112	2 302	484	908	710	192	94	43
Forecasts												
2008	9 966	9 520	8 824	8 032	2 183	2 401	465	906	733	209	109	40
2009	9 900	9 684	9 050	8 370	2 268	2 460	482	891	762	209	101	39
2010	10 300	9 922	9 388	8 676	2 339	2 520	486	924	778	216	105	40
2011	10 840	10 258	9 856	9 102	2 406	2 585	488	967	796	227	109	41
2012	11 564	10 764	10 529	9 708	2 486	2 672	491	1 024	824	242	112	42
2013	12 145	11 265	11 209	10 283	2 565	2 756	496	1 064	857	254	111	42
2014	12 774	11 805	11 950	10 907	2 651	2 847	503	1 107	893	268	110	42
2015	13 420	12 358	12 726	11 556	2 736	2 938	509	1 151	929	281	109	42
2016	14 151	12 982	13 601	12 288	2 833	3 042	517	1 200	970	297	109	42
2017	14 933	13 649	14 548	13 078	2 935	3 153	525	1 253	1 014	313	108	43
2018	15 533	14 237	15 409	13 763	3 038	3 257	535	1 290	1 058	326	106	42
2019	16 100	14 744	16 196	14 390	3 131	3 347	543	1 325	1 096	339	104	42
2020	16 628	15 195	16 931	14 971	3 218	3 430	550	1 357	1 130	350	103	42
2021	17 195	15 643	17 681	15 569	3 306	3 512	556	1 393	1 162	362	102	42
2022	17 772	16 080	18 436	16 171	3 390	3 591	561	1 429	1 193	374	102	42
2023	18 301	16 483	19 166	16 743	3 469	3 664	565	1 461	1 222	385	101	42
2024	18 846	16 877	19 906	17 323	3 545	3 734	568	1 493	1 251	396	101	42
2025	19 402	17 277	20 668	17 919	3 622	3 804	571	1 526	1 279	408	100	42
2026	19 968	17 679	21 452	18 528	3 698	3 875	574	1 560	1 308	419	99	42
2027	20 516	18 076	22 244	19 136	3 777	3 946	578	1 591	1 337	431	98	42
2028	21 078	18 462	23 042	19 748	3 851	4 014	580	1 623	1 365	442	98	42
2029	21 648	18 849	23 859	20 374	3 926	4 082	583	1 656	1 393	454	97	42
2030	22 236	19 245	24 709	21 021	4 002	4 152	585	1 689	1 422	466	96	41

continued

T3.2 Interstate road freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	NSW–TAS	TAS–NSW	VIC–QLD	QLD–VIC	VIC–SA	SA–VIC	VIC–WA	WA–VIC	VIC–ACT	ACT–VIC	VIC–NT	NT–VIC
Estimates												
1972	0	0	494	117	198	165	110	40	84	9	0	2
1973	0	0	585	159	252	212	175	56	82	10	0	2
1974	0	0	664	201	304	257	251	70	80	10	0	2
1975	0	0	700	222	328	278	298	73	78	11	0	3
1976	0	0	774	266	379	324	248	53	76	11	0	3
1977	0	0	808	288	403	345	286	53	74	11	0	3
1978	0	0	818	295	410	352	295	55	72	12	0	3
1979	0	0	883	339	458	395	356	66	70	12	0	3
1980	0	0	972	404	526	456	449	83	68	13	0	3
1981	0	0	1 031	450	573	499	519	96	66	13	0	3
1982	0	0	1 088	497	619	541	580	109	65	14	0	3
1983	0	0	1 004	429	551	479	456	90	63	15	0	3
1984	0	0	1 182	579	698	613	647	134	61	15	1	3
1985	0	0	1 213	606	724	637	655	143	60	16	1	3
1986	0	0	1 324	713	823	728	770	168	58	17	1	3
1987	0	0	1 339	727	836	740	747	164	57	17	1	3
1988	0	0	1 466	859	953	849	878	194	55	18	1	4
1989	0	0	1 580	985	1 062	950	987	219	54	19	2	4
1990	0	0	1 642	1 057	1 123	1 007	1 012	226	52	20	2	4
1991	0	0	1 659	1 077	1 139	1 022	948	213	51	20	2	4
1992	0	0	1 676	1 097	1 156	1 038	916	208	50	21	2	4
1993	0	0	1 786	1 234	1 268	1 143	1 031	236	48	22	3	4
1994	0	0	1 879	1 353	1 364	1 233	973	225	47	23	4	4
1995	0	0	1 971	1 477	1 461	1 325	981	229	46	24	5	4
1996	0	0	2 133	1 708	1 639	1 494	897	213	45	25	6	4
1997	0	0	2 268	1 911	1 791	1 639	782	189	43	26	8	4
1998	0	0	2 405	2 128	1 949	1 790	670	165	42	27	11	4
1999	0	0	2 566	2 395	2 140	1 974	629	155	41	28	14	5
2000	0	0	2 722	2 669	2 331	2 158	484	215	40	30	18	5
2001	0	0	2 799	2 810	2 427	2 251	376	251	39	31	20	5
2002	0	0	2 935	3 064	2 599	2 417	366	244	38	32	25	5
2003	0	0	3 088	3 363	2 797	2 609	363	242	37	33	15	13
2004	0	0	3 228	3 648	2 982	2 790	384	256	36	35	18	13
2005	0	0	3 356	3 917	3 155	2 958	417	278	35	36	22	13
2006	0	0	3 495	4 220	3 345	3 145	350	350	34	38	26	13
2007	0	0	3 680	4 638	3 604	3 399	363	363	33	39	27	14
Forecasts												
2008	0	0	4 418	5 671	3 803	3 737	570	322	37	55	29	13
2009	0	0	4 340	5 679	3 900	3 748	576	327	37	56	29	13
2010	0	0	4 468	5 832	4 036	3 911	593	335	36	58	30	13
2011	0	0	4 647	6 061	4 227	4 142	613	345	36	59	29	13
2012	0	0	4 893	6 403	4 501	4 466	641	358	34	61	29	12
2013	0	0	5 070	6 717	4 760	4 756	666	369	33	64	29	12
2014	0	0	5 260	7 055	5 040	5 072	693	382	31	66	28	11
2015	0	0	5 451	7 402	5 332	5 402	720	394	30	69	28	10
2016	0	0	5 669	7 794	5 660	5 776	752	409	29	72	28	10
2017	0	0	5 901	8 212	6 014	6 180	785	424	27	75	27	9
2018	0	0	6 056	8 556	6 319	6 513	813	437	27	78	27	9
2019	0	0	6 196	8 854	6 596	6 825	838	449	26	81	27	9
2020	0	0	6 319	9 117	6 851	7 117	861	459	25	83	27	8
2021	0	0	6 452	9 383	7 112	7 424	884	470	24	85	26	8
2022	0	0	6 585	9 645	7 375	7 739	907	480	24	88	26	8
2023	0	0	6 696	9 880	7 623	8 036	928	489	23	90	26	7
2024	0	0	6 809	10 113	7 874	8 342	949	498	22	92	26	7
2025	0	0	6 922	10 348	8 132	8 658	970	507	22	94	25	7
2026	0	0	7 033	10 584	8 394	8 983	991	516	21	96	25	7
2027	0	0	7 134	10 811	8 655	9 303	1 012	525	21	98	25	7
2028	0	0	7 237	11 033	8 917	9 631	1 032	534	20	100	24	6
2029	0	0	7 338	11 254	9 184	9 968	1 053	543	19	102	24	6
2030	0	0	7 440	11 480	9 461	10 317	1 074	551	19	104	24	6

continued

T3.2 Interstate road freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	VIC–TAS	TAS–VIC	QLD–SA	SA–QLD	QLD–WA	WA–QLD	QLD–ACT	ACT–QLD	QLD–NT	NT–QLD	QLD–TAS	TAS–QLD
Estimates												
1972	0	0	69	177	18	13	1	1	65	123	0	0
1973	0	0	87	202	29	19	1	1	79	137	0	0
1974	0	0	103	223	42	23	1	1	91	148	0	0
1975	0	0	111	232	50	24	1	1	97	153	0	0
1976	0	0	127	251	41	18	1	1	108	162	0	0
1977	0	0	134	260	48	18	1	1	113	167	0	0
1978	0	0	136	263	49	18	1	1	115	168	0	0
1979	0	0	151	279	59	22	1	1	125	176	0	0
1980	0	0	172	301	75	28	1	1	139	187	0	0
1981	0	0	186	315	86	32	1	1	149	193	0	0
1982	0	0	199	328	101	36	1	1	158	200	0	0
1983	0	0	179	308	83	30	1	1	144	190	0	0
1984	0	0	223	350	124	45	1	1	173	210	0	0
1985	0	0	231	357	133	48	1	1	178	214	0	0
1986	0	0	260	383	165	59	1	1	197	225	0	0
1987	0	0	263	386	169	61	1	1	199	227	0	0
1988	0	0	297	415	212	76	1	1	220	240	0	0
1989	0	0	329	440	254	92	1	1	239	251	0	0
1990	0	0	346	453	280	101	1	1	250	257	0	0
1991	0	0	351	457	283	103	1	1	253	259	0	0
1992	0	0	356	461	297	108	1	1	256	260	0	0
1993	0	0	387	484	365	133	1	1	274	271	0	0
1994	0	0	414	504	380	139	1	1	290	279	0	0
1995	0	0	442	523	428	157	1	1	306	287	0	0
1996	0	0	491	557	442	163	1	1	335	302	0	0
1997	0	0	533	584	443	163	1	1	358	313	0	0
1998	0	0	577	611	447	165	1	1	382	325	0	0
1999	0	0	629	643	419	155	1	1	411	338	0	0
2000	0	0	680	674	323	215	1	1	439	350	0	0
2001	0	0	706	689	251	251	1	1	453	356	0	0
2002	0	0	752	715	244	244	1	1	477	366	0	0
2003	0	0	805	744	242	242	1	1	411	276	0	0
2004	0	0	855	770	256	256	1	1	432	284	0	0
2005	0	0	900	794	278	278	1	1	451	291	0	0
2006	0	0	950	819	234	350	1	1	472	298	0	0
2007	0	0	1 018	853	242	363	1	1	499	308	0	0
Forecasts												
2008	0	0	1 029	852	383	400	1	1	634	330	0	0
2009	0	0	1 090	861	339	402	1	1	645	343	0	0
2010	0	0	1 118	904	364	417	1	1	664	348	0	0
2011	0	0	1 153	955	398	437	1	1	690	353	0	0
2012	0	0	1 204	1 011	441	466	1	1	727	362	0	0
2013	0	0	1 269	1 034	459	493	1	1	761	372	0	0
2014	0	0	1 340	1 060	479	523	1	1	799	384	0	0
2015	0	0	1 413	1 084	499	554	1	1	837	395	0	0
2016	0	0	1 495	1 113	522	589	1	1	881	408	0	0
2017	0	0	1 584	1 144	546	627	1	1	927	422	0	0
2018	0	0	1 677	1 153	549	660	1	1	968	436	0	0
2019	0	0	1 759	1 167	557	690	1	1	1 005	449	0	0
2020	0	0	1 834	1 182	565	717	1	1	1 038	459	0	0
2021	0	0	1 908	1 203	578	746	1	1	1 072	469	0	0
2022	0	0	1 979	1 226	594	774	1	1	1 105	478	0	0
2023	0	0	2 049	1 243	606	802	1	1	1 137	487	0	0
2024	0	0	2 118	1 263	620	829	1	1	1 168	495	0	0
2025	0	0	2 188	1 282	634	858	1	1	1 200	503	0	0
2026	0	0	2 260	1 301	649	886	1	1	1 232	511	0	0
2027	0	0	2 335	1 317	661	915	1	1	1 264	519	0	0
2028	0	0	2 407	1 336	675	944	1	1	1 296	527	0	0
2029	0	0	2 481	1 354	689	974	1	1	1 328	534	0	0
2030	0	0	2 557	1 372	703	1 005	1	1	1 361	542	0	0

continued

T3.2 Interstate road freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	SA–WA	WA–SA	SA–ACT	ACT–SA	SA–NT	NT–SA	SA–TAS	TAS–SA	WA–ACT	ACT–WA	WA–NT	NT–WA
Estimates												
1972	18	27	0	1	87	29	0	0	0	2	28	12
1973	29	37	0	1	104	38	0	0	0	2	35	16
1974	42	47	0	1	120	47	0	0	0	2	42	19
1975	50	49	0	1	127	51	0	0	0	2	45	21
1976	41	35	0	1	142	60	0	0	0	2	52	24
1977	48	35	0	1	149	65	0	0	0	2	55	26
1978	49	36	0	1	151	66	0	0	0	2	56	26
1979	59	44	0	1	165	75	0	0	0	2	62	30
1980	75	55	0	1	183	87	0	0	0	2	71	34
1981	86	64	0	1	195	96	0	0	0	2	77	38
1982	101	73	0	1	207	105	0	0	0	2	83	41
1983	104	60	0	1	190	92	0	0	0	2	74	36
1984	186	89	0	1	227	120	0	0	0	2	93	46
1985	232	95	0	1	234	125	0	0	0	2	96	48
1986	329	132	0	1	258	144	0	0	0	2	109	55
1987	381	150	0	1	261	146	0	0	0	2	111	56
1988	529	206	0	1	288	169	0	0	0	2	125	64
1989	699	269	0	1	313	191	0	0	0	2	139	71
1990	839	320	0	1	327	203	0	0	0	2	147	76
1991	919	348	0	1	331	207	0	0	0	2	149	77
1992	1 038	391	0	1	334	210	0	0	0	2	151	78
1993	1 369	513	1	1	359	233	0	0	2	2	165	86
1994	1 520	567	1	1	379	253	0	0	2	2	177	93
1995	1 817	676	1	1	400	273	0	0	2	2	189	100
1996	1 989	738	1	1	437	311	0	0	2	2	211	112
1997	2 104	779	1	1	467	343	0	0	2	2	230	123
1998	2 234	826	1	1	499	377	0	0	2	2	250	135
1999	2 097	775	1	1	535	419	0	0	2	2	273	149
2000	1 613	1 075	1	1	572	461	0	0	2	2	296	162
2001	1 254	1 253	1	1	590	482	0	0	2	2	308	169
2002	1 221	1 221	1	1	621	520	0	0	2	2	329	182
2003	1 211	1 211	1	1	506	184	0	0	2	2	353	196
2004	1 281	1 281	1	1	532	198	0	0	2	2	376	210
2005	1 388	1 388	1	1	555	210	0	0	2	2	396	223
2006	1 168	1 752	1	1	581	225	0	0	2	2	419	237
2007	1 211	1 816	1	1	615	244	0	0	2	2	450	256
Forecasts												
2008	1 284	1 900	1	1	631	249	0	0	4	4	474	212
2009	1 327	1 877	1	1	610	251	0	0	4	4	462	224
2010	1 375	1 945	1	1	633	269	0	0	4	4	482	227
2011	1 442	2 040	1	1	665	291	0	0	4	4	510	229
2012	1 538	2 175	1	1	706	321	0	0	4	4	546	232
2013	1 628	2 303	1	1	733	347	0	0	4	4	571	239
2014	1 727	2 443	1	1	762	375	0	0	4	4	598	246
2015	1 829	2 587	1	1	791	405	0	0	4	4	626	253
2016	1 945	2 751	1	1	824	439	0	0	4	4	658	262
2017	2 069	2 927	1	1	859	476	0	0	4	4	692	271
2018	2 177	3 079	1	1	880	507	0	0	4	4	714	281
2019	2 276	3 219	1	1	900	537	0	0	4	4	736	289
2020	2 367	3 348	1	1	918	567	0	0	4	4	757	296
2021	2 461	3 481	1	1	940	599	0	0	4	4	780	303
2022	2 556	3 615	1	1	962	633	0	0	4	4	803	309
2023	2 646	3 742	1	1	980	666	0	0	4	4	825	314
2024	2 737	3 871	1	1	1 000	700	0	0	4	4	847	319
2025	2 830	4 003	1	1	1 019	736	0	0	4	4	869	324
2026	2 926	4 138	1	1	1 038	773	0	0	4	4	892	329
2027	3 021	4 273	1	1	1 056	810	0	0	3	3	913	335
2028	3 117	4 409	1	1	1 075	848	0	0	3	3	936	340
2029	3 215	4 547	1	1	1 093	888	0	0	3	3	958	344
2030	3 316	4 691	1	1	1 112	930	0	0	3	3	981	349

continued

T3.2 Interstate road freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	WA–TAS	TAS–WA	ACT–NT	NT–ACT	ACT–TAS	TAS–ACT	NT–TAS	TAS–NT	Total Australia
Estimates									
1972	0	0	2	2	0	0	0	0	5 380
1973	0	0	2	2	0	0	0	0	6 629
1974	0	0	2	2	0	0	0	0	7 801
1975	0	0	2	2	0	0	0	0	8 347
1976	0	0	2	2	0	0	0	0	9 157
1977	0	0	2	2	0	0	0	0	9 667
1978	0	0	2	2	0	0	0	0	9 825
1979	0	0	2	2	0	0	0	0	10 839
1980	0	0	2	2	0	0	0	0	12 280
1981	0	0	2	2	0	0	0	0	13 269
1982	0	0	2	2	0	0	0	0	14 249
1983	0	0	2	2	0	0	0	0	12 811
1984	0	0	2	2	0	0	0	0	15 928
1985	0	0	2	2	0	0	0	0	16 491
1986	0	0	2	2	0	0	0	0	18 599
1987	0	0	2	2	0	0	0	0	18 882
1988	0	0	2	2	0	0	0	0	21 414
1989	0	0	2	2	0	0	0	0	23 777
1990	0	0	2	2	0	0	0	0	25 120
1991	0	0	2	2	0	0	0	0	25 421
1992	0	0	2	2	0	0	0	0	25 874
1993	0	0	2	2	0	0	0	0	28 598
1994	0	0	2	2	0	0	0	0	30 342
1995	0	0	2	2	0	0	0	0	32 523
1996	0	0	2	2	0	0	0	0	35 542
1997	0	0	2	2	0	0	0	0	37 950
1998	0	0	2	2	0	0	0	0	40 478
1999	0	0	2	2	0	0	0	0	43 097
2000	0	0	2	2	0	0	0	0	45 703
2001	0	0	2	2	0	0	0	0	46 843
2002	0	0	2	2	0	0	0	0	49 348
2003	0	0	2	2	0	0	0	0	51 594
2004	0	0	2	2	0	0	0	0	54 633
2005	0	0	2	2	0	0	0	0	57 601
2006	0	0	2	2	0	0	0	0	60 698
2007	0	0	2	2	0	0	0	0	64 713
Forecasts									
2008	0	0	5	5	0	0	0	0	70 446
2009	0	0	5	5	0	0	0	0	71 375
2010	0	0	5	5	0	0	0	0	73 771
2011	0	0	5	5	0	0	0	0	77 033
2012	0	0	5	5	0	0	0	0	81 609
2013	0	0	5	5	0	0	0	0	85 756
2014	0	0	4	4	0	0	0	0	90 252
2015	0	0	4	4	0	0	0	0	94 890
2016	0	0	4	4	0	0	0	0	100 137
2017	0	0	4	4	0	0	0	0	105 770
2018	0	0	4	4	0	0	0	0	110 531
2019	0	0	4	4	0	0	0	0	114 861
2020	0	0	4	4	0	0	0	0	118 841
2021	0	0	4	4	0	0	0	0	122 952
2022	0	0	4	4	0	0	0	0	127 071
2023	0	0	4	4	0	0	0	0	130 916
2024	0	0	4	4	0	0	0	0	134 800
2025	0	0	4	4	0	0	0	0	138 768
2026	0	0	4	4	0	0	0	0	142 807
2027	0	0	4	4	0	0	0	0	146 799
2028	0	0	4	4	0	0	0	0	150 808
2029	0	0	4	4	0	0	0	0	154 878
2030	0	0	4	4	0	0	0	0	159 078

Source: BITRE estimates.

3.3 Summary

The total interstate road freight task showed an average increase of 7.4 per cent per annum between 1972 and 2007. Although the global financial crisis will dampen total interstate road freight growth during the early years of forecast period (i.e. 2008–2010), it is forecast to increase at an average annual growth rate of 3.8 per cent from 2008 to 2030. Much of the explanation for the lower interstate road freight forecast growth rate compared to the past road freight growth lies in assumed lower economic growth, the growing saturating effect, and fact that road will no longer be rapidly growing mode share. However, some routes will grow faster than other routes over the next 22 years.

The next chapter (Chapter 4) provides aggregate interstate rail freight estimates and forecasts, interstate rail freight tasks by 56 individual origin–destination routes, as well as traffic shares of dominant both ways traffic routes.

CHAPTER 4

Interstate rail freight estimates and forecasts, 1972–2030

4.1 Background

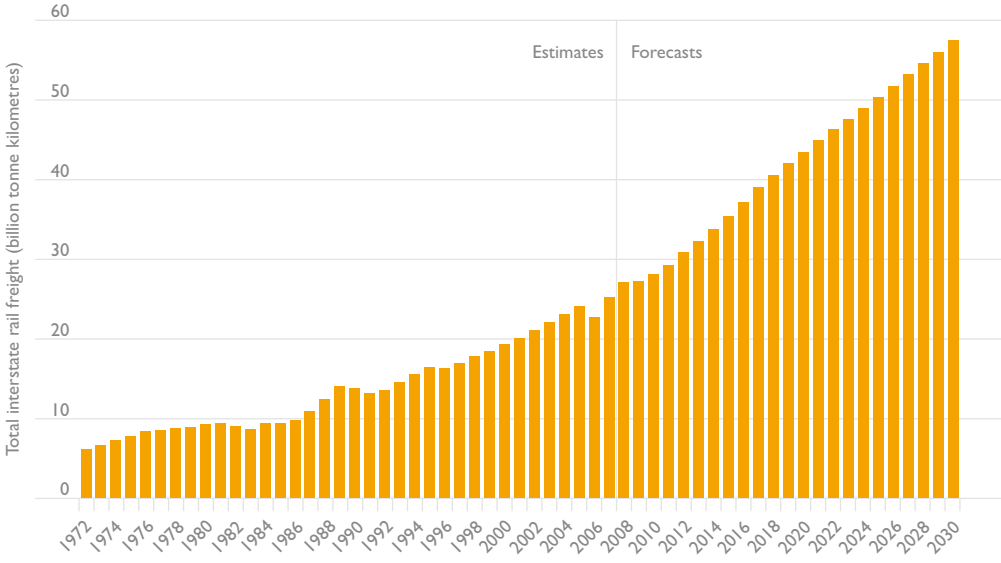
This chapter provides estimates (1972–2007) and forecasts (2008–2030) for total interstate rail freight, as well as for 56 individual origin–destination (OD) routes. It also calculates shares of total interstate rail freight accounted for by eastern states–Western Australia long-haul both ways traffic routes and also four major eastern states both ways traffic routes between 1972 and 2030.

4.2 Interstate rail freight task

4.2.1 Total (sum of all 56 OD routes)

The total (sum of all 56 OD routes) interstate rail freight task increased at an average annual growth of 4.2 per cent, from 6.1 billion tonne-kilometres (tkm) in 1972 to 25.2 billion tkm in 2007 (Figure 4.1). (Data underlying this figure can be found in Appendix A, Table A.57).

F4.1 Total interstate rail freight tasks, all 56 origin–destination routes, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimates.

However, total interstate rail freight task was substantially lower in 2006 compared to 2005. This is due to the lower rail freight carried on the SA–WA, WA–SA, SA–NT and NT–SA OD traffic routes.

The total interstate rail freight task is forecast to grow over the next 22 years at an average annual growth rate of 3.5 per cent, from 27.1 billion tkm in 2008 to 57.4 billion tkm in 2030. However, the global financial crisis will dampen rail freight growth in the early years of forecast period (i.e. 2008–2010), as shown in Figure 4.1.

4.2.2 Individual OD routes

Table 4.1 shows the average annual growth rate of interstate rail freight estimates (1972–2007) and forecasts (2008–2030) by individual OD routes, while Table 4.2 provides the underlying rail freight estimate and forecast data.

Between 1972 and 2007, interstate rail freight traffic grew positively on several OD routes. The largest growth was on the routes from Western Australia to the three major eastern states (New South Wales, Victoria and Queensland). This increase is partly driven by the mining boom in Western Australia. Although Victoria–Northern Territory grew substantially, the interstate rail freight task was only started in the mid-1980s. However, interstate rail freight task on the NSW–ACT route declined from 157 million tonne-kilometres (tkm) in 1972 to 10 million tkm in 2007 (Table 4.2), at an average rate of –7.4 per cent per annum (Table 4.1). Rail freight traffic on this route is projected to cease by 2010. This is because transporting petroleum products by rail from NSW to ACT was by Shell ceased in late 2009. Shell has changed distribution system, from rail to road.

Over the next 22 years (2008–2030), the interstate rail freight tasks on several routes (e.g. NSW–SA, SA–NSW, QLD–SA and SA–QLD) are projected to decline substantially. During the forecast period, interstate rail freight tasks on some routes (e.g. VIC–NSW and QLD–VIC) are expected to grow faster. These variations are due to different levels of responsiveness to economic activity.

T4.1 Average annual growth rate (per cent) of interstate rail freight tasks by all 56 OD routes, 1972–2030

OD routes	Average annual growth rate (per cent)	
	1972–2007	2008–2030
NSW–VIC	0.8	1.1
VIC–NSW	–0.4	10.4
NSW–QLD	1.4	–0.7
QLD–NSW	–0.8	3.0
NSW–SA	4.8	–7.4
SA–NSW	1.0	–2.3
NSW–WA	5.6	1.1
WA–NSW	10.8	2.9
NSW–ACT	–7.4	nd
ACT–NSW	7.3	3.7
NSW–NT	0.0	–0.8
NT–NSW	4.0	–0.1
NSW–TAS	nd	nd
TAS–NSW	nd	nd
VIC–QLD	5.2	5.1
QLD–VIC	8.2	6.9
VIC–SA	4.0	4.9
SA–VIC	1.8	3.3
VIC–WA	5.3	2.9
WA–VIC	13.7	2.5
VIC–ACT	nd	nd
ACT–VIC	nd	nd
VIC–NT	24.6	–0.9
NT–VIC	nd	–0.3
VIC–TAS	nd	nd
TAS–VIC	nd	nd
QLD–SA	5.0	–4.6
SA–QLD	3.7	–3.8
QLD–WA	10.0	2.8
WA–QLD	15.6	4.3
QLD–ACT	nd	nd
ACT–QLD	nd	nd
QLD–NT	nd	nd
NT–QLD	nd	nd
QLD–TAS	nd	nd
TAS–QLD	nd	nd
SA–WA	4.2	4.4
WA–SA	5.0	4.2
SA–ACT	nd	nd
ACT–SA	nd	nd
SA–NT	3.5	3.3
NT–SA	2.3	2.3
SA–TAS	nd	nd
TAS–SA	nd	nd
WA–ACT	nd	nd
ACT–WA	nd	nd
WA–NT	nd	nd
NT–WA	nd	nd
WA–TAS	nd	nd
TAS–WA	nd	nd
ACT–NT	nd	nd
NT–ACT	nd	nd
ACT–TAS	nd	nd
TAS–ACT	nd	nd
NT–TAS	nd	nd
TAS–NT	nd	nd
All 56 OD routes	4.2	3.5

nd not determined due to no data.

Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: Table 4.2.

T4.2 Interstate rail freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030

Year	NSW–VIC	VIC–NSW	NSW–QLD	QLD–NSW	NSW–SA	SA–NSW	NSW–WA	WA–NSW	NSW–ACT	ACT–NSW	NSW–NT	NT–NSW
Estimates												
1972	768	431	700	295	106	350	431	49	157	16	14	1
1973	768	428	761	299	106	350	562	152	132	20	14	1
1974	768	424	822	304	106	350	692	254	108	23	14	2
1975	768	420	883	308	106	350	823	356	84	25	14	3
1976	768	416	944	313	106	350	954	459	59	28	14	4
1977	768	419	979	327	119	405	999	418	58	29	14	4
1978	768	422	1 014	341	132	459	1 045	377	56	30	14	4
1979	768	425	1 049	355	145	513	1 090	336	55	33	14	4
1980	768	427	1 084	370	158	568	1 135	295	53	37	14	4
1981	768	430	1 158	350	146	613	1 114	299	51	40	14	4
1982	621	433	1 059	381	133	558	1 017	410	46	43	14	4
1983	474	436	960	413	119	503	921	520	41	39	14	2
1984	561	452	1 042	356	142	601	1 080	369	49	47	14	3
1985	545	493	1 034	402	148	581	1 063	381	51	49	14	3
1986	566	463	1 165	543	103	522	1 253	471	36	54	14	2
1987	711	482	1 212	583	203	526	1 299	442	38	55	14	3
1988	652	553	1 334	539	232	681	2 005	426	40	62	14	4
1989	737	632	1 557	553	262	720	2 211	446	38	67	14	4
1990	728	579	1 490	570	307	742	1 908	467	37	71	14	4
1991	648	552	1 275	508	273	581	1 803	426	36	72	14	4
1992	642	401	1 188	522	203	622	1 959	496	34	73	14	4
1993	707	423	1 210	504	296	742	2 082	596	30	79	14	4
1994	772	438	1 233	487	389	787	2 205	697	25	84	14	4
1995	837	453	1 255	470	481	832	2 329	799	20	89	14	4
1996	965	405	1 225	452	533	699	2 362	524	21	98	14	4
1997	975	429	1 087	424	569	587	2 467	758	24	105	14	4
1998	981	417	1 072	539	529	536	2 535	971	28	113	14	4
1999	965	378	1 063	443	543	501	2 560	1 269	28	123	14	4
2000	1 046	378	962	457	530	501	2 585	1 226	30	132	14	4
2001	1 127	378	855	457	530	501	2 610	1 184	31	137	14	4
2002	1 111	378	850	457	530	501	2 635	1 374	21	145	14	4
2003	1 094	378	844	457	530	501	2 656	1 564	10	154	14	4
2004	1 078	378	839	457	530	501	2 682	1 754	10	163	14	4
2005	1 065	378	834	457	530	501	2 707	1 944	10	171	14	4
2006	778	378	931	553	530	501	2 535	2 359	10	180	14	4
2007	1 017	378	1 142	222	549	501	2 871	1 777	10	192	14	4
Forecasts												
2008	1 082	460	1 216	177	539	506	2 854	2 224	10	209	6	2
2009	1 052	532	1 206	182	529	502	2 960	2 188	11	209	6	1
2010	1 072	611	1 208	187	516	497	2 987	2 269	0	216	6	2
2011	1 104	700	1 223	194	500	493	2 997	2 375	0	227	6	2
2012	1 152	808	1 259	204	487	492	3 014	2 513	0	242	6	2
2013	1 184	923	1 290	213	472	489	3 049	2 611	0	254	6	2
2014	1 217	1 050	1 322	223	457	487	3 088	2 717	0	268	6	2
2015	1 249	1 186	1 351	233	441	483	3 125	2 825	0	281	6	2
2016	1 286	1 339	1 384	245	426	481	3 173	2 947	0	297	6	2
2017	1 325	1 506	1 416	257	411	478	3 225	3 077	0	313	6	2
2018	1 345	1 675	1 433	267	394	474	3 289	3 167	0	326	6	2
2019	1 360	1 844	1 436	275	375	466	3 338	3 253	0	339	6	2
2020	1 369	2 014	1 428	282	354	456	3 378	3 332	0	350	6	2
2021	1 379	2 192	1 415	289	332	445	3 415	3 419	0	362	6	2
2022	1 388	2 376	1 397	296	309	433	3 444	3 508	0	374	6	2
2023	1 390	2 564	1 372	302	285	419	3 470	3 586	0	385	5	2
2024	1 392	2 758	1 341	308	260	405	3 490	3 666	0	396	5	2
2025	1 393	2 961	1 306	314	235	389	3 510	3 747	0	408	5	2
2026	1 392	3 173	1 266	319	209	373	3 528	3 829	0	419	5	2
2027	1 387	3 392	1 221	325	183	357	3 550	3 905	0	431	5	2
2028	1 382	3 617	1 170	330	156	339	3 565	3 985	0	442	5	2
2029	1 375	3 851	1 114	335	128	321	3 580	4 064	0	454	5	2
2030	1 367	4 096	1 053	340	100	303	3 595	4 145	0	466	5	2

continued

T4.2 Interstate rail freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	NSW–TAS	TAS–NSW	VIC–QLD	QLD–VIC	VIC–SA	SA–VIC	VIC–WA	WA–VIC	VIC–ACT	ACT–VIC	VIC–NT	NT–VIC
Estimates												
1972	0	0	253	82	330	373	425	31	6	0	0	0
1973	0	0	274	79	332	373	529	78	6	0	0	0
1974	0	0	294	77	334	373	632	125	7	0	0	0
1975	0	0	315	74	336	373	735	172	8	0	0	0
1976	0	0	335	71	339	373	839	219	8	0	0	0
1977	0	0	359	74	344	392	810	232	9	0	0	0
1978	0	0	382	78	350	411	781	245	10	0	0	0
1979	0	0	406	81	356	430	752	258	10	0	0	0
1980	0	0	429	84	362	449	723	271	11	0	0	0
1981	0	0	422	75	399	477	821	369	12	0	0	0
1982	0	0	364	81	408	435	826	451	12	0	0	0
1983	0	0	307	88	417	393	830	532	13	0	0	0
1984	0	0	345	134	507	468	896	466	15	0	1	0
1985	0	0	339	153	531	448	919	383	16	0	1	0
1986	0	0	385	155	463	407	899	383	14	0	1	0
1987	0	0	337	163	462	458	1 029	480	12	0	1	3
1988	0	0	406	163	520	525	1 144	477	10	0	1	5
1989	0	0	512	218	601	580	1 401	536	9	0	2	5
1990	0	0	510	255	617	472	1 314	522	8	0	2	5
1991	0	0	577	276	649	448	1 231	560	8	0	2	5
1992	0	0	816	360	672	479	1 185	685	7	0	2	5
1993	0	0	866	382	679	542	1 102	743	0	0	3	8
1994	0	0	916	405	621	605	1 267	801	0	0	4	9
1995	0	0	966	427	563	667	1 433	859	0	0	5	10
1996	0	0	899	372	559	679	1 513	738	0	0	6	11
1997	0	0	1 010	446	742	604	1 637	731	0	0	8	8
1998	0	0	1 004	563	1 020	680	1 761	891	0	0	11	0
1999	0	0	1 330	490	996	543	1 885	981	0	0	14	5
2000	0	0	1 345	578	1 025	580	2 009	1 166	0	0	18	7
2001	0	0	1 361	666	1 055	616	2 136	1 346	0	0	20	8
2002	0	0	1 377	753	1 085	653	2 260	1 531	0	0	25	8
2003	0	0	1 392	841	1 115	690	2 382	1 712	0	0	15	8
2004	0	0	1 408	928	1 145	726	2 507	1 896	0	0	18	8
2005	0	0	1 423	1 016	1 174	763	2 631	2 077	0	0	22	8
2006	0	0	1 468	1 404	1 285	638	2 090	2 380	0	0	26	8
2007	0	0	1 514	1 305	1 305	689	2 611	2 769	0	0	27	8
Forecasts												
2008	0	0	1 582	1 664	1 423	804	2 940	2 507	0	0	29	1
2009	0	0	1 600	1 737	1 469	796	2 975	2 543	0	0	29	1
2010	0	0	1 695	1 857	1 530	819	3 059	2 606	0	0	30	1
2011	0	0	1 814	2 007	1 613	856	3 164	2 680	0	0	29	1
2012	0	0	1 964	2 204	1 729	911	3 309	2 781	0	0	29	1
2013	0	0	2 092	2 401	1 841	957	3 438	2 871	0	0	29	1
2014	0	0	2 231	2 618	1 962	1 007	3 578	2 969	0	0	28	1
2015	0	0	2 375	2 848	2 089	1 058	3 719	3 066	0	0	28	1
2016	0	0	2 537	3 109	2 232	1 116	3 880	3 178	0	0	28	1
2017	0	0	2 711	3 393	2 387	1 178	4 051	3 297	0	0	27	1
2018	0	0	2 856	3 660	2 525	1 225	4 197	3 400	0	0	27	1
2019	0	0	2 998	3 920	2 653	1 266	4 326	3 491	0	0	27	1
2020	0	0	3 137	4 175	2 773	1 303	4 444	3 572	0	0	27	1
2021	0	0	3 285	4 443	2 897	1 340	4 565	3 654	0	0	26	1
2022	0	0	3 438	4 719	3 024	1 378	4 683	3 734	0	0	26	1
2023	0	0	3 584	4 994	3 145	1 412	4 791	3 805	0	0	26	1
2024	0	0	3 736	5 279	3 270	1 446	4 898	3 875	0	0	26	1
2025	0	0	3 892	5 577	3 398	1 481	5 006	3 946	0	0	25	1
2026	0	0	4 051	5 886	3 530	1 516	5 115	4 016	0	0	25	1
2027	0	0	4 210	6 203	3 663	1 549	5 222	4 086	0	0	25	1
2028	0	0	4 374	6 529	3 797	1 582	5 328	4 153	0	0	24	1
2029	0	0	4 541	6 867	3 936	1 615	5 434	4 220	0	0	24	0
2030	0	0	4 715	7 221	4 079	1 649	5 543	4 288	0	0	24	1

continued

T4.2 Interstate rail freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	VIC–TAS	TAS–VIC	QLD–SA	SA–QLD	QLD–WA	WA–QLD	QLD–ACT	ACT–QLD	QLD–NT	NT–QLD	QLD–TAS	TAS–QLD
Estimates												
1972	0	0	35	171	32	5	0	0	0	0	0	0
1973	0	0	34	152	30	48	0	0	0	0	0	0
1974	0	0	33	133	29	91	0	0	0	0	0	0
1975	0	0	32	114	28	134	0	0	0	0	0	0
1976	0	0	31	95	26	177	0	0	0	0	0	0
1977	0	0	28	147	32	137	0	0	0	0	0	0
1978	0	0	26	199	37	97	0	0	0	0	0	0
1979	0	0	24	250	42	56	0	0	0	0	0	0
1980	0	0	22	302	48	16	0	0	0	0	0	0
1981	0	0	22	238	32	22	0	0	0	0	0	0
1982	0	0	13	217	26	35	0	0	0	0	0	0
1983	0	0	4	196	21	48	0	0	0	0	0	0
1984	0	0	20	235	21	75	0	0	0	0	0	0
1985	0	0	24	232	16	75	0	0	0	0	0	0
1986	0	0	26	204	11	113	0	0	0	0	0	0
1987	0	0	39	210	11	140	0	0	0	0	0	0
1988	0	0	59	274	53	177	0	0	0	0	0	0
1989	0	0	107	358	42	226	0	0	0	0	0	0
1990	0	0	157	453	26	118	0	0	0	0	0	0
1991	0	0	170	380	74	237	0	0	0	0	0	0
1992	0	0	138	403	132	285	0	0	0	0	0	0
1993	0	0	132	459	194	326	0	0	0	0	0	0
1994	0	0	126	514	256	367	0	0	0	0	0	0
1995	0	0	120	570	318	409	0	0	0	0	0	0
1996	0	0	103	501	471	511	0	0	0	0	0	0
1997	0	0	122	509	492	570	0	0	0	0	0	0
1998	0	0	127	509	466	505	0	0	0	0	0	0
1999	0	0	81	559	474	548	0	0	0	0	0	0
2000	0	0	108	545	482	575	0	0	0	0	0	0
2001	0	0	135	531	490	602	0	0	0	0	0	0
2002	0	0	140	509	498	697	0	0	0	0	0	0
2003	0	0	144	487	506	791	0	0	0	0	0	0
2004	0	0	149	464	514	886	0	0	0	0	0	0
2005	0	0	153	442	522	981	0	0	0	0	0	0
2006	0	0	157	419	498	1 344	0	0	0	0	0	0
2007	0	0	194	607	879	871	0	0	0	0	0	0
Forecasts												
2008	0	0	192	557	994	1 229	0	0	0	0	0	0
2009	0	0	195	440	880	1 234	0	0	0	0	0	0
2010	0	0	191	445	943	1 279	0	0	0	0	0	0
2011	0	0	187	451	1 033	1 341	0	0	0	0	0	0
2012	0	0	186	460	1 144	1 430	0	0	0	0	0	0
2013	0	0	186	452	1 191	1 515	0	0	0	0	0	0
2014	0	0	186	444	1 242	1 606	0	0	0	0	0	0
2015	0	0	185	435	1 294	1 702	0	0	0	0	0	0
2016	0	0	185	428	1 352	1 809	0	0	0	0	0	0
2017	0	0	184	421	1 415	1 925	0	0	0	0	0	0
2018	0	0	182	405	1 423	2 025	0	0	0	0	0	0
2019	0	0	178	391	1 443	2 117	0	0	0	0	0	0
2020	0	0	173	377	1 464	2 202	0	0	0	0	0	0
2021	0	0	166	365	1 499	2 289	0	0	0	0	0	0
2022	0	0	159	353	1 540	2 377	0	0	0	0	0	0
2023	0	0	150	339	1 571	2 461	0	0	0	0	0	0
2024	0	0	140	326	1 608	2 545	0	0	0	0	0	0
2025	0	0	130	312	1 645	2 632	0	0	0	0	0	0
2026	0	0	119	299	1 683	2 721	0	0	0	0	0	0
2027	0	0	108	284	1 713	2 810	0	0	0	0	0	0
2028	0	0	95	269	1 749	2 899	0	0	0	0	0	0
2029	0	0	82	254	1 786	2 990	0	0	0	0	0	0
2030	0	0	68	239	1 824	3 085	0	0	0	0	0	0

continued

T4.2 Interstate rail freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	SA–WA	WA–SA	SA–ACT	ACT–SA	SA–NT	NT–SA	SA–TAS	TAS–SA	WA–ACT	ACT–WA	WA–NT	NT–WA
Estimates												
1972	451	203	1	0	209	126	0	0	4	0	0	0
1973	564	205	2	0	185	114	0	0	6	0	0	9
1974	677	207	2	0	162	102	0	0	8	0	0	17
1975	790	209	2	0	138	91	0	0	10	0	0	26
1976	904	211	3	0	114	79	0	0	13	0	0	34
1977	919	213	3	0	136	91	0	0	12	0	0	33
1978	934	216	3	0	159	103	0	0	10	0	0	31
1979	948	218	3	0	181	115	0	0	9	0	0	30
1980	963	220	3	0	203	127	0	0	8	0	0	28
1981	906	287	3	0	199	127	0	0	8	0	0	26
1982	826	276	3	0	187	116	0	0	7	0	0	23
1983	746	266	2	0	175	106	0	0	7	0	0	21
1984	888	314	2	0	194	126	0	0	8	0	0	28
1985	849	367	2	0	186	120	0	0	10	0	0	24
1986	774	434	2	0	169	109	0	0	12	0	0	22
1987	1 155	409	2	0	208	130	0	0	8	0	0	22
1988	1 220	398	1	0	246	151	0	0	4	0	0	23
1989	1 336	455	1	0	262	161	0	0	4	0	0	23
1990	1 569	437	1	0	277	171	0	0	4	0	0	17
1991	1 388	402	1	0	291	182	0	0	4	0	0	17
1992	1 357	365	1	0	306	193	0	0	4	0	0	17
1993	1 437	407	0	0	351	206	0	0	0	0	0	17
1994	1 419	434	0	0	397	219	0	0	0	0	0	17
1995	1 401	462	0	0	442	232	0	0	0	0	0	17
1996	1 549	460	0	0	453	245	0	0	0	0	0	17
1997	1 554	381	0	0	449	216	0	0	0	0	0	0
1998	1 554	379	0	0	417	292	0	0	0	0	0	0
1999	1 554	520	0	0	400	258	0	0	0	0	0	0
2000	1 629	661	0	0	436	287	0	0	0	0	0	0
2001	1 701	800	0	0	472	317	0	0	0	0	0	0
2002	1 776	941	0	0	508	346	0	0	0	0	0	0
2003	1 849	1 082	0	0	544	376	0	0	0	0	0	0
2004	1 924	1 223	0	0	579	405	0	0	0	0	0	0
2005	1 996	1 361	0	0	615	405	0	0	0	0	0	0
2006	917	814	0	0	374	222	0	0	0	0	0	0
2007	1 872	1 123	0	0	705	279	0	0	0	0	0	0
Forecasts												
2008	1 708	1 325	0	0	766	274	0	0	0	0	0	0
2009	1 765	1 308	0	0	747	266	0	0	0	0	0	0
2010	1 829	1 356	0	0	780	274	0	0	0	0	0	0
2011	1 919	1 422	0	0	824	286	0	0	0	0	0	0
2012	2 046	1 517	0	0	881	303	0	0	0	0	0	0
2013	2 167	1 606	0	0	920	316	0	0	0	0	0	0
2014	2 298	1 703	0	0	962	329	0	0	0	0	0	0
2015	2 434	1 804	0	0	1 005	342	0	0	0	0	0	0
2016	2 588	1 918	0	0	1 054	358	0	0	0	0	0	0
2017	2 753	2 041	0	0	1 106	374	0	0	0	0	0	0
2018	2 897	2 147	0	0	1 140	384	0	0	0	0	0	0
2019	3 028	2 244	0	0	1 174	392	0	0	0	0	0	0
2020	3 150	2 334	0	0	1 206	399	0	0	0	0	0	0
2021	3 275	2 427	0	0	1 242	407	0	0	0	0	0	0
2022	3 401	2 520	0	0	1 279	415	0	0	0	0	0	0
2023	3 520	2 609	0	0	1 312	421	0	0	0	0	0	0
2024	3 641	2 699	0	0	1 346	427	0	0	0	0	0	0
2025	3 766	2 791	0	0	1 382	432	0	0	0	0	0	0
2026	3 893	2 885	0	0	1 417	438	0	0	0	0	0	0
2027	4 019	2 979	0	0	1 450	443	0	0	0	0	0	0
2028	4 147	3 074	0	0	1 485	447	0	0	0	0	0	0
2029	4 278	3 171	0	0	1 521	451	0	0	0	0	0	0
2030	4 413	3 271	0	0	1 557	455	0	0	0	0	0	0

continued

T4.2 Interstate rail freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	WA–TAS	TAS–WA	ACT–NT	NT–ACT	ACT–TAS	TAS–ACT	NT–TAS	TAS–NT	Total Australia
Estimates									
1972	0	0	0	0	0	0	0	0	6 052
1973	0	0	0	0	0	0	0	0	6 608
1974	0	0	0	0	0	0	0	0	7 163
1975	0	0	0	0	0	0	0	0	7 719
1976	0	0	0	0	0	0	0	0	8 275
1977	0	0	0	0	0	0	0	0	8 498
1978	0	0	0	0	0	0	0	0	8 720
1979	0	0	0	0	0	0	0	0	8 943
1980	0	0	0	0	0	0	0	0	9 166
1981	0	0	0	0	0	0	0	0	9 409
1982	0	0	0	0	0	0	0	0	9 003
1983	0	0	0	0	0	0	0	0	8 596
1984	0	0	0	0	0	0	0	0	9 437
1985	0	0	0	0	0	0	0	0	9 436
1986	0	0	0	0	0	0	0	0	9 745
1987	0	0	0	0	0	0	0	0	10 817
1988	0	0	0	0	0	0	0	0	12 366
1989	0	0	0	0	0	0	0	0	14 046
1990	0	0	0	0	0	0	0	0	13 814
1991	0	0	0	0	0	0	0	0	13 055
1992	0	0	0	0	0	0	0	0	13 530
1993	0	0	0	0	0	0	0	0	14 497
1994	0	0	0	0	0	0	0	0	15 465
1995	0	0	0	0	0	0	0	0	16 432
1996	0	0	0	0	0	0	0	0	16 329
1997	0	0	0	0	0	0	0	0	16 854
1998	0	0	0	0	0	0	0	0	17 835
1999	0	0	0	0	0	0	0	0	18 446
2000	0	0	0	0	0	0	0	0	19 212
2001	0	0	0	0	0	0	0	0	19 965
2002	0	0	0	0	0	0	0	0	20 990
2003	0	0	0	0	0	0	0	0	22 005
2004	0	0	0	0	0	0	0	0	23 042
2005	0	0	0	0	0	0	0	0	24 045
2006	0	0	0	0	0	0	0	0	22 640
2007	0	0	0	0	0	0	0	0	25 248
Forecasts									
2008	0	0	0	0	0	0	0	0	27 079
2009	0	0	0	0	0	0	0	0	27 159
2010	0	0	0	0	0	0	0	0	28 049
2011	0	0	0	0	0	0	0	0	29 227
2012	0	0	0	0	0	0	0	0	30 837
2013	0	0	0	0	0	0	0	0	32 226
2014	0	0	0	0	0	0	0	0	33 737
2015	0	0	0	0	0	0	0	0	35 292
2016	0	0	0	0	0	0	0	0	37 064
2017	0	0	0	0	0	0	0	0	38 970
2018	0	0	0	0	0	0	0	0	40 548
2019	0	0	0	0	0	0	0	0	42 006
2020	0	0	0	0	0	0	0	0	43 360
2021	0	0	0	0	0	0	0	0	44 780
2022	0	0	0	0	0	0	0	0	46 210
2023	0	0	0	0	0	0	0	0	47 541
2024	0	0	0	0	0	0	0	0	48 895
2025	0	0	0	0	0	0	0	0	50 281
2026	0	0	0	0	0	0	0	0	51 695
2027	0	0	0	0	0	0	0	0	53 093
2028	0	0	0	0	0	0	0	0	54 509
2029	0	0	0	0	0	0	0	0	55 949
2030	0	0	0	0	0	0	0	0	57 441

Source: BITRE estimates.

4.3 Summary

The total interstate rail freight task showed an average increase of 4.2 per cent per annum between 1972 and 2007. As with interstate road freight, the global financial crisis will also dampen total interstate rail freight growth during the early years of forecast period (i.e. 2008–2010). However, it is forecast to increase at an average annual growth rate of 3.5 per cent from 2008 to 2030, although some routes will grow faster than other routes over the next 22 years.

The next chapter (Chapter 5) provides total interstate coastal shipping freight estimates and forecast, interstate freight tasks by 56 individual origin–destination routes, as well as traffic shares by dominant both ways traffic routes.

CHAPTER 5

Interstate coastal shipping freight estimates and forecasts, 1972–2030

5.1 Background

This chapter provides estimates (1972–2007) and forecasts (2008–2030) for total interstate coastal shipping freight as well as for 56 individual origin–destination (OD) routes. It also provides share of coastal shipping freight estimates and forecasts on NSW–TAS and VIC–TAS both ways traffic routes and on long-distance VIC–WA and NSW–WA both ways traffic routes from 1972 to 2030.

5.2 Interstate coastal shipping freight tasks

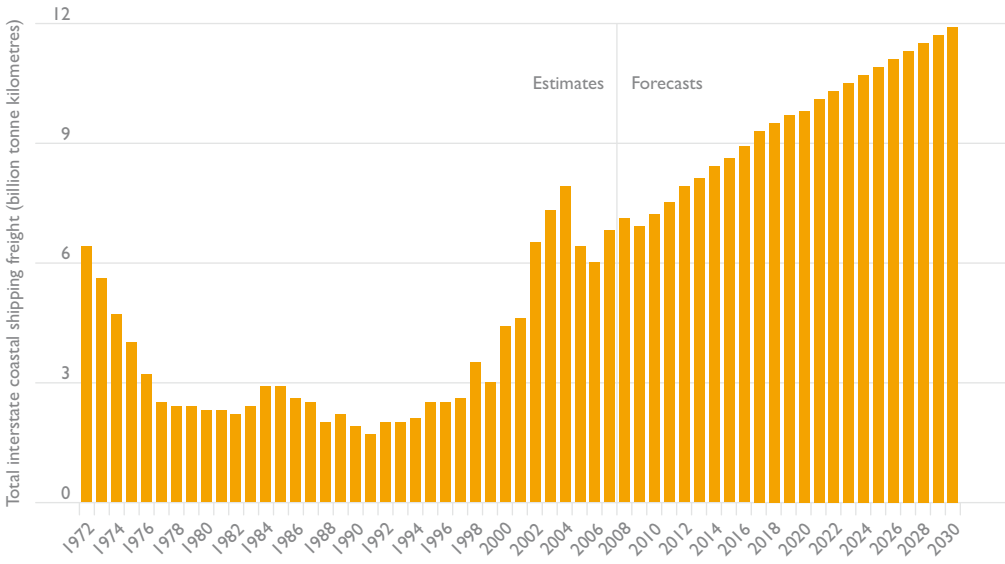
5.2.1 Total (sum of all 56 OD routes)

The total (sum of all 56 OD routes) interstate coastal shipping freight task increased marginally, at an average annual growth of 0.2 cent, from 6.4 billion tonne-kilometres (tkm) in 1972 to 6.8 billion tkm in 2007 (Figure 5.1). (Data underlying this figure can be found in Appendix A, Table A.57).

From 2002 to 2004, the substantial increase in the interstate coastal shipping freight task was largely due to the higher freight task carried out between Tasmania and Western Australia (see Table 5.2).

On the other hand, the total interstate coastal shipping freight task is forecast to grow faster over the next 22 years—averaging 2.4 per cent per annum, going from 7.1 billion tkm in 2008 to 11.9 billion tkm in 2030. However, the global financial crisis will also dampen coastal shipping freight growth in the early years of forecast period (i.e. 2008–2010), as shown in Figure 5.1. (Data underlying this figure can be found in Appendix A, Table A.57).

F5.1 Total interstate coastal shipping freight tasks, all 56 OD routes, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimates.

5.2.2 *Individual OD routes*

Table 5.1 shows the average annual growth rate of interstate coastal shipping freight estimates (1972–2007) and forecasts (2008–2030) by individual OD routes (all 56 routes), while Table 5.2 provides the underlying interstate coastal shipping freight estimates and forecasts data.

Due to different levels of responsiveness to economic activity, interstate coastal shipping freight task grew substantially (more than 8.0 per cent per annum) during 1972 to 2007 on the VIC–SA, TAS–WA and WA–TAS routes, while another 11 OD routes showed positive or no growth (Table 5.1). On the other hand, interstate coastal shipping freight tasks grew negatively on 20 OD routes. Among these OD routes, interstate coastal shipping freight task on the SA–TAS, QLD–VIC and QLD–NSW OD routes declined by more than 7.0 per cent per annum during this period (Table 5.1).

Interstate coastal shipping freight is forecast to grow positively over the next 22 years (2008–2030) on many of the interstate OD routes, while NSW–NT is projected to decline by 0.6 per cent per annum.

T5.1 Average annual growth rate (per cent) of interstate coastal shipping freight by all 56 OD routes, 1972–2030

OD routes	Average annual growth rate (per cent)	
	1972–2007	2008–2030
NSW–VIC	–3.7	3.5
VIC–NSW	–2.7	3.8
NSW–QLD	2.2	4.5
QLD–NSW	–7.1	4.4
NSW–SA	3.2	1.4
SA–NSW	nd	nd
NSW–WA	2.2	1.1
WA–NSW	–5.8	2.9
NSW–ACT	nd	nd
ACT–NSW	nd	nd
NSW–NT	–6.0	–1.5
NT–NSW	nd	nd
NSW–TAS	–3.4	–0.9
TAS–NSW	–2.3	–0.9
VIC–QLD	–1.9	3.2
QLD–VIC	–7.4	4.3
VIC–SA	9.8	4.5
SA–VIC	–5.9	4.7
VIC–WA	0.8	2.9
WA–VIC	–6.0	2.5
VIC–ACT	nd	nd
ACT–VIC	nd	nd
VIC–NT	nd	nd
NT–VIC	nd	nd
VIC–TAS	1.7	–0.4
TAS–VIC	1.7	3.4
QLD–SA	–0.4	3.6
SA–QLD	nd	1.4
QLD–WA	2.5	2.8
WA–QLD	–2.4	4.3
QLD–ACT	nd	nd
ACT–QLD	nd	nd
QLD–NT	2.3	3.5
NT–QLD	nd	nd
QLD–TAS	–2.8	–0.9
TAS–QLD	–3.9	–0.9
SA–WA	2.2	4.4
WA–SA	–2.0	4.2
SA–ACT	nd	nd
ACT–SA	nd	nd
SA–NT	nd	nd
NT–SA	nd	nd
SA–TAS	–10.9	–0.9
TAS–SA	–3.9	–0.9
WA–ACT	nd	nd
ACT–WA	nd	nd
WA–NT	–2.0	1.7
NT–WA	–6.6	2.3
WA–TAS	8.0	–0.9
TAS–WA	9.6	–0.9
ACT–NT	nd	nd
NT–ACT	nd	nd
ACT–TAS	nd	nd
TAS–ACT	nd	nd
NT–TAS	0.0	–0.9
TAS–NT	0.0	–0.9
All 56 OD routes	0.2	2.4

Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

nd not determined due to no data.

Source: Table 5.2.

T5.2 Interstate coastal shipping freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030

Year	NSW–VIC	VIC–NSW	NSW–QLD	QLD–NSW	NSW–SA	SA–NSW	NSW–WA	WA–NSW	NSW–ACT	ACT–NSW	NSW–NT	NT–NSW
Estimates												
1972	196	54	131	68	6	4	540	644	0	0	118	12
1973	136	92	128	66	6	4	500	487	0	0	109	12
1974	77	130	125	64	6	4	461	329	0	0	99	12
1975	52	131	93	50	6	0	386	241	0	0	90	8
1976	26	131	61	37	6	0	310	153	0	0	81	4
1977	23	57	55	46	6	0	303	0	0	0	72	0
1978	20	57	48	55	6	0	295	0	0	0	63	0
1979	16	57	41	65	6	0	288	0	0	0	54	0
1980	13	57	35	74	6	0	280	0	0	0	45	0
1981	10	57	28	83	6	0	273	0	0	0	36	0
1982	7	57	21	92	6	0	265	0	0	0	27	0
1983	3	57	16	102	21	30	257	0	0	0	18	0
1984	3	2	30	75	2	0	420	79	0	0	4	0
1985	3	12	35	14	0	0	507	119	0	0	0	0
1986	3	0	28	4	2	0	531	23	0	0	0	0
1987	2	0	4	6	0	0	292	0	0	0	0	0
1988	2	2	2	4	0	0	2	0	0	0	0	0
1989	3	2	6	0	0	45	77	23	0	0	0	0
1990	3	0	7	12	7	0	5	0	0	0	0	0
1991	3	7	11	4	8	0	25	0	0	0	0	0
1992	3	3	5	5	2	0	59	6	0	0	0	0
1993	4	10	7	8	11	0	44	11	0	0	0	0
1994	3	42	12	8	7	0	94	6	0	0	18	4
1995	4	12	12	16	6	0	235	23	0	0	0	4
1996	4	30	28	6	10	0	201	6	0	0	27	4
1997	53	34	15	4	0	4	193	0	0	0	40	0
1998	106	39	89	47	1	6	265	2	0	0	25	0
1999	30	7	68	10	0	1	8	45	0	0	14	2
2000	92	26	93	43	5	6	424	241	0	0	37	0
2001	37	30	77	253	61	7	633	130	0	0	20	0
2002	56	4	25	26	6	34	623	372	0	0	5	0
2003	75	16	112	15	20	4	712	607	0	0	28	0
2004	21	20	217	240	7	5	629	46	0	0	9	0
2005	34	30	158	79	13	0	634	191	0	0	23	1
2006	42	21	137	1	15	0	878	51	0	0	13	0
2007	53	21	279	5	19	0	1 152	79	0	0	13	0
Forecasts												
2008	40	36	205	101	13	0	953	63	0	0	10	0
2009	40	37	209	105	13	0	988	62	0	0	9	0
2010	41	38	217	109	14	0	997	64	0	0	9	0
2011	43	39	227	114	14	0	1 001	68	0	0	9	0
2012	46	42	241	121	14	0	1 006	71	0	0	10	0
2013	49	44	256	129	14	0	1 018	74	0	0	9	0
2014	51	46	272	136	15	0	1 031	77	0	0	9	0
2015	53	49	289	144	15	0	1 043	80	0	0	9	0
2016	56	51	308	153	15	0	1 059	84	0	0	9	0
2017	59	54	328	163	16	0	1 077	87	0	0	9	0
2018	62	57	347	171	16	0	1 098	90	0	0	9	0
2019	64	59	363	179	16	0	1 114	92	0	0	8	0
2020	66	61	378	186	16	0	1 128	95	0	0	8	0
2021	68	63	394	193	17	0	1 140	97	0	0	8	0
2022	70	66	409	200	17	0	1 150	100	0	0	8	0
2023	72	68	424	207	17	0	1 159	102	0	0	8	0
2024	74	70	439	214	17	0	1 165	104	0	0	8	0
2025	76	72	455	221	17	0	1 172	107	0	0	8	0
2026	78	74	470	229	17	0	1 178	109	0	0	7	0
2027	80	76	486	236	18	0	1 185	111	0	0	7	0
2028	82	78	502	243	18	0	1 190	113	0	0	7	0
2029	84	80	518	251	18	0	1 195	116	0	0	7	0
2030	86	82	535	259	18	0	1 200	118	0	0	7	0

continued

T5.2 Interstate coastal shipping freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	NSW–TAS	TAS–NSW	VIC–QLD	QLD–VIC	VIC–SA	SA–VIC	VIC–WA	WA–VIC	VIC–ACT	ACT–VIC	VIC–NT	NT–VIC
Estimates												
1972	168	255	491	112	7	22	600	801	0	0	61	40
1973	175	171	414	112	10	22	588	781	0	0	56	38
1974	182	87	337	112	12	22	577	762	0	0	50	35
1975	192	75	267	106	25	11	405	523	0	0	53	33
1976	203	63	197	100	38	0	234	283	0	0	57	30
1977	186	94	171	42	37	0	213	14	0	0	60	27
1978	169	125	145	42	36	0	193	14	0	0	63	24
1979	153	156	119	42	35	0	172	14	0	0	67	21
1980	136	187	93	42	34	0	151	14	0	0	70	19
1981	119	218	67	42	33	0	130	14	0	0	73	16
1982	102	249	41	42	32	0	109	14	0	0	77	13
1983	86	281	14	42	31	4	89	14	0	0	80	10
1984	121	331	19	90	10	0	71	67	0	0	10	5
1985	117	318	12	17	7	0	239	86	0	0	0	0
1986	139	271	10	2	0	20	203	29	0	0	0	0
1987	129	341	5	0	0	0	149	29	0	0	0	0
1988	120	190	0	0	0	0	198	10	0	0	0	0
1989	105	306	2	0	0	0	130	19	0	0	0	0
1990	97	147	0	0	0	13	62	5	0	0	0	0
1991	101	170	0	0	0	1	30	10	0	0	0	0
1992	147	210	10	0	0	0	54	0	0	0	0	0
1993	97	186	14	134	0	0	125	19	0	0	0	0
1994	107	147	24	15	3	4	160	5	0	0	0	0
1995	76	206	14	2	3	0	247	19	0	0	0	0
1996	54	122	40	18	48	0	229	5	0	0	18	4
1997	37	1	36	30	5	3	271	0	0	0	0	0
1998	16	12	122	20	16	7	291	32	0	0	0	0
1999	13	3	61	52	10	0	384	21	0	0	0	0
2000	43	222	196	54	14	1	603	29	0	0	0	0
2001	62	77	99	106	29	67	599	95	0	0	0	0
2002	35	54	191	21	50	0	713	233	0	0	0	0
2003	38	46	298	25	44	0	953	451	0	0	0	0
2004	36	55	551	14	67	4	907	75	0	0	0	0
2005	44	392	490	5	114	8	876	149	0	0	0	0
2006	64	40	408	10	130	0	785	72	0	0	0	0
2007	50	113	250	7	196	3	800	91	0	0	0	0
Forecasts												
2008	43	105	662	9	132	9	979	79	0	0	0	0
2009	44	105	655	9	136	9	991	81	0	0	0	0
2010	44	106	679	9	141	9	1 019	83	0	0	0	0
2011	44	106	711	10	148	10	1 054	85	0	0	0	0
2012	43	105	755	10	158	11	1 102	88	0	0	0	0
2013	43	103	788	11	168	11	1 145	91	0	0	0	0
2014	42	102	824	11	178	12	1 191	94	0	0	0	0
2015	41	100	860	12	189	13	1 238	97	0	0	0	0
2016	41	99	901	13	201	14	1 292	101	0	0	0	0
2017	40	98	945	14	214	15	1 349	104	0	0	0	0
2018	40	97	978	14	225	16	1 397	108	0	0	0	0
2019	40	96	1 008	15	236	16	1 441	111	0	0	0	0
2020	39	95	1 036	16	246	17	1 480	113	0	0	0	0
2021	39	94	1 067	16	256	18	1 520	116	0	0	0	0
2022	39	94	1 098	17	266	18	1 559	118	0	0	0	0
2023	38	93	1 125	17	275	19	1 595	121	0	0	0	0
2024	38	92	1 154	18	285	20	1 631	123	0	0	0	0
2025	38	91	1 182	19	295	21	1 667	125	0	0	0	0
2026	37	90	1 211	19	305	21	1 703	127	0	0	0	0
2027	37	89	1 239	20	316	22	1 739	129	0	0	0	0
2028	36	88	1 268	21	326	23	1 774	132	0	0	0	0
2029	36	87	1 296	21	336	24	1 810	134	0	0	0	0
2030	35	86	1 326	22	347	25	1 846	136	0	0	0	0

continued

T5.2 Interstate coastal shipping freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	VIC–TAS	TAS–VIC	QLD–SA	SA–QLD	QLD–WA	WA–QLD	QLD–ACT	ACT–QLD	QLD–NT	NT–QLD	QLD–TAS	TAS–QLD
Estimates												
1972	675	559	13	0	224	60	0	0	42	0	36	10
1973	576	369	13	1	206	49	0	0	64	0	18	13
1974	477	179	13	1	188	36	0	0	86	0	1	16
1975	520	154	8	2	133	23	0	0	75	0	4	17
1976	563	129	0	1	79	10	0	0	63	0	6	18
1977	519	152	0	0	9	10	0	0	63	0	8	35
1978	475	175	0	0	9	9	0	0	63	0	10	53
1979	432	198	0	0	9	8	0	0	63	0	12	71
1980	388	220	0	0	9	7	0	0	63	0	14	89
1981	344	243	0	0	9	7	0	0	63	0	16	107
1982	301	266	0	0	9	6	0	0	63	0	18	125
1983	262	288	4	0	9	5	0	0	64	32	21	143
1984	307	339	0	0	4	0	0	0	101	70	26	140
1985	323	333	34	3	0	0	0	0	24	0	2	125
1986	354	331	0	0	0	0	0	0	24	8	17	120
1987	419	439	0	0	0	0	0	0	20	0	28	155
1988	430	430	8	0	0	0	0	0	10	0	2	68
1989	524	494	0	0	9	16	0	0	0	0	9	10
1990	544	536	42	0	0	0	0	0	3	0	2	28
1991	479	593	0	0	0	5	0	0	0	0	2	3
1992	513	520	0	0	4	203	0	0	0	0	2	3
1993	536	513	53	0	4	0	0	0	3	0	7	5
1994	559	614	11	0	57	0	0	0	0	3	5	3
1995	615	589	0	0	44	5	0	0	7	0	12	3
1996	670	621	0	2	9	5	0	0	41	0	3	0
1997	702	685	0	0	19	0	0	0	88	0	2	3
1998	684	677	0	3	113	157	0	0	108	1	1	0
1999	690	685	0	1	154	148	0	0	39	1	3	10
2000	795	708	8	1	211	51	0	0	101	2	1	0
2001	682	725	4	6	334	5	0	0	98	7	15	4
2002	814	885	1	12	184	20	0	0	106	9	12	41
2003	921	1 054	1	8	361	107	0	0	109	9	14	8
2004	1 062	1 218	0	5	581	80	0	0	106	33	2	65
2005	1 149	1 252	3	0	263	12	0	0	97	0	13	35
2006	1 158	1 021	27	3	407	10	0	0	92	0	13	10
2007	1 207	1 006	11	18	539	26	0	0	92	0	13	3
Forecasts												
2008	1 207	1 281	4	0	617	17	0	0	159	0	14	25
2009	1 067	1 235	4	0	546	17	0	0	162	0	14	25
2010	1 121	1 293	4	0	585	18	0	0	166	0	14	25
2011	1 187	1 373	4	0	641	19	0	0	173	0	14	25
2012	1 254	1 479	5	0	710	20	0	0	182	0	14	25
2013	1 248	1 549	5	0	739	21	0	0	191	0	14	25
2014	1 243	1 625	5	0	771	22	0	0	200	0	14	24
2015	1 237	1 704	5	0	803	23	0	0	210	0	14	24
2016	1 236	1 792	6	0	839	25	0	0	221	0	13	24
2017	1 235	1 886	6	0	878	27	0	0	232	0	13	23
2018	1 198	1 945	6	0	883	28	0	0	243	0	13	23
2019	1 176	2 003	6	0	895	29	0	0	252	0	13	23
2020	1 159	2 058	7	0	908	30	0	0	260	0	13	23
2021	1 153	2 122	7	0	930	32	0	0	268	0	13	22
2022	1 151	2 188	7	0	955	33	0	0	277	0	13	22
2023	1 142	2 246	7	0	974	34	0	0	285	0	13	22
2024	1 138	2 308	7	0	997	35	0	0	293	0	12	22
2025	1 132	2 370	8	0	1 020	36	0	0	301	0	12	22
2026	1 127	2 434	8	0	1 044	38	0	0	309	0	12	21
2027	1 117	2 493	8	0	1 062	39	0	0	317	0	12	21
2028	1 111	2 555	8	0	1 085	40	0	0	325	0	12	21
2029	1 105	2 619	9	0	1 108	41	0	0	333	0	12	21
2030	1 099	2 684	9	0	1 131	43	0	0	341	0	12	20

continued

T5.2 Interstate coastal shipping freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	SA–WA	WA–SA	SA–ACT	ACT–SA	SA–NT	NT–SA	SA–TAS	TAS–SA	WA–ACT	ACT–WA	WA–NT	NT–WA
Estimates												
1972	17	58	0	0	25	0	97	65	0	0	69	63
1973	13	31	0	0	12	0	81	42	0	0	68	59
1974	10	3	0	0	0	0	66	19	0	0	67	56
1975	10	2	0	0	0	0	88	25	0	0	67	62
1976	10	0	0	0	0	0	110	31	0	0	66	69
1977	0	0	0	0	0	0	100	41	0	0	65	65
1978	0	0	0	0	0	0	89	50	0	0	64	61
1979	0	0	0	0	0	0	79	60	0	0	63	57
1980	0	0	0	0	0	0	68	70	0	0	62	53
1981	0	0	0	0	0	0	58	80	0	0	61	49
1982	0	0	0	0	0	0	47	90	0	0	60	45
1983	0	0	0	0	0	0	38	101	0	0	59	41
1984	0	3	0	0	0	0	113	94	0	0	66	6
1985	0	0	0	0	0	0	94	40	0	0	59	6
1986	0	0	0	0	6	0	72	2	0	0	76	9
1987	0	0	0	0	0	0	62	40	0	0	76	6
1988	6	3	0	0	0	0	62	47	0	0	59	6
1989	3	10	0	0	0	0	2	28	0	0	66	9
1990	0	0	0	0	0	0	2	2	0	0	97	6
1991	5	0	0	0	0	0	2	7	0	0	31	9
1992	17	52	0	0	0	0	2	28	0	0	35	18
1993	17	10	0	0	0	0	2	21	0	0	38	12
1994	1	0	0	0	0	0	2	3	0	0	73	15
1995	12	52	0	0	0	0	2	30	0	0	62	9
1996	11	18	0	0	0	0	2	2	0	0	61	7
1997	20	0	0	0	81	0	19	2	0	0	0	0
1998	29	14	0	0	0	0	0	2	0	0	56	132
1999	14	10	0	0	0	0	1	8	0	0	69	11
2000	17	87	0	0	0	0	1	3	0	0	39	8
2001	73	20	0	0	0	0	2	2	0	0	42	16
2002	29	72	0	0	18	0	4	28	0	0	40	14
2003	59	38	0	0	0	0	0	69	0	0	48	18
2004	39	63	0	0	0	0	2	10	0	0	57	260
2005	51	37	0	0	0	0	0	16	0	0	32	8
2006	15	29	0	0	0	0	2	16	0	0	28	23
2007	36	29	0	0	0	0	2	16	0	0	35	6
Forecasts												
2008	41	48	0	0	0	0	2	17	0	0	21	7
2009	42	48	0	0	0	0	2	17	0	0	21	7
2010	44	50	0	0	0	0	2	18	0	0	21	7
2011	46	52	0	0	0	0	2	18	0	0	22	7
2012	49	55	0	0	0	0	2	17	0	0	23	8
2013	52	59	0	0	0	0	2	17	0	0	24	8
2014	55	62	0	0	0	0	2	17	0	0	24	8
2015	58	66	0	0	0	0	2	17	0	0	25	8
2016	62	70	0	0	0	0	2	16	0	0	26	8
2017	66	75	0	0	0	0	2	16	0	0	27	9
2018	69	78	0	0	0	0	2	16	0	0	27	9
2019	72	82	0	0	0	0	2	16	0	0	28	9
2020	75	85	0	0	0	0	2	16	0	0	28	10
2021	78	89	0	0	0	0	2	16	0	0	28	10
2022	81	92	0	0	0	0	2	16	0	0	29	10
2023	84	95	0	0	0	0	2	15	0	0	29	10
2024	87	99	0	0	0	0	1	15	0	0	29	10
2025	90	102	0	0	0	0	1	15	0	0	30	10
2026	93	105	0	0	0	0	1	15	0	0	30	11
2027	96	109	0	0	0	0	1	15	0	0	30	11
2028	99	112	0	0	0	0	1	15	0	0	30	11
2029	102	116	0	0	0	0	1	14	0	0	31	11
2030	105	120	0	0	0	0	1	14	0	0	31	11

continued

T5.2 Interstate coastal shipping freight estimates and forecasts (million tkm), by all 56 OD routes, 1972–2030 (continued)

Year	WA–TAS	TAS–WA	ACT–NT	NT–ACT	ACT–TAS	TAS–ACT	NT–TAS	TAS–NT	Total Australia
Estimates									
1972	3	24	0	0	0	0	5	6	6 382
1973	3	24	0	0	0	0	5	6	5 564
1974	3	24	0	0	0	0	5	6	4 744
1975	3	17	0	0	0	0	5	6	3 967
1976	3	10	0	0	0	0	5	6	3 192
1977	3	3	0	0	0	0	5	6	2 489
1978	3	3	0	0	0	0	5	6	2 432
1979	3	3	0	0	0	0	5	6	2 374
1980	3	3	0	0	0	0	5	6	2 317
1981	3	3	0	0	0	0	5	6	2 260
1982	3	3	0	0	0	0	5	6	2 203
1983	29	177	0	0	0	0	5	6	2 440
1984	58	184	0	0	0	0	5	17	2 874
1985	71	243	0	0	0	0	5	6	2 854
1986	61	205	0	0	0	0	5	6	2 559
1987	74	243	0	0	0	0	5	6	2 529
1988	125	205	0	0	0	0	5	6	2 001
1989	116	191	0	0	0	0	5	6	2 213
1990	132	163	0	0	0	0	5	6	1 925
1991	67	156	0	0	0	0	5	6	1 739
1992	39	62	0	0	0	0	5	6	2 011
1993	3	104	0	0	0	0	5	6	2 010
1994	22	87	0	0	0	0	5	6	2 124
1995	42	80	0	0	0	0	5	6	2 452
1996	26	173	0	0	0	0	5	6	2 515
1997	3	201	0	0	0	0	5	6	2 561
1998	110	282	0	0	0	0	5	10	3 478
1999	58	380	0	0	0	0	5	0	3 017
2000	41	215	0	0	0	0	5	12	4 436
2001	22	128	0	0	0	0	5	4	4 576
2002	1 024	723	0	0	0	0	5	6	6 494
2003	30	961	0	0	0	0	5	6	7 271
2004	15	1 391	0	0	0	0	5	6	7 905
2005	26	41	0	0	0	0	5	72	6 356
2006	22	468	0	0	0	0	5	6	6 022
2007	48	600	0	0	0	0	5	6	6 827
Forecasts									
2008	26	173	0	0	0	0	5	6	7 111
2009	26	174	0	0	0	0	5	6	6 910
2010	26	175	0	0	0	0	5	6	7 159
2011	26	175	0	0	0	0	5	6	7 477
2012	26	173	0	0	0	0	5	6	7 877
2013	25	170	0	0	0	0	5	6	8 111
2014	25	168	0	0	0	0	5	6	8 369
2015	24	165	0	0	0	0	5	6	8 629
2016	24	163	0	0	0	0	5	5	8 934
2017	24	161	0	0	0	0	5	5	9 263
2018	24	160	0	0	0	0	5	5	9 458
2019	23	158	0	0	0	0	5	5	9 657
2020	23	157	0	0	0	0	5	5	9 845
2021	23	156	0	0	0	0	5	5	10 065
2022	23	154	0	0	0	0	4	5	10 291
2023	23	153	0	0	0	0	4	5	10 485
2024	22	151	0	0	0	0	4	5	10 689
2025	22	150	0	0	0	0	4	5	10 896
2026	22	148	0	0	0	0	4	5	11 104
2027	22	146	0	0	0	0	4	5	11 299
2028	21	145	0	0	0	0	4	5	11 503
2029	21	143	0	0	0	0	4	5	11 708
2030	21	141	0	0	0	0	4	5	11 920

Source: BITRE estimates.

5.3 Summary

The total interstate coastal shipping freight task grew marginally over the past 35 years—averaging only 0.2 per cent per annum, while it is forecast to grow substantially, at the rate of 2.4 per cent per annum, between 2008 and 2030. This variation in coastal freight growth rates is due to the presence of 'collapse' and 'no growth' episodes in the historical period.

In terms of individual origin–destination (OD) routes, most showed negative growth during 1972 to 2007, but many are expected to grow positively during the next 22 years. The interstate coastal shipping freight tasks are expected to grow faster on some OD routes.

The next chapter (Chapter 6) provides total interstate freight estimates and forecasts by transport mode (i.e. road, rail and coastal shipping) on the North–South and East–West corridors.

CHAPTER 6

Interstate freight tasks on the North–South and East–West corridors, 1972–2030

6.1 Background

The interstate transport network in Australia is split into two major corridors. These are: the North–South corridor and the East–West corridor.

This chapter presents the interstate freight task (total and by transport mode) on the North–South and East–West corridors between 1972 and 2007 (estimates) as well as forecasts (projected freight demand) from 2008 to 2030, based on origin–destination routes.

It also presents the comparison of average annual growth rates and transport mode shares (both estimates and forecasts) between the North–South and the East–West corridors. Three major types of transport modes (i.e. road, rail and coastal shipping) are used for each of the corridors.

6.2 Corridor definitions and characteristics

The interstate freight estimates and forecasts for the North–South and the East–West corridors are based on various portions (line segments).

The North–South corridor services three distinct interstate general freight markets (Melbourne–Brisbane, Melbourne–Sydney and Sydney–Brisbane) as well as portions of more peripheral origin–destination routes. The East–West corridor is more isolated and thus more distinct in its markets.

Table 6.1 lists the origin–destination pairs that are part of the North–South corridor along with line segments of road, rail and coastal shipping routes used and route distances, while Table 6.2 lists the same for the East–West corridor.

The North–South corridor refers to the eastern part of the country, spreading from Adelaide and Tasmania to Queensland, while the East–West corridor refers to the six eastern states and territory (NSW, VIC, QLD, SA, TAS and the ACT) to Western Australia.

The North–South road, rail and coastal shipping line segments are widespread, as defined in Table 6.1. On the other hand, the East–West road and rail corridors are defined here as the

road or rail distances from Crystal Brook (South Australia) to Perth (Western Australia), while the coastal shipping corridor is defined as the coastal shipping distance from Adelaide (South Australia) to Fremantle (Western Australia) (Table 6.2).

The 'corridor distances' are defined from the point where the traffic enters the corridor to where it leaves the corridor. Thus, for example, the TAS–NSW road distance is taken as the road distance, and the SA–NSW coastal shipping distance as the coastal shipping distance from Melbourne to Sydney.

The tonnage data is converted to tonne-kilometres (tkm) by multiplying distances of the route portion where freight has been moved.

T6.1 North–south corridor: origin–destination pairs, portions of road, rail and coastal shipping routes used, and distances.

Route 1	Route 2	Portion (line segment)—road	Road distance (km)	Portion (line segment)—rail	Rail distance (km)	Portion (line segment)—coastal shipping	Coastal shipping distance (km)
NSW–VIC	VIC–NSW	Sydney–Melbourne (Hume Hwy)	881	Melbourne–Sydney	926	Melbourne–Sydney	1 052
NSW–QLD	QLD–NSW	Sydney–Brisbane (Pacific Hwy)	926	Brisbane–Sydney	969	Sydney–Brisbane	915
NSW–SA	SA–NSW	Sydney–Tarcutta	412	Sydney–Cootamundra	412	Melbourne–Sydney	1 052
NSW–WA	WA–NSW	Sydney–Tarcutta	412	Sydney–Cootamundra	412	Melbourne–Sydney	1 052
NSW–TAS	TAS–NSW	Sydney–Melbourne (Hume Hwy)	881	Melbourne–Sydney	926	Melbourne–Sydney	1 052
NSW–NT	NT–NSW	Sydney–Tarcutta	412	Sydney–Cootamundra	409	Sydney–Brisbane	915
NSW–ACT	ACT–NSW	Sydney–Goulburn	196	Sydney–Goulburn	207	–	–
VIC–QLD	QLD–VIC	Brisbane–Dubbo–Melbourne (Newell Hwy)	1 691	Melbourne–Brisbane	1 894	Melbourne–Brisbane	1 959
VIC–ACT	ACT–VIC	Melbourne–Yass	606	Melbourne–Goulburn	887	–	–
QLD–SA	SA–QLD	Brisbane–Dubbo (Newell Hwy)	859	Brisbane–Cootamundra	1 381	Melbourne–Brisbane	1 959
QLD–WA	WA–QLD	Brisbane–Dubbo (Newell Hwy)	859	Brisbane–Cootamundra	1 381	Melbourne–Brisbane	1 959
QLD–TAS	TAS–QLD	Brisbane–Dubbo–Melbourne (Newell Hwy)	1 691	Brisbane–Melbourne	1 895	Melbourne–Brisbane	1 959
QLD–ACT	ACT–QLD	Brisbane–Dubbo–Yass (Newell Hwy)	1 227	Brisbane–Goulburn	1 176	–	–
SA–ACT	ACT–SA	Yass–Tarcutta	146	Cootamundra–Goulburn	206	–	–
WA–ACT	ACT–WA	Yass–Tarcutta	146	Cootamundra–Goulburn	206	–	–
ACT–TAS	TAS–ACT	Yass–Melbourne (Hume Hwy)	606	Goulburn–Melbourne	887	–	–
ACT–NT	NT–ACT	Tarcutta–Yass	146	Goulburn–Cootamundra	206	–	–

Sources: For road distances, www.maps.google.com. For rail distances, BITRE estimates from ARTC (2004) and WestNetRail (2006). For coastal shipping distances, Llyod's Maritime Atlas.

T6.2 East–West corridor: origin–destination pairs, portions of road, rail and coastal shipping routes used, and distances.

Route 1	Route 2	Portion (line segment)—road	Road distance (km)	Portion (line segment)—rail	Rail distance (km)	Portion (line segment)—coastal shipping	Coastal shipping distance (km)
NSW–WA	WA–NSW	Crystal Brook (SA)–Perth	2 502	Crystal Brook–Perth	2 459	Adelaide–Fremantle	2 495
VIC–WA	WA–VIC	Crystal Brook (SA)–Perth	2 502	Crystal Brook–Perth	2 459	Adelaide–Fremantle	2 495
QLD–WA	WA–QLD	Crystal Brook (SA)–Perth	2 502	Crystal Brook–Perth	2 459	Adelaide–Fremantle	2 495
SA–WA	WA–SA	Crystal Brook (SA)–Perth	2 502	Crystal Brook–Perth	2 459	Adelaide–Fremantle	2 495
WA–TAS	TAS–WA	Crystal Brook (SA)–Perth	2 502	Crystal Brook–Perth	2 459	Adelaide–Fremantle	2 495
WA–ACT	ACT–WA	Crystal Brook (SA)–Perth	2 502	Crystal Brook–Perth	2 459	Adelaide–Fremantle	2 495

Sources: For road distances, www.maps.google.com. For rail distances, BITRE estimates from ARTC (2004) and WestNetRail (2006). For coastal shipping distances Llyod's Maritime Atlas.

6.3 Interstate freight tasks on the North–South corridor

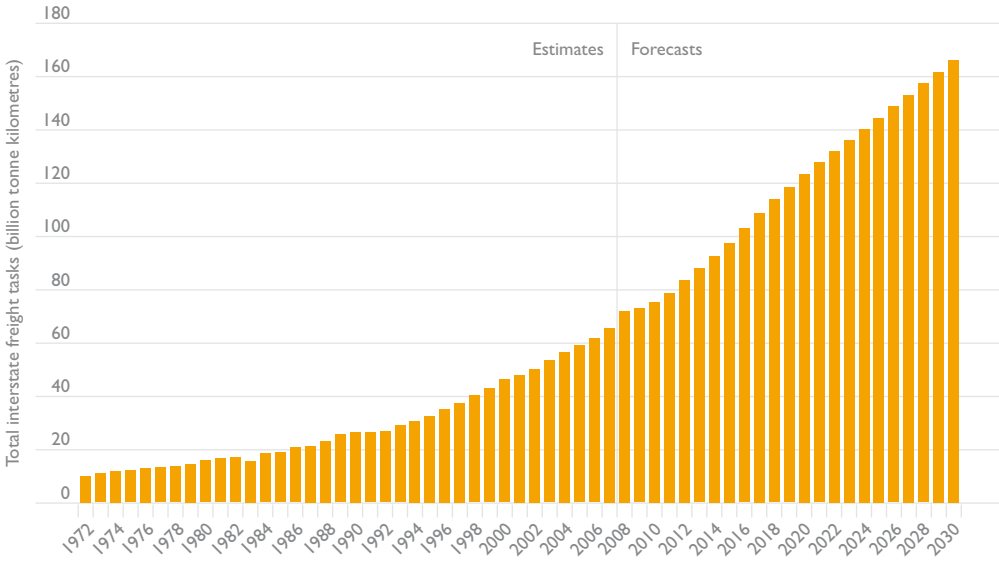
This section provides results on total interstate freight task (as billion tonne-kilometres or tkm) estimates (1972–2007) and forecasts (2008–2030) on the North–south corridor by all transport modes (i.e. road, rail and coastal shipping) as well as individual transport mode and modal shares.

6.3.1 Total interstate freight task—all transport modes

Interstate freight tasks on the North–South corridor from 1972 to 2007 (estimates of historical data) by all transport modes (i.e. road, rail and coastal shipping) increased from 9.9 tkm to 65.4 billion tkm (Figure 6.1), at an average annual growth rate of 5.5 per cent (Table 6.3). (Data underlying Figure 6.1 can be found in Appendix E; see Table E.1).

On the other hand, between 2008 and 2030 (forecast), interstate freight tasks on the North–South corridor is expected to increase from 71.7 billion tkm to 165.9 billion tkm, at an average annual growth rate of 3.9 per cent (Table 6.3). Much of the explanation for the lower forecast growth rate on the North–South corridor lies assumed lower economic growth, plus the growing saturation effect.

F6.1 Total (all transport modes) interstate freight estimates and forecasts on the North–south corridor, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.
Source: BITRE estimtes.

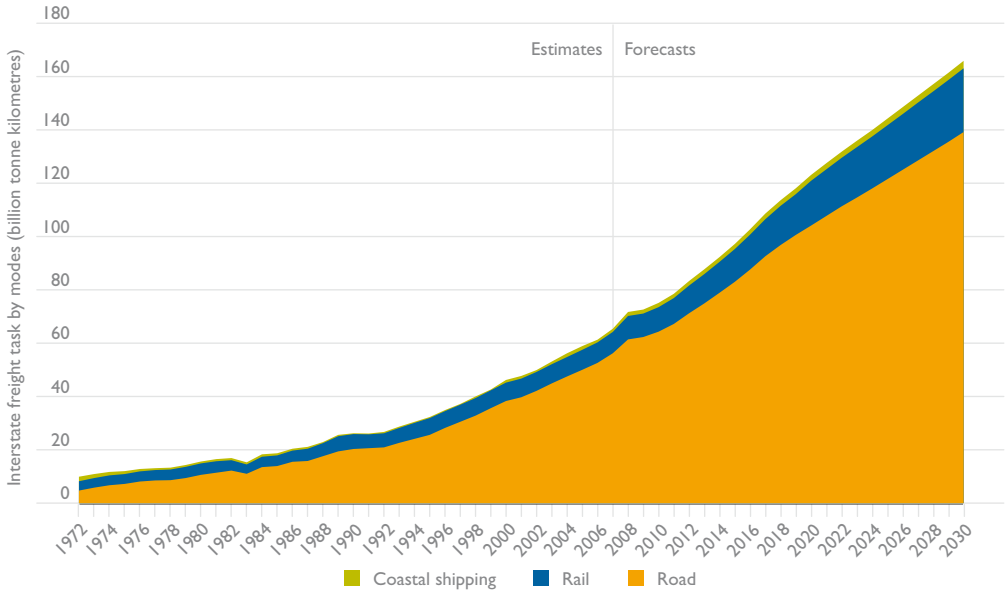
During forecast period (2008–2030), the total North–South freight task is expected to plateau temporarily, especially in the early forecast period (i.e. 2008 to 2010) due to the global economic downturn. It is expected that the freight task will begin to increase after 2009 until the end of forecast period (i.e. 2030), as shown in Figure 6.1.

6.3.2 The North–South corridor freight task by transport mode

Figure 6.2 shows the North–South freight estimates (1972–2007) and forecasts (2008–2030) by transport mode, while Table 6.3 presents average annual growth rates of the modal freight tasks. (Data underlying Figure 6.2 can be found in Appendix E, see Table E.1).

In 1972 the interstate road freight task on the North–South corridor was estimated at 4.7 billion tkm and this number has increased to 56.2 billion tkm in 2007 (Figure 6.2), an average annual growth rate of 7.3 per cent (Table 6.3). By 2030, North–South corridor road freight task is expected to reach 139.2 billion tkm, an average growth rate of 3.8 per cent (Table 6.3).

F6.2 Interstate freight estimates and forecasts on the North–South corridor by transport mode, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.
Source: BITRE estimtes.

T6.3 Average annual growth rate (per cent) of interstate freight estimates and forecasts on the North–South corridor by transport mode, 1972–2030

Period	Transport mode			
	All modes	Road	Rail	Coastal shipping
1972–2007	5.5	7.3	2.4	–1.0
2008–2030	3.9	3.8	4.7	2.7

Note: From 1972 to 2007 are estimates; while from 2008 to 2030 are forecasts.
Source: Figures 6.1 and 6.2.

The ARTC (2007) has indicated that a number of factors could influence the road market demand on the North–South corridor in the future. These include increasing oil prices, increased heavy vehicle charges, the effect of a tightening employment market and the ageing of the truck drivers, safety regulations, the effect of major road improvements and the extent to which these will be funded by tolls, and future heavy vehicle productivity improvements.

The interstate rail freight task on the North–South corridor has increased slowly, from 3.5 billion tkm in 1972 to 8.0 billion tkm in 2007, at an average annual growth of 2.4 per cent (Table 6.3). Between 2008 and 2030, the interstate rail freight task is projected to grow at an average annual rate of 4.7 per cent, from 8.8 billion tkm to 23.9 billion tkm (Figure 6.2).

Interstate coastal shipping freight task on the North–South corridor declined sharply from 1972 until 1980 (from 1.7 billion tkm to 0.7 billion tkm) and remained steady until 1987. After that, it gradually increased to 1.2 billion tkm in 2007. Overall, the average annual growth rate was negative (–1.0 per cent) from 1972 to 2007. Between 2008 and 2030, the interstate coastal shipping freight task on the North–South corridor is expected to increase gradually, from 1.5 billion tkm to 2.8 billion tkm (Figure 6.2), at an average annual growth of 2.7 per cent (Table 6.3).

6.3.3 Modal split of interstate freight transport task on the North–South corridor

On the North–South corridor, road freight mode share has increased significantly over the past 35 years, from 47 per cent in 1972 to 86 per cent in 2007 (Figure 6.3). This is due to duplication and improvements to the highway and vast improvements in truck productivity (i.e. 6 axle articulated trucks, B-doubles, etc.).

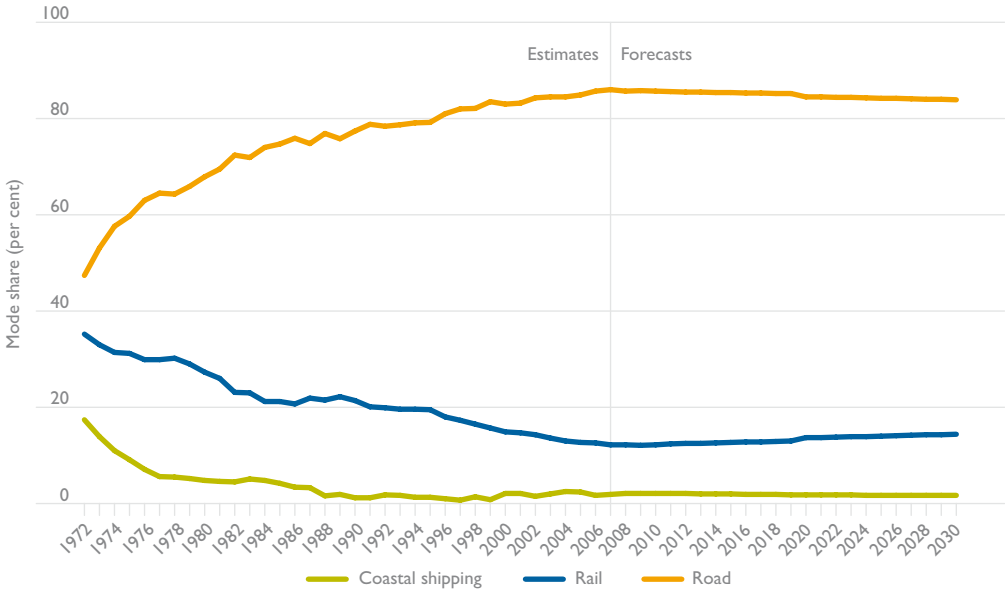
During the projection period (2008–2030), the road freight mode share on the North–South corridor is forecast to decrease slightly to 84 per cent in 2030.

On the other hand, rail freight mode share on the North–South corridor has declined significantly over the past 35 years, from 35 per cent in 1972 to 12 per cent in 2007 (Figure 6.3), due to duplication and improvements to the highway and vast improvements in truck productivity (i.e. 6 axle articulated trucks, B-doubles, etc.).

Compared with the corridor road freight mode share, the rail freight mode share is low. The key reason for such a low share of the market is poor transit times/availability, reliability and price (ARTC 2007). On the North–South rail corridor, on-time reliability until recently has been about 40 to 50 per cent compared with road's 95 per cent to 98 per cent (Ernst & Young 2006, ALC 2008). Rail freight has the added disadvantage of the pick-up and delivery costs at each end of the journey and has less flexibility than road freight services especially for time sensitive freight (Ernst & Young 2006). However, during the projection period (2008–2030), interstate rail freight share is forecast to increase slightly, from 12 per cent in 2008 to 14 per cent in 2030.

Between 1972 and 2007, the interstate coastal shipping freight mode share declined sharply to a low in 1988. Even more than road, coastal shipping cost effectiveness is limited for the short North–South routes by the high fixed costs of going through the ports at either end. Interstate coastal shipping freight mode share is expected to remain the same until 2030.

F6.3 Transport mode shares of interstate freight estimates and forecasts on the North–South corridor, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimtes.

6.4 Interstate freight task on the East–West Corridor

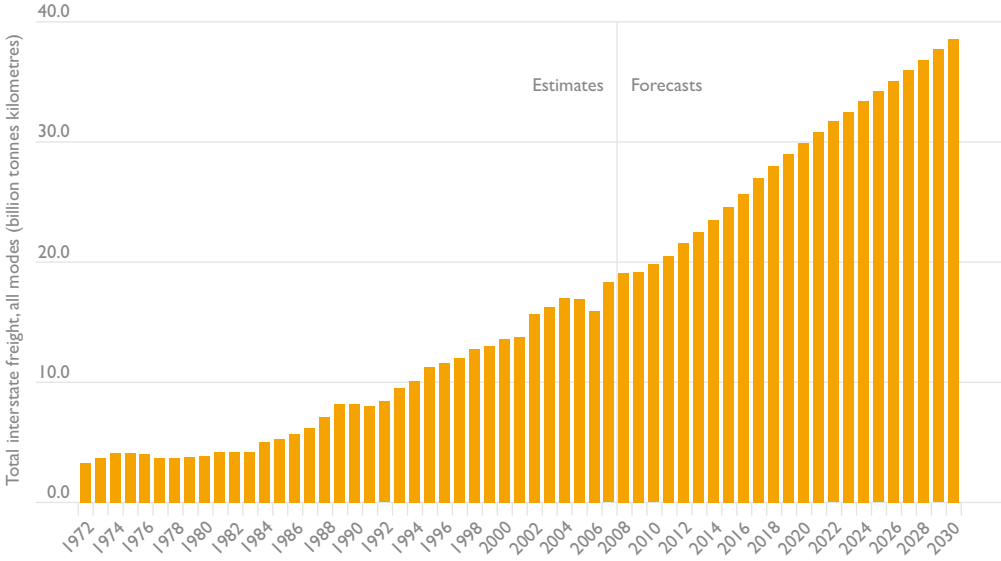
6.4.1 Total interstate freight task—all transport mode

Between 1972 and 2007, the total interstate freight task (by all transport modes, i.e. road, rail and coastal shipping) on the East–West corridor grew from 3.3 billion tkm to 18.3 billion tkm (Figure 6.4). (Data underlying Figure 6.4 can be found in Appendix E, see Table E.2). The increase in the total interstate freight task equates to an average annual growth rate of 5.0 per cent (Table 6.4). This increase has been partly driven by mining boom in Western Australia, which in turn is increasing demand for project freight and consumables destined for the north-west of Western Australia.

Over the forecast period between 2008 and 2030, the total interstate freight task on the East–West corridor is projected to increase from 19.1 billion tkm to 38.6 billion tkm, at an average annual growth rate of 3.3 per cent (Table 6.4). Again, much of the explanation for the lower forecast growth rate lies assumed lower economic growth, plus the growing saturation effect.

Like the North–South corridor, the total interstate freight task on the East–West corridor will also be affected during early forecast period (i.e. 2008–2010) by the global financial crisis.

F6.4 Total interstate freight estimates and forecasts on the East–West corridor, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimtes.

6.4.2 *The East–West corridor freight task by tranport mode*

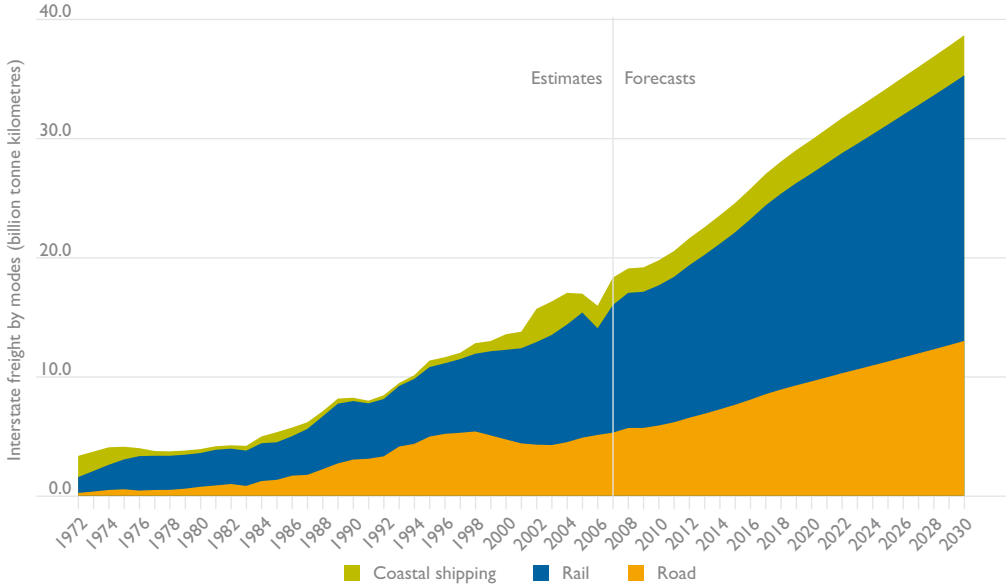
Figure 6.5 shows the interstate freight estimates (1972–2007) and forecasts (2008–2030) on the East–West corridor by transport mode, while Table 6.4 presents average annual growth rates for the interstate freight tasks. (Data underlying Figure 6.5 can be found in Appendix E, see Table E.2).

Historically, rail has been the main mode of interstate freight transport and it is expected to continue to dominate on the East–West corridor, due to the long distances involved.

The interstate rail freight task on the East–West corridor has increased from 1.3 billion tkm in 1972 to 10.7 billion tkm in 2007 (Figure 6.5), an average annual growth of 6.1 per cent (Table 6.4). Between 2008 and 2030, the corridor rail freight task is projected to grow more slowly, at an average annual rate of 3.1 per cent, from 11.3 billion tkm to 22.3 billion tkm.

In 1972 the interstate road freight task on the East–West corridor was estimated at 0.2 billion tkm and this number increased to 5.3 billion tkm in 2007 (Figure 6.5), an average annual growth rate of 9.3 per cent (Table 6.4). By 2030, interstate road freight task is expected to reach 13.0 billion tkm, an average growth rate of 3.8 per cent (Table 6.4).

F6.5 Interstate freight estimates and forecasts on the East–West corridor by transport mode, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimtes.

Between 1972 and 2007, the interstate coastal shipping freight task on the East–West corridor declined sharply in absolute terms from 1972 until 1976 and then remained steady until 1999. After that, it gradually increased until 2007 (see Figure 6.5). Overall, the average annual growth rate of interstate coastal shipping freight on the East–West corridor was 0.7 per cent from 1972 to 2007 (Table 6.4). Between 2008 and 2030, the interstate coastal shipping freight task on the East–West corridor is expected to increase, from 2.0 billion tkm to 3.4 billion tkm (Figure 6.5), at an average annual growth of 2.3 per cent (Table 6.4).

T6.4 Average annual growth rate (per cent) of interstate freight estimates and forecasts on the East–West corridor by transport mode, 1972–2030

Period	Transport mode			
	All modes	Road	Rail	Coastal shipping
1972–2007	5.0	9.3	6.1	0.7
2008–2030	3.3	3.8	3.1	2.3

Note: From 1972 to 2007 are estimates; while from 2008 to 2030 are forecasts.

Source: Figures 6.4 and 6.5.

6.4.3 Modal split of interstate freight transport tasks on the East–West corridor

On the East–West corridor, rail is the most favoured mode of transport for interstate freight. Pick-up and delivery costs are a smaller proportion of total rail freight costs than on shorter routes. Rail has largely retained its share, due to an historical legacy of good infrastructure, complemented in recent years by strategically targeted investment that has enabled significant reductions in freight tariffs to be introduced. Since 1997, there has been a large increase in coastal shipping under Single and Continuous Voyage Permits.[5] This increase in shipping share has come mainly at the expense of road (BTRE 2003).

The modal shares of interstate road, rail and coastal shipping freight estimates and forecasts from 1972 to 2030 on the East–West corridor are illustrated in Figure 6.6.

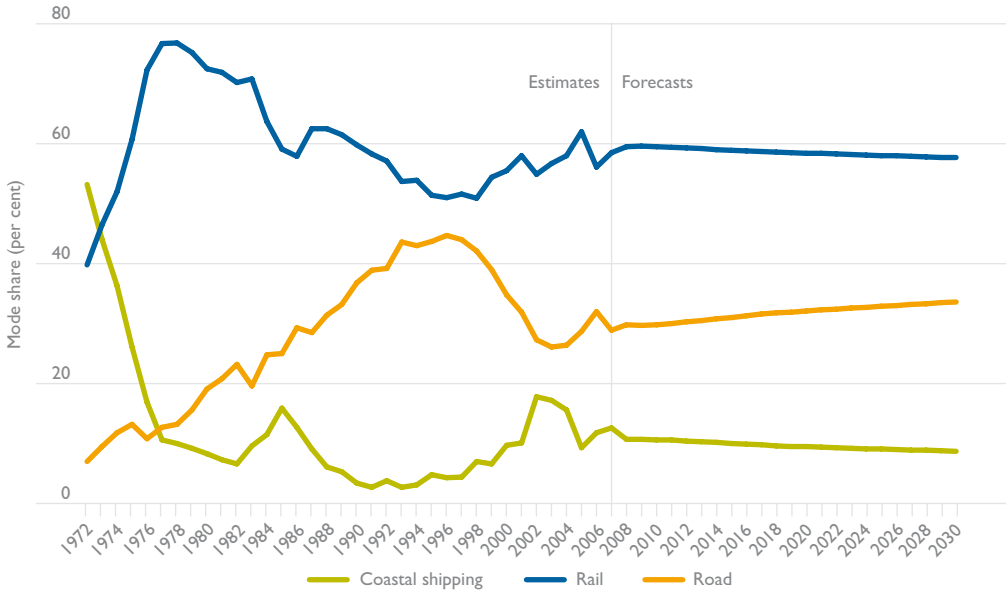
Between 1972 and 1976, the interstate coastal shipping freight mode share declined sharply due to cessation of the uneconomic service. Thereafter it remained stable until the advent of the single and continuous voyage permit system in the late 1990s. However, the interstate coastal shipping freight share on the corridor is expected to decline slowly until 2030 with the tightening of the voyage permit system.

By contrast to the increasing share of interstate road freight, interstate rail freight share on the East–West corridor increased from 1972 to 1977, as coastal shipping collapsed and then decreased gradually until 1998 as road became competitive. It then increased slowly to 2007, as infrastructure improvements lowered costs and improved service. The forecast interstate rail mode share is expected to decrease slightly, from 59 per cent in 2008 to 58 per cent in 2030.

The road freight share of East–West traffic increased from 7 per cent in 1972 to 45 per cent in 1996 due to the sealing of the highway and vast improvements in truck productivity (i.e. 6 axle articulated trucks, B-doubles, etc.), and then dropped to 29 per cent in 2007 as coastal shipping was resurrected. However, road freight share is projected increase to 34 per cent in 2030.

5 Permits offered to foreign ships to carry cargo on the Australian coast.

F6.6 Transport mode shares of interstate freight estimates and forecasts on the East–West corridor, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimtes.

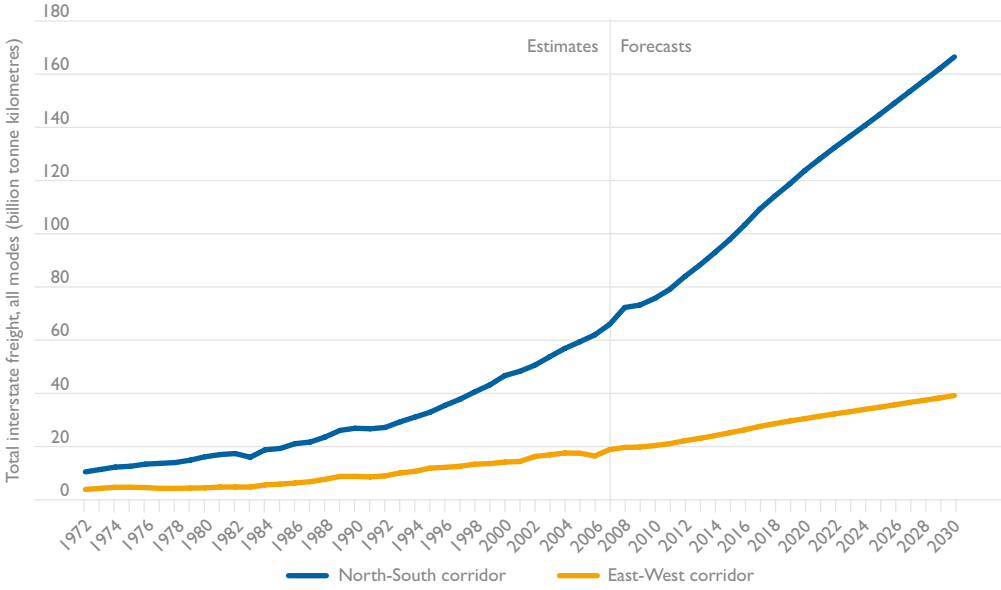
6.5 Comparison of total interstate freight task estimates and forecasts between the North–South and the East–West corridors

The purpose of this section is to compare and contrast the interstate freight task estimates (1972–2007) and forecasts (2008–2030) between the North–South and the East–West corridors in terms of total interstate freight task (all modes) and transport mode shares.

6.5.1 Total interstate freight tasks by all transport modes

Traffic volumes (in terms of freight task, expressed as billion tkm) have been higher and are also projected to continue higher on the North–South corridor than on the East–West corridor (Figure 6.7). By 2030, the total interstate freight task on the North–South corridor is expected to be more than four times greater than the East–West corridor task (165.9 billion tkm versus 38.6 billion tkm).

F6.7 Comparison of total interstate freight tasks (all modes) between the North–South and the East–West corridors, 1972–2030



Note: From 1972 to 2007, estimates, while from 2008 to 2030, forecasts.

Source: BITRE estimates.

Compared to the East–West corridor, the growth in the corridor total interstate freight task (all modes) was faster on the North–South corridor between 1972 and 2007 (5.5 per cent per year on the North–South corridor versus 5.0 per cent per year on the East–West corridor). Over the next 22 years between 2008 and 2030, it is also projected to continue to grow slightly faster on the North–South corridor (3.9 per cent per year) than the East–West corridor (3.1 per cent per year).

6.5.2 *Transport mode shares*

Comparison of freight task and transport mode shares between the North–south and the East–West corridors between 1972 and 2030 are shown in Table 6.5.

Historically, road transport has been the preferred mode of interstate freight transport on the North–South corridor, with a mode share of 86 per cent in 2007 (Table 6.5). On the other hand, rail transport has been the preferred mode on the longer East–West corridor, with a mode share of 59 per cent in 2007.

The dominance of rail freight on the East–West corridor is due to the fact that the long distance of the East–West corridor provides advantages to rail due to the favourable economics of rail on long-haul route. Moreover, the advantage of rail increases with distance, as the lower line haul cost begins to outweigh the cost of transhipping at the journey's beginning and end.

T6.5 Comparison of freight task and transport mode shares between the North–South and the East–West corridors, 1972–2030

Year	Road		Rail		Coastal shipping	
	North–South	East–West	North–South	East–West	North–South	East–West
	Freight task (billion tkm)					
Estimates						
1972	4.7	0.2	3.5	1.3	1.7	1.8
2007	56.2	5.3	8.0	10.7	1.2	2.3
Forecasts						
2008	61.4	5.7	8.8	11.4	1.5	2.0
2030	139.2	13.0	23.9	22.3	2.8	3.4
	Mode share (per cent)					
Estimates						
1972	47	7	35	40	17	53
2007	86	29	12	59	2	13
Forecasts						
2008	86	30	12	59	2	11
2030	84	34	14	58	2	9

Note: Total may not add to 100, due to rounding.

Source: Appendix E (Table E.1 and Table E.2).

6.6 Summary

This chapter has presented data on interstate freight trends and forecasts (total and by transport modes), based on origin–destination (OD) routes, on the two Australia's major interstate transport network corridors—the North–South and the East–West corridors. It also presented the comparison of these two corridors, in terms of average annual growth rates of total (all modes) interstate freight and transport mode shares (historical and forecasts).

The major key differences in interstate freight tasks between North–South and East–West corridors are:

- Between 1972 and 2007, total interstate freight task (tkm) by all modes grew faster on the North–South corridor than on the East–West corridor.
- Between 2008 and 2030, total interstate freight task on the North–South corridor is projected to grow slightly faster compared to the East–West corridor.
- Interstate road freight has been dominant on the North–South corridor, while interstate rail freight has been the main transport mode on the East–West corridor.

CHAPTER 7
Discussions and concluding remarks

7.1 Background

This chapter discusses total interstate freight tasks as well as transport mode (i.e. road, rail and coastal shipping) share in Australia from 1971–72 to 2006–07 and long-term forecasts of these tasks from 2007–08 to 2029–30, based on 56 origin–destination (OD) routes. In addition, interstate freight tasks (total and by transport modes) on the North–South and the East–West corridors between 1972 and 2007, as well as forecasts from 2008 to 2030 are also presented.

7.2 Total interstate freight estimates and forecasts

Total interstate freight (sum of all 56 OD routes by all transport modes) estimates showed two plateaus during the early 1980s and 1990s. These were primarily due to the economic slowdowns during those periods. Overall, the total interstate freight task grew at an average annual rate of 5.0 per cent, from 17.8 billion tkm to 96.8 billion tkm between 1972 and 2007.

Total interstate freight demand is expected to plateau temporarily, especially early in the forecast period (i.e. 2008 to 2009). This is due to the global financial crisis of 2008–2009. However, it is expected that growth will begin again after 2009 until the end of forecast period (i.e. 2030). Overall, the total interstate freight task is projected to grow from 104.6 billion tkm to 228.4 billion tkm between 2008 and 2030—equivalent to average annual growth of 3.6 per cent. However, it is important to take into consideration several factors which might affect future interstate freight demand, including:

- changes in economic growth rates, both in the short run (e.g. recessions) and the long run (higher or lower trend growth rates).
- fuel price impacts,
- public policy impacts,
- technological impacts (and investment required to implement new technologies), and
- breaks in 'business-as-usual' mode share trends.

The total interstate freight task is projected to grow much faster than the rate of population growth in Australia (1.58 per cent from 2008 to 2030) and also faster than the average national GDP growth (2.79 per cent from 2006 to 2026) (see Table 2.5).

7.3 Interstate freight estimates and forecasts by transport modes

Interstate freight from 1972 to 2007 varied among the transport modes and by origin–destination (OD) routes. It is also forecast to grow differently between 2008 and 2030, based on transport modes and OD routes.

Total (sum of all 56 OD routes) interstate road freight increased at an average annual growth rate of 7.4 per cent, from 5.4 billion tonne-kilometres (tkm) in 1972 to 64.7 billion tkm in 2007. It is forecast to grow at an average annual growth rate of 3.8 per cent, from 70.4 billion tkm in 2008 to 159.1 billion tkm in 2030.

Between 1972 and 2007, the highest average annual growth rates of interstate road freight tasks were on the Western Australia–South Australia route (12.8 per cent per annum); the South Australia–Western Australia route (12.7 per cent per annum); and Queensland–Victoria (11.1 per cent per annum). Interstate road freight is projected to grow fastest on the Northern Territory–South Australia OD route between 2008 and 2030.

Total interstate rail freight task increased at an average annual growth of 4.2 per cent, from 6.1 billion tonne-kilometres (tkm) in 1972 to 25.2 billion tkm in 2007. It is forecast to grow at an average annual growth rate of 3.5 per cent, from 27.1 billion tkm in 2008 to 57.4 billion tkm in 2030.

Between 1972 and 2007, interstate rail freight traffic grew positively on several OD routes. The largest growth was on the routes from Western Australia to the three major eastern states (New South Wales, Victoria and Queensland). This increase is partly driven by the mining boom in Western Australia. Although Victoria–Northern Territory grew substantially, the interstate rail freight task was only started in mid-1980s. However, interstate rail freight tasks on several routes (e.g. NSW–SA, SA–NSW, QLD–SA and SA–QLD) are projected to decline substantially over the next 22 years (2008–2030). During the forecast period, interstate rail freight tasks on some routes (e.g. VIC–NSW and QLD–VIC) are expected to grow more quickly.

There was a substantial increase in the total interstate coastal shipping freight task from 2002 to 2004 which was largely due to the higher freight task carried out between Tasmania and Western Australia. But the overall total interstate coastal shipping freight task increased only marginally, at an average annual growth of 0.2 cent, from 6.4 billion tonne-kilometres (tkm) in 1972 to 6.8 billion tkm in 2007. It is forecast to grow faster over the next 22 years — averaging 2.4 per cent per annum, from 7.1 billion tkm in 2008 to 11.9 billion tkm in 2030.

During 1972 to 2007, interstate coastal shipping freight tasks grew substantially (more than 8.0 per cent per annum) on the VIC–SA, TAS–WA and WA–TAS routes, while another 11 OD routes showed positive or no growth. On the other hand, interstate coastal shipping freight tasks grew negatively on many OD routes. Among these OD routes, interstate coastal shipping freight task on the SA–TAS, QLD–VIC and QLD–NSW OD routes declined by more than 7.0 per cent per annum during this period.

Interstate coastal shipping freight is forecast to grow positively over the next 22 years (2008–2030) on many of the interstate OD routes, while NSW–NT is projected to decline by 0.6 per cent per annum.

Between 1972 and 2007, interstate road freight mode share increased greatly (from 30.2 per cent to 66.9 per cent), and is expected to continue to increase (up to 69.6 per cent) by 2030, while rail freight share increased until 1978 and then decreased gradually. This is because of improving road and truck design, congestion on the tracks, and the time and cost of local pickup and delivery (Ernst & Young 2006). This declining trend is expected to continue during the forecast period. The trend for interstate rail to lose mode share could be reversed by the significant improvement in rail's quality of service (BTR 2000) and rail infrastructure development which is taking place. On the other hand, the decrease in share of the coastal shipping freight task is expected to be steeper than for the rail freight during 2008–2030. Overall, road is forecast to increase its mode share of interstate freight, while rail and coastal shipping are forecast to decrease their mode shares.

There is nothing pre-ordained about the mode split forecasts. They are business-as-usual projections, and as such may not come to pass if, for example, rail became much more competitive on routes shorter than 1500 kilometres as a result of investment, technological change and reorganisation, or if much higher oil prices changed the competitiveness of rail versus road.

Modal shares on various routes reflect the relative strengths of the different transport modes for the carriage of different freight types over different distances. Road transport currently dominates the market for freight that is either express or sensitive to reliability and availability—typically manufactured goods. However, the choice of transport mode generally involves a trade-off between cost and several service quality factors. The nature of the freight and the requirements of shippers influence the relative importance of cost and service quality—perishable and high value commodities tend to be more time and reliability sensitive than other freight. For any freight, it is the 'door-to-door' service, rather than just the 'line-haul' component, that matters to shippers. For intercapital origin–destination freight, road can provide a single-mode door-to-door service, whereas conveying non-bulk goods by rail typically involves transhipment between road and rail, adding to total freight costs and transit times.

Literature suggests that several factors affect freight mode choice, including freight demand characteristics, cross elasticities, freight costs, commodity characteristics, modal characteristics and customer characteristics. It also highlights that trucks dominate short trip lengths and higher value goods, while rail dominates long trip lengths with bulky, low-value products. Cost benefits often have to be weighed against customer service and satisfaction for many commodities where time constraints exist. For commodities with time constraints and/or service guarantees, it is typical that the truck is the preferred mode of transportation due to speed, flexibility and reliability. Recently, BITRE (2009) listed three major factors which influence freight mode choice. These are:

1. freight transport service requirements (i.e. transit time, reliability and service availability/frequency
2. freight transport costs versus service attributes and
3. market structure and competition.

Domestic economic activity and perhaps world commodity demand will largely drive future growth in interstate road and rail freight. Infrastructure investment will improve the efficiency of freight transport and have some impact on modal demand. Because fuel represents a larger share of road freight costs, long-term oil prices are likely to be influential on future modal

shares where road and rail compete (BITRE 2009). Nonetheless, the efficient and effective movement of Australia's interstate freight task will continue to involve a mix of road, rail and coastal shipping transport services, depending on the interstate origin–destination routes.

7.4 Interstate freight estimates and forecasts in the North–South and the East–West corridors

The interstate total freight forecast results show that North–South corridor is projected to grow slightly faster compared to the East–West corridor between 2008 and 2030. Interstate road freight has been dominant on the North–South corridor. The key reason for rail's a low share of the market is poor transit times/availability, reliability and price (ARTC 2007). On the North–South rail corridor, until recently on-time reliability has been about 40 to 50 per cent by contrast with road's 95 per cent to 98 per cent (Ernst & Young 2006, ALC 2008). Rail freight has the added disadvantage of the pick-up and delivery costs at each end of the journey and has less flexibility than road freight services especially for time sensitive freight (Ernst & Young 2006).

On the other hand, interstate rail freight has been the main transport mode on the East–West corridor and rail has largely retained its share, due to an historical legacy of good infrastructure, complemented in recent years by strategically targeted investment that has enabled significant reductions in freight tariffs to be introduced. Since 1997, there has been a large increase in coastal shipping under Single and Continuous Voyage Permits. This increase in shipping share has come mainly at the expense of road (BTRE 2003). However, 'there is growing recognition across the economy that sea transport is an essential mode in the development of a surface transport strategy for the nation. The greenhouse effect alone demands that sea transport play a greater role in interstate freight transport' (Speech by the Hon Peter Morris, cited in: Commonwealth of Australia 2007).

7.5 Conclusions

Although the global financial crisis will dampen interstate freight growth (total as well as by all modes) in the early years of the forecast period, there will be a moderate rate of interstate freight growth between 2008 and 2030. Overall, the total interstate freight task is forecast to increase by 2.2 times over the next 22 years.

The forecasts are 'business-as-usual' forecasts. It should be borne in mind that there are several possibilities for radical changes from assumptions, the principal ones being markedly lower or higher economic growth, and/or rising real freight rates in a carbon constrained world, as well as mode share discontinuities.

Despite these possibilities, total interstate freight task in tonne-kilometres (sum of all 56 OD routes) is projected to grow much faster than the rate of population growth in Australia and also faster than the average national GDP growth. As explained previously, the 'saturating' effect only results in the gap between freight growth and GDP growth narrowing when measured over the 22 year forecast period.

In conclusion, the state-to-state 'business-as-usual' forecasts will be useful in assessing the likely future freight flows between states on the interstate road, rail and port networks, in assessing the success of efforts to improve these networks, and in assessing changes over time in the base state-to-state freight flow patterns.

APPENDIX A

Interstate freight between states and territories by transport modes

Appendix A provides interstate freight flows in kilotonnes, as well as interstate freight task in million tonne-kilometres (tkm), between states and territories and 56 origin–destination (OD) routes by transport modes (i.e. road, rail and coastal shipping) from 1972 to 2030 (from 1972 to 2007, actual estimates, while from 2008 to 2030, forecasts). Table A.1 to Table A.28 show the interstate freight flows (in kilotonnes) between states and territories (all 56 OD routes) by transport modes between 1972 and 2030.

From 1972 to 2007, freight flows are estimates, while from 2008 to 2030 freight flows are forecasts. Road and rail freight flows are total freight (combination of bulk and non-bulk), while shipping freight flows are non-bulk only.

Estimation of historical interstate freight flows (and tasks) between the states and territories are very difficult and complex. However, previously BITRE has produced new disaggregate interstate road freight estimates—56 state-to-state OD time series from 1971–72 to 2003–04 (Gargett et al 2006). Later disaggregate interstate rail and coastal shipping freight estimates—56 state-to-state OD time series from 1971–72 to 2004–05—were added (see Soames et al 2007). Subsequently, the disaggregate interstate road freight estimation (56 state-to-state OD time series) has been extended from 1971–72 to 2005–06 (Gargett and Hossain 2008) and from 1971–72 to 2006–07) (BITRE 2010).

This appendix also provides distances in kilometres for each route and each mode. These distances are used to calculate freight tasks, multiplying freight flows by distance. The interstate freight task between states and territories (all 56 OD routes) by transport modes from 1972 to 2030 are presented in Table A.29 to Table A.56. Table A. 57 shows the total interstate freight task in Australia (sum of all 56 OD routes) between 1972 and 2030.

TA.1 Interstate freight flows (kilotonnes) between New South Wales and Victoria, by transport mode, 1972–2030

Year	NSW–VIC				VIC–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	2 801	1 324	1 298	179	2 307	1 606	649	52
1973	3 045	1 623	1 298	124	2 663	1 931	643	89
1974	3 263	1 895	1 298	70	2 986	2 223	637	126
1975	3 365	2 020	1 298	47	3 112	2 355	632	126
1976	3 602	2 280	1 298	24	3 381	2 629	626	126
1977	3 720	2 401	1 298	21	3 440	2 755	630	55
1978	3 755	2 439	1 298	18	3 483	2 794	634	55
1979	3 988	2 675	1 298	15	3 731	3 038	638	55
1980	4 314	3 004	1 298	12	4 072	3 374	643	55
1981	4 533	3 226	1 298	9	4 301	3 599	647	55
1982	4 497	3 442	1 049	6	4 523	3 818	651	55
1983	3 927	3 124	800	3	4 206	3 496	655	55
1984	4 756	3 807	947	3	4 863	4 183	679	2
1985	4 850	3 927	920	2	5 055	4 302	741	12
1986	5 328	4 370	956	2	5 435	4 739	696	0
1987	5 631	4 428	1 201	2	5 521	4 797	724	0
1988	6 047	4 943	1 102	2	6 133	5 300	831	2
1989	6 658	5 410	1 245	3	6 705	5 752	951	2
1990	6 903	5 671	1 230	3	6 873	6 002	871	0
1991	6 837	5 740	1 095	3	6 905	6 068	830	7
1992	6 898	5 811	1 084	3	6 742	6 136	603	3
1993	7 476	6 279	1 194	3	7 228	6 582	636	10
1994	7 981	6 674	1 304	3	7 656	6 957	659	41
1995	8 488	7 071	1 414	3	8 023	7 331	681	12
1996	9 420	7 785	1 631	4	8 637	7 999	609	29
1997	10 081	8 385	1 647	48	9 233	8 555	645	33
1998	10 755	9 002	1 657	96	9 788	9 123	627	38
1999	11 393	9 735	1 630	28	10 369	9 794	568	6
2000	12 309	10 458	1 767	84	11 044	10 451	568	25
2001	12 757	10 819	1 904	34	11 374	10 777	568	29
2002	13 383	11 455	1 876	51	11 922	11 350	568	4
2003	14 100	12 182	1 849	69	12 584	12 001	568	15
2004	14 697	12 857	1 821	19	13 189	12 601	568	19
2005	15 305	13 476	1 799	31	13 747	13 150	568	29
2006	15 508	14 155	1 315	38	14 337	13 749	568	20
2007	16 833	15 067	1 718	48	15 137	14 549	568	20
Forecasts								
2008	18 088	16 224	1 827	37	16 394	15 668	692	35
2009	17 929	16 115	1 778	36	16 773	15 938	799	36
2010	18 616	16 768	1 811	38	17 283	16 328	918	37
2011	19 552	17 647	1 865	40	17 973	16 882	1 053	38
2012	20 814	18 825	1 947	42	18 970	17 715	1 215	40
2013	21 815	19 771	1 999	44	19 969	18 539	1 388	42
2014	22 897	20 794	2 056	46	21 051	19 428	1 579	44
2015	24 006	21 847	2 110	49	22 167	20 337	1 783	47
2016	25 260	23 035	2 173	51	23 427	21 365	2 013	49
2017	26 602	24 309	2 239	54	24 779	22 463	2 265	52
2018	27 614	25 286	2 273	56	26 003	23 430	2 518	55
2019	28 564	26 209	2 297	58	27 094	24 265	2 772	57
2020	29 442	27 069	2 313	60	28 093	25 006	3 028	59
2021	30 383	27 991	2 330	62	29 101	25 744	3 296	61
2022	31 339	28 931	2 344	64	30 099	26 463	3 573	63
2023	32 207	29 792	2 349	66	31 046	27 126	3 855	65
2024	33 099	30 679	2 352	67	31 990	27 775	4 148	67
2025	34 007	31 585	2 353	69	32 955	28 433	4 453	69
2026	34 928	32 505	2 351	71	33 936	29 094	4 771	71
2027	35 814	33 397	2 344	73	34 922	29 748	5 100	73
2028	36 722	34 313	2 335	75	35 897	30 383	5 439	75
2029	37 640	35 241	2 323	77	36 888	31 020	5 791	77
2030	38 585	36 198	2 309	79	37 910	31 672	6 158	79
Distance (km)		614	592	1 097		608	665	1 038

Source: BITRE estimates.

TA.2 Interstate freight flows (kilotonnes) between New South Wales and Queensland, by transport mode, 1972–2030

Year	NSW–QLD				QLD–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1 350	594	655	102	928	553	322	53
1973	1 568	757	712	99	1 080	702	327	51
1974	1 776	910	769	97	1 223	841	332	50
1975	1 880	982	826	72	1 282	906	337	39
1976	2 066	1 135	883	48	1 415	1 045	342	29
1977	2 165	1 207	916	42	1 503	1 110	358	36
1978	2 215	1 230	949	37	1 546	1 130	373	43
1979	2 386	1 373	981	32	1 698	1 259	389	50
1980	2 617	1 576	1 014	27	1 904	1 443	404	57
1981	2 821	1 716	1 084	22	2 014	1 568	382	64
1982	2 861	1 854	991	17	2 180	1 692	417	71
1983	2 562	1 651	898	12	2 040	1 510	451	79
1984	3 089	2 090	975	24	2 351	1 904	389	58
1985	3 164	2 169	968	27	2 424	1 974	439	11
1986	3 575	2 463	1 090	22	2 834	2 237	594	3
1987	3 640	2 503	1 134	3	2 914	2 272	637	5
1988	4 103	2 853	1 248	2	3 177	2 585	589	3
1989	4 638	3 177	1 457	4	3 477	2 873	604	0
1990	4 759	3 360	1 394	5	3 667	3 035	623	9
1991	4 611	3 409	1 193	9	3 637	3 079	555	3
1992	4 575	3 459	1 112	4	3 697	3 123	570	4
1993	4 932	3 794	1 133	5	3 977	3 420	551	6
1994	5 243	4 080	1 153	9	4 212	3 673	533	6
1995	5 554	4 371	1 174	9	4 456	3 930	514	12
1996	6 069	4 901	1 146	21	4 898	4 399	494	5
1997	6 383	5 355	1 017	12	5 264	4 798	463	3
1998	6 899	5 827	1 003	69	5 839	5 214	589	36
1999	7 445	6 397	995	53	6 205	5 714	484	7
2000	7 938	6 967	900	72	6 747	6 214	500	33
2001	8 114	7 254	800	60	7 161	6 465	500	196
2002	8 579	7 765	795	20	7 432	6 913	500	20
2003	9 232	8 356	790	87	7 941	7 429	500	11
2004	9 863	8 909	785	168	8 599	7 913	500	186
2005	10 326	9 423	780	123	8 921	8 361	500	61
2006	10 968	9 991	871	106	9 461	8 856	604	1
2007	12 048	10 763	1 069	216	9 774	9 527	243	4
Forecasts								
2008	12 485	11 188	1 138	159	10 851	10 579	194	78
2009	12 765	11 474	1 128	162	11 306	11 025	199	81
2010	13 202	11 904	1 130	168	11 715	11 427	204	84
2011	13 818	12 497	1 144	176	12 289	11 989	212	88
2012	14 716	13 351	1 178	187	13 104	12 788	223	94
2013	15 618	14 213	1 207	199	13 877	13 544	233	99
2014	16 600	15 152	1 237	211	14 715	14 366	244	105
2015	17 624	16 136	1 264	224	15 588	15 221	255	112
2016	18 779	17 245	1 295	239	16 572	16 186	267	119
2017	20 026	18 446	1 325	255	17 633	17 226	281	126
2018	21 148	19 538	1 341	269	18 553	18 129	291	133
2019	22 161	20 536	1 344	282	19 393	18 954	301	138
2020	23 098	21 468	1 336	293	20 171	19 719	308	144
2021	24 048	22 418	1 324	305	20 972	20 506	316	149
2022	25 002	23 377	1 308	317	21 779	21 300	324	155
2023	25 914	24 302	1 283	329	22 544	22 053	330	160
2024	26 835	25 240	1 255	341	23 319	22 817	336	166
2025	27 781	26 207	1 222	353	24 116	23 602	343	171
2026	28 750	27 201	1 185	365	24 931	24 405	349	177
2027	29 724	28 205	1 142	377	25 742	25 205	355	183
2028	30 700	29 216	1 095	389	26 560	26 012	360	188
2029	31 697	30 253	1 042	402	27 395	26 836	366	194
2030	32 730	31 330	985	415	28 260	27 689	371	200
Distance (km)		789	1 069	1 290		759	915	1 292

Source: BITRE estimates.

TA.3 Interstate freight flows (kilotonnes) between New South Wales and South Australia, by transport mode, 1972–2030

Year	NSW–SA				SA–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	411	248	160	3	421	240	179	2
1973	458	295	160	3	466	285	179	2
1974	499	336	160	3	506	325	179	2
1975	518	355	160	3	523	344	179	0
1976	557	394	160	3	560	381	179	0
1977	594	412	180	3	605	398	207	0
1978	620	417	200	3	638	403	235	0
1979	673	451	219	3	698	436	262	0
1980	740	498	239	3	771	481	290	0
1981	753	529	221	3	824	511	313	0
1982	763	559	201	3	825	540	285	0
1983	705	515	180	10	769	498	257	14
1984	824	609	214	1	896	589	307	0
1985	849	626	223	0	901	604	297	0
1986	842	685	156	1	929	662	267	0
1987	1 000	693	307	0	938	669	269	0
1988	1 111	761	350	0	1 083	735	348	0
1989	1 218	822	396	0	1 183	794	368	21
1990	1 323	855	464	3	1 205	826	379	0
1991	1 280	864	412	4	1 131	834	297	0
1992	1 181	873	307	1	1 161	843	318	0
1993	1 385	933	447	5	1 280	901	379	0
1994	1 573	983	586	3	1 351	949	402	0
1995	1 761	1 032	726	3	1 421	996	425	0
1996	1 929	1 120	804	5	1 438	1 081	357	0
1997	2 052	1 194	858	0	1 454	1 152	300	2
1998	2 068	1 268	799	1	1 500	1 223	274	3
1999	2 175	1 355	820	0	1 564	1 307	256	0
2000	2 243	1 441	800	2	1 648	1 389	256	3
2001	2 312	1 483	800	29	1 689	1 430	256	3
2002	2 360	1 557	800	3	1 773	1 501	256	16
2003	2 450	1 640	800	10	1 840	1 582	256	2
2004	2 521	1 717	800	4	1 914	1 656	256	2
2005	2 594	1 787	800	6	1 979	1 723	256	0
2006	2 671	1 864	800	7	2 053	1 797	256	0
2007	2 803	1 966	828	9	2 151	1 895	256	0
Forecasts								
2008	2 851	2 032	813	6	2 234	1 976	259	0
2009	2 916	2 110	799	6	2 281	2 025	257	0
2010	2 961	2 176	778	7	2 328	2 074	254	0
2011	3 001	2 239	755	7	2 380	2 128	252	0
2012	3 054	2 313	734	7	2 451	2 199	251	0
2013	3 106	2 387	712	7	2 519	2 269	250	0
2014	3 163	2 467	690	7	2 592	2 343	249	0
2015	3 218	2 545	666	7	2 665	2 418	247	0
2016	3 286	2 636	643	7	2 750	2 504	246	0
2017	3 358	2 731	620	7	2 840	2 595	245	0
2018	3 429	2 827	594	8	2 922	2 680	242	0
2019	3 487	2 914	565	8	2 993	2 755	238	0
2020	3 536	2 995	534	8	3 056	2 823	233	0
2021	3 585	3 076	501	8	3 118	2 891	227	0
2022	3 629	3 154	466	8	3 177	2 955	221	0
2023	3 666	3 228	430	8	3 230	3 015	214	0
2024	3 700	3 299	393	8	3 280	3 073	207	0
2025	3 733	3 370	355	8	3 330	3 131	199	0
2026	3 765	3 441	315	8	3 380	3 189	191	0
2027	3 798	3 514	276	8	3 430	3 248	182	0
2028	3 827	3 584	235	8	3 477	3 304	173	0
2029	3 855	3 653	194	8	3 524	3 360	164	0
2030	3 884	3 724	151	9	3 572	3 417	155	0
Distance (km)		1 075	663	2 101		1 215	1 957	2 119

Source: BITRE estimates.

TA.4 Interstate freight flows (kilotonnes) between New South Wales and Western Australia, by transport mode, 1972–2030

Year	NSW–WA				WA–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	245	9	103	134	139	13	12	114
1973	272	14	134	124	141	18	37	86
1974	300	20	165	115	143	23	62	58
1975	316	24	196	96	154	24	87	43
1976	324	20	227	77	157	18	112	27
1977	336	23	238	75	120	18	102	0
1978	346	24	249	73	110	18	92	0
1979	360	29	259	71	104	22	82	0
1980	376	36	270	70	100	28	72	0
1981	375	42	265	68	105	32	73	0
1982	357	49	242	66	136	36	100	0
1983	323	41	219	64	157	30	127	0
1984	422	61	257	104	148	44	90	14
1985	443	65	253	126	161	47	93	21
1986	510	80	298	132	176	57	115	4
1987	464	82	309	72	165	57	108	0
1988	581	103	477	1	173	69	104	0
1989	669	124	526	19	194	81	109	4
1990	592	136	454	1	200	86	114	0
1991	573	138	429	6	188	84	104	0
1992	625	144	466	15	208	86	121	1
1993	684	178	495	11	250	102	146	2
1994	733	185	525	23	274	102	170	1
1995	821	208	554	58	310	111	195	4
1996	827	215	562	50	239	110	128	1
1997	851	216	587	48	291	106	185	0
1998	886	218	603	66	340	103	237	0
1999	815	204	609	2	414	96	310	8
2000	877	157	615	105	475	134	300	42
2001	900	122	621	157	468	156	289	23
2002	901	119	627	155	553	152	335	66
2003	927	118	632	177	639	150	382	107
2004	919	125	638	156	595	159	428	8
2005	937	135	644	157	681	172	475	34
2006	935	114	603	218	803	218	576	9
2007	1 087	118	683	286	674	226	434	14
Forecasts								
2008	1 029	113	679	237	776	225	543	11
2009	1 067	117	704	245	763	221	534	11
2010	1 077	118	711	248	791	230	554	11
2011	1 080	119	713	248	828	240	580	12
2012	1 086	120	717	250	877	254	614	13
2013	1 099	121	725	253	911	264	638	13
2014	1 113	122	735	256	948	275	664	14
2015	1 126	124	743	259	985	286	690	14
2016	1 144	126	755	263	1 028	298	720	15
2017	1 162	128	767	267	1 073	311	751	15
2018	1 186	130	782	273	1 105	320	773	16
2019	1 203	132	794	277	1 135	329	794	16
2020	1 218	134	804	280	1 162	337	814	17
2021	1 231	135	812	283	1 193	346	835	17
2022	1 241	137	819	286	1 224	355	857	18
2023	1 251	138	826	288	1 251	363	876	18
2024	1 258	138	830	289	1 279	371	895	18
2025	1 265	139	835	291	1 307	379	915	19
2026	1 272	140	839	292	1 336	387	935	19
2027	1 280	141	844	294	1 362	395	954	20
2028	1 285	141	848	296	1 390	403	973	20
2029	1 290	142	852	297	1 418	411	992	20
2030	1 296	143	855	298	1 446	419	1 012	21
Distance (km)		4 106	4 203	4 027		4 027	4 095	5 674

Source: BITRE estimates.

TA.5 Interstate freight flows (kilotonnes) between New South Wales and Australian Capital Territory, by transport mode, 1972–2030

Year	NSW–ACT				ACT–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	757	244	513	0	76	71	5	0
1973	732	299	433	0	92	87	5	0
1974	702	349	354	0	107	102	5	0
1975	645	372	274	0	114	109	5	0
1976	613	419	194	0	129	124	5	0
1977	630	441	189	0	135	130	5	0
1978	632	448	184	0	137	132	5	0
1979	670	491	179	0	150	145	5	0
1980	726	552	174	0	169	164	5	0
1981	758	592	166	0	181	176	5	0
1982	782	632	151	0	193	188	5	0
1983	709	574	135	0	175	170	5	0
1984	859	698	161	0	213	208	5	0
1985	887	720	167	0	220	215	5	0
1986	918	801	117	0	245	240	5	0
1987	935	811	124	0	248	243	5	0
1988	1 036	905	131	0	277	272	5	0
1989	1 116	990	126	0	303	298	5	0
1990	1 160	1 038	122	0	318	313	5	0
1991	1 167	1 050	117	0	322	317	5	0
1992	1 175	1 063	112	0	326	321	5	0
1993	1 245	1 148	97	0	352	347	5	0
1994	1 301	1 220	81	0	374	369	5	0
1995	1 358	1 292	66	0	397	392	5	0
1996	1 492	1 422	70	0	437	432	5	0
1997	1 611	1 531	80	0	471	466	5	0
1998	1 734	1 643	91	0	506	501	5	0
1999	1 869	1 776	93	0	548	543	5	0
2000	2 005	1 907	98	0	589	584	5	0
2001	2 075	1 972	103	0	609	604	5	0
2002	2 157	2 088	69	0	641	641	0	0
2003	2 254	2 220	34	0	682	682	0	0
2004	2 376	2 342	34	0	721	721	0	0
2005	2 488	2 454	34	0	756	756	0	0
2006	2 611	2 577	34	0	795	795	0	0
2007	2 776	2 742	34	0	847	847	0	0
Forecasts								
2008	2 832	2 832	34	0	925	925	0	0
2009	2 944	2 944	34	0	922	922	0	0
2010	3 004	3 004	0	0	957	957	0	0
2011	3 075	3 075	0	0	1 004	1 004	0	0
2012	3 184	3 184	0	0	1 069	1 069	0	0
2013	3 312	3 312	0	0	1 124	1 124	0	0
2014	3 450	3 450	0	0	1 183	1 183	0	0
2015	3 590	3 590	0	0	1 244	1 244	0	0
2016	3 749	3 749	0	0	1 312	1 312	0	0
2017	3 918	3 918	0	0	1 385	1 385	0	0
2018	4 089	4 089	0	0	1 443	1 443	0	0
2019	4 234	4 234	0	0	1 497	1 497	0	0
2020	4 364	4 364	0	0	1 547	1 547	0	0
2021	4 489	4 489	0	0	1 599	1 599	0	0
2022	4 608	4 608	0	0	1 652	1 652	0	0
2023	4 722	4 722	0	0	1 701	1 701	0	0
2024	4 831	4 831	0	0	1 751	1 751	0	0
2025	4 941	4 941	0	0	1 802	1 802	0	0
2026	5 052	5 052	0	0	1 854	1 854	0	0
2027	5 166	5 166	0	0	1 904	1 904	0	0
2028	5 274	5 274	0	0	1 956	1 956	0	0
2029	5 382	5 382	0	0	2 008	2 008	0	0
2030	5 493	5 493	0	0	2 061	2 061	0	0
Distance (km)		259	305	1		226	547	1

Source: BITRE estimates.

TA.6 Interstate freight flows (kilotonnes) between New South Wales and Northern Territory, by transport mode, 1972–2030

Year	NSW–NT				NT–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	46	16	4	26	7	4	0	3
1973	45	17	4	24	7	4	0	3
1974	43	17	4	22	7	4	1	3
1975	42	18	4	20	7	4	1	2
1976	40	18	4	18	6	4	1	1
1977	38	18	4	16	5	4	1	0
1978	36	18	4	14	5	4	1	0
1979	35	19	4	12	5	4	1	0
1980	33	19	4	10	6	5	1	0
1981	32	20	4	8	6	5	1	0
1982	30	20	4	6	6	5	1	0
1983	27	19	4	4	5	5	1	0
1984	25	20	4	1	6	5	1	0
1985	24	20	4	0	6	5	1	0
1986	25	21	4	0	6	5	1	0
1987	25	21	4	0	6	5	1	0
1988	25	21	4	0	6	5	1	0
1989	26	22	4	0	7	6	1	0
1990	26	22	4	0	7	6	1	0
1991	26	22	4	0	7	6	1	0
1992	26	22	4	0	7	6	1	0
1993	27	23	4	0	7	6	1	0
1994	31	23	4	4	8	6	1	1
1995	27	23	4	0	8	6	1	1
1996	34	24	4	6	8	6	1	1
1997	37	24	4	9	8	7	1	0
1998	34	24	4	5	8	7	1	0
1999	32	25	4	3	8	7	1	0
2000	37	25	4	8	8	7	1	0
2001	34	25	4	4	8	7	1	0
2002	31	26	4	1	8	7	1	0
2003	33	23	4	6	10	9	1	0
2004	29	23	4	2	10	9	1	0
2005	33	24	4	5	10	9	1	0
2006	31	24	4	3	9	9	0	0
2007	31	24	4	3	10	10	0	0
Forecasts								
2008	32	28	2	2	9	9	0	0
2009	30	26	2	2	9	9	0	0
2010	31	27	2	2	9	9	0	0
2011	32	28	2	2	10	9	0	0
2012	33	29	2	2	10	9	0	0
2013	32	28	2	2	10	9	0	0
2014	32	28	2	2	10	9	0	0
2015	32	28	2	2	10	9	0	0
2016	31	28	2	2	10	9	0	0
2017	31	28	2	2	10	9	0	0
2018	31	27	2	2	10	9	0	0
2019	30	27	2	2	10	9	0	0
2020	30	26	2	2	10	9	0	0
2021	30	26	2	2	10	9	0	0
2022	29	26	2	2	10	9	0	0
2023	29	26	2	2	10	9	0	0
2024	29	26	1	2	10	9	0	0
2025	29	26	1	2	10	9	0	0
2026	29	25	1	2	10	9	0	0
2027	28	25	1	2	10	9	0	0
2028	28	25	1	2	10	9	0	0
2029	28	25	1	2	10	9	0	0
2030	28	25	1	2	10	9	0	0
Distance (km)		3 901	3 622	4 498		4 505	3 791	4 099

Source: BITRE estimates.

TA.7 Interstate freight flows (kilotonnes) between New South Wales and Tasmania, by transport mode, 1972–2030

Year	NSW–TAS				TAS–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	155	0	0	155	243	0	0	243
1973	161	0	0	161	163	0	0	163
1974	167	0	0	167	83	0	0	83
1975	177	0	0	177	71	0	0	71
1976	187	0	0	187	60	0	0	60
1977	171	0	0	171	89	0	0	89
1978	156	0	0	156	119	0	0	119
1979	140	0	0	140	148	0	0	148
1980	125	0	0	125	178	0	0	178
1981	110	0	0	110	207	0	0	207
1982	94	0	0	94	237	0	0	237
1983	79	0	0	79	267	0	0	267
1984	111	0	0	111	315	0	0	315
1985	107	0	0	107	302	0	0	302
1986	128	0	0	128	258	0	0	258
1987	119	0	0	119	324	0	0	324
1988	110	0	0	110	181	0	0	181
1989	97	0	0	97	291	0	0	291
1990	90	0	0	90	140	0	0	140
1991	93	0	0	93	162	0	0	162
1992	135	0	0	135	200	0	0	200
1993	90	0	0	90	177	0	0	177
1994	98	0	0	98	140	0	0	140
1995	70	0	0	70	196	0	0	196
1996	49	0	0	49	116	0	0	116
1997	34	0	0	34	1	0	0	1
1998	14	0	0	14	12	0	0	12
1999	12	0	0	12	3	0	0	3
2000	40	0	0	40	211	0	0	211
2001	57	0	0	57	73	0	0	73
2002	32	0	0	32	51	0	0	51
2003	35	0	0	35	44	0	0	44
2004	33	0	0	33	52	0	0	52
2005	40	0	0	40	373	0	0	373
2006	59	0	0	59	38	0	0	38
2007	46	0	0	46	107	0	0	107
Forecasts								
2008	40	0	0	40	100	0	0	100
2009	40	0	0	40	100	0	0	100
2010	40	0	0	40	101	0	0	101
2011	40	0	0	40	101	0	0	101
2012	40	0	0	40	100	0	0	100
2013	39	0	0	39	98	0	0	98
2014	39	0	0	39	97	0	0	97
2015	38	0	0	38	95	0	0	95
2016	38	0	0	38	94	0	0	94
2017	37	0	0	37	93	0	0	93
2018	37	0	0	37	92	0	0	92
2019	37	0	0	37	91	0	0	91
2020	36	0	0	36	90	0	0	90
2021	36	0	0	36	90	0	0	90
2022	36	0	0	36	89	0	0	89
2023	35	0	0	35	88	0	0	88
2024	35	0	0	35	87	0	0	87
2025	34	0	0	34	86	0	0	86
2026	34	0	0	34	85	0	0	85
2027	34	0	0	34	84	0	0	84
2028	33	0	0	33	83	0	0	83
2029	33	0	0	33	82	0	0	82
2030	33	0	0	33	81	0	0	81
Distance (km)		1	1	1 087		1	1	1 052

Source: BITRE estimates.

TA.8 Interstate freight flows (kilotonnes) between Victoria and Queensland, by transport mode, 1972–2030

Year	VIC–QLD				QLD–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	616	282	132	203	153	65	43	45
1973	647	333	143	171	175	88	42	45
1974	671	379	154	139	196	111	40	45
1975	673	399	164	110	204	123	39	43
1976	697	441	175	81	224	147	37	40
1977	718	460	187	70	215	159	39	17
1978	725	466	200	60	221	163	41	17
1979	764	503	212	49	247	188	42	17
1980	816	554	224	38	285	224	44	17
1981	835	587	220	27	305	249	39	17
1982	827	620	190	17	334	275	43	17
1983	738	572	160	6	300	237	46	17
1984	861	674	180	8	426	320	70	36
1985	873	691	177	5	423	336	80	7
1986	960	755	201	4	476	394	81	1
1987	941	763	176	2	487	402	85	0
1988	1 048	836	212	0	560	475	85	0
1989	1 168	900	267	1	659	545	114	0
1990	1 202	936	266	0	718	585	133	0
1991	1 246	945	301	0	740	596	144	0
1992	1 385	955	426	4	795	607	188	0
1993	1 476	1 018	452	6	936	683	200	54
1994	1 559	1 071	478	10	966	749	211	6
1995	1 633	1 123	504	6	1 041	817	223	1
1996	1 701	1 216	469	16	1 146	945	194	7
1997	1 835	1 293	527	15	1 302	1 057	233	12
1998	1 945	1 371	524	50	1 479	1 177	294	8
1999	2 181	1 462	694	25	1 602	1 325	256	21
2000	2 334	1 551	702	81	1 801	1 477	302	22
2001	2 346	1 595	710	41	1 945	1 555	347	43
2002	2 470	1 672	718	79	2 097	1 695	393	8
2003	2 609	1 760	727	123	2 310	1 861	439	10
2004	2 802	1 840	735	227	2 509	2 019	485	6
2005	2 857	1 912	743	202	2 700	2 168	530	2
2006	2 926	1 992	766	168	3 072	2 335	733	4
2007	2 990	2 097	790	103	3 250	2 566	681	3
Forecasts								
2008	3 616	2 518	826	273	4 010	3 138	869	3
2009	3 578	2 473	835	270	4 053	3 143	907	4
2010	3 711	2 546	885	280	4 200	3 227	969	4
2011	3 888	2 648	947	293	4 405	3 354	1 048	4
2012	4 125	2 789	1 025	311	4 698	3 543	1 150	4
2013	4 306	2 889	1 092	325	4 975	3 717	1 253	4
2014	4 501	2 998	1 164	339	5 275	3 904	1 366	5
2015	4 701	3 107	1 240	354	5 588	4 096	1 487	5
2016	4 926	3 231	1 324	372	5 941	4 313	1 623	5
2017	5 167	3 363	1 415	390	6 321	4 544	1 771	5
2018	5 345	3 451	1 490	403	6 651	4 734	1 911	6
2019	5 511	3 531	1 565	416	6 952	4 900	2 046	6
2020	5 665	3 601	1 637	427	7 231	5 045	2 180	6
2021	5 831	3 677	1 715	440	7 518	5 192	2 319	7
2022	6 000	3 753	1 794	452	7 807	5 337	2 464	7
2023	6 151	3 816	1 871	464	8 082	5 467	2 607	7
2024	6 306	3 880	1 950	476	8 360	5 596	2 756	7
2025	6 463	3 945	2 031	487	8 645	5 727	2 911	8
2026	6 622	4 008	2 114	499	8 937	5 857	3 073	8
2027	6 774	4 066	2 197	511	9 228	5 982	3 238	8
2028	6 929	4 124	2 283	523	9 522	6 105	3 408	8
2029	7 086	4 182	2 370	534	9 821	6 228	3 585	9
2030	7 247	4 240	2 461	547	10 131	6 353	3 769	9
Distance (km)		1 755	1 916	2 426		1 807	1 916	2 489

Source: BITRE estimates.

TA.9 Interstate freight flows (kilotonnes) between Victoria and South Australia, by transport mode, 1972–2030

Year	VIC–SA				SA–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	771	354	413	5	957	356	584	17
1973	872	451	415	6	1 060	459	584	17
1974	968	543	418	8	1 156	557	583	17
1975	1 021	586	420	15	1 194	603	583	8
1976	1 123	677	423	23	1 284	701	583	0
1977	1 173	720	430	22	1 360	747	613	0
1978	1 193	733	438	22	1 404	762	643	0
1979	1 285	819	445	21	1 527	855	672	0
1980	1 413	940	452	21	1 690	988	702	0
1981	1 542	1 024	498	20	1 825	1 079	746	0
1982	1 635	1 106	510	20	1 850	1 170	680	0
1983	1 525	985	521	19	1 654	1 037	614	3
1984	1 887	1 248	633	6	2 059	1 327	732	0
1985	1 962	1 295	663	4	2 079	1 379	700	0
1986	2 049	1 471	578	0	2 227	1 575	637	15
1987	2 071	1 494	577	0	2 318	1 601	717	0
1988	2 354	1 704	650	0	2 659	1 837	822	0
1989	2 649	1 898	751	0	2 962	2 055	907	0
1990	2 778	2 007	771	0	2 927	2 179	738	10
1991	2 847	2 036	811	0	2 914	2 212	701	1
1992	2 907	2 067	840	0	2 995	2 246	749	0
1993	3 115	2 267	848	0	3 321	2 474	847	0
1994	3 215	2 438	776	2	3 617	2 669	946	3
1995	3 317	2 612	703	2	3 912	2 868	1 044	0
1996	3 657	2 930	698	29	4 295	3 233	1 062	0
1997	4 131	3 201	927	3	4 493	3 546	945	2
1998	4 769	3 484	1 275	10	4 942	3 874	1 063	5
1999	5 075	3 825	1 244	6	5 121	4 270	850	0
2000	5 456	4 167	1 281	8	5 577	4 669	907	1
2001	5 674	4 339	1 318	17	5 885	4 870	964	51
2002	6 031	4 645	1 356	30	6 251	5 229	1 021	0
2003	6 418	4 999	1 393	27	6 725	5 646	1 079	0
2004	6 802	5 331	1 430	41	7 176	6 038	1 136	3
2005	7 175	5 638	1 467	69	7 601	6 402	1 193	6
2006	7 663	5 979	1 605	79	7 804	6 806	998	0
2007	8 190	6 441	1 630	119	8 436	7 356	1 078	2
Forecasts								
2008	8 655	6 797	1 777	80	9 352	8 087	1 258	7
2009	8 888	6 971	1 835	83	9 362	8 110	1 245	7
2010	9 210	7 213	1 912	86	9 751	8 462	1 282	7
2011	9 661	7 556	2 016	90	10 309	8 962	1 339	8
2012	10 302	8 045	2 161	96	11 096	9 663	1 424	8
2013	10 909	8 508	2 300	102	11 796	10 291	1 497	9
2014	11 569	9 009	2 452	108	12 558	10 974	1 575	9
2015	12 255	9 530	2 610	115	13 355	11 690	1 655	10
2016	13 028	10 117	2 789	122	14 254	12 498	1 745	11
2017	13 862	10 749	2 983	130	15 225	13 372	1 842	11
2018	14 585	11 294	3 155	137	16 021	14 093	1 916	12
2019	15 246	11 789	3 314	143	16 761	14 768	1 980	12
2020	15 858	12 244	3 464	149	17 451	15 400	2 037	13
2021	16 487	12 712	3 620	155	18 175	16 065	2 097	14
2022	17 122	13 182	3 778	161	18 916	16 745	2 156	14
2023	17 723	13 626	3 930	167	19 612	17 388	2 209	15
2024	18 333	14 074	4 085	173	20 329	18 051	2 262	15
2025	18 959	14 534	4 246	179	21 067	18 735	2 317	16
2026	19 600	15 004	4 410	185	21 824	19 437	2 371	16
2027	20 238	15 470	4 576	192	22 569	20 129	2 423	17
2028	20 881	15 939	4 744	198	23 333	20 840	2 475	18
2029	21 537	16 416	4 917	204	24 114	21 569	2 527	18
2030	22 217	16 909	5 097	211	24 924	22 325	2 580	19
Distance (km)		559	800	1 646		462	639	1 305

Source: BITRE estimates.

TA.10 Interstate freight flows (kilotonnes) between Victoria and Western Australia, by transport mode, 1972–2030

Year	VIC–WA				WA–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	388	31	148	210	187	11	9	167
1973	438	49	183	206	201	16	23	163
1974	492	70	219	202	215	20	36	159
1975	481	84	255	142	179	21	50	109
1976	442	69	291	82	137	15	63	59
1977	436	80	281	75	85	15	67	3
1978	421	83	271	67	89	15	71	3
1979	421	100	261	60	96	19	74	3
1980	430	126	251	53	104	23	78	3
1981	476	146	285	46	136	27	106	3
1982	488	163	287	38	163	31	130	3
1983	447	128	288	31	181	25	153	3
1984	517	182	311	25	186	38	134	14
1985	586	184	319	84	168	40	110	18
1986	599	216	312	71	164	48	110	6
1987	619	210	357	52	190	46	138	6
1988	713	246	397	69	194	55	137	2
1989	808	277	486	46	220	62	154	4
1990	762	284	456	22	215	64	150	1
1991	703	266	427	10	223	60	161	2
1992	687	257	411	19	256	59	197	0
1993	715	289	382	44	284	67	214	4
1994	769	273	440	56	295	64	230	1
1995	859	275	497	86	316	65	247	4
1996	857	252	525	80	273	60	212	1
1997	882	219	568	95	263	53	210	0
1998	901	188	611	102	309	47	256	7
1999	965	177	654	135	330	44	282	4
2000	1 044	136	697	211	402	61	335	6
2001	1 056	106	741	210	478	71	387	20
2002	1 137	103	784	250	558	69	440	49
2003	1 262	102	827	334	655	68	492	94
2004	1 295	108	870	318	633	72	545	16
2005	1 337	117	913	307	707	78	597	31
2006	1 098	98	725	275	798	99	684	15
2007	1 288	102	906	280	918	103	796	19
Forecasts								
2008	1 523	160	1 020	343	828	91	721	17
2009	1 541	162	1 032	347	840	92	731	17
2010	1 584	166	1 061	357	861	95	749	17
2011	1 639	172	1 098	369	885	97	770	18
2012	1 714	180	1 148	386	919	101	799	18
2013	1 781	187	1 193	401	949	104	825	19
2014	1 853	194	1 241	417	981	108	853	20
2015	1 926	202	1 290	434	1 013	111	881	20
2016	2 009	211	1 346	452	1 050	115	913	21
2017	2 098	220	1 405	472	1 089	120	948	22
2018	2 173	228	1 456	489	1 123	124	977	22
2019	2 241	235	1 501	505	1 153	127	1 003	23
2020	2 302	242	1 542	518	1 180	130	1 027	24
2021	2 364	248	1 584	532	1 207	133	1 050	24
2022	2 425	255	1 625	546	1 233	136	1 073	25
2023	2 481	260	1 662	559	1 257	138	1 094	25
2024	2 537	266	1 699	571	1 280	141	1 114	26
2025	2 593	272	1 737	584	1 304	143	1 134	26
2026	2 649	278	1 775	597	1 327	146	1 154	27
2027	2 705	284	1 812	609	1 350	148	1 174	27
2028	2 759	290	1 849	621	1 372	151	1 194	27
2029	2 814	295	1 885	634	1 394	153	1 213	28
2030	2 871	301	1 923	646	1 417	156	1 232	28
Distance (km)		3 564	2 882	2 855		3 538	3 479	4 794

Source: BITRE estimates.

TA.11 Interstate freight flows (kilotonnes) between Victoria and Australian Capital Territory, by transport mode, 1972–2030

Year	VIC–ACT				ACT–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	144	137	7	0	15	15	0	0
1973	141	133	8	0	16	16	0	0
1974	138	130	9	0	16	16	0	0
1975	135	126	9	0	17	17	0	0
1976	133	123	10	0	18	18	0	0
1977	130	120	11	0	19	19	0	0
1978	128	117	12	0	19	19	0	0
1979	126	113	12	0	20	20	0	0
1980	124	110	13	0	21	21	0	0
1981	122	108	14	0	22	22	0	0
1982	119	105	15	0	23	23	0	0
1983	117	102	15	0	24	24	0	0
1984	117	99	18	0	25	25	0	0
1985	116	97	19	0	26	26	0	0
1986	111	94	17	0	27	27	0	0
1987	106	92	14	0	28	28	0	0
1988	101	89	12	0	29	29	0	0
1989	98	87	11	0	30	30	0	0
1990	95	85	10	0	32	32	0	0
1991	91	82	9	0	33	33	0	0
1992	88	80	8	0	34	34	0	0
1993	78	78	0	0	36	36	0	0
1994	76	76	0	0	37	37	0	0
1995	74	74	0	0	39	39	0	0
1996	72	72	0	0	41	41	0	0
1997	70	70	0	0	42	42	0	0
1998	68	68	0	0	44	44	0	0
1999	67	67	0	0	46	46	0	0
2000	65	65	0	0	48	48	0	0
2001	63	63	0	0	50	50	0	0
2002	61	61	0	0	52	52	0	0
2003	60	60	0	0	54	54	0	0
2004	58	58	0	0	57	57	0	0
2005	57	57	0	0	59	59	0	0
2006	55	55	0	0	61	61	0	0
2007	54	54	0	0	64	64	0	0
Forecasts								
2008	59	59	0	0	89	89	0	0
2009	59	59	0	0	91	91	0	0
2010	59	59	0	0	93	93	0	0
2011	58	58	0	0	96	96	0	0
2012	55	55	0	0	99	99	0	0
2013	53	53	0	0	103	103	0	0
2014	51	51	0	0	108	108	0	0
2015	48	48	0	0	112	112	0	0
2016	46	46	0	0	117	117	0	0
2017	44	44	0	0	122	122	0	0
2018	43	43	0	0	127	127	0	0
2019	42	42	0	0	131	131	0	0
2020	40	40	0	0	135	135	0	0
2021	39	39	0	0	138	138	0	0
2022	38	38	0	0	142	142	0	0
2023	37	37	0	0	145	145	0	0
2024	36	36	0	0	149	149	0	0
2025	35	35	0	0	152	152	0	0
2026	34	34	0	0	155	155	0	0
2027	33	33	0	0	159	159	0	0
2028	32	32	0	0	162	162	0	0
2029	31	31	0	0	165	165	0	0
2030	30	30	0	0	168	168	0	0
Distance (km)		617	838	1		617	838	1

Source: BITRE estimates.

TA.12 Interstate freight flows (kilotonnes) between Victoria and Northern Territory, by transport mode, 1972–2030

Year	VIC–NT				NT–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	16	0	4	12	9	1	0	8
1973	16	0	4	11	9	1	0	8
1974	15	0	5	10	8	1	0	7
1975	16	0	5	11	8	1	0	7
1976	17	0	6	11	7	1	0	6
1977	18	0	6	12	7	1	0	5
1978	19	0	6	13	6	1	0	5
1979	20	0	7	13	6	1	0	4
1980	21	0	7	14	5	1	0	4
1981	22	0	7	15	5	1	0	3
1982	23	0	8	15	4	1	0	3
1983	24	0	8	16	3	1	0	2
1984	11	0	9	2	3	2	0	1
1985	10	0	10	0	2	2	0	0
1986	9	0	8	0	2	2	0	0
1987	10	0	10	0	3	2	1	0
1988	12	1	11	0	4	2	2	0
1989	13	1	12	0	4	2	2	0
1990	13	1	12	0	4	2	2	0
1991	14	1	13	0	4	2	2	0
1992	14	1	13	0	4	2	2	0
1993	16	1	14	0	5	2	3	0
1994	17	2	16	0	5	2	3	0
1995	19	2	17	0	6	2	4	0
1996	25	3	18	4	7	2	4	1
1997	21	4	17	0	5	2	3	0
1998	21	5	16	0	2	2	0	0
1999	27	7	20	0	4	2	2	0
2000	26	9	17	0	5	2	3	0
2001	24	10	14	0	5	2	3	0
2002	26	12	14	0	5	2	3	0
2003	21	7	14	0	9	6	3	0
2004	23	9	14	0	9	6	3	0
2005	24	10	14	0	9	6	3	0
2006	26	12	14	0	9	6	3	0
2007	27	13	14	0	7	7	0	0
Forecasts								
2008	28	14	14	0	7	6	0	0
2009	28	14	14	0	6	6	0	0
2010	28	14	14	0	6	6	0	0
2011	28	14	14	0	6	6	0	0
2012	28	14	14	0	6	6	0	0
2013	27	14	14	0	6	6	0	0
2014	27	14	14	0	6	5	0	0
2015	27	13	13	0	5	5	0	0
2016	26	13	13	0	5	5	0	0
2017	26	13	13	0	5	5	0	0
2018	26	13	13	0	5	4	0	0
2019	26	13	13	0	4	4	0	0
2020	25	13	13	0	4	4	0	0
2021	25	13	13	0	4	4	0	0
2022	25	12	12	0	4	4	0	0
2023	25	12	12	0	4	4	0	0
2024	24	12	12	0	4	3	0	0
2025	24	12	12	0	4	3	0	0
2026	24	12	12	0	3	3	0	0
2027	24	12	12	0	3	3	0	0
2028	23	12	12	0	3	3	0	0
2029	23	12	12	0	3	3	0	0
2030	23	11	11	0	3	3	0	0
Distance (km)		2 092	2 449	5 000		2 092	2 660	5 000

Source: BITRE estimates.

TA.13 Interstate freight flows (kilotonnes) between Victoria and Tasmania, by transport mode, 1972–2030

Year	VIC–TAS				TAS–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1 068	0	0	1 068	1 177	0	0	1 177
1973	912	0	0	912	777	0	0	777
1974	755	0	0	755	378	0	0	378
1975	823	0	0	823	325	0	0	325
1976	891	0	0	891	272	0	0	272
1977	821	0	0	821	320	0	0	320
1978	752	0	0	752	368	0	0	368
1979	683	0	0	683	416	0	0	416
1980	614	0	0	614	463	0	0	463
1981	545	0	0	545	511	0	0	511
1982	476	0	0	476	559	0	0	559
1983	414	0	0	414	607	0	0	607
1984	486	0	0	486	713	0	0	713
1985	511	0	0	511	701	0	0	701
1986	559	0	0	559	696	0	0	696
1987	662	0	0	662	923	0	0	923
1988	680	0	0	680	905	0	0	905
1989	830	0	0	830	1 039	0	0	1 039
1990	861	0	0	861	1 127	0	0	1 127
1991	757	0	0	757	1 247	0	0	1 247
1992	812	0	0	812	1 095	0	0	1 095
1993	847	0	0	847	1 079	0	0	1 079
1994	884	0	0	884	1 291	0	0	1 291
1995	973	0	0	973	1 239	0	0	1 239
1996	1 061	0	0	1 061	1 307	0	0	1 307
1997	1 110	0	0	1 110	1 440	0	0	1 440
1998	1 082	0	0	1 082	1 425	0	0	1 425
1999	1 092	0	0	1 092	1 442	0	0	1 442
2000	1 258	0	0	1 258	1 489	0	0	1 489
2001	1 079	0	0	1 079	1 525	0	0	1 525
2002	1 288	0	0	1 288	1 862	0	0	1 862
2003	1 457	0	0	1 457	2 218	0	0	2 218
2004	1 680	0	0	1 680	2 563	0	0	2 563
2005	1 818	0	0	1 818	2 635	0	0	2 635
2006	1 832	0	0	1 832	2 148	0	0	2 148
2007	1 910	0	0	1 910	2 116	0	0	2 116
Forecasts								
2008	1 909	0	0	1 909	2 696	0	0	2 696
2009	1 688	0	0	1 688	2 597	0	0	2 597
2010	1 774	0	0	1 774	2 719	0	0	2 719
2011	1 879	0	0	1 879	2 889	0	0	2 889
2012	1 984	0	0	1 984	3 111	0	0	3 111
2013	1 974	0	0	1 974	3 259	0	0	3 259
2014	1 967	0	0	1 967	3 419	0	0	3 419
2015	1 957	0	0	1 957	3 583	0	0	3 583
2016	1 955	0	0	1 955	3 769	0	0	3 769
2017	1 954	0	0	1 954	3 968	0	0	3 968
2018	1 895	0	0	1 895	4 091	0	0	4 091
2019	1 861	0	0	1 861	4 214	0	0	4 214
2020	1 834	0	0	1 834	4 330	0	0	4 330
2021	1 825	0	0	1 825	4 463	0	0	4 463
2022	1 821	0	0	1 821	4 603	0	0	4 603
2023	1 807	0	0	1 807	4 724	0	0	4 724
2024	1 800	0	0	1 800	4 854	0	0	4 854
2025	1 792	0	0	1 792	4 986	0	0	4 986
2026	1 783	0	0	1 783	5 120	0	0	5 120
2027	1 768	0	0	1 768	5 244	0	0	5 244
2028	1 758	0	0	1 758	5 375	0	0	5 375
2029	1 749	0	0	1 749	5 509	0	0	5 509
2030	1 739	0	0	1 739	5 646	0	0	5 646
Distance (km)		1	1	632		1	1	475

Source: BITRE estimates.

TA.14 Interstate freight flows (kilotonnes) between Queensland and South Australia, by transport mode, 1972–2030

Year	QLD–SA				SA–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	54	35	16	4	153	92	61	0
1973	63	44	16	4	159	105	54	0
1974	70	52	15	4	164	116	48	1
1975	72	56	15	2	162	121	41	1
1976	78	64	14	0	165	131	34	1
1977	80	67	13	0	188	135	53	0
1978	81	69	12	0	208	137	71	0
1979	87	76	11	0	235	145	90	0
1980	96	86	10	0	264	156	108	0
1981	103	93	10	0	249	164	85	0
1982	106	100	6	0	248	171	78	0
1983	93	90	2	1	230	160	70	0
1984	121	112	9	0	266	182	84	0
1985	136	116	11	9	270	186	83	1
1986	142	130	12	0	272	199	73	0
1987	150	132	18	0	276	201	75	0
1988	178	149	27	2	314	216	98	0
1989	214	165	49	0	357	229	128	0
1990	257	174	72	11	398	236	162	0
1991	254	176	78	0	374	238	136	0
1992	242	179	63	0	384	240	144	0
1993	269	195	60	14	416	252	164	0
1994	269	208	58	3	446	262	184	0
1995	277	222	55	0	476	272	204	0
1996	294	247	47	0	469	290	179	1
1997	324	268	56	0	486	304	182	0
1998	348	290	58	0	501	318	182	1
1999	353	316	37	0	535	335	200	0
2000	393	342	50	2	546	351	195	0
2001	418	355	62	1	550	358	190	2
2002	442	378	64	0	558	372	182	4
2003	471	405	66	0	564	387	174	3
2004	497	429	68	0	569	401	166	2
2005	523	452	70	1	571	413	158	0
2006	557	478	72	7	577	426	150	1
2007	604	512	89	3	667	444	217	6
Forecasts								
2008	606	517	88	1	643	444	199	0
2009	638	548	89	1	606	448	157	0
2010	650	562	87	1	629	470	159	0
2011	666	579	86	1	658	497	161	0
2012	691	605	85	1	691	526	164	0
2013	724	638	85	1	700	538	161	0
2014	760	673	85	1	710	551	159	0
2015	796	710	85	1	720	564	156	0
2016	838	751	85	1	733	579	153	0
2017	882	796	84	2	746	595	150	0
2018	928	843	83	2	745	600	145	0
2019	967	884	82	2	747	608	140	0
2020	1 003	922	79	2	750	615	135	0
2021	1 036	959	76	2	757	626	131	0
2022	1 069	994	73	2	764	638	126	0
2023	1 100	1 030	69	2	768	647	121	0
2024	1 131	1 064	64	2	774	657	117	0
2025	1 161	1 100	60	2	779	667	112	0
2026	1 192	1 136	55	2	784	677	107	0
2027	1 225	1 173	49	2	787	686	101	0
2028	1 256	1 210	44	2	792	695	96	0
2029	1 287	1 247	38	2	796	705	91	0
2030	1 319	1 285	31	2	800	714	86	0
Distance (km)		1 990	2 185	3 799		1 922	2 796	2 993

Source: BITRE estimates.

TA.15 Interstate freight flows (kilotonnes) between Queensland and Western Australia, by transport mode, 1972–2030

Year	QLD–WA				WA–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	54	4	6	44	16	3	1	12
1973	52	6	6	41	23	4	9	10
1974	51	9	6	37	30	6	17	7
1975	42	11	5	26	35	6	25	5
1976	29	9	5	16	39	4	33	2
1977	18	10	6	2	32	4	26	2
1978	19	11	7	2	24	4	18	2
1979	22	13	8	2	17	5	11	2
1980	27	16	9	2	11	7	3	1
1981	26	19	6	2	13	8	4	1
1982	28	22	5	2	16	9	7	1
1983	24	18	4	2	17	7	9	1
1984	31	27	4	1	25	11	14	0
1985	31	28	3	0	25	11	14	0
1986	37	35	2	0	35	14	21	0
1987	38	36	2	0	40	14	26	0
1988	55	45	10	0	51	18	33	0
1989	64	54	8	2	67	22	42	3
1990	65	60	5	0	46	24	22	0
1991	75	61	14	0	69	24	44	1
1992	89	64	25	1	118	26	53	39
1993	116	78	37	1	92	32	61	0
1994	141	81	48	11	101	33	68	0
1995	160	92	60	9	114	37	76	1
1996	186	95	89	2	134	38	95	1
1997	192	95	93	4	145	39	106	0
1998	206	96	88	22	163	39	94	30
1999	210	90	90	30	167	37	102	28
2000	202	69	91	41	168	51	107	10
2001	212	54	93	66	172	59	112	1
2002	182	52	94	36	191	58	130	4
2003	218	52	96	71	225	57	147	21
2004	266	55	97	114	241	61	165	15
2005	210	59	99	52	250	66	182	2
2006	224	50	94	80	335	83	250	2
2007	324	52	166	106	253	86	162	5
Forecasts								
2008	391	82	188	121	327	95	229	3
2009	346	73	166	107	328	95	230	3
2010	371	78	178	115	340	99	238	3
2011	406	85	195	126	356	103	249	4
2012	450	95	216	140	380	110	266	4
2013	469	98	225	145	402	117	282	4
2014	489	103	235	152	427	124	299	4
2015	509	107	244	158	452	131	316	5
2016	532	112	255	165	481	139	336	5
2017	557	117	267	173	511	148	358	5
2018	560	118	269	174	538	156	377	5
2019	568	119	273	176	562	163	394	6
2020	576	121	277	179	585	170	410	6
2021	590	124	283	183	608	176	426	6
2022	606	127	291	188	632	183	442	6
2023	618	130	297	192	654	190	458	7
2024	632	133	304	196	676	196	473	7
2025	647	136	311	201	699	203	490	7
2026	662	139	318	205	723	210	506	7
2027	674	141	323	209	747	217	523	7
2028	688	145	330	213	770	223	539	8
2029	703	148	337	218	795	230	556	8
2030	718	151	344	222	820	238	574	8
Distance (km)		4 668	5 295	5 086		4 228	5 377	5 203

Source: BITRE estimates.

TA.16 Interstate freight flows (kilotonnes) between Queensland and Australian Capital Territory, by transport mode, 1972–2030

Year	QLD–ACT				ACT–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1	1	0	0	1	1	0	0
1973	1	1	0	0	1	1	0	0
1974	1	1	0	0	1	1	0	0
1975	1	1	0	0	1	1	0	0
1976	1	1	0	0	1	1	0	0
1977	1	1	0	0	1	1	0	0
1978	1	1	0	0	1	1	0	0
1979	1	1	0	0	1	1	0	0
1980	1	1	0	0	1	1	0	0
1981	1	1	0	0	1	1	0	0
1982	1	1	0	0	1	1	0	0
1983	1	1	0	0	1	1	0	0
1984	1	1	0	0	1	1	0	0
1985	1	1	0	0	1	1	0	0
1986	1	1	0	0	1	1	0	0
1987	1	1	0	0	1	1	0	0
1988	1	1	0	0	1	1	0	0
1989	1	1	0	0	1	1	0	0
1990	1	1	0	0	1	1	0	0
1991	1	1	0	0	1	1	0	0
1992	1	1	0	0	1	1	0	0
1993	1	1	0	0	1	1	0	0
1994	1	1	0	0	1	1	0	0
1995	1	1	0	0	1	1	0	0
1996	1	1	0	0	1	1	0	0
1997	1	1	0	0	1	1	0	0
1998	1	1	0	0	1	1	0	0
1999	1	1	0	0	1	1	0	0
2000	1	1	0	0	1	1	0	0
2001	1	1	0	0	1	1	0	0
2002	1	1	0	0	1	1	0	0
2003	1	1	0	0	1	1	0	0
2004	1	1	0	0	1	1	0	0
2005	1	1	0	0	1	1	0	0
2006	1	1	0	0	1	1	0	0
2007	1	1	0	0	1	1	0	0
Forecasts								
2008	1	1	0	0	1	1	0	0
2009	1	1	0	0	1	1	0	0
2010	1	1	0	0	1	1	0	0
2011	1	1	0	0	1	1	0	0
2012	1	1	0	0	1	1	0	0
2013	1	1	0	0	1	1	0	0
2014	1	1	0	0	1	1	0	0
2015	1	1	0	0	1	1	0	0
2016	1	1	0	0	1	1	0	0
2017	1	1	0	0	1	1	0	0
2018	1	1	0	0	1	1	0	0
2019	1	1	0	0	1	1	0	0
2020	1	1	0	0	1	1	0	0
2021	1	1	0	0	1	1	0	0
2022	1	1	0	0	1	1	0	0
2023	1	1	0	0	1	1	0	0
2024	1	1	0	0	1	1	0	0
2025	1	1	0	0	1	1	0	0
2026	1	1	0	0	1	1	0	0
2027	1	1	0	0	1	1	0	0
2028	1	1	0	0	1	1	0	0
2029	1	1	0	0	1	1	0	0
2030	1	1	0	0	1	1	0	0
Distance (km)		1 196	1	1		1 223	1	1

Source: BITRE estimates.

TA.17 Interstate freight flows (kilotonnes) between Queensland and Northern Territory, by transport mode, 1972–2030

Year	QLD–NT				NT–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	40	28	0	12	53	53	0	0
1973	52	34	0	19	59	59	0	0
1974	64	39	0	26	64	64	0	0
1975	63	41	0	22	66	66	0	0
1976	64	46	0	19	70	70	0	0
1977	67	48	0	19	72	72	0	0
1978	67	49	0	19	72	72	0	0
1979	72	53	0	19	76	76	0	0
1980	78	59	0	19	80	80	0	0
1981	82	63	0	19	83	83	0	0
1982	86	67	0	19	86	86	0	0
1983	80	61	0	19	94	82	0	12
1984	103	74	0	30	117	91	0	26
1985	83	76	0	7	92	92	0	0
1986	91	84	0	7	100	97	0	3
1987	91	85	0	6	98	98	0	0
1988	97	94	0	3	103	103	0	0
1989	102	102	0	0	108	108	0	0
1990	107	106	0	1	111	111	0	0
1991	108	108	0	0	111	111	0	0
1992	109	109	0	0	112	112	0	0
1993	118	117	0	1	117	117	0	0
1994	124	124	0	0	121	120	0	1
1995	132	130	0	2	124	124	0	0
1996	154	142	0	12	130	130	0	0
1997	178	152	0	26	135	135	0	0
1998	195	163	0	32	140	140	0	0
1999	186	175	0	12	146	145	0	0
2000	217	187	0	30	151	151	0	1
2001	222	193	0	29	156	153	0	3
2002	234	203	0	31	161	158	0	3
2003	207	175	0	32	122	119	0	3
2004	215	184	0	31	134	122	0	12
2005	220	192	0	29	125	125	0	0
2006	228	201	0	27	128	128	0	0
2007	240	213	0	27	132	132	0	0
Forecasts								
2008	317	270	0	47	142	142	0	0
2009	322	274	0	48	148	148	0	0
2010	332	283	0	49	150	150	0	0
2011	345	294	0	51	152	152	0	0
2012	363	309	0	54	156	156	0	0
2013	380	324	0	56	160	160	0	0
2014	399	340	0	59	165	165	0	0
2015	418	356	0	62	170	170	0	0
2016	440	375	0	65	176	176	0	0
2017	463	395	0	69	182	182	0	0
2018	484	412	0	72	188	188	0	0
2019	502	428	0	74	193	193	0	0
2020	518	442	0	77	198	198	0	0
2021	535	456	0	79	202	202	0	0
2022	552	470	0	82	206	206	0	0
2023	568	484	0	84	210	210	0	0
2024	583	497	0	86	213	213	0	0
2025	599	511	0	89	217	217	0	0
2026	615	524	0	91	220	220	0	0
2027	631	538	0	93	224	224	0	0
2028	647	552	0	96	227	227	0	0
2029	663	565	0	98	230	230	0	0
2030	680	579	0	101	233	233	0	0
Distance (km)		2 349	2 469	3 390		2 322	2 469	2 693

Source: BITRE estimates.

TA.18 Interstate freight flows (kilotonnes) between Queensland and Tasmania, by transport mode, 1972–2030

Year	QLD–TAS				TAS–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	15	0	0	15	4	0	0	4
1973	8	0	0	8	5	0	0	5
1974	1	0	0	1	7	0	0	7
1975	2	0	0	2	7	0	0	7
1976	3	0	0	3	7	0	0	7
1977	3	0	0	3	14	0	0	14
1978	4	0	0	4	21	0	0	21
1979	5	0	0	5	28	0	0	28
1980	6	0	0	6	36	0	0	36
1981	7	0	0	7	43	0	0	43
1982	8	0	0	8	50	0	0	50
1983	9	0	0	9	57	0	0	57
1984	11	0	0	11	56	0	0	56
1985	1	0	0	1	50	0	0	50
1986	7	0	0	7	48	0	0	48
1987	12	0	0	12	62	0	0	62
1988	1	0	0	1	27	0	0	27
1989	4	0	0	4	4	0	0	4
1990	1	0	0	1	11	0	0	11
1991	1	0	0	1	1	0	0	1
1992	1	0	0	1	1	0	0	1
1993	3	0	0	3	2	0	0	2
1994	2	0	0	2	1	0	0	1
1995	5	0	0	5	1	0	0	1
1996	1	0	0	1	0	0	0	0
1997	1	0	0	1	1	0	0	1
1998	0	0	0	0	0	0	0	0
1999	1	0	0	1	4	0	0	4
2000	1	0	0	1	0	0	0	0
2001	6	0	0	6	1	0	0	1
2002	5	0	0	5	17	0	0	17
2003	6	0	0	6	3	0	0	3
2004	1	0	0	1	26	0	0	26
2005	6	0	0	6	14	0	0	14
2006	6	0	0	6	4	0	0	4
2007	6	0	0	6	1	0	0	1
Forecasts								
2008	6	0	0	6	10	0	0	10
2009	6	0	0	6	10	0	0	10
2010	6	0	0	6	10	0	0	10
2011	6	0	0	6	10	0	0	10
2012	6	0	0	6	10	0	0	10
2013	6	0	0	6	10	0	0	10
2014	6	0	0	6	10	0	0	10
2015	6	0	0	6	10	0	0	10
2016	6	0	0	6	9	0	0	9
2017	6	0	0	6	9	0	0	9
2018	6	0	0	6	9	0	0	9
2019	5	0	0	5	9	0	0	9
2020	5	0	0	5	9	0	0	9
2021	5	0	0	5	9	0	0	9
2022	5	0	0	5	9	0	0	9
2023	5	0	0	5	9	0	0	9
2024	5	0	0	5	9	0	0	9
2025	5	0	0	5	9	0	0	9
2026	5	0	0	5	9	0	0	9
2027	5	0	0	5	8	0	0	8
2028	5	0	0	5	8	0	0	8
2029	5	0	0	5	8	0	0	8
2030	5	0	0	5	8	0	0	8
Distance (km)		1	1	2 368		1	1	2 505

Source: BITRE estimates.

TA.19 Interstate freight flows (kilotonnes) between South Australia and Western Australia, by transport mode, 1972–2030

Year	SA–WA				WA–SA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	189	9	174	7	118	12	88	18
1973	237	14	218	5	116	17	89	10
1974	286	20	262	4	113	22	90	1
1975	333	24	305	4	114	23	91	1
1976	373	20	349	4	108	16	92	0
1977	378	23	355	0	109	16	92	0
1978	384	24	361	0	110	17	93	0
1979	395	29	366	0	114	20	94	0
1980	408	36	372	0	121	26	95	0
1981	392	42	350	0	154	30	124	0
1982	368	49	319	0	153	34	120	0
1983	338	50	288	0	143	28	115	0
1984	433	90	343	0	178	41	136	1
1985	440	112	328	0	203	44	159	0
1986	458	159	299	0	249	61	188	0
1987	630	184	446	0	247	70	177	0
1988	729	256	471	2	268	95	172	1
1989	855	338	516	1	325	125	197	3
1990	1 012	406	606	0	338	149	189	0
1991	982	444	536	2	335	161	174	0
1992	1 032	502	524	7	355	181	158	16
1993	1 223	662	555	7	417	238	176	3
1994	1 283	735	548	0	451	263	188	0
1995	1 424	879	541	5	530	314	200	16
1996	1 564	962	598	4	547	343	199	5
1997	1 625	1 018	600	8	527	362	165	0
1998	1 692	1 080	600	11	552	383	164	4
1999	1 619	1 014	600	5	588	360	225	3
2000	1 416	780	629	7	812	499	286	27
2001	1 292	606	657	29	934	582	346	6
2002	1 288	591	686	11	996	567	407	22
2003	1 323	586	714	23	1 042	562	468	12
2004	1 378	619	743	15	1 143	594	529	19
2005	1 462	671	771	20	1 245	644	589	11
2006	925	565	354	6	1 174	813	352	9
2007	1 323	586	723	14	1 338	843	486	9
Forecasts								
2008	1 294	621	660	16	1 470	882	573	15
2009	1 337	642	682	16	1 452	871	566	15
2010	1 385	665	706	17	1 504	903	587	15
2011	1 453	697	741	18	1 578	947	615	16
2012	1 549	744	790	19	1 683	1 010	656	17
2013	1 641	788	837	20	1 782	1 069	695	18
2014	1 740	835	887	21	1 889	1 134	737	19
2015	1 843	885	940	23	2 001	1 201	781	20
2016	1 959	940	999	24	2 128	1 277	830	22
2017	2 085	1 001	1 063	26	2 264	1 358	883	23
2018	2 194	1 053	1 119	27	2 382	1 429	929	24
2019	2 293	1 101	1 169	28	2 490	1 494	971	25
2020	2 385	1 145	1 216	29	2 590	1 554	1 010	26
2021	2 480	1 190	1 265	31	2 693	1 616	1 050	27
2022	2 575	1 236	1 313	32	2 796	1 678	1 091	29
2023	2 665	1 279	1 359	33	2 895	1 737	1 129	30
2024	2 757	1 323	1 406	34	2 994	1 797	1 168	31
2025	2 851	1 369	1 454	35	3 096	1 858	1 208	32
2026	2 948	1 415	1 503	36	3 201	1 921	1 248	33
2027	3 044	1 461	1 552	38	3 305	1 983	1 289	34
2028	3 140	1 507	1 602	39	3 410	2 046	1 330	35
2029	3 239	1 555	1 652	40	3 518	2 111	1 372	36
2030	3 341	1 604	1 704	41	3 629	2 177	1 415	37
Distance (km)		2 068	2 589	2 552		2 155	2 311	3 228

Source: BITRE estimates.

TA.20 Interstate freight flows (kilotonnes) between South Australia and Australian Captial Territory, by transport mode, 1972–2030

Year	SA–ACT				ACT–SA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1	0	1	0	1	1	0	0
1973	1	0	1	0	1	1	0	0
1974	2	0	2	0	1	1	0	0
1975	2	0	2	0	1	1	0	0
1976	2	0	2	0	1	1	0	0
1977	2	0	2	0	1	1	0	0
1978	2	0	2	0	1	1	0	0
1979	2	0	2	0	1	1	0	0
1980	2	0	2	0	1	1	0	0
1981	2	0	2	0	1	1	0	0
1982	2	0	2	0	1	1	0	0
1983	2	0	2	0	1	1	0	0
1984	2	0	2	0	1	1	0	0
1985	2	0	2	0	1	1	0	0
1986	2	0	2	0	1	1	0	0
1987	1	0	1	0	1	1	0	0
1988	1	0	1	0	1	1	0	0
1989	1	0	1	0	1	1	0	0
1990	1	0	1	0	1	1	0	0
1991	1	0	1	0	1	1	0	0
1992	1	0	1	0	1	1	0	0
1993	1	1	0	0	1	1	0	0
1994	1	1	0	0	1	1	0	0
1995	1	1	0	0	1	1	0	0
1996	1	1	0	0	1	1	0	0
1997	1	1	0	0	1	1	0	0
1998	1	1	0	0	1	1	0	0
1999	1	1	0	0	1	1	0	0
2000	1	1	0	0	1	1	0	0
2001	1	1	0	0	1	1	0	0
2002	1	1	0	0	1	1	0	0
2003	1	1	0	0	1	1	0	0
2004	1	1	0	0	1	1	0	0
2005	1	1	0	0	1	1	0	0
2006	1	1	0	0	1	1	0	0
2007	1	1	0	0	1	1	0	0
Forecasts								
2008	1	1	0	0	1	1	0	0
2009	1	1	0	0	1	1	0	0
2010	1	1	0	0	1	1	0	0
2011	1	1	0	0	1	1	0	0
2012	1	1	0	0	1	1	0	0
2013	1	1	0	0	1	1	0	0
2014	1	1	0	0	1	1	0	0
2015	1	1	0	0	1	1	0	0
2016	1	1	0	0	1	1	0	0
2017	1	1	0	0	1	1	0	0
2018	1	1	0	0	1	1	0	0
2019	1	1	0	0	1	1	0	0
2020	1	1	0	0	1	1	0	0
2021	1	1	0	0	1	1	0	0
2022	1	1	0	0	1	1	0	0
2023	1	1	0	0	1	1	0	0
2024	1	1	0	0	1	1	0	0
2025	1	1	0	0	1	1	0	0
2026	1	1	0	0	1	1	0	0
2027	1	1	0	0	1	1	0	0
2028	1	1	0	0	1	1	0	0
2029	1	1	0	0	1	1	0	0
2030	1	1	0	0	1	1	0	0
Distance (km)		1 189	1 304	1		1 110	1 304	1

Source: BITRE estimates.

TA.21 Interstate freight flows (kilotonnes) between South Australia and Northern Territory, by transport mode, 1972–2030

Year	SA–NT				NT–SA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	181	41	136	4	93	12	81	0
1973	172	49	121	2	89	16	74	0
1974	162	57	105	0	85	19	66	0
1975	150	60	90	0	79	21	59	0
1976	141	67	74	0	76	25	51	0
1977	159	70	89	0	85	26	59	0
1978	174	71	103	0	93	27	67	0
1979	195	78	118	0	105	31	74	0
1980	218	86	132	0	118	36	82	0
1981	221	92	129	0	121	39	82	0
1982	219	98	122	0	118	43	75	0
1983	204	90	114	0	106	38	68	0
1984	233	107	126	0	130	49	81	0
1985	231	110	121	0	128	51	77	0
1986	233	122	110	1	129	59	70	0
1987	258	123	135	0	144	60	84	0
1988	296	136	160	0	166	69	97	0
1989	318	148	170	0	182	78	104	0
1990	334	154	180	0	193	83	110	0
1991	345	156	189	0	202	85	117	0
1992	357	158	199	0	210	86	124	0
1993	398	169	228	0	228	95	133	0
1994	437	179	258	0	244	103	141	0
1995	476	189	287	0	261	112	150	0
1996	500	206	294	0	285	127	158	0
1997	527	221	292	14	279	140	139	0
1998	506	235	271	0	342	154	188	0
1999	513	253	260	0	337	171	166	0
2000	553	270	283	0	373	188	185	0
2001	585	278	307	0	401	197	204	0
2002	626	293	330	3	436	213	223	0
2003	592	239	353	0	317	75	242	0
2004	627	251	376	0	342	81	261	0
2005	662	262	400	0	347	86	261	0
2006	517	274	243	0	235	92	143	0
2007	748	290	458	0	280	100	180	0
Forecasts								
2008	796	298	498	0	278	102	176	0
2009	773	288	485	0	274	103	171	0
2010	806	299	507	0	286	110	176	0
2011	849	314	535	0	303	119	184	0
2012	906	333	572	0	327	131	195	0
2013	944	346	598	0	345	142	203	0
2014	985	360	625	0	365	154	212	0
2015	1 026	373	653	0	386	166	221	0
2016	1 074	389	685	0	410	180	230	0
2017	1 124	405	718	0	435	195	241	0
2018	1 156	415	741	0	454	207	247	0
2019	1 187	425	763	0	472	220	253	0
2020	1 217	434	783	0	489	232	257	0
2021	1 250	444	807	0	507	245	262	0
2022	1 285	454	831	0	526	259	267	0
2023	1 315	463	852	0	543	272	271	0
2024	1 347	472	875	0	561	286	275	0
2025	1 379	481	898	0	579	301	278	0
2026	1 411	490	921	0	598	316	282	0
2027	1 441	499	942	0	616	331	285	0
2028	1 472	507	965	0	635	347	288	0
2029	1 504	516	988	0	654	363	291	0
2030	1 536	525	1 011	0	674	380	293	0
Distance (km)		2 118	1 539	5 821		2 445	1 553	1

Source: BITRE estimates.

TA.22 Interstate freight flows (kilotonnes) between South Australia and Tasmania, by transport mode, 1972–2030

Year	SA–TAS				TAS–SA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	57	0	0	57	38	0	0	38
1973	48	0	0	48	24	0	0	24
1974	39	0	0	39	11	0	0	11
1975	52	0	0	52	14	0	0	14
1976	65	0	0	65	18	0	0	18
1977	58	0	0	58	23	0	0	23
1978	52	0	0	52	29	0	0	29
1979	46	0	0	46	35	0	0	35
1980	40	0	0	40	40	0	0	40
1981	34	0	0	34	46	0	0	46
1982	28	0	0	28	52	0	0	52
1983	22	0	0	22	58	0	0	58
1984	66	0	0	66	54	0	0	54
1985	55	0	0	55	23	0	0	23
1986	42	0	0	42	1	0	0	1
1987	36	0	0	36	23	0	0	23
1988	36	0	0	36	27	0	0	27
1989	1	0	0	1	16	0	0	16
1990	1	0	0	1	1	0	0	1
1991	1	0	0	1	4	0	0	4
1992	1	0	0	1	16	0	0	16
1993	1	0	0	1	12	0	0	12
1994	1	0	0	1	2	0	0	2
1995	1	0	0	1	17	0	0	17
1996	1	0	0	1	1	0	0	1
1997	11	0	0	11	1	0	0	1
1998	0	0	0	0	1	0	0	1
1999	0	0	0	0	5	0	0	5
2000	0	0	0	0	2	0	0	2
2001	1	0	0	1	1	0	0	1
2002	2	0	0	2	16	0	0	16
2003	0	0	0	0	39	0	0	39
2004	1	0	0	1	6	0	0	6
2005	0	0	0	0	9	0	0	9
2006	1	0	0	1	9	0	0	9
2007	1	0	0	1	9	0	0	9
Forecasts								
2008	1	0	0	1	10	0	0	10
2009	1	0	0	1	10	0	0	10
2010	1	0	0	1	10	0	0	10
2011	1	0	0	1	10	0	0	10
2012	1	0	0	1	10	0	0	10
2013	1	0	0	1	10	0	0	10
2014	1	0	0	1	10	0	0	10
2015	1	0	0	1	10	0	0	10
2016	1	0	0	1	9	0	0	9
2017	1	0	0	1	9	0	0	9
2018	1	0	0	1	9	0	0	9
2019	1	0	0	1	9	0	0	9
2020	1	0	0	1	9	0	0	9
2021	1	0	0	1	9	0	0	9
2022	1	0	0	1	9	0	0	9
2023	1	0	0	1	9	0	0	9
2024	1	0	0	1	9	0	0	9
2025	1	0	0	1	9	0	0	9
2026	1	0	0	1	9	0	0	9
2027	1	0	0	1	8	0	0	8
2028	1	0	0	1	8	0	0	8
2029	1	0	0	1	8	0	0	8
2030	1	0	0	1	8	0	0	8
Distance (km)		1	1	1 713		1	1	1 746

Source: BITRE estimates.

TA.23 Interstate freight flows (kilotonnes) between Western Australia and Australian Capital Territory, by transport mode, 1972–2030

Year	WA–ACT				ACT–WA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1	0	1	0	1	1	0	0
1973	2	0	2	0	1	1	0	0
1974	2	0	2	0	1	1	0	0
1975	3	0	3	0	1	1	0	0
1976	3	0	3	0	1	1	0	0
1977	3	0	3	0	1	1	0	0
1978	3	0	3	0	1	1	0	0
1979	2	0	2	0	1	1	0	0
1980	2	0	2	0	1	1	0	0
1981	2	0	2	0	1	1	0	0
1982	2	0	2	0	1	1	0	0
1983	2	0	2	0	1	1	0	0
1984	2	0	2	0	1	1	0	0
1985	2	0	2	0	1	1	0	0
1986	3	0	3	0	1	1	0	0
1987	2	0	2	0	1	1	0	0
1988	1	0	1	0	1	1	0	0
1989	1	0	1	0	1	1	0	0
1990	1	0	1	0	1	1	0	0
1991	1	0	1	0	1	1	0	0
1992	1	0	1	0	1	1	0	0
1993	1	1	0	0	1	1	0	0
1994	1	1	0	0	1	1	0	0
1995	1	1	0	0	1	1	0	0
1996	1	1	0	0	1	1	0	0
1997	1	1	0	0	1	1	0	0
1998	1	1	0	0	1	1	0	0
1999	1	1	0	0	1	1	0	0
2000	1	1	0	0	1	1	0	0
2001	1	1	0	0	1	1	0	0
2002	1	1	0	0	1	1	0	0
2003	1	1	0	0	1	1	0	0
2004	1	1	0	0	1	1	0	0
2005	1	1	0	0	1	1	0	0
2006	1	1	0	0	1	1	0	0
2007	1	1	0	0	1	1	0	0
Forecasts								
2008	1	1	0	0	1	1	0	0
2009	1	1	0	0	1	1	0	0
2010	1	1	0	0	1	1	0	0
2011	1	1	0	0	1	1	0	0
2012	1	1	0	0	1	1	0	0
2013	1	1	0	0	1	1	0	0
2014	1	1	0	0	1	1	0	0
2015	1	1	0	0	1	1	0	0
2016	1	1	0	0	1	1	0	0
2017	1	1	0	0	1	1	0	0
2018	1	1	0	0	1	1	0	0
2019	1	1	0	0	1	1	0	0
2020	1	1	0	0	1	1	0	0
2021	1	1	0	0	1	1	0	0
2022	1	1	0	0	1	1	0	0
2023	1	1	0	0	1	1	0	0
2024	1	1	0	0	1	1	0	0
2025	1	1	0	0	1	1	0	0
2026	1	1	0	0	1	1	0	0
2027	1	1	0	0	1	1	0	0
2028	1	1	0	0	1	1	0	0
2029	1	1	0	0	1	1	0	0
2030	1	1	0	0	1	1	0	0
Distance (km)		4 145	4 196	1		4 145	4 196	1

Source: BITRE estimates.

TA.24 Interstate freight flows (kilotonnes) between Western Australia and Northern Territory, by transport mode, 1972–2030

Year	WA–NT				NT–WA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	30	10	0	20	27	6	0	22
1973	32	13	0	20	29	7	2	20
1974	35	15	0	19	31	9	3	19
1975	35	16	0	19	36	10	5	21
1976	38	19	0	19	41	11	6	24
1977	39	20	0	19	40	12	6	22
1978	39	20	0	18	39	12	6	21
1979	41	23	0	18	39	14	5	19
1980	44	26	0	18	39	16	5	18
1981	45	28	0	18	39	17	5	17
1982	47	30	0	17	38	19	4	15
1983	44	27	0	17	35	17	4	14
1984	53	34	0	19	28	21	5	2
1985	52	35	0	17	29	22	4	2
1986	62	40	0	22	32	25	4	3
1987	62	40	0	22	32	26	4	2
1988	63	46	0	17	36	30	4	2
1989	69	50	0	19	40	33	4	3
1990	81	53	0	28	40	35	3	2
1991	63	54	0	9	42	36	3	3
1992	65	55	0	10	45	36	3	6
1993	71	60	0	11	47	40	3	4
1994	85	64	0	21	51	43	3	5
1995	87	69	0	18	52	46	3	3
1996	94	77	0	17	58	52	3	2
1997	83	83	0	0	57	57	0	0
1998	107	91	0	16	108	63	0	45
1999	119	99	0	20	73	69	0	4
2000	119	108	0	11	78	76	0	3
2001	124	112	0	12	84	79	0	5
2002	131	119	0	11	89	85	0	5
2003	142	128	0	14	97	91	0	6
2004	153	136	0	17	186	98	0	89
2005	153	144	0	9	106	104	0	3
2006	160	152	0	8	118	110	0	8
2007	173	163	0	10	121	119	0	2
Forecasts								
2008	178	172	0	6	101	99	0	2
2009	174	168	0	6	107	104	0	2
2010	181	175	0	6	108	105	0	2
2011	191	185	0	6	109	106	0	3
2012	205	198	0	7	111	108	0	3
2013	214	207	0	7	114	111	0	3
2014	224	217	0	7	117	115	0	3
2015	234	227	0	7	121	118	0	3
2016	246	239	0	8	125	122	0	3
2017	259	251	0	8	129	126	0	3
2018	267	259	0	8	134	131	0	3
2019	275	267	0	8	138	135	0	3
2020	283	275	0	8	141	138	0	3
2021	291	283	0	8	144	141	0	3
2022	300	292	0	8	147	144	0	3
2023	308	299	0	8	150	146	0	3
2024	316	307	0	8	152	149	0	4
2025	324	315	0	9	155	151	0	4
2026	332	324	0	9	157	153	0	4
2027	340	331	0	9	160	156	0	4
2028	348	340	0	9	162	158	0	4
2029	357	348	0	9	164	160	0	4
2030	365	356	0	9	166	163	0	4
Distance (km)		2 756	3 795	3 467		2 148	5 673	2 931

Source: BITRE estimates.

TA.25 Interstate freight flows (kilotonnes) between Western Australia and Tasmania, by transport mode, 1972–2030

Year	WA–NT				NT–WA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1	0	0	1	7	0	0	7
1973	1	0	0	1	7	0	0	7
1974	1	0	0	1	7	0	0	7
1975	1	0	0	1	5	0	0	5
1976	1	0	0	1	3	0	0	3
1977	1	0	0	1	1	0	0	1
1978	1	0	0	1	1	0	0	1
1979	1	0	0	1	1	0	0	1
1980	1	0	0	1	1	0	0	1
1981	1	0	0	1	1	0	0	1
1982	1	0	0	1	1	0	0	1
1983	9	0	0	9	51	0	0	51
1984	18	0	0	18	53	0	0	53
1985	22	0	0	22	70	0	0	70
1986	19	0	0	19	59	0	0	59
1987	23	0	0	23	70	0	0	70
1988	39	0	0	39	59	0	0	59
1989	36	0	0	36	55	0	0	55
1990	41	0	0	41	47	0	0	47
1991	21	0	0	21	45	0	0	45
1992	12	0	0	12	18	0	0	18
1993	1	0	0	1	30	0	0	30
1994	7	0	0	7	25	0	0	25
1995	13	0	0	13	23	0	0	23
1996	8	0	0	8	50	0	0	50
1997	1	0	0	1	58	0	0	58
1998	34	0	0	34	81	0	0	81
1999	18	0	0	18	109	0	0	109
2000	13	0	0	13	62	0	0	62
2001	7	0	0	7	37	0	0	37
2002	319	0	0	319	208	0	0	208
2003	9	0	0	9	277	0	0	277
2004	5	0	0	5	401	0	0	401
2005	8	0	0	8	12	0	0	12
2006	7	0	0	7	135	0	0	135
2007	15	0	0	15	173	0	0	173
Forecasts								
2008	8	0	0	8	50	0	0	50
2009	8	0	0	8	50	0	0	50
2010	8	0	0	8	50	0	0	50
2011	8	0	0	8	50	0	0	50
2012	8	0	0	8	50	0	0	50
2013	8	0	0	8	49	0	0	49
2014	8	0	0	8	48	0	0	48
2015	8	0	0	8	48	0	0	48
2016	8	0	0	8	47	0	0	47
2017	7	0	0	7	47	0	0	47
2018	7	0	0	7	46	0	0	46
2019	7	0	0	7	46	0	0	46
2020	7	0	0	7	45	0	0	45
2021	7	0	0	7	45	0	0	45
2022	7	0	0	7	45	0	0	45
2023	7	0	0	7	44	0	0	44
2024	7	0	0	7	44	0	0	44
2025	7	0	0	7	43	0	0	43
2026	7	0	0	7	43	0	0	43
2027	7	0	0	7	42	0	0	42
2028	7	0	0	7	42	0	0	42
2029	7	0	0	7	41	0	0	41
2030	7	0	0	7	41	0	0	41
Distance (km)		1	1	3 211		1	1	3 468

Source: BITRE estimates.

TA.26 Interstate freight flows (kilotonnes) between Australian Capital Territory and Northern Territory, by transport mode, 1972–2030

Year	ACT–NT				NT–ACT			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1	1	0	0	1	1	0	0
1973	1	1	0	0	1	1	0	0
1974	1	1	0	0	1	1	0	0
1975	1	1	0	0	1	1	0	0
1976	1	1	0	0	1	1	0	0
1977	1	1	0	0	1	1	0	0
1978	1	1	0	0	1	1	0	0
1979	1	1	0	0	1	1	0	0
1980	1	1	0	0	1	1	0	0
1981	1	1	0	0	1	1	0	0
1982	1	1	0	0	1	1	0	0
1983	1	1	0	0	1	1	0	0
1984	1	1	0	0	1	1	0	0
1985	1	1	0	0	1	1	0	0
1986	1	1	0	0	1	1	0	0
1987	1	1	0	0	1	1	0	0
1988	1	1	0	0	1	1	0	0
1989	1	1	0	0	1	1	0	0
1990	1	1	0	0	1	1	0	0
1991	1	1	0	0	1	1	0	0
1992	1	1	0	0	1	1	0	0
1993	1	1	0	0	1	1	0	0
1994	1	1	0	0	1	1	0	0
1995	1	1	0	0	1	1	0	0
1996	1	1	0	0	1	1	0	0
1997	1	1	0	0	1	1	0	0
1998	1	1	0	0	1	1	0	0
1999	1	1	0	0	1	1	0	0
2000	1	1	0	0	1	1	0	0
2001	1	1	0	0	1	1	0	0
2002	1	1	0	0	1	1	0	0
2003	1	1	0	0	1	1	0	0
2004	1	1	0	0	1	1	0	0
2005	1	1	0	0	1	1	0	0
2006	1	1	0	0	1	1	0	0
2007	1	1	0	0	1	1	0	0
Forecasts								
2008	1	1	0	0	1	1	0	0
2009	1	1	0	0	1	1	0	0
2010	1	1	0	0	1	1	0	0
2011	1	1	0	0	1	1	0	0
2012	1	1	0	0	1	1	0	0
2013	1	1	0	0	1	1	0	0
2014	1	1	0	0	1	1	0	0
2015	1	1	0	0	1	1	0	0
2016	1	1	0	0	1	1	0	0
2017	1	1	0	0	1	1	0	0
2018	1	1	0	0	1	1	0	0
2019	1	1	0	0	1	1	0	0
2020	1	1	0	0	1	1	0	0
2021	1	1	0	0	1	1	0	0
2022	1	1	0	0	1	1	0	0
2023	1	1	0	0	1	1	0	0
2024	1	1	0	0	1	1	0	0
2025	1	1	0	0	1	1	0	0
2026	1	1	0	0	1	1	0	0
2027	1	1	0	0	1	1	0	0
2028	1	1	0	0	1	1	0	0
2029	1	1	0	0	1	1	0	0
2030	1	1	0	0	1	1	0	0
Distance (km)		4 593	4 641	1		4 593	4 641	1

Source: BITRE estimates.

TA.27 Interstate freight flows (kilotonnes) between Australian Capital Territory and Tasmania, by transport mode, 1972–2030

Year	ACT–TAS				TAS–ACT			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972			0	0			0	0
1973			0	0			0	0
1974			0	0			0	0
1975			0	0			0	0
1976			0	0			0	0
1977			0	0			0	0
1978			0	0			0	0
1979			0	0			0	0
1980			0	0			0	0
1981			0	0			0	0
1982			0	0			0	0
1983			0	0			0	0
1984			0	0			0	0
1985			0	0			0	0
1986			0	0			0	0
1987			0	0			0	0
1988			0	0			0	0
1989			0	0			0	0
1990			0	0			0	0
1991			0	0			0	0
1992			0	0			0	0
1993			0	0			0	0
1994			0	0			0	0
1995			0	0			0	0
1996			0	0			0	0
1997			0	0			0	0
1998			0	0			0	0
1999			0	0			0	0
2000			0	0			0	0
2001			0	0			0	0
2002			0	0			0	0
2003			0	0			0	0
2004			0	0			0	0
2005			0	0			0	0
2006			0	0			0	0
2007			0	0			0	0
Forecasts								
2008			0	0			0	0
2009			0	0			0	0
2010			0	0			0	0
2011			0	0			0	0
2012			0	0			0	0
2013			0	0			0	0
2014			0	0			0	0
2015			0	0			0	0
2016			0	0			0	0
2017			0	0			0	0
2018			0	0			0	0
2019			0	0			0	0
2020			0	0			0	0
2021			0	0			0	0
2022			0	0			0	0
2023			0	0			0	0
2024			0	0			0	0
2025			0	0			0	0
2026			0	0			0	0
2027			0	0			0	0
2028			0	0			0	0
2029			0	0			0	0
2030			0	0			0	0
Distance (km)		0	0	0		0	0	0

Source: BITRE estimates.

TA.28 Interstate freight flows (kilotonnes) between Northern Territory and Tasmania, by transport mode, 1972–2030

Year	NT–TAS				TAS–NT			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1	0	0	1	1	0	0	1
1973	1	0	0	1	1	0	0	1
1974	1	0	0	1	1	0	0	1
1975	1	0	0	1	1	0	0	1
1976	1	0	0	1	1	0	0	1
1977	1	0	0	1	1	0	0	1
1978	1	0	0	1	1	0	0	1
1979	1	0	0	1	1	0	0	1
1980	1	0	0	1	1	0	0	1
1981	1	0	0	1	1	0	0	1
1982	1	0	0	1	1	0	0	1
1983	1	0	0	1	1	0	0	1
1984	1	0	0	1	3	0	0	3
1985	1	0	0	1	1	0	0	1
1986	1	0	0	1	1	0	0	1
1987	1	0	0	1	1	0	0	1
1988	1	0	0	1	1	0	0	1
1989	1	0	0	1	1	0	0	1
1990	1	0	0	1	1	0	0	1
1991	1	0	0	1	1	0	0	1
1992	1	0	0	1	1	0	0	1
1993	1	0	0	1	1	0	0	1
1994	1	0	0	1	1	0	0	1
1995	1	0	0	1	1	0	0	1
1996	1	0	0	1	1	0	0	1
1997	1	0	0	1	1	0	0	1
1998	1	0	0	1	2	0	0	2
1999	1	0	0	1	0	0	0	0
2000	1	0	0	1	2	0	0	2
2001	1	0	0	1	1	0	0	1
2002	1	0	0	1	1	0	0	1
2003	1	0	0	1	1	0	0	1
2004	1	0	0	1	1	0	0	1
2005	1	0	0	1	12	0	0	12
2006	1	0	0	1	1	0	0	1
2007	1	0	0	1	1	0	0	1
Forecasts								
2008	1	0	0	1	1	0	0	1
2009	1	0	0	1	1	0	0	1
2010	1	0	0	1	1	0	0	1
2011	1	0	0	1	1	0	0	1
2012	1	0	0	1	1	0	0	1
2013	1	0	0	1	1	0	0	1
2014	1	0	0	1	1	0	0	1
2015	1	0	0	1	1	0	0	1
2016	1	0	0	1	1	0	0	1
2017	1	0	0	1	1	0	0	1
2018	1	0	0	1	1	0	0	1
2019	1	0	0	1	1	0	0	1
2020	1	0	0	1	1	0	0	1
2021	1	0	0	1	1	0	0	1
2022	1	0	0	1	1	0	0	1
2023	1	0	0	1	1	0	0	1
2024	1	0	0	1	1	0	0	1
2025	1	0	0	1	1	0	0	1
2026	1	0	0	1	1	0	0	1
2027	1	0	0	1	1	0	0	1
2028	1	0	0	1	1	0	0	1
2029	1	0	0	1	1	0	0	1
2030	1	0	0	1	1	0	0	1
Distance (km)		1	1	5 031		1	1	5 793

Source: BITRE estimates.

TA.29 Interstate freight task (million tkm) between New South Wales and Victoria, by transport mode, 1972–2030

Year	NSW–VIC				VIC–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1 777	813	768	196	1 461	976	431	54
1973	1 901	997	768	136	1 693	1 173	428	92
1974	2 009	1 164	768	77	1 905	1 351	424	130
1975	2 060	1 241	768	52	1 982	1 431	420	131
1976	2 196	1 401	768	26	2 145	1 597	416	131
1977	2 266	1 475	768	23	2 150	1 674	419	57
1978	2 286	1 498	768	20	2 176	1 698	422	57
1979	2 428	1 643	768	16	2 327	1 846	425	57
1980	2 627	1 845	768	13	2 534	2 050	427	57
1981	2 760	1 981	768	10	2 674	2 187	430	57
1982	2 742	2 114	621	7	2 809	2 320	433	57
1983	2 395	1 919	474	3	2 617	2 125	436	57
1984	2 902	2 338	561	3	2 995	2 541	452	2
1985	2 960	2 412	545	3	3 119	2 614	493	12
1986	3 253	2 684	566	3	3 343	2 880	463	0
1987	3 433	2 720	711	2	3 396	2 915	482	0
1988	3 691	3 037	652	2	3 775	3 220	553	2
1989	4 063	3 324	737	3	4 129	3 495	632	2
1990	4 214	3 483	728	3	4 226	3 647	579	0
1991	4 177	3 526	648	3	4 246	3 687	552	7
1992	4 214	3 570	642	3	4 133	3 728	401	3
1993	4 567	3 857	707	4	4 433	4 000	423	10
1994	4 875	4 100	772	3	4 707	4 227	438	42
1995	5 184	4 344	837	4	4 920	4 454	453	12
1996	5 752	4 783	965	4	5 295	4 860	405	30
1997	6 179	5 151	975	53	5 661	5 198	429	34
1998	6 616	5 530	981	106	6 000	5 544	417	39
1999	6 975	5 980	965	30	6 336	5 951	378	7
2000	7 562	6 424	1 046	92	6 754	6 350	378	26
2001	7 810	6 646	1 127	37	6 956	6 548	378	30
2002	8 204	7 037	1 111	56	7 278	6 896	378	4
2003	8 653	7 484	1 094	75	7 686	7 292	378	16
2004	8 997	7 898	1 078	21	8 055	7 657	378	20
2005	9 376	8 278	1 065	34	8 398	7 990	378	30
2006	9 515	8 695	778	42	8 753	8 354	378	21
2007	10 325	9 255	1 017	53	9 239	8 841	378	21
Forecasts								
2008	11 088	9 966	1 082	40	10 016	9 520	460	36
2009	10 992	9 900	1 052	40	10 253	9 684	532	37
2010	11 414	10 300	1 072	41	10 570	9 922	611	38
2011	11 988	10 840	1 104	43	10 998	10 258	700	39
2012	12 763	11 564	1 152	46	11 614	10 764	808	42
2013	13 377	12 145	1 184	49	12 232	11 265	923	44
2014	14 042	12 774	1 217	51	12 901	11 805	1 050	46
2015	14 723	13 420	1 249	53	13 592	12 358	1 186	49
2016	15 493	14 151	1 286	56	14 372	12 982	1 339	51
2017	16 317	14 933	1 325	59	15 209	13 649	1 506	54
2018	16 940	15 533	1 345	62	15 968	14 237	1 675	57
2019	17 523	16 100	1 360	64	16 647	14 744	1 844	59
2020	18 063	16 628	1 369	66	17 270	15 195	2 014	61
2021	18 642	17 195	1 379	68	17 898	15 643	2 192	63
2022	19 230	17 772	1 388	70	18 522	16 080	2 376	66
2023	19 764	18 301	1 390	72	19 114	16 483	2 564	68
2024	20 312	18 846	1 392	74	19 705	16 877	2 758	70
2025	20 871	19 402	1 393	76	20 310	17 277	2 961	72
2026	21 438	19 968	1 392	78	20 925	17 679	3 173	74
2027	21 983	20 516	1 387	80	21 544	18 076	3 392	76
2028	22 542	21 078	1 382	82	22 157	18 462	3 617	78
2029	23 107	21 648	1 375	84	22 780	18 849	3 851	80
2030	23 689	22 236	1 367	86	23 423	19 245	4 096	82

Source: BITRE estimates.

TA.30 Interstate freight task (million tkm) between New South Wales and Queensland, by transport mode, 1972–2030

Year	NSW–QLD				QLD–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1 299	468	700	131	783	420	295	68
1973	1 486	597	761	128	898	533	299	66
1974	1 665	718	822	125	1 006	639	304	64
1975	1 751	775	883	93	1 047	688	308	50
1976	1 900	895	944	61	1 143	793	313	37
1977	1 985	952	979	55	1 216	843	327	46
1978	2 031	970	1 014	48	1 255	858	341	55
1979	2 173	1 083	1 049	41	1 376	956	355	65
1980	2 361	1 243	1 084	35	1 539	1 095	370	74
1981	2 540	1 353	1 158	28	1 623	1 190	350	83
1982	2 543	1 462	1 059	21	1 758	1 285	381	92
1983	2 278	1 302	960	16	1 661	1 147	413	102
1984	2 721	1 648	1 042	30	1 876	1 445	356	75
1985	2 781	1 711	1 034	35	1 915	1 499	402	14
1986	3 136	1 943	1 165	28	2 246	1 699	543	4
1987	3 190	1 974	1 212	4	2 314	1 725	583	6
1988	3 586	2 250	1 334	2	2 505	1 962	539	4
1989	4 068	2 506	1 557	6	2 734	2 181	553	0
1990	4 146	2 650	1 490	7	2 886	2 304	570	12
1991	3 974	2 688	1 275	11	2 849	2 337	508	4
1992	3 922	2 728	1 188	5	2 898	2 371	522	5
1993	4 209	2 992	1 210	7	3 108	2 596	504	8
1994	4 462	3 218	1 233	12	3 284	2 789	487	8
1995	4 713	3 447	1 255	12	3 469	2 984	470	16
1996	5 118	3 866	1 225	28	3 798	3 340	452	6
1997	5 325	4 223	1 087	15	4 070	3 643	424	4
1998	5 756	4 596	1 072	89	4 544	3 958	539	47
1999	6 177	5 045	1 063	68	4 790	4 338	443	10
2000	6 549	5 494	962	93	5 218	4 718	457	43
2001	6 653	5 721	855	77	5 619	4 909	457	253
2002	6 998	6 124	850	25	5 731	5 248	457	26
2003	7 546	6 590	844	112	6 113	5 640	457	15
2004	8 083	7 027	839	217	6 705	6 008	457	240
2005	8 423	7 431	834	158	6 884	6 347	457	79
2006	8 947	7 880	931	137	7 277	6 723	553	1
2007	9 909	8 488	1 142	279	7 461	7 233	222	5
Forecasts								
2008	10 245	8 824	1 216	205	8 310	8 032	177	101
2009	10 465	9 050	1 206	209	8 658	8 370	182	105
2010	10 812	9 388	1 208	217	8 971	8 676	187	109
2011	11 306	9 856	1 223	227	9 410	9 102	194	114
2012	12 030	10 529	1 259	241	10 034	9 708	204	121
2013	12 755	11 209	1 290	256	10 625	10 283	213	129
2014	13 544	11 950	1 322	272	11 266	10 907	223	136
2015	14 365	12 726	1 351	289	11 934	11 556	233	144
2016	15 292	13 601	1 384	308	12 686	12 288	245	153
2017	16 292	14 548	1 416	328	13 498	13 078	257	163
2018	17 188	15 409	1 433	347	14 201	13 763	267	171
2019	17 995	16 196	1 436	363	14 844	14 390	275	179
2020	18 737	16 931	1 428	378	15 439	14 971	282	186
2021	19 490	17 681	1 415	394	16 051	15 569	289	193
2022	20 243	18 436	1 397	409	16 668	16 171	296	200
2023	20 962	19 166	1 372	424	17 252	16 743	302	207
2024	21 685	19 906	1 341	439	17 845	17 323	308	214
2025	22 429	20 668	1 306	455	18 454	17 919	314	221
2026	23 189	21 452	1 266	470	19 076	18 528	319	229
2027	23 951	22 244	1 221	486	19 696	19 136	325	236
2028	24 713	23 042	1 170	502	20 321	19 748	330	243
2029	25 491	23 859	1 114	518	20 959	20 374	335	251
2030	26 297	24 709	1 053	535	21 620	21 021	340	259

Source: BITRE estimates.

TA.31 Interstate freight task (million tkm) between New South Wales and South Australia, by transport mode, 1972–2030

Year	NSW–SA				SA–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	379	266	106	6	646	292	350	4
1973	429	317	106	6	701	347	350	4
1974	474	362	106	6	750	395	350	4
1975	494	382	106	6	768	417	350	0
1976	536	423	106	6	813	463	350	0
1977	568	442	119	6	888	483	405	0
1978	587	448	132	6	949	490	459	0
1979	636	485	145	6	1 043	530	513	0
1980	700	535	158	6	1 152	585	568	0
1981	721	569	146	6	1 234	621	613	0
1982	740	601	133	6	1 214	657	558	0
1983	694	553	119	21	1 137	605	503	30
1984	799	655	142	2	1 316	715	601	0
1985	820	672	148	0	1 316	734	581	0
1986	842	736	103	2	1 327	804	522	0
1987	948	745	203	0	1 340	813	526	0
1988	1 050	818	232	0	1 574	893	681	0
1989	1 146	883	262	0	1 729	964	720	45
1990	1 234	919	307	7	1 745	1 003	742	0
1991	1 210	929	273	8	1 595	1 014	581	0
1992	1 144	939	203	2	1 647	1 025	622	0
1993	1 310	1 003	296	11	1 836	1 094	742	0
1994	1 452	1 056	389	7	1 939	1 152	787	0
1995	1 597	1 109	481	6	2 042	1 210	832	0
1996	1 747	1 204	533	10	2 012	1 314	699	0
1997	1 851	1 283	569	0	1 990	1 399	587	4
1998	1 893	1 363	529	1	2 029	1 486	536	6
1999	2 000	1 456	543	0	2 090	1 588	501	1
2000	2 083	1 548	530	5	2 195	1 688	501	6
2001	2 185	1 593	530	61	2 245	1 737	501	7
2002	2 209	1 673	530	6	2 358	1 824	501	34
2003	2 313	1 763	530	20	2 427	1 922	501	4
2004	2 383	1 846	530	7	2 517	2 012	501	5
2005	2 464	1 921	530	13	2 595	2 094	501	0
2006	2 548	2 003	530	15	2 684	2 183	501	0
2007	2 680	2 112	549	19	2 803	2 302	501	0
Forecasts								
2008	2 735	2 183	539	13	2 907	2 401	506	0
2009	2 811	2 268	529	13	2 962	2 460	502	0
2010	2 868	2 339	516	14	3 018	2 520	497	0
2011	2 920	2 406	500	14	3 078	2 585	493	0
2012	2 986	2 486	487	14	3 164	2 672	492	0
2013	3 051	2 565	472	14	3 246	2 756	489	0
2014	3 122	2 651	457	15	3 334	2 847	487	0
2015	3 192	2 736	441	15	3 421	2 938	483	0
2016	3 274	2 833	426	15	3 523	3 042	481	0
2017	3 361	2 935	411	16	3 632	3 153	478	0
2018	3 448	3 038	394	16	3 730	3 257	474	0
2019	3 522	3 131	375	16	3 813	3 347	466	0
2020	3 588	3 218	354	16	3 885	3 430	456	0
2021	3 655	3 306	332	17	3 957	3 512	445	0
2022	3 716	3 390	309	17	4 024	3 591	433	0
2023	3 771	3 469	285	17	4 083	3 664	419	0
2024	3 823	3 545	260	17	4 138	3 734	405	0
2025	3 874	3 622	235	17	4 194	3 804	389	0
2026	3 924	3 698	209	17	4 248	3 875	373	0
2027	3 977	3 777	183	18	4 303	3 946	357	0
2028	4 025	3 851	156	18	4 354	4 014	339	0
2029	4 072	3 926	128	18	4 404	4 082	321	0
2030	4 120	4 002	100	18	4 454	4 152	303	0

Source: BITRE estimates.

TA.32 Interstate freight task (million tkm) between New South Wales and Western Australia, by transport mode, 1972–2030

Year	NSW–WA				WA–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1 007	37	431	540	746	53	49	644
1973	1 120	58	562	500	712	74	152	487
1974	1 237	84	692	461	677	94	254	329
1975	1 308	99	823	386	695	98	356	241
1976	1 347	83	954	310	683	71	459	153
1977	1 397	95	999	303	488	71	418	0
1978	1 438	98	1 045	295	450	73	377	0
1979	1 496	119	1 090	288	424	88	336	0
1980	1 565	150	1 135	280	406	111	295	0
1981	1 559	173	1 114	273	427	128	299	0
1982	1 485	202	1 017	265	555	146	410	0
1983	1 344	167	921	257	640	120	520	0
1984	1 749	249	1 080	420	626	178	369	79
1985	1 835	265	1 063	507	690	190	381	119
1986	2 113	329	1 253	531	723	230	471	23
1987	1 929	339	1 299	292	672	230	442	0
1988	2 431	423	2 005	2	705	279	426	0
1989	2 796	508	2 211	77	794	325	446	23
1990	2 473	560	1 908	5	814	347	467	0
1991	2 393	565	1 803	25	766	340	426	0
1992	2 611	593	1 959	59	846	345	496	6
1993	2 856	730	2 082	44	1 018	410	596	11
1994	3 060	760	2 205	94	1 115	412	697	6
1995	3 418	855	2 329	235	1 268	447	799	23
1996	3 447	884	2 362	201	974	444	524	6
1997	3 547	886	2 467	193	1 185	427	758	0
1998	3 693	894	2 535	265	1 386	413	971	2
1999	3 407	839	2 560	8	1 702	388	1 269	45
2000	3 654	645	2 585	424	2 005	538	1 226	241
2001	3 744	501	2 610	633	1 941	627	1 184	130
2002	3 747	489	2 635	623	2 356	611	1 374	372
2003	3 853	485	2 656	712	2 776	606	1 564	607
2004	3 823	512	2 682	629	2 440	640	1 754	46
2005	3 896	555	2 707	634	2 829	694	1 944	191
2006	3 880	467	2 535	878	3 286	876	2 359	51
2007	4 507	484	2 871	1 152	2 765	908	1 777	79
Forecasts								
2008	4 272	465	2 854	953	3 193	906	2 224	63
2009	4 431	482	2 960	988	3 141	891	2 188	62
2010	4 470	486	2 987	997	3 257	924	2 269	64
2011	4 485	488	2 997	1 001	3 409	967	2 375	68
2012	4 511	491	3 014	1 006	3 608	1 024	2 513	71
2013	4 563	496	3 049	1 018	3 749	1 064	2 611	74
2014	4 622	503	3 088	1 031	3 902	1 107	2 717	77
2015	4 676	509	3 125	1 043	4 056	1 151	2 825	80
2016	4 749	517	3 173	1 059	4 231	1 200	2 947	84
2017	4 826	525	3 225	1 077	4 418	1 253	3 077	87
2018	4 923	535	3 289	1 098	4 547	1 290	3 167	90
2019	4 995	543	3 338	1 114	4 670	1 325	3 253	92
2020	5 056	550	3 378	1 128	4 784	1 357	3 332	95
2021	5 111	556	3 415	1 140	4 909	1 393	3 419	97
2022	5 155	561	3 444	1 150	5 037	1 429	3 508	100
2023	5 193	565	3 470	1 159	5 148	1 461	3 586	102
2024	5 224	568	3 490	1 165	5 263	1 493	3 666	104
2025	5 253	571	3 510	1 172	5 380	1 526	3 747	107
2026	5 280	574	3 528	1 178	5 497	1 560	3 829	109
2027	5 313	578	3 550	1 185	5 607	1 591	3 905	111
2028	5 336	580	3 565	1 190	5 721	1 623	3 985	113
2029	5 358	583	3 580	1 195	5 835	1 656	4 064	116
2030	5 380	585	3 595	1 200	5 952	1 689	4 145	118

Source: BITRE estimates.

TA.33 Interstate freight task (million tkm) between New South Wales and Australian Capital Territory, by transport mode, 1972–2030

Year	NSW–ACT				ACT–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	220	63	157	0	19	16	3	0
1973	210	77	132	0	22	20	3	0
1974	198	90	108	0	26	23	3	0
1975	180	96	84	0	27	25	3	0
1976	168	109	59	0	31	28	3	0
1977	172	114	58	0	32	29	3	0
1978	172	116	56	0	33	30	3	0
1979	182	127	55	0	36	33	3	0
1980	196	143	53	0	40	37	3	0
1981	204	153	51	0	43	40	3	0
1982	209	163	46	0	45	43	3	0
1983	190	148	41	0	41	39	3	0
1984	230	181	49	0	50	47	3	0
1985	237	186	51	0	51	49	3	0
1986	243	207	36	0	57	54	3	0
1987	248	210	38	0	58	55	3	0
1988	274	234	40	0	64	62	3	0
1989	295	256	38	0	70	67	3	0
1990	306	269	37	0	73	71	3	0
1991	308	272	36	0	74	72	3	0
1992	309	275	34	0	75	73	3	0
1993	327	297	30	0	81	79	3	0
1994	341	316	25	0	86	84	3	0
1995	355	335	20	0	91	89	3	0
1996	389	368	21	0	100	98	3	0
1997	421	396	24	0	108	105	3	0
1998	453	425	28	0	116	113	3	0
1999	488	460	28	0	126	123	3	0
2000	524	494	30	0	135	132	3	0
2001	542	511	31	0	139	137	3	0
2002	561	540	21	0	145	145	0	0
2003	585	575	10	0	154	154	0	0
2004	617	606	10	0	163	163	0	0
2005	646	635	10	0	171	171	0	0
2006	678	667	10	0	180	180	0	0
2007	720	710	10	0	192	192	0	0
Forecasts								
2008	744	733	10	0	209	209	0	0
2009	773	762	11	0	209	209	0	0
2010	778	778	0	0	216	216	0	0
2011	796	796	0	0	227	227	0	0
2012	824	824	0	0	242	242	0	0
2013	857	857	0	0	254	254	0	0
2014	893	893	0	0	268	268	0	0
2015	929	929	0	0	281	281	0	0
2016	970	970	0	0	297	297	0	0
2017	1 014	1 014	0	0	313	313	0	0
2018	1 058	1 058	0	0	326	326	0	0
2019	1 096	1 096	0	0	339	339	0	0
2020	1 130	1 130	0	0	350	350	0	0
2021	1 162	1 162	0	0	362	362	0	0
2022	1 193	1 193	0	0	374	374	0	0
2023	1 222	1 222	0	0	385	385	0	0
2024	1 251	1 251	0	0	396	396	0	0
2025	1 279	1 279	0	0	408	408	0	0
2026	1 308	1 308	0	0	419	419	0	0
2027	1 337	1 337	0	0	431	431	0	0
2028	1 365	1 365	0	0	442	442	0	0
2029	1 393	1 393	0	0	454	454	0	0
2030	1 422	1 422	0	0	466	466	0	0

Source: BITRE estimates.

TA.34 Interstate freight task (million tkm) between New South Wales and Northern Territory, by transport mode, 1972–2030

Year	NSW–NT				NT–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	195	63	14	118	28	16	0	12
1973	189	65	14	109	30	17	1	12
1974	181	68	14	99	32	18	2	12
1975	173	69	14	90	29	18	3	8
1976	166	71	14	81	27	19	4	4
1977	158	71	14	72	23	19	4	0
1978	149	72	14	63	23	19	4	0
1979	141	73	14	54	24	20	4	0
1980	134	75	14	45	25	21	4	0
1981	127	76	14	36	25	21	4	0
1982	119	77	14	27	26	22	4	0
1983	108	76	14	18	24	21	2	0
1984	98	79	14	4	25	23	3	0
1985	94	79	14	0	26	23	3	0
1986	96	81	14	0	26	24	2	0
1987	96	82	14	0	27	24	3	0
1988	98	83	14	0	29	25	4	0
1989	100	85	14	0	29	26	4	0
1990	101	86	14	0	30	26	4	0
1991	101	86	14	0	30	26	4	0
1992	101	86	14	0	30	26	4	0
1993	102	88	14	0	31	27	4	0
1994	122	89	14	18	35	27	4	4
1995	105	90	14	0	36	28	4	4
1996	134	92	14	27	37	29	4	4
1997	148	94	14	40	33	30	4	0
1998	134	95	14	25	35	30	4	0
1999	126	97	14	14	37	31	4	2
2000	150	98	14	37	36	32	4	0
2001	134	99	14	20	36	32	4	0
2002	120	100	14	5	37	33	4	0
2003	132	90	14	28	44	40	4	0
2004	115	91	14	9	45	41	4	0
2005	130	92	14	23	46	42	4	1
2006	121	93	14	13	42	42	0	0
2007	122	94	14	13	43	43	0	0
Forecasts								
2008	125	109	6	10	42	40	2	0
2009	116	101	6	9	41	39	1	0
2010	120	105	6	9	42	40	2	0
2011	124	109	6	9	43	41	2	0
2012	128	112	6	10	44	42	2	0
2013	127	111	6	9	44	42	2	0
2014	125	110	6	9	44	42	2	0
2015	124	109	6	9	44	42	2	0
2016	124	109	6	9	44	42	2	0
2017	123	108	6	9	45	43	2	0
2018	120	106	6	9	44	42	2	0
2019	118	104	6	8	44	42	2	0
2020	117	103	6	8	44	42	2	0
2021	116	102	6	8	44	42	2	0
2022	115	102	6	8	44	42	2	0
2023	114	101	5	8	44	42	2	0
2024	114	101	5	8	44	42	2	0
2025	113	100	5	8	44	42	2	0
2026	112	99	5	7	44	42	2	0
2027	111	98	5	7	44	42	2	0
2028	110	98	5	7	44	42	2	0
2029	109	97	5	7	43	42	2	0
2030	108	96	5	7	43	41	2	0

Source: BITRE estimates.

TA.35 Interstate freight task (million tkm) between New South Wales and Tasmania, by transport mode, 1972–2030

Year	NSW–TAS				TAS–NSW			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	168	0	0	168	255	0	0	255
1973	175	0	0	175	171	0	0	171
1974	182	0	0	182	87	0	0	87
1975	192	0	0	192	75	0	0	75
1976	203	0	0	203	63	0	0	63
1977	186	0	0	186	94	0	0	94
1978	169	0	0	169	125	0	0	125
1979	153	0	0	153	156	0	0	156
1980	136	0	0	136	187	0	0	187
1981	119	0	0	119	218	0	0	218
1982	102	0	0	102	249	0	0	249
1983	86	0	0	86	281	0	0	281
1984	121	0	0	121	331	0	0	331
1985	117	0	0	117	318	0	0	318
1986	139	0	0	139	271	0	0	271
1987	129	0	0	129	341	0	0	341
1988	120	0	0	120	190	0	0	190
1989	105	0	0	105	306	0	0	306
1990	97	0	0	97	147	0	0	147
1991	101	0	0	101	170	0	0	170
1992	147	0	0	147	210	0	0	210
1993	97	0	0	97	186	0	0	186
1994	107	0	0	107	147	0	0	147
1995	76	0	0	76	206	0	0	206
1996	54	0	0	54	122	0	0	122
1997	37	0	0	37	1	0	0	1
1998	16	0	0	16	12	0	0	12
1999	13	0	0	13	3	0	0	3
2000	43	0	0	43	222	0	0	222
2001	62	0	0	62	77	0	0	77
2002	35	0	0	35	54	0	0	54
2003	38	0	0	38	46	0	0	46
2004	36	0	0	36	55	0	0	55
2005	44	0	0	44	392	0	0	392
2006	64	0	0	64	40	0	0	40
2007	50	0	0	50	113	0	0	113
Forecasts								
2008	43	0	0	43	105	0	0	105
2009	44	0	0	44	105	0	0	105
2010	44	0	0	44	106	0	0	106
2011	44	0	0	44	106	0	0	106
2012	43	0	0	43	105	0	0	105
2013	43	0	0	43	103	0	0	103
2014	42	0	0	42	102	0	0	102
2015	41	0	0	41	100	0	0	100
2016	41	0	0	41	99	0	0	99
2017	40	0	0	40	98	0	0	98
2018	40	0	0	40	97	0	0	97
2019	40	0	0	40	96	0	0	96
2020	39	0	0	39	95	0	0	95
2021	39	0	0	39	94	0	0	94
2022	39	0	0	39	94	0	0	94
2023	38	0	0	38	93	0	0	93
2024	38	0	0	38	92	0	0	92
2025	38	0	0	38	91	0	0	91
2026	37	0	0	37	90	0	0	90
2027	37	0	0	37	89	0	0	89
2028	36	0	0	36	88	0	0	88
2029	36	0	0	36	87	0	0	87
2030	35	0	0	35	86	0	0	86

Source: BITRE estimates.

TA.36 Interstate freight task (million tkm) between Victoria and Queensland, by transport mode, 1972–2030

Year	VIC–QLD				QLD–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1 238	494	253	491	311	117	82	112
1973	1 272	585	274	414	351	159	79	112
1974	1 296	664	294	337	390	201	77	112
1975	1 282	700	315	267	401	222	74	106
1976	1 306	774	335	197	437	266	71	100
1977	1 337	808	359	171	405	288	74	42
1978	1 345	818	382	145	415	295	78	42
1979	1 407	883	406	119	462	339	81	42
1980	1 494	972	429	93	531	404	84	42
1981	1 519	1 031	422	67	567	450	75	42
1982	1 492	1 088	364	41	621	497	81	42
1983	1 325	1 004	307	14	559	429	88	42
1984	1 546	1 182	345	19	802	579	134	90
1985	1 564	1 213	339	12	777	606	153	17
1986	1 719	1 324	385	10	870	713	155	2
1987	1 681	1 339	337	5	890	727	163	0
1988	1 873	1 466	406	0	1 022	859	163	0
1989	2 094	1 580	512	2	1 203	985	218	0
1990	2 152	1 642	510	0	1 312	1 057	255	0
1991	2 236	1 659	577	0	1 353	1 077	276	0
1992	2 502	1 676	816	10	1 457	1 097	360	0
1993	2 667	1 786	866	14	1 750	1 234	382	134
1994	2 819	1 879	916	24	1 773	1 353	405	15
1995	2 951	1 971	966	14	1 906	1 477	427	2
1996	3 072	2 133	899	40	2 098	1 708	372	18
1997	3 314	2 268	1 010	36	2 387	1 911	446	30
1998	3 531	2 405	1 004	122	2 711	2 128	563	20
1999	3 957	2 566	1 330	61	2 938	2 395	490	52
2000	4 264	2 722	1 345	196	3 302	2 669	578	54
2001	4 259	2 799	1 361	99	3 582	2 810	666	106
2002	4 502	2 935	1 377	191	3 838	3 064	753	21
2003	4 777	3 088	1 392	298	4 228	3 363	841	25
2004	5 187	3 228	1 408	551	4 591	3 648	928	14
2005	5 269	3 356	1 423	490	4 939	3 917	1 016	5
2006	5 370	3 495	1 468	408	5 634	4 220	1 404	10
2007	5 443	3 680	1 514	250	5 950	4 638	1 305	7
Forecasts								
2008	6 662	4 418	1 582	662	7 344	5 671	1 664	9
2009	6 594	4 340	1 600	655	7 425	5 679	1 737	9
2010	6 842	4 468	1 695	679	7 697	5 832	1 857	9
2011	7 173	4 647	1 814	711	8 077	6 061	2 007	10
2012	7 612	4 893	1 964	755	8 617	6 403	2 204	10
2013	7 950	5 070	2 092	788	9 129	6 717	2 401	11
2014	8 315	5 260	2 231	824	9 684	7 055	2 618	11
2015	8 686	5 451	2 375	860	10 263	7 402	2 848	12
2016	9 108	5 669	2 537	901	10 915	7 794	3 109	13
2017	9 557	5 901	2 711	945	11 619	8 212	3 393	14
2018	9 890	6 056	2 856	978	12 230	8 556	3 660	14
2019	10 203	6 196	2 998	1 008	12 790	8 854	3 920	15
2020	10 492	6 319	3 137	1 036	13 308	9 117	4 175	16
2021	10 804	6 452	3 285	1 067	13 842	9 383	4 443	16
2022	11 121	6 585	3 438	1 098	14 381	9 645	4 719	17
2023	11 406	6 696	3 584	1 125	14 892	9 880	4 994	17
2024	11 698	6 809	3 736	1 154	15 411	10 113	5 279	18
2025	11 996	6 922	3 892	1 182	15 944	10 348	5 577	19
2026	12 296	7 033	4 051	1 211	16 489	10 584	5 886	19
2027	12 584	7 134	4 210	1 239	17 033	10 811	6 203	20
2028	12 878	7 237	4 374	1 268	17 582	11 033	6 529	21
2029	13 175	7 338	4 541	1 296	18 142	11 254	6 867	21
2030	13 481	7 440	4 715	1 326	18 723	11 480	7 221	22

Source: BITRE estimates.

TA.37 Interstate freight task (million tkm) between Victoria and South Australia, by transport mode, 1972–2030

Year	VIC–SA				SA–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	536	198	330	7	560	165	373	22
1973	594	252	332	10	608	212	373	22
1974	650	304	334	12	651	257	373	22
1975	689	328	336	25	662	278	373	11
1976	755	379	339	38	697	324	373	0
1977	784	403	344	37	737	345	392	0
1978	796	410	350	36	763	352	411	0
1979	849	458	356	35	825	395	430	0
1980	922	526	362	34	905	456	449	0
1981	1 005	573	399	33	976	499	477	0
1982	1 059	619	408	32	976	541	435	0
1983	1 000	551	417	31	876	479	393	4
1984	1 214	698	507	10	1 081	613	468	0
1985	1 262	724	531	7	1 085	637	448	0
1986	1 285	823	463	0	1 155	728	407	20
1987	1 298	836	462	0	1 198	740	458	0
1988	1 474	953	520	0	1 374	849	525	0
1989	1 663	1 062	601	0	1 530	950	580	0
1990	1 740	1 123	617	0	1 492	1 007	472	13
1991	1 788	1 139	649	0	1 472	1 022	448	1
1992	1 828	1 156	672	0	1 517	1 038	479	0
1993	1 947	1 268	679	0	1 685	1 143	542	0
1994	1 988	1 364	621	3	1 842	1 233	605	4
1995	2 027	1 461	563	3	1 993	1 325	667	0
1996	2 246	1 639	559	48	2 173	1 494	679	0
1997	2 538	1 791	742	5	2 246	1 639	604	3
1998	2 986	1 949	1 020	16	2 477	1 790	680	7
1999	3 146	2 140	996	10	2 517	1 974	543	0
2000	3 370	2 331	1 025	14	2 738	2 158	580	1
2001	3 511	2 427	1 055	29	2 934	2 251	616	67
2002	3 734	2 599	1 085	50	3 070	2 417	653	0
2003	3 956	2 797	1 115	44	3 299	2 609	690	0
2004	4 194	2 982	1 145	67	3 520	2 790	726	4
2005	4 443	3 155	1 174	114	3 729	2 958	763	8
2006	4 760	3 345	1 285	130	3 783	3 145	638	0
2007	5 104	3 604	1 305	196	4 091	3 399	689	3
Forecasts								
2008	5 358	3 803	1 423	132	4 551	3 737	804	9
2009	5 505	3 900	1 469	136	4 553	3 748	796	9
2010	5 707	4 036	1 530	141	4 739	3 911	819	9
2011	5 989	4 227	1 613	148	5 008	4 142	856	10
2012	6 389	4 501	1 729	158	5 387	4 466	911	11
2013	6 768	4 760	1 841	168	5 724	4 756	957	11
2014	7 181	5 040	1 962	178	6 090	5 072	1 007	12
2015	7 610	5 332	2 089	189	6 473	5 402	1 058	13
2016	8 094	5 660	2 232	201	6 905	5 776	1 116	14
2017	8 615	6 014	2 387	214	7 372	6 180	1 178	15
2018	9 069	6 319	2 525	225	7 753	6 513	1 225	16
2019	9 484	6 596	2 653	236	8 107	6 825	1 266	16
2020	9 869	6 851	2 773	246	8 437	7 117	1 303	17
2021	10 265	7 112	2 897	256	8 782	7 424	1 340	18
2022	10 665	7 375	3 024	266	9 136	7 739	1 378	18
2023	11 044	7 623	3 145	275	9 467	8 036	1 412	19
2024	11 429	7 874	3 270	285	9 809	8 342	1 446	20
2025	11 825	8 132	3 398	295	10 160	8 658	1 481	21
2026	12 230	8 394	3 530	305	10 520	8 983	1 516	21
2027	12 633	8 655	3 663	316	10 874	9 303	1 549	22
2028	13 040	8 917	3 797	326	11 236	9 631	1 582	23
2029	13 456	9 184	3 936	336	11 607	9 968	1 615	24
2030	13 887	9 461	4 079	347	11 991	10 317	1 649	25

Source: BITRE estimates.

TA.38 Interstate freight task (million tkm) between Victoria and Western Australia, by transport mode, 1972–2030

Year	VIC–WA				WA–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1 135	110	425	600	872	40	31	801
1973	1 292	175	529	588	916	56	78	781
1974	1 459	251	632	577	958	70	125	762
1975	1 439	298	735	405	768	73	172	523
1976	1 320	248	839	234	555	53	219	283
1977	1 310	286	810	213	300	53	232	14
1978	1 269	295	781	193	314	55	245	14
1979	1 280	356	752	172	339	66	258	14
1980	1 324	449	723	151	369	83	271	14
1981	1 470	519	821	130	479	96	369	14
1982	1 515	580	826	109	574	109	451	14
1983	1 376	456	830	89	637	90	532	14
1984	1 614	647	896	71	667	134	466	67
1985	1 813	655	919	239	612	143	383	86
1986	1 872	770	899	203	580	168	383	29
1987	1 925	747	1 029	149	673	164	480	29
1988	2 220	878	1 144	198	680	194	477	10
1989	2 518	987	1 401	130	774	219	536	19
1990	2 389	1 012	1 314	62	753	226	522	5
1991	2 208	948	1 231	30	783	213	560	10
1992	2 155	916	1 185	54	893	208	685	0
1993	2 257	1 031	1 102	125	998	236	743	19
1994	2 400	973	1 267	160	1 031	225	801	5
1995	2 660	981	1 433	247	1 108	229	859	19
1996	2 640	897	1 513	229	955	213	738	5
1997	2 690	782	1 637	271	919	189	731	0
1998	2 723	670	1 761	291	1 088	165	891	32
1999	2 899	629	1 885	384	1 158	155	981	21
2000	3 095	484	2 009	603	1 410	215	1 166	29
2001	3 111	376	2 136	599	1 692	251	1 346	95
2002	3 339	366	2 260	713	2 008	244	1 531	233
2003	3 699	363	2 382	953	2 406	242	1 712	451
2004	3 798	384	2 507	907	2 228	256	1 896	75
2005	3 924	417	2 631	876	2 504	278	2 077	149
2006	3 225	350	2 090	785	2 802	350	2 380	72
2007	3 774	363	2 611	800	3 224	363	2 769	91
Forecasts								
2008	4 489	570	2 940	979	2 909	322	2 507	79
2009	4 542	576	2 975	991	2 951	327	2 543	81
2010	4 670	593	3 059	1 019	3 023	335	2 606	83
2011	4 831	613	3 164	1 054	3 109	345	2 680	85
2012	5 052	641	3 309	1 102	3 227	358	2 781	88
2013	5 250	666	3 438	1 145	3 331	369	2 871	91
2014	5 463	693	3 578	1 191	3 444	382	2 969	94
2015	5 678	720	3 719	1 238	3 557	394	3 066	97
2016	5 924	752	3 880	1 292	3 688	409	3 178	101
2017	6 185	785	4 051	1 349	3 825	424	3 297	104
2018	6 407	813	4 197	1 397	3 945	437	3 400	108
2019	6 605	838	4 326	1 441	4 050	449	3 491	111
2020	6 785	861	4 444	1 480	4 144	459	3 572	113
2021	6 969	884	4 565	1 520	4 240	470	3 654	116
2022	7 149	907	4 683	1 559	4 332	480	3 734	118
2023	7 314	928	4 791	1 595	4 415	489	3 805	121
2024	7 478	949	4 898	1 631	4 497	498	3 875	123
2025	7 643	970	5 006	1 667	4 578	507	3 946	125
2026	7 809	991	5 115	1 703	4 659	516	4 016	127
2027	7 973	1 012	5 222	1 739	4 740	525	4 086	129
2028	8 135	1 032	5 328	1 774	4 818	534	4 153	132
2029	8 296	1 053	5 434	1 810	4 896	543	4 220	134
2030	8 462	1 074	5 543	1 846	4 975	551	4 288	136

Source: BITRE estimates.

TA.39 Interstate freight task (million tkm) between Victoria and Australian Capital Territory, by transport mode, 1972–2030

Year	VIC–ACT				ACT–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	90	84	6	0	9	9	0	0
1973	89	82	6	0	10	10	0	0
1974	87	80	7	0	10	10	0	0
1975	86	78	8	0	11	11	0	0
1976	84	76	8	0	11	11	0	0
1977	83	74	9	0	11	11	0	0
1978	82	72	10	0	12	12	0	0
1979	80	70	10	0	12	12	0	0
1980	79	68	11	0	13	13	0	0
1981	78	66	12	0	13	13	0	0
1982	77	65	12	0	14	14	0	0
1983	76	63	13	0	15	15	0	0
1984	76	61	15	0	15	15	0	0
1985	76	60	16	0	16	16	0	0
1986	72	58	14	0	17	17	0	0
1987	68	57	12	0	17	17	0	0
1988	65	55	10	0	18	18	0	0
1989	63	54	9	0	19	19	0	0
1990	61	52	8	0	20	20	0	0
1991	58	51	8	0	20	20	0	0
1992	56	50	7	0	21	21	0	0
1993	48	48	0	0	22	22	0	0
1994	47	47	0	0	23	23	0	0
1995	46	46	0	0	24	24	0	0
1996	45	45	0	0	25	25	0	0
1997	43	43	0	0	26	26	0	0
1998	42	42	0	0	27	27	0	0
1999	41	41	0	0	28	28	0	0
2000	40	40	0	0	30	30	0	0
2001	39	39	0	0	31	31	0	0
2002	38	38	0	0	32	32	0	0
2003	37	37	0	0	33	33	0	0
2004	36	36	0	0	35	35	0	0
2005	35	35	0	0	36	36	0	0
2006	34	34	0	0	38	38	0	0
2007	33	33	0	0	39	39	0	0
Forecasts								
2008	37	37	0	0	55	55	0	0
2009	37	37	0	0	56	56	0	0
2010	36	36	0	0	58	58	0	0
2011	36	36	0	0	59	59	0	0
2012	34	34	0	0	61	61	0	0
2013	33	33	0	0	64	64	0	0
2014	31	31	0	0	66	66	0	0
2015	30	30	0	0	69	69	0	0
2016	29	29	0	0	72	72	0	0
2017	27	27	0	0	75	75	0	0
2018	27	27	0	0	78	78	0	0
2019	26	26	0	0	81	81	0	0
2020	25	25	0	0	83	83	0	0
2021	24	24	0	0	85	85	0	0
2022	24	24	0	0	88	88	0	0
2023	23	23	0	0	90	90	0	0
2024	22	22	0	0	92	92	0	0
2025	22	22	0	0	94	94	0	0
2026	21	21	0	0	96	96	0	0
2027	21	21	0	0	98	98	0	0
2028	20	20	0	0	100	100	0	0
2029	19	19	0	0	102	102	0	0
2030	19	19	0	0	104	104	0	0

Source: BITRE estimates.

TA.40 Interstate freight task (million tkm) between Victoria and Northern Territory, by transport mode, 1972–2030

Year	VIC–NT				NT–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	71	0	10	61	42	2	0	40
1973	66	0	11	56	40	2	0	38
1974	62	0	12	50	37	2	0	35
1975	66	0	13	53	35	3	0	33
1976	70	0	13	57	33	3	0	30
1977	75	0	14	60	30	3	0	27
1978	79	0	15	63	27	3	0	24
1979	83	0	16	67	24	3	0	21
1980	87	0	17	70	22	3	0	19
1981	92	0	18	73	19	3	0	16
1982	96	0	18	77	16	3	0	13
1983	99	0	19	80	13	3	0	10
1984	33	1	23	10	8	3	0	5
1985	24	1	24	0	3	3	0	0
1986	21	1	21	0	3	3	0	0
1987	25	1	24	0	6	3	3	0
1988	28	1	27	0	9	4	5	0
1989	31	2	29	0	9	4	5	0
1990	31	2	29	0	9	4	5	0
1991	34	2	32	0	9	4	5	0
1992	34	2	32	0	9	4	5	0
1993	38	3	35	0	12	4	8	0
1994	42	4	38	0	13	4	9	0
1995	46	5	41	0	14	4	10	0
1996	68	6	44	18	19	4	11	4
1997	50	8	42	0	12	4	8	0
1998	50	11	39	0	4	4	0	0
1999	63	14	49	0	10	5	5	0
2000	60	18	42	0	11	5	7	0
2001	55	20	34	0	13	5	8	0
2002	59	25	34	0	13	5	8	0
2003	49	15	34	0	21	13	8	0
2004	53	18	34	0	21	13	8	0
2005	56	22	34	0	21	13	8	0
2006	60	26	34	0	21	13	8	0
2007	61	27	34	0	22	14	8	0
Forecasts								
2008	64	29	34	0	14	13	1	0
2009	64	29	34	0	14	13	1	0
2010	64	30	35	0	14	13	1	0
2011	64	29	35	0	14	13	1	0
2012	63	29	34	0	13	12	1	0
2013	62	29	34	0	12	12	1	0
2014	62	28	33	0	12	11	1	0
2015	61	28	33	0	11	10	1	0
2016	60	28	32	0	11	10	1	0
2017	59	27	32	0	10	9	1	0
2018	59	27	32	0	10	9	1	0
2019	58	27	31	0	9	9	1	0
2020	58	27	31	0	9	8	1	0
2021	57	26	31	0	9	8	1	0
2022	57	26	31	0	8	8	1	0
2023	56	26	30	0	8	7	1	0
2024	55	26	30	0	8	7	1	0
2025	55	25	30	0	8	7	1	0
2026	54	25	29	0	7	7	1	0
2027	54	25	29	0	7	7	1	0
2028	53	24	29	0	7	6	1	0
2029	52	24	28	0	7	6	0	0
2030	52	24	28	0	7	6	1	0

Source: BITRE estimates.

TA.41 Interstate freight task (million tkm) between Victoria and Tasmania, by transport mode, 1972–2030

Year	VIC–TAS				TAS–VIC			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	675	0	0	675	559	0	0	559
1973	576	0	0	576	369	0	0	369
1974	477	0	0	477	179	0	0	179
1975	520	0	0	520	154	0	0	154
1976	563	0	0	563	129	0	0	129
1977	519	0	0	519	152	0	0	152
1978	475	0	0	475	175	0	0	175
1979	432	0	0	432	198	0	0	198
1980	388	0	0	388	220	0	0	220
1981	344	0	0	344	243	0	0	243
1982	301	0	0	301	266	0	0	266
1983	262	0	0	262	288	0	0	288
1984	307	0	0	307	339	0	0	339
1985	323	0	0	323	333	0	0	333
1986	354	0	0	354	331	0	0	331
1987	419	0	0	419	439	0	0	439
1988	430	0	0	430	430	0	0	430
1989	524	0	0	524	494	0	0	494
1990	544	0	0	544	536	0	0	536
1991	479	0	0	479	593	0	0	593
1992	513	0	0	513	520	0	0	520
1993	536	0	0	536	513	0	0	513
1994	559	0	0	559	614	0	0	614
1995	615	0	0	615	589	0	0	589
1996	670	0	0	670	621	0	0	621
1997	702	0	0	702	685	0	0	685
1998	684	0	0	684	677	0	0	677
1999	690	0	0	690	685	0	0	685
2000	795	0	0	795	708	0	0	708
2001	682	0	0	682	725	0	0	725
2002	814	0	0	814	885	0	0	885
2003	921	0	0	921	1 054	0	0	1 054
2004	1 062	0	0	1 062	1 218	0	0	1 218
2005	1 149	0	0	1 149	1 252	0	0	1 252
2006	1 158	0	0	1 158	1 021	0	0	1 021
2007	1 207	0	0	1 207	1 006	0	0	1 006
Forecasts								
2008	1 207	0	0	1 207	1 281	0	0	1 281
2009	1 067	0	0	1 067	1 235	0	0	1 235
2010	1 121	0	0	1 121	1 293	0	0	1 293
2011	1 187	0	0	1 187	1 373	0	0	1 373
2012	1 254	0	0	1 254	1 479	0	0	1 479
2013	1 248	0	0	1 248	1 549	0	0	1 549
2014	1 243	0	0	1 243	1 625	0	0	1 625
2015	1 237	0	0	1 237	1 704	0	0	1 704
2016	1 236	0	0	1 236	1 792	0	0	1 792
2017	1 235	0	0	1 235	1 886	0	0	1 886
2018	1 198	0	0	1 198	1 945	0	0	1 945
2019	1 176	0	0	1 176	2 003	0	0	2 003
2020	1 159	0	0	1 159	2 058	0	0	2 058
2021	1 153	0	0	1 153	2 122	0	0	2 122
2022	1 151	0	0	1 151	2 188	0	0	2 188
2023	1 142	0	0	1 142	2 246	0	0	2 246
2024	1 138	0	0	1 138	2 308	0	0	2 308
2025	1 132	0	0	1 132	2 370	0	0	2 370
2026	1 127	0	0	1 127	2 434	0	0	2 434
2027	1 117	0	0	1 117	2 493	0	0	2 493
2028	1 111	0	0	1 111	2 555	0	0	2 555
2029	1 105	0	0	1 105	2 619	0	0	2 619
2030	1 099	0	0	1 099	2 684	0	0	2 684

Source: BITRE estimates.

TA.42 Interstate freight task (million tkm) between Queensland and South Australia, by transport mode,1972–2030

Year	QLD–SA				SA–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	118	69	35	13	347	177	171	0
1973	134	87	34	13	354	202	152	1
1974	149	103	33	13	357	223	133	1
1975	150	111	32	8	349	232	114	2
1976	157	127	31	0	348	251	95	1
1977	162	134	28	0	407	260	147	0
1978	163	136	26	0	461	263	199	0
1979	175	151	24	0	529	279	250	0
1980	193	172	22	0	603	301	302	0
1981	208	186	22	0	552	315	238	0
1982	213	199	13	0	545	328	217	0
1983	187	179	4	4	504	308	196	0
1984	243	223	20	0	585	350	235	0
1985	289	231	24	34	593	357	232	3
1986	286	260	26	0	587	383	204	0
1987	303	263	39	0	596	386	210	0
1988	364	297	59	8	689	415	274	0
1989	436	329	107	0	798	440	358	0
1990	545	346	157	42	906	453	453	0
1991	521	351	170	0	837	457	380	0
1992	493	356	138	0	863	461	403	0
1993	572	387	132	53	943	484	459	0
1994	552	414	126	11	1 018	504	514	0
1995	562	442	120	0	1 093	523	570	0
1996	594	491	103	0	1 059	557	501	2
1997	655	533	122	0	1 093	584	509	0
1998	703	577	127	0	1 123	611	509	3
1999	710	629	81	0	1 204	643	559	1
2000	796	680	108	8	1 220	674	545	1
2001	846	706	135	4	1 226	689	531	6
2002	893	752	140	1	1 235	715	509	12
2003	950	805	144	1	1 238	744	487	8
2004	1 003	855	149	0	1 240	770	464	5
2005	1 056	900	153	3	1 236	794	442	0
2006	1 134	950	157	27	1 242	819	419	3
2007	1 224	1 018	194	11	1 478	853	607	18
Forecasts								
2008	1 225	1 029	192	4	1 410	852	557	0
2009	1 289	1 090	195	4	1 302	861	440	0
2010	1 313	1 118	191	4	1 349	904	445	0
2011	1 344	1 153	187	4	1 406	955	451	0
2012	1 394	1 204	186	5	1 471	1 011	460	0
2013	1 460	1 269	186	5	1 486	1 034	452	0
2014	1 531	1 340	186	5	1 504	1 060	444	0
2015	1 604	1 413	185	5	1 520	1 084	435	0
2016	1 686	1 495	185	6	1 542	1 113	428	0
2017	1 774	1 584	184	6	1 565	1 144	421	0
2018	1 866	1 677	182	6	1 559	1 153	405	0
2019	1 944	1 759	178	6	1 559	1 167	391	0
2020	2 014	1 834	173	7	1 560	1 182	377	0
2021	2 081	1 908	166	7	1 569	1 203	365	0
2022	2 144	1 979	159	7	1 579	1 226	353	0
2023	2 207	2 049	150	7	1 583	1 243	339	0
2024	2 266	2 118	140	7	1 589	1 263	326	0
2025	2 326	2 188	130	8	1 595	1 282	312	0
2026	2 387	2 260	119	8	1 600	1 301	299	0
2027	2 451	2 335	108	8	1 602	1 317	284	0
2028	2 511	2 407	95	8	1 606	1 336	269	0
2029	2 572	2 481	82	9	1 609	1 354	254	0
2030	2 635	2 557	68	9	1 612	1 372	239	0

Source: BITRE estimates.

TA.43 Interstate freight task (million tkm) between Queensland and Western Australia, by transport mode,1972–2030

Year	QLD–WA				WA–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	274	18	32	224	79	13	5	60
1973	266	29	30	206	116	19	48	49
1974	259	42	29	188	151	23	91	36
1975	211	50	28	133	182	24	134	23
1976	147	41	26	79	206	18	177	10
1977	88	48	32	9	164	18	137	10
1978	95	49	37	9	124	18	97	9
1979	110	59	42	9	87	22	56	8
1980	131	75	48	9	51	28	16	7
1981	127	86	32	9	60	32	22	7
1982	136	101	26	9	77	36	35	6
1983	113	83	21	9	84	30	48	5
1984	150	124	21	4	120	45	75	0
1985	148	133	16	0	123	48	75	0
1986	175	165	11	0	172	59	113	0
1987	180	169	11	0	201	61	140	0
1988	265	212	53	0	254	76	177	0
1989	305	254	42	9	333	92	226	16
1990	306	280	26	0	220	101	118	0
1991	357	283	74	0	345	103	237	5
1992	433	297	132	4	596	108	285	203
1993	563	365	194	4	459	133	326	0
1994	693	380	256	57	507	139	367	0
1995	789	428	318	44	571	157	409	5
1996	923	442	471	9	678	163	511	5
1997	954	443	492	19	733	163	570	0
1998	1 026	447	466	113	827	165	505	157
1999	1 047	419	474	154	851	155	548	148
2000	1 015	323	482	211	841	215	575	51
2001	1 075	251	490	334	858	251	602	5
2002	926	244	498	184	961	244	697	20
2003	1 109	242	506	361	1 141	242	791	107
2004	1 351	256	514	581	1 222	256	886	80
2005	1 063	278	522	263	1 271	278	981	12
2006	1 138	234	498	407	1 705	350	1 344	10
2007	1 660	242	879	539	1 260	363	871	26
Forecasts								
2008	1 994	383	994	617	1 647	400	1 229	17
2009	1 765	339	880	546	1 653	402	1 234	17
2010	1 891	364	943	585	1 713	417	1 279	18
2011	2 072	398	1 033	641	1 797	437	1 341	19
2012	2 295	441	1 144	710	1 916	466	1 430	20
2013	2 390	459	1 191	739	2 029	493	1 515	21
2014	2 492	479	1 242	771	2 152	523	1 606	22
2015	2 595	499	1 294	803	2 279	554	1 702	23
2016	2 713	522	1 352	839	2 423	589	1 809	25
2017	2 838	546	1 415	878	2 578	627	1 925	27
2018	2 854	549	1 423	883	2 713	660	2 025	28
2019	2 895	557	1 443	895	2 836	690	2 117	29
2020	2 938	565	1 464	908	2 949	717	2 202	30
2021	3 008	578	1 499	930	3 067	746	2 289	32
2022	3 089	594	1 540	955	3 184	774	2 377	33
2023	3 150	606	1 571	974	3 296	802	2 461	34
2024	3 225	620	1 608	997	3 410	829	2 545	35
2025	3 300	634	1 645	1 020	3 526	858	2 632	36
2026	3 376	649	1 683	1 044	3 645	886	2 721	38
2027	3 435	661	1 713	1 062	3 764	915	2 810	39
2028	3 509	675	1 749	1 085	3 884	944	2 899	40
2029	3 583	689	1 786	1 108	4 006	974	2 990	41
2030	3 659	703	1 824	1 131	4 132	1 005	3 085	43

Source: BITRE estimates.

TA.44 Interstate freight task (million tkm) between Queensland and Australian Capital Territory, by transport mode, 1972–2030

Year	QLD–ACT				ACT–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972			0	0			0	0
1973			0	0			0	0
1974			0	0			0	0
1975			0	0			0	0
1976			0	0			0	0
1977			0	0			0	0
1978			0	0			0	0
1979			0	0			0	0
1980			0	0			0	0
1981			0	0			0	0
1982			0	0			0	0
1983			0	0			0	0
1984			0	0			0	0
1985			0	0			0	0
1986			0	0			0	0
1987			0	0			0	0
1988			0	0			0	0
1989			0	0			0	0
1990			0	0			0	0
1991			0	0			0	0
1992			0	0			0	0
1993			0	0			0	0
1994			0	0			0	0
1995			0	0			0	0
1996			0	0			0	0
1997			0	0			0	0
1998			0	0			0	0
1999			0	0			0	0
2000			0	0			0	0
2001			0	0			0	0
2002			0	0			0	0
2003			0	0			0	0
2004			0	0			0	0
2005			0	0			0	0
2006			0	0			0	0
2007			0	0			0	0
Forecasts								
2008			0	0			0	0
2009			0	0			0	0
2010			0	0			0	0
2011			0	0			0	0
2012			0	0			0	0
2013			0	0			0	0
2014			0	0			0	0
2015			0	0			0	0
2016			0	0			0	0
2017			0	0			0	0
2018			0	0			0	0
2019			0	0			0	0
2020			0	0			0	0
2021			0	0			0	0
2022			0	0			0	0
2023			0	0			0	0
2024			0	0			0	0
2025			0	0			0	0
2026			0	0			0	0
2027			0	0			0	0
2028			0	0			0	0
2029			0	0			0	0
2030			0	0			0	0

Source: BITRE estimates.

TA.45 Interstate freight task (million tkm) between Queensland and Northern Territory, by transport mode, 1972–2030

Year	QLD–NT				NT–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	107	65	0	42	123	123	0	0
1973	143	79	0	64	137	137	0	0
1974	178	91	0	86	148	148	0	0
1975	171	97	0	75	153	153	0	0
1976	171	108	0	63	162	162	0	0
1977	176	113	0	63	167	167	0	0
1978	178	115	0	63	168	168	0	0
1979	188	125	0	63	176	176	0	0
1980	202	139	0	63	187	187	0	0
1981	211	149	0	63	193	193	0	0
1982	221	158	0	63	200	200	0	0
1983	208	144	0	64	223	190	0	32
1984	274	173	0	101	280	210	0	70
1985	202	178	0	24	214	214	0	0
1986	220	197	0	24	234	225	0	8
1987	219	199	0	20	227	227	0	0
1988	230	220	0	10	240	240	0	0
1989	239	239	0	0	251	251	0	0
1990	253	250	0	3	257	257	0	0
1991	253	253	0	0	259	259	0	0
1992	256	256	0	0	260	260	0	0
1993	278	274	0	3	271	271	0	0
1994	290	290	0	0	282	279	0	3
1995	313	306	0	7	287	287	0	0
1996	375	335	0	41	302	302	0	0
1997	446	358	0	88	313	313	0	0
1998	490	382	0	108	325	325	0	1
1999	450	411	0	39	338	338	0	1
2000	540	439	0	101	352	350	0	2
2001	551	453	0	98	363	356	0	7
2002	583	477	0	106	375	366	0	9
2003	519	411	0	109	285	276	0	9
2004	538	432	0	106	317	284	0	33
2005	548	451	0	97	291	291	0	0
2006	563	472	0	92	298	298	0	0
2007	591	499	0	92	308	308	0	0
Forecasts								
2008	793	634	0	159	330	330	0	0
2009	806	645	0	162	343	343	0	0
2010	831	664	0	166	348	348	0	0
2011	863	690	0	173	353	353	0	0
2012	909	727	0	182	362	362	0	0
2013	952	761	0	191	372	372	0	0
2014	999	799	0	200	384	384	0	0
2015	1 047	837	0	210	395	395	0	0
2016	1 101	881	0	221	408	408	0	0
2017	1 160	927	0	232	422	422	0	0
2018	1 211	968	0	243	436	436	0	0
2019	1 256	1 005	0	252	449	449	0	0
2020	1 298	1 038	0	260	459	459	0	0
2021	1 340	1 072	0	268	469	469	0	0
2022	1 382	1 105	0	277	478	478	0	0
2023	1 421	1 137	0	285	487	487	0	0
2024	1 461	1 168	0	293	495	495	0	0
2025	1 500	1 200	0	301	503	503	0	0
2026	1 541	1 232	0	309	511	511	0	0
2027	1 581	1 264	0	317	519	519	0	0
2028	1 621	1 296	0	325	527	527	0	0
2029	1 661	1 328	0	333	534	534	0	0
2030	1 702	1 361	0	341	542	542	0	0

Source: BITRE estimates.

TA.46 Interstate freight task (million tkm) between Queensland and Tasmania, by transport mode, 1972–2030

Year	QLD–TAS				TAS–QLD			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	36	0	0	36	10	0	0	10
1973	18	0	0	18	13	0	0	13
1974	1	0	0	1	16	0	0	16
1975	4	0	0	4	17	0	0	17
1976	6	0	0	6	18	0	0	18
1977	8	0	0	8	35	0	0	35
1978	10	0	0	10	53	0	0	53
1979	12	0	0	12	71	0	0	71
1980	14	0	0	14	89	0	0	89
1981	16	0	0	16	107	0	0	107
1982	18	0	0	18	125	0	0	125
1983	21	0	0	21	143	0	0	143
1984	26	0	0	26	140	0	0	140
1985	2	0	0	2	125	0	0	125
1986	17	0	0	17	120	0	0	120
1987	28	0	0	28	155	0	0	155
1988	2	0	0	2	68	0	0	68
1989	9	0	0	9	10	0	0	10
1990	2	0	0	2	28	0	0	28
1991	2	0	0	2	3	0	0	3
1992	2	0	0	2	3	0	0	3
1993	7	0	0	7	5	0	0	5
1994	5	0	0	5	3	0	0	3
1995	12	0	0	12	3	0	0	3
1996	3	0	0	3	0	0	0	0
1997	2	0	0	2	3	0	0	3
1998	1	0	0	1	0	0	0	0
1999	3	0	0	3	10	0	0	10
2000	1	0	0	1	0	0	0	0
2001	15	0	0	15	4	0	0	4
2002	12	0	0	12	41	0	0	41
2003	14	0	0	14	8	0	0	8
2004	2	0	0	2	65	0	0	65
2005	13	0	0	13	35	0	0	35
2006	13	0	0	13	10	0	0	10
2007	13	0	0	13	3	0	0	3
Forecasts								
2008	14	0	0	14	25	0	0	25
2009	14	0	0	14	25	0	0	25
2010	14	0	0	14	25	0	0	25
2011	14	0	0	14	25	0	0	25
2012	14	0	0	14	25	0	0	25
2013	14	0	0	14	25	0	0	25
2014	14	0	0	14	24	0	0	24
2015	14	0	0	14	24	0	0	24
2016	13	0	0	13	24	0	0	24
2017	13	0	0	13	23	0	0	23
2018	13	0	0	13	23	0	0	23
2019	13	0	0	13	23	0	0	23
2020	13	0	0	13	23	0	0	23
2021	13	0	0	13	22	0	0	22
2022	13	0	0	13	22	0	0	22
2023	13	0	0	13	22	0	0	22
2024	12	0	0	12	22	0	0	22
2025	12	0	0	12	22	0	0	22
2026	12	0	0	12	21	0	0	21
2027	12	0	0	12	21	0	0	21
2028	12	0	0	12	21	0	0	21
2029	12	0	0	12	21	0	0	21
2030	12	0	0	12	20	0	0	20

Source: BITRE estimates.

TA.47 Interstate freight task (million tkm) between South Australia and Western Australia, by transport mode,1972–2030

Year	SA–WA				WA–SA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	486	18	451	17	288	27	203	58
1973	606	29	564	13	273	37	205	31
1974	729	42	677	10	258	47	207	3
1975	850	50	790	10	260	49	209	2
1976	955	41	904	10	247	35	211	0
1977	966	48	919	0	249	35	213	0
1978	983	49	934	0	252	36	216	0
1979	1 008	59	948	0	261	44	218	0
1980	1 038	75	963	0	275	55	220	0
1981	993	86	906	0	351	64	287	0
1982	927	101	826	0	349	73	276	0
1983	850	104	746	0	326	60	266	0
1984	1 075	186	888	0	407	89	314	3
1985	1 081	232	849	0	462	95	367	0
1986	1 103	329	774	0	566	132	434	0
1987	1 536	381	1 155	0	559	150	409	0
1988	1 754	529	1 220	6	606	206	398	3
1989	2 038	699	1 336	3	734	269	455	10
1990	2 409	839	1 569	0	757	320	437	0
1991	2 312	919	1 388	5	750	348	402	0
1992	2 411	1 038	1 357	17	807	391	365	52
1993	2 822	1 369	1 437	17	929	513	407	10
1994	2 940	1 520	1 419	1	1 002	567	434	0
1995	3 229	1 817	1 401	12	1 190	676	462	52
1996	3 548	1 989	1 549	11	1 215	738	460	18
1997	3 678	2 104	1 554	20	1 161	779	381	0
1998	3 817	2 234	1 554	29	1 219	826	379	14
1999	3 664	2 097	1 554	14	1 306	775	520	10
2000	3 258	1 613	1 629	17	1 823	1 075	661	87
2001	3 028	1 254	1 701	73	2 073	1 253	800	20
2002	3 026	1 221	1 776	29	2 234	1 221	941	72
2003	3 119	1 211	1 849	59	2 331	1 211	1 082	38
2004	3 244	1 281	1 924	39	2 566	1 281	1 223	63
2005	3 435	1 388	1 996	51	2 786	1 388	1 361	37
2006	2 100	1 168	917	15	2 594	1 752	814	29
2007	3 119	1 211	1 872	36	2 969	1 816	1 123	29
Forecasts								
2008	3 033	1 284	1 708	41	3 273	1 900	1 325	48
2009	3 134	1 327	1 765	42	3 233	1 877	1 308	48
2010	3 248	1 375	1 829	44	3 350	1 945	1 356	50
2011	3 407	1 442	1 919	46	3 514	2 040	1 422	52
2012	3 633	1 538	2 046	49	3 747	2 175	1 517	55
2013	3 847	1 628	2 167	52	3 968	2 303	1 606	59
2014	4 079	1 727	2 298	55	4 208	2 443	1 703	62
2015	4 321	1 829	2 434	58	4 457	2 587	1 804	66
2016	4 594	1 945	2 588	62	4 739	2 751	1 918	70
2017	4 888	2 069	2 753	66	5 042	2 927	2 041	75
2018	5 143	2 177	2 897	69	5 305	3 079	2 147	78
2019	5 376	2 276	3 028	72	5 545	3 219	2 244	82
2020	5 592	2 367	3 150	75	5 768	3 348	2 334	85
2021	5 814	2 461	3 275	78	5 997	3 481	2 427	89
2022	6 037	2 556	3 401	81	6 228	3 615	2 520	92
2023	6 249	2 646	3 520	84	6 446	3 742	2 609	95
2024	6 465	2 737	3 641	87	6 668	3 871	2 699	99
2025	6 685	2 830	3 766	90	6 896	4 003	2 791	102
2026	6 911	2 926	3 893	93	7 129	4 138	2 885	105
2027	7 136	3 021	4 019	96	7 361	4 273	2 979	109
2028	7 363	3 117	4 147	99	7 595	4 409	3 074	112
2029	7 595	3 215	4 278	102	7 834	4 547	3 171	116
2030	7 834	3 316	4 413	105	8 081	4 691	3 271	120

Source: BITRE estimates.

TA.48 Interstate freight task (million tkm) between South Australia and Australian Capital Territory, by transport mode, 1972–2030

Year	SA–ACT				ACT–SA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	1	0	1	0	1	1	0	0
1973	2	0	2	0	1	1	0	0
1974	2	0	2	0	1	1	0	0
1975	2	0	2	0	1	1	0	0
1976	3	0	3	0	1	1	0	0
1977	3	0	3	0	1	1	0	0
1978	3	0	3	0	1	1	0	0
1979	3	0	3	0	1	1	0	0
1980	3	0	3	0	1	1	0	0
1981	3	0	3	0	1	1	0	0
1982	3	0	3	0	1	1	0	0
1983	2	0	2	0	1	1	0	0
1984	2	0	2	0	1	1	0	0
1985	2	0	2	0	1	1	0	0
1986	2	0	2	0	1	1	0	0
1987	2	0	2	0	1	1	0	0
1988	1	0	1	0	1	1	0	0
1989	1	0	1	0	1	1	0	0
1990	1	0	1	0	1	1	0	0
1991	1	0	1	0	1	1	0	0
1992	1	0	1	0	1	1	0	0
1993	1	1	0	0	1	1	0	0
1994	1	1	0	0	1	1	0	0
1995	1	1	0	0	1	1	0	0
1996	1	1	0	0	1	1	0	0
1997	1	1	0	0	1	1	0	0
1998	1	1	0	0	1	1	0	0
1999	1	1	0	0	1	1	0	0
2000	1	1	0	0	1	1	0	0
2001	1	1	0	0	1	1	0	0
2002	1	1	0	0	1	1	0	0
2003	1	1	0	0	1	1	0	0
2004	1	1	0	0	1	1	0	0
2005	1	1	0	0	1	1	0	0
2006	1	1	0	0	1	1	0	0
2007	1	1	0	0	1	1	0	0
Forecasts								
2008	1	1	0	0	1	1	0	0
2009	1	1	0	0	1	1	0	0
2010	1	1	0	0	1	1	0	0
2011	1	1	0	0	1	1	0	0
2012	1	1	0	0	1	1	0	0
2013	1	1	0	0	1	1	0	0
2014	1	1	0	0	1	1	0	0
2015	1	1	0	0	1	1	0	0
2016	1	1	0	0	1	1	0	0
2017	1	1	0	0	1	1	0	0
2018	1	1	0	0	1	1	0	0
2019	1	1	0	0	1	1	0	0
2020	1	1	0	0	1	1	0	0
2021	1	1	0	0	1	1	0	0
2022	1	1	0	0	1	1	0	0
2023	1	1	0	0	1	1	0	0
2024	1	1	0	0	1	1	0	0
2025	1	1	0	0	1	1	0	0
2026	1	1	0	0	1	1	0	0
2027	1	1	0	0	1	1	0	0
2028	1	1	0	0	1	1	0	0
2029	1	1	0	0	1	1	0	0
2030	1	1	0	0	1	1	0	0

Source: BITRE estimates.

TA.49 Interstate freight task (million tkm) between South Australia and Northern Territory, by transport mode, 1972–2030

Year	SA–NT				NT–SA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	321	87	209	25	155	29	126	0
1973	301	104	185	12	152	38	114	0
1974	282	120	162	0	150	47	102	0
1975	265	127	138	0	142	51	91	0
1976	256	142	114	0	140	60	79	0
1977	285	149	136	0	156	65	91	0
1978	310	151	159	0	169	66	103	0
1979	345	165	181	0	190	75	115	0
1980	386	183	203	0	214	87	127	0
1981	394	195	199	0	223	96	127	0
1982	394	207	187	0	221	105	116	0
1983	365	190	175	0	197	92	106	0
1984	421	227	194	0	245	120	126	0
1985	420	234	186	0	244	125	120	0
1986	433	258	169	6	252	144	109	0
1987	469	261	208	0	277	146	130	0
1988	535	288	246	0	320	169	151	0
1989	575	313	262	0	353	191	161	0
1990	604	327	277	0	374	203	171	0
1991	621	331	291	0	388	207	182	0
1992	641	334	306	0	403	210	193	0
1993	710	359	351	0	439	233	206	0
1994	776	379	397	0	472	253	219	0
1995	842	400	442	0	505	273	232	0
1996	889	437	453	0	556	311	245	0
1997	998	467	449	81	559	343	216	0
1998	916	499	417	0	669	377	292	0
1999	936	535	400	0	676	419	258	0
2000	1 008	572	436	0	748	461	287	0
2001	1 062	590	472	0	799	482	317	0
2002	1 147	621	508	18	866	520	346	0
2003	1 050	506	544	0	560	184	376	0
2004	1 111	532	579	0	603	198	405	0
2005	1 170	555	615	0	616	210	405	0
2006	955	581	374	0	447	225	222	0
2007	1 320	615	705	0	524	244	279	0
Forecasts								
2008	1 397	631	766	0	523	249	274	0
2009	1 357	610	747	0	517	251	266	0
2010	1 413	633	780	0	542	269	274	0
2011	1 489	665	824	0	577	291	286	0
2012	1 587	706	881	0	624	321	303	0
2013	1 653	733	920	0	663	347	316	0
2014	1 724	762	962	0	704	375	329	0
2015	1 796	791	1 005	0	748	405	342	0
2016	1 878	824	1 054	0	797	439	358	0
2017	1 965	859	1 106	0	850	476	374	0
2018	2 020	880	1 140	0	890	507	384	0
2019	2 074	900	1 174	0	929	537	392	0
2020	2 124	918	1 206	0	966	567	399	0
2021	2 182	940	1 242	0	1 006	599	407	0
2022	2 241	962	1 279	0	1 048	633	415	0
2023	2 292	980	1 312	0	1 086	666	421	0
2024	2 346	1 000	1 346	0	1 127	700	427	0
2025	2 401	1 019	1 382	0	1 168	736	432	0
2026	2 456	1 038	1 417	0	1 211	773	438	0
2027	2 506	1 056	1 450	0	1 252	810	443	0
2028	2 560	1 075	1 485	0	1 295	848	447	0
2029	2 614	1 093	1 521	0	1 339	888	451	0
2030	2 669	1 112	1 557	0	1 385	930	455	0

Source: BITRE estimates.

TA.50 Interstate freight task (million tkm) between South Australia and Tasmania, by transport mode, 1972–2030

Year	SA–TAS				TAS–SA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	97	0	0	97	65	0	0	65
1973	81	0	0	81	42	0	0	42
1974	66	0	0	66	19	0	0	19
1975	88	0	0	88	25	0	0	25
1976	110	0	0	110	31	0	0	31
1977	100	0	0	100	41	0	0	41
1978	89	0	0	89	50	0	0	50
1979	79	0	0	79	60	0	0	60
1980	68	0	0	68	70	0	0	70
1981	58	0	0	58	80	0	0	80
1982	47	0	0	47	90	0	0	90
1983	38	0	0	38	101	0	0	101
1984	113	0	0	113	94	0	0	94
1985	94	0	0	94	40	0	0	40
1986	72	0	0	72	2	0	0	2
1987	62	0	0	62	40	0	0	40
1988	62	0	0	62	47	0	0	47
1989	2	0	0	2	28	0	0	28
1990	2	0	0	2	2	0	0	2
1991	2	0	0	2	7	0	0	7
1992	2	0	0	2	28	0	0	28
1993	2	0	0	2	21	0	0	21
1994	2	0	0	2	3	0	0	3
1995	2	0	0	2	30	0	0	30
1996	2	0	0	2	2	0	0	2
1997	19	0	0	19	2	0	0	2
1998	0	0	0	0	2	0	0	2
1999	1	0	0	1	8	0	0	8
2000	1	0	0	1	3	0	0	3
2001	2	0	0	2	2	0	0	2
2002	4	0	0	4	28	0	0	28
2003	0	0	0	0	69	0	0	69
2004	2	0	0	2	10	0	0	10
2005	0	0	0	0	16	0	0	16
2006	2	0	0	2	16	0	0	16
2007	2	0	0	2	16	0	0	16
Forecasts								
2008	2	0	0	2	17	0	0	17
2009	2	0	0	2	17	0	0	17
2010	2	0	0	2	18	0	0	18
2011	2	0	0	2	18	0	0	18
2012	2	0	0	2	17	0	0	17
2013	2	0	0	2	17	0	0	17
2014	2	0	0	2	17	0	0	17
2015	2	0	0	2	17	0	0	17
2016	2	0	0	2	16	0	0	16
2017	2	0	0	2	16	0	0	16
2018	2	0	0	2	16	0	0	16
2019	2	0	0	2	16	0	0	16
2020	2	0	0	2	16	0	0	16
2021	2	0	0	2	16	0	0	16
2022	2	0	0	2	16	0	0	16
2023	2	0	0	2	15	0	0	15
2024	1	0	0	1	15	0	0	15
2025	1	0	0	1	15	0	0	15
2026	1	0	0	1	15	0	0	15
2027	1	0	0	1	15	0	0	15
2028	1	0	0	1	15	0	0	15
2029	1	0	0	1	14	0	0	14
2030	1	0	0	1	14	0	0	14

Source: BITRE estimates.

TA.51 Interstate freight task (million tkm) between Western Australia and Australian Capital Territory, by transport mode, 1972–2030

Year	WA–ACT				ACT–WA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	4	0	4	0	2	2	0	0
1973	6	0	6	0	2	2	0	0
1974	8	0	8	0	2	2	0	0
1975	10	0	10	0	2	2	0	0
1976	13	0	13	0	2	2	0	0
1977	12	0	12	0	2	2	0	0
1978	10	0	10	0	2	2	0	0
1979	9	0	9	0	2	2	0	0
1980	8	0	8	0	2	2	0	0
1981	8	0	8	0	2	2	0	0
1982	7	0	7	0	2	2	0	0
1983	7	0	7	0	2	2	0	0
1984	8	0	8	0	2	2	0	0
1985	10	0	10	0	2	2	0	0
1986	12	0	12	0	2	2	0	0
1987	8	0	8	0	2	2	0	0
1988	4	0	4	0	2	2	0	0
1989	4	0	4	0	2	2	0	0
1990	4	0	4	0	2	2	0	0
1991	4	0	4	0	2	2	0	0
1992	4	0	4	0	2	2	0	0
1993	2	2	0	0	2	2	0	0
1994	2	2	0	0	2	2	0	0
1995	2	2	0	0	2	2	0	0
1996	2	2	0	0	2	2	0	0
1997	2	2	0	0	2	2	0	0
1998	2	2	0	0	2	2	0	0
1999	2	2	0	0	2	2	0	0
2000	2	2	0	0	2	2	0	0
2001	2	2	0	0	2	2	0	0
2002	2	2	0	0	2	2	0	0
2003	2	2	0	0	2	2	0	0
2004	2	2	0	0	2	2	0	0
2005	2	2	0	0	2	2	0	0
2006	2	2	0	0	2	2	0	0
2007	2	2	0	0	2	2	0	0
Forecasts								
2008	4	4	0	0	4	4	0	0
2009	4	4	0	0	4	4	0	0
2010	4	4	0	0	4	4	0	0
2011	4	4	0	0	4	4	0	0
2012	4	4	0	0	4	4	0	0
2013	4	4	0	0	4	4	0	0
2014	4	4	0	0	4	4	0	0
2015	4	4	0	0	4	4	0	0
2016	4	4	0	0	4	4	0	0
2017	4	4	0	0	4	4	0	0
2018	4	4	0	0	4	4	0	0
2019	4	4	0	0	4	4	0	0
2020	4	4	0	0	4	4	0	0
2021	4	4	0	0	4	4	0	0
2022	4	4	0	0	4	4	0	0
2023	4	4	0	0	4	4	0	0
2024	4	4	0	0	4	4	0	0
2025	4	4	0	0	4	4	0	0
2026	4	4	0	0	4	4	0	0
2027	3	3	0	0	3	3	0	0
2028	3	3	0	0	3	3	0	0
2029	3	3	0	0	3	3	0	0
2030	3	3	0	0	3	3	0	0

Source: BITRE estimates.

TA.52 Interstate freight task (million tkm) between Western Australia and Northern Territory, by transport mode, 1972–2030

Year	WA–NT				NT–WA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	97	28	0	69	75	12	0	63
1973	103	35	0	68	84	16	9	59
1974	109	42	0	67	92	19	17	56
1975	111	45	0	67	109	21	26	62
1976	117	52	0	66	127	24	34	69
1977	119	55	0	65	123	26	33	65
1978	119	56	0	64	119	26	31	61
1979	125	62	0	63	116	30	30	57
1980	133	71	0	62	116	34	28	53
1981	138	77	0	61	112	38	26	49
1982	143	83	0	60	109	41	23	45
1983	133	74	0	59	98	36	21	41
1984	159	93	0	66	80	46	28	6
1985	155	96	0	59	78	48	24	6
1986	185	109	0	76	86	55	22	9
1987	187	111	0	76	84	56	22	6
1988	184	125	0	59	92	64	23	6
1989	205	139	0	66	103	71	23	9
1990	244	147	0	97	99	76	17	6
1991	180	149	0	31	103	77	17	9
1992	186	151	0	35	113	78	17	18
1993	203	165	0	38	115	86	17	12
1994	250	177	0	73	125	93	17	15
1995	252	189	0	62	126	100	17	9
1996	272	211	0	61	136	112	17	7
1997	230	230	0	0	123	123	0	0
1998	305	250	0	56	266	135	0	132
1999	342	273	0	69	160	149	0	11
2000	335	296	0	39	170	162	0	8
2001	350	308	0	42	185	169	0	16
2002	369	329	0	40	196	182	0	14
2003	401	353	0	48	214	196	0	18
2004	433	376	0	57	470	210	0	260
2005	429	396	0	32	231	223	0	8
2006	447	419	0	28	260	237	0	23
2007	485	450	0	35	262	256	0	6
Forecasts								
2008	496	474	0	21	219	212	0	7
2009	483	462	0	21	231	224	0	7
2010	503	482	0	21	234	227	0	7
2011	531	510	0	22	236	229	0	7
2012	569	546	0	23	240	232	0	8
2013	595	571	0	24	247	239	0	8
2014	623	598	0	24	254	246	0	8
2015	651	626	0	25	262	253	0	8
2016	684	658	0	26	270	262	0	8
2017	718	692	0	27	279	271	0	9
2018	741	714	0	27	290	281	0	9
2019	764	736	0	28	298	289	0	9
2020	785	757	0	28	306	296	0	10
2021	808	780	0	28	312	303	0	10
2022	832	803	0	29	319	309	0	10
2023	854	825	0	29	324	314	0	10
2024	876	847	0	29	330	319	0	10
2025	899	869	0	30	335	324	0	10
2026	922	892	0	30	340	329	0	11
2027	943	913	0	30	346	335	0	11
2028	966	936	0	30	351	340	0	11
2029	989	958	0	31	355	344	0	11
2030	1 012	981	0	31	360	349	0	11

Source: BITRE estimates.

TA.53 Interstate freight task (million tkm) between Western Australia and Tasmania, by transport mode, 1972–2030

Year	WA–TAS				TAS–WA			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	3	0	0	3	24	0	0	24
1973	3	0	0	3	24	0	0	24
1974	3	0	0	3	24	0	0	24
1975	3	0	0	3	17	0	0	17
1976	3	0	0	3	10	0	0	10
1977	3	0	0	3	3	0	0	3
1978	3	0	0	3	3	0	0	3
1979	3	0	0	3	3	0	0	3
1980	3	0	0	3	3	0	0	3
1981	3	0	0	3	3	0	0	3
1982	3	0	0	3	3	0	0	3
1983	29	0	0	29	177	0	0	177
1984	58	0	0	58	184	0	0	184
1985	71	0	0	71	243	0	0	243
1986	61	0	0	61	205	0	0	205
1987	74	0	0	74	243	0	0	243
1988	125	0	0	125	205	0	0	205
1989	116	0	0	116	191	0	0	191
1990	132	0	0	132	163	0	0	163
1991	67	0	0	67	156	0	0	156
1992	39	0	0	39	62	0	0	62
1993	3	0	0	3	104	0	0	104
1994	22	0	0	22	87	0	0	87
1995	42	0	0	42	80	0	0	80
1996	26	0	0	26	173	0	0	173
1997	3	0	0	3	201	0	0	201
1998	110	0	0	110	282	0	0	282
1999	58	0	0	58	380	0	0	380
2000	41	0	0	41	215	0	0	215
2001	22	0	0	22	128	0	0	128
2002	1 024	0	0	1 024	723	0	0	723
2003	30	0	0	30	961	0	0	961
2004	15	0	0	15	1 391	0	0	1 391
2005	26	0	0	26	41	0	0	41
2006	22	0	0	22	468	0	0	468
2007	48	0	0	48	600	0	0	600
Forecasts								
2008	26	0	0	26	173	0	0	173
2009	26	0	0	26	174	0	0	174
2010	26	0	0	26	175	0	0	175
2011	26	0	0	26	175	0	0	175
2012	26	0	0	26	173	0	0	173
2013	25	0	0	25	170	0	0	170
2014	25	0	0	25	168	0	0	168
2015	24	0	0	24	165	0	0	165
2016	24	0	0	24	163	0	0	163
2017	24	0	0	24	161	0	0	161
2018	24	0	0	24	160	0	0	160
2019	23	0	0	23	158	0	0	158
2020	23	0	0	23	157	0	0	157
2021	23	0	0	23	156	0	0	156
2022	23	0	0	23	154	0	0	154
2023	23	0	0	23	153	0	0	153
2024	22	0	0	22	151	0	0	151
2025	22	0	0	22	150	0	0	150
2026	22	0	0	22	148	0	0	148
2027	22	0	0	22	146	0	0	146
2028	21	0	0	21	145	0	0	145
2029	21	0	0	21	143	0	0	143
2030	21	0	0	21	141	0	0	141

Source: BITRE estimates.

TA.54 Interstate freight task (million tkm) between Australian Capital Territory and Northern Territory, by transport mode, 1972–2030

Year	ACT–NT				NT–ACT			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	2	2	0	0	2	2	0	0
1973	2	2	0	0	2	2	0	0
1974	2	2	0	0	2	2	0	0
1975	2	2	0	0	2	2	0	0
1976	2	2	0	0	2	2	0	0
1977	2	2	0	0	2	2	0	0
1978	2	2	0	0	2	2	0	0
1979	2	2	0	0	2	2	0	0
1980	2	2	0	0	2	2	0	0
1981	2	2	0	0	2	2	0	0
1982	2	2	0	0	2	2	0	0
1983	2	2	0	0	2	2	0	0
1984	2	2	0	0	2	2	0	0
1985	2	2	0	0	2	2	0	0
1986	2	2	0	0	2	2	0	0
1987	2	2	0	0	2	2	0	0
1988	2	2	0	0	2	2	0	0
1989	2	2	0	0	2	2	0	0
1990	2	2	0	0	2	2	0	0
1991	2	2	0	0	2	2	0	0
1992	2	2	0	0	2	2	0	0
1993	2	2	0	0	2	2	0	0
1994	2	2	0	0	2	2	0	0
1995	2	2	0	0	2	2	0	0
1996	2	2	0	0	2	2	0	0
1997	2	2	0	0	2	2	0	0
1998	2	2	0	0	2	2	0	0
1999	2	2	0	0	2	2	0	0
2000	2	2	0	0	2	2	0	0
2001	2	2	0	0	2	2	0	0
2002	2	2	0	0	2	2	0	0
2003	2	2	0	0	2	2	0	0
2004	2	2	0	0	2	2	0	0
2005	2	2	0	0	2	2	0	0
2006	2	2	0	0	2	2	0	0
2007	2	2	0	0	2	2	0	0
Forecasts								
2008	5	5	0	0	5	5	0	0
2009	5	5	0	0	5	5	0	0
2010	5	5	0	0	5	5	0	0
2011	5	5	0	0	5	5	0	0
2012	5	5	0	0	5	5	0	0
2013	5	5	0	0	5	5	0	0
2014	4	4	0	0	4	4	0	0
2015	4	4	0	0	4	4	0	0
2016	4	4	0	0	4	4	0	0
2017	4	4	0	0	4	4	0	0
2018	4	4	0	0	4	4	0	0
2019	4	4	0	0	4	4	0	0
2020	4	4	0	0	4	4	0	0
2021	4	4	0	0	4	4	0	0
2022	4	4	0	0	4	4	0	0
2023	4	4	0	0	4	4	0	0
2024	4	4	0	0	4	4	0	0
2025	4	4	0	0	4	4	0	0
2026	4	4	0	0	4	4	0	0
2027	4	4	0	0	4	4	0	0
2028	4	4	0	0	4	4	0	0
2029	4	4	0	0	4	4	0	0
2030	4	4	0	0	4	4	0	0

Source: BITRE estimates.

TA.55 Interstate freight task (million tkm) between Australian Capital Territory and Tasmania, by transport mode, 1972–2030

Year	ACT–TAS				TAS–ACT			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	0	0	0	0	0	0	0	0
1973	0	0	0	0	0	0	0	0
1974	0	0	0	0	0	0	0	0
1975	0	0	0	0	0	0	0	0
1976	0	0	0	0	0	0	0	0
1977	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0
1979	0	0	0	0	0	0	0	0
1980	0	0	0	0	0	0	0	0
1981	0	0	0	0	0	0	0	0
1982	0	0	0	0	0	0	0	0
1983	0	0	0	0	0	0	0	0
1984	0	0	0	0	0	0	0	0
1985	0	0	0	0	0	0	0	0
1986	0	0	0	0	0	0	0	0
1987	0	0	0	0	0	0	0	0
1988	0	0	0	0	0	0	0	0
1989	0	0	0	0	0	0	0	0
1990	0	0	0	0	0	0	0	0
1991	0	0	0	0	0	0	0	0
1992	0	0	0	0	0	0	0	0
1993	0	0	0	0	0	0	0	0
1994	0	0	0	0	0	0	0	0
1995	0	0	0	0	0	0	0	0
1996	0	0	0	0	0	0	0	0
1997	0	0	0	0	0	0	0	0
1998	0	0	0	0	0	0	0	0
1999	0	0	0	0	0	0	0	0
2000	0	0	0	0	0	0	0	0
2001	0	0	0	0	0	0	0	0
2002	0	0	0	0	0	0	0	0
2003	0	0	0	0	0	0	0	0
2004	0	0	0	0	0	0	0	0
2005	0	0	0	0	0	0	0	0
2006	0	0	0	0	0	0	0	0
2007	0	0	0	0	0	0	0	0
Forecasts								
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	0	0	0	0	0	0	0
2011	0	0	0	0	0	0	0	0
2012	0	0	0	0	0	0	0	0
2013	0	0	0	0	0	0	0	0
2014	0	0	0	0	0	0	0	0
2015	0	0	0	0	0	0	0	0
2016	0	0	0	0	0	0	0	0
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0
2019	0	0	0	0	0	0	0	0
2020	0	0	0	0	0	0	0	0
2021	0	0	0	0	0	0	0	0
2022	0	0	0	0	0	0	0	0
2023	0	0	0	0	0	0	0	0
2024	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0

Source: BITRE estimates.

TA.56 Interstate freight task (million tkm) between Northern Territory and Tasmania, by transport mode, 1972–2030

Year	NT–TAS				TAS–NT			
	Total	Road	Rail	Sea	Total	Road	Rail	Sea
Estimates								
1972	5	0	0	5	6	0	0	6
1973	5	0	0	5	6	0	0	6
1974	5	0	0	5	6	0	0	6
1975	5	0	0	5	6	0	0	6
1976	5	0	0	5	6	0	0	6
1977	5	0	0	5	6	0	0	6
1978	5	0	0	5	6	0	0	6
1979	5	0	0	5	6	0	0	6
1980	5	0	0	5	6	0	0	6
1981	5	0	0	5	6	0	0	6
1982	5	0	0	5	6	0	0	6
1983	5	0	0	5	6	0	0	6
1984	5	0	0	5	17	0	0	17
1985	5	0	0	5	6	0	0	6
1986	5	0	0	5	6	0	0	6
1987	5	0	0	5	6	0	0	6
1988	5	0	0	5	6	0	0	6
1989	5	0	0	5	6	0	0	6
1990	5	0	0	5	6	0	0	6
1991	5	0	0	5	6	0	0	6
1992	5	0	0	5	6	0	0	6
1993	5	0	0	5	6	0	0	6
1994	5	0	0	5	6	0	0	6
1995	5	0	0	5	6	0	0	6
1996	5	0	0	5	6	0	0	6
1997	5	0	0	5	6	0	0	6
1998	5	0	0	5	10	0	0	10
1999	5	0	0	5	0	0	0	0
2000	5	0	0	5	12	0	0	12
2001	5	0	0	5	4	0	0	4
2002	5	0	0	5	6	0	0	6
2003	5	0	0	5	6	0	0	6
2004	5	0	0	5	6	0	0	6
2005	5	0	0	5	72	0	0	72
2006	5	0	0	5	6	0	0	6
2007	5	0	0	5	6	0	0	6
Forecasts								
2008	5	0	0	5	6	0	0	6
2009	5	0	0	5	6	0	0	6
2010	5	0	0	5	6	0	0	6
2011	5	0	0	5	6	0	0	6
2012	5	0	0	5	6	0	0	6
2013	5	0	0	5	6	0	0	6
2014	5	0	0	5	6	0	0	6
2015	5	0	0	5	6	0	0	6
2016	5	0	0	5	5	0	0	5
2017	5	0	0	5	5	0	0	5
2018	5	0	0	5	5	0	0	5
2019	5	0	0	5	5	0	0	5
2020	5	0	0	5	5	0	0	5
2021	5	0	0	5	5	0	0	5
2022	4	0	0	4	5	0	0	5
2023	4	0	0	4	5	0	0	5
2024	4	0	0	4	5	0	0	5
2025	4	0	0	4	5	0	0	5
2026	4	0	0	4	5	0	0	5
2027	4	0	0	4	5	0	0	5
2028	4	0	0	4	5	0	0	5
2029	4	0	0	4	5	0	0	5
2030	4	0	0	4	5	0	0	5

Source: BITRE estimates.

TA.57 Total interstate freight task estimates and forecasts (billion tkm) in Australia (sum of all 56 OD routes) and transport mode share (per cent), 1972–2030

Year	Total IS (all 56 OD routes)				Mode share (per cent)		
	All modes	Road	Rail	Sea	Road	Rail	Sea
Estimates							
1972	17.8	5.4	6.1	6.4	29.8	35.3	34.9
1973	18.8	6.6	6.6	5.6	34.9	36.4	28.8
1974	19.7	7.8	7.2	4.7	39.2	37.4	23.4
1975	20.0	8.3	7.7	4.0	41.2	39.5	19.3
1976	20.6	9.2	8.3	3.2	43.9	41.0	15.1
1977	20.7	9.7	8.5	2.5	46.2	42.0	11.7
1978	21.0	9.8	8.7	2.4	46.2	42.5	11.3
1979	22.2	10.8	8.9	2.4	48.3	41.3	10.4
1980	23.8	12.3	9.2	2.3	51.0	39.5	9.5
1981	24.9	13.3	9.4	2.3	52.5	38.7	8.8
1982	25.5	14.2	9.0	2.2	55.4	36.2	8.4
1983	23.8	12.8	8.6	2.4	53.2	36.9	10.0
1984	28.2	15.9	9.4	2.9	55.8	34.3	9.9
1985	28.8	16.5	9.4	2.9	56.7	33.6	9.7
1986	30.9	18.6	9.7	2.6	59.8	32.2	8.0
1987	32.2	18.9	10.8	2.5	58.1	34.2	7.7
1988	35.8	21.4	12.4	2.0	59.3	35.2	5.5
1989	40.0	23.8	14.0	2.2	58.9	35.7	5.4
1990	40.9	25.1	13.8	1.9	61.1	34.3	4.6
1991	40.2	25.4	13.1	1.7	62.8	32.9	4.2
1992	41.4	25.9	13.5	2.0	62.1	33.2	4.8
1993	45.1	28.6	14.5	2.0	63.0	32.7	4.4
1994	47.9	30.3	15.5	2.1	62.8	32.8	4.3
1995	51.4	32.5	16.4	2.5	62.8	32.6	4.7
1996	54.4	35.5	16.3	2.5	64.9	30.6	4.5
1997	57.4	38.0	16.9	2.6	65.8	29.8	4.4
1998	61.8	40.5	17.8	3.5	65.2	29.4	5.5
1999	64.6	43.1	18.4	3.0	66.6	28.9	4.6
2000	69.4	45.7	19.2	4.4	65.7	28.0	6.3
2001	71.4	46.8	20.0	4.6	65.5	28.3	6.2
2002	76.8	49.3	21.0	6.5	64.1	27.6	8.3
2003	80.9	51.6	22.0	7.3	63.7	27.5	8.8
2004	85.6	54.6	23.0	7.9	63.7	27.2	9.0
2005	88.0	57.6	24.0	6.4	65.3	27.6	7.1
2006	89.4	60.7	22.6	6.0	68.9	24.4	6.7
2007	96.8	64.7	25.2	6.8	64.1	29.3	6.6
Forecasts							
2008	104.6	70.4	27.1	7.1	66.3	27.1	6.6
2009	105.4	71.4	27.2	6.9	66.7	26.9	6.4
2010	109.0	73.8	28.0	7.2	66.8	26.9	6.4
2011	113.7	77.0	29.2	7.5	66.7	26.8	6.5
2012	120.3	81.6	30.8	7.9	66.8	26.7	6.5
2013	126.1	85.8	32.2	8.1	67.1	26.6	6.4
2014	132.4	90.3	33.7	8.4	67.3	26.4	6.2
2015	138.8	94.9	35.3	8.6	67.6	26.3	6.1
2016	146.1	100.1	37.1	8.9	67.8	26.2	6.0
2017	154.0	105.8	39.0	9.3	68.0	26.1	5.9
2018	160.5	110.5	40.5	9.5	68.2	26.0	5.8
2019	166.5	114.9	42.0	9.7	68.4	25.9	5.7
2020	172.0	118.8	43.4	9.8	68.5	25.9	5.6
2021	177.8	123.0	44.8	10.1	68.6	25.8	5.6
2022	183.6	127.1	46.2	10.3	68.7	25.7	5.5
2023	188.9	130.9	47.5	10.5	68.9	25.7	5.5
2024	194.4	134.8	48.9	10.7	69.0	25.6	5.4
2025	199.9	138.8	50.3	10.9	69.1	25.6	5.4
2026	205.6	142.8	51.7	11.1	69.2	25.5	5.3
2027	211.2	146.8	53.1	11.3	69.3	25.5	5.3
2028	216.8	150.8	54.5	11.5	69.4	25.4	5.2
2029	222.5	154.9	55.9	11.7	69.5	25.4	5.2
2030	228.4	159.1	57.4	11.9	69.5	25.3	5.1

Source: BITRE estimates.

APPENDIX B

National Gross Domestic Product

Appendix B provides the national Gross Domestic Products (GDP) between 1972 and 2030. Forecast GDP amounts from 2008 to 2030 are 2006–07 values.

TB.1 National Gross Domestic Product (GDP), 1972–2030

Year	GDP ($ Billion)	Change (per cent)
1972	351.05	4.51
1973	360.40	2.66
1974	374.95	4.04
1975	379.44	1.20
1976	389.71	2.71
1977	403.20	3.46
1978	406.81	0.90
1979	423.86	4.19
1980	437.23	3.15
1981	451.92	3.36
1982	466.28	3.18
1983	455.23	-2.37
1984	476.52	4.68
1985	501.84	5.31
1986	524.13	4.44
1987	536.83	2.42
1988	564.55	5.16
1989	585.41	3.69
1990	608.45	3.94
1991	604.53	-0.64
1992	604.80	0.05
1993	627.18	3.70
1994	652.98	4.11
1995	681.00	4.29
1996	708.93	4.10
1997	736.57	3.90
1998	769.72	4.50
1999	809.74	5.20
2000	842.13	4.00
2001	858.13	1.90
2002	890.74	3.80
2003	919.25	3.20
2004	956.02	4.00
2005	982.79	2.80
2006	1012.27	3.00
2007	1045.67	3.30
2008	1083.66	3.60
2009	1090.16	0.60
2010	1106.52	1.50
2011	1136.94	2.75
2012	1182.42	4.00
2013	1229.72	4.00
2014	1278.91	4.00
2015	1330.06	4.00
2016	1383.27	4.00
2017	1438.60	4.00
2018	1486.07	3.30
2019	1529.17	2.90
2020	1568.93	2.60
2021	1608.15	2.50
2022	1648.35	2.50
2023	1687.91	2.40
2024	1728.42	2.40
2025	1769.91	2.40
2026	1812.38	2.40
2027	1854.07	2.30
2028	1896.71	2.30
2029	1940.34	2.30
2030	1984.96	2.30

Source: Australian National Accounts: National Income, Expenditure and Product (ABS, Cat. No. 5206.0) (1971–72 to 2006–07); BITRE estimates (from the 2009 Treasury Budget, 2007–08 to 2016–17; Access Economics April 2009, 2017–18 to 2019–20; and Treasury's long-term projections, 2020–21 to 2029–30.

APPENDIX C
Road freight estimates of eastern states–Western Australia, 1972–2007

This appendix provides the estimation of combined road freight tasks (both ways, i.e. 'to' and 'from') between eastern states (ES) (include NSW, Victoria, Queensland and South Australia) and Western Australia (WA) from 1972 to 2007 prior to splitting to each individual origin–destination (OD) routes.

For this exercise, two separate regressions were done to smooth actual Survey of Motor Vehicle Use (SMVU) data, i.e. to interpolate between what is scattered ES–WA and WA–ES road freight estimates.

First regression was done for 1972, 1981, 1982 and 1985 which was regressed against combined (both ways, i.e. ES–WA and WA–ES) 'Log' transformed road freight task (dependent variable) and the number of trucks passing through Hume Highway at Marulan (independent variable) ('Log' transformed). The Marulan traffic data was used in the absence of Eyre Highway traffic data. In this regression, a dummy variable for 1981, 1982 and 1985 was used to capture the effect of the coastal shipping of the Eyre Highway.

In the second regression, combined (both ways, i.e. ES–WA and WA–ES) 'Log' transformed road freight task (dependent variable) was regressed against 'Log' transformed Eyre Highway truck traffic.

Regression results and Analysis of Variance (ANOVA) of these two regressions are presented in Table C.1 and Table C.2.

TC.1 Regression results for 'total eastern states–Western Australia (both ways combined)' road freight task

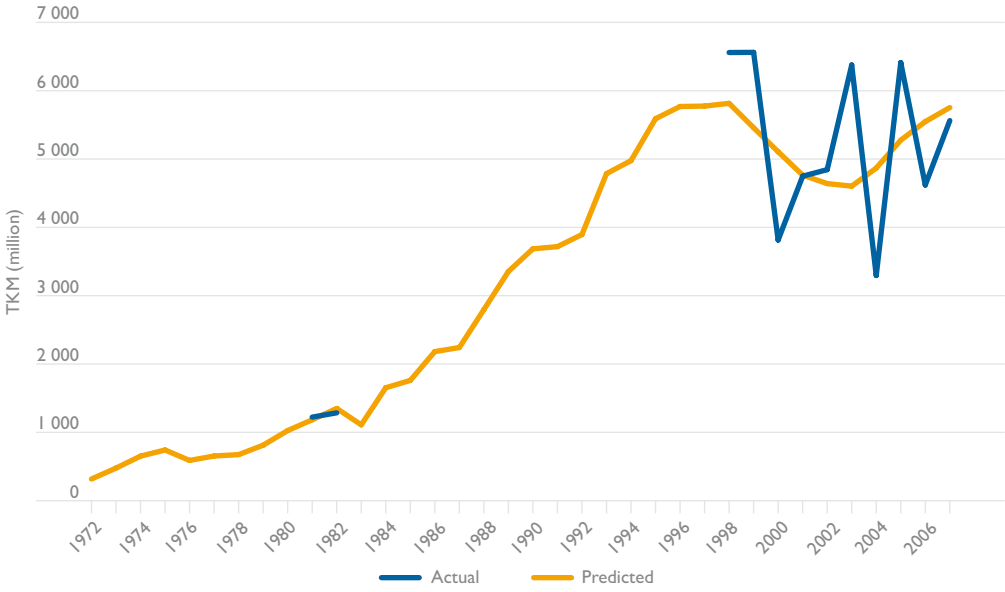
	Regression results			
	1972, 1981, 1982 and 1985		1998–2007	
Regression statistics				
Multiple R	0.9990		0.3286	
R Square	0.9979		0.1080	
Adjusted R Square	0.9938		–0.0195	
Standard Error	0.0602		0.2577	
Observations	4		9	
	Coefficients	Standard error	Coefficients	Standard error
Intercept	–9.0623	3.1281	–0.2771	9.5772
Hume Highway (Marulan)	1.9802	0.4179		
Eyre dummy	–0.4745	0.4211		
Eyre Highway traffic			0.6594	0.7164

TC.2 ANOVA for 'total eastern states–Western Australia (both ways combined)' road freight task

	df	SS	MS	F	Significance F
1972, 1981, 1982, 1985					
Regression	2	1.7544	0.87720	241.7245	0.0454
Residual	1	0.0036	0.00363		
Total	3	1.7580			
1998–2007					
Regression	1	0.0563	0.0563	0.8472	0.3880
Residual	7	0.4650	0.0664		
Total	8	0.5213			

Combining these two sets of data show the good fit of data points and interpolation between ES and WA (both ways) (Figure C.1).

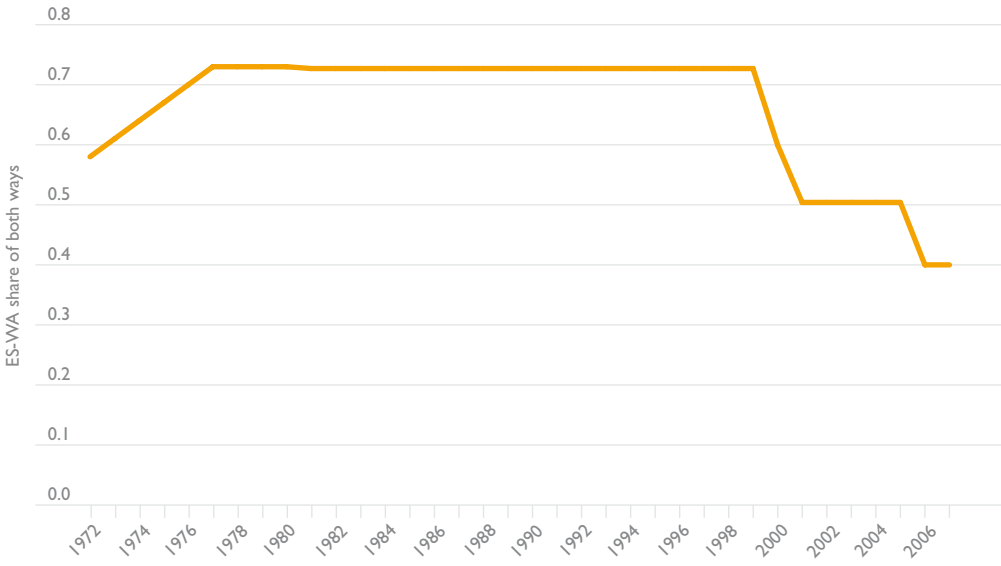
FC.1 Interstate road freight data points (actual) and interpolation (predicted), eastern states to and from Western Australia, 1972–2007



Source: BITRE estimates.

This both ways predicted data was separated for each route (i.e. ES–WA and WA–ES) using the share. Figure C.2 shows the ES–WA share of both ways traffic generated between 1972 and 2007. Several changes happened during this period. Firstly, coastal shipping dropped out during mid-1970s and came back after 2000 with the single and multiple voyage permits. Secondly, since 2006, rail is probably benefiting from infrastructure updates and also more competitive pricing.

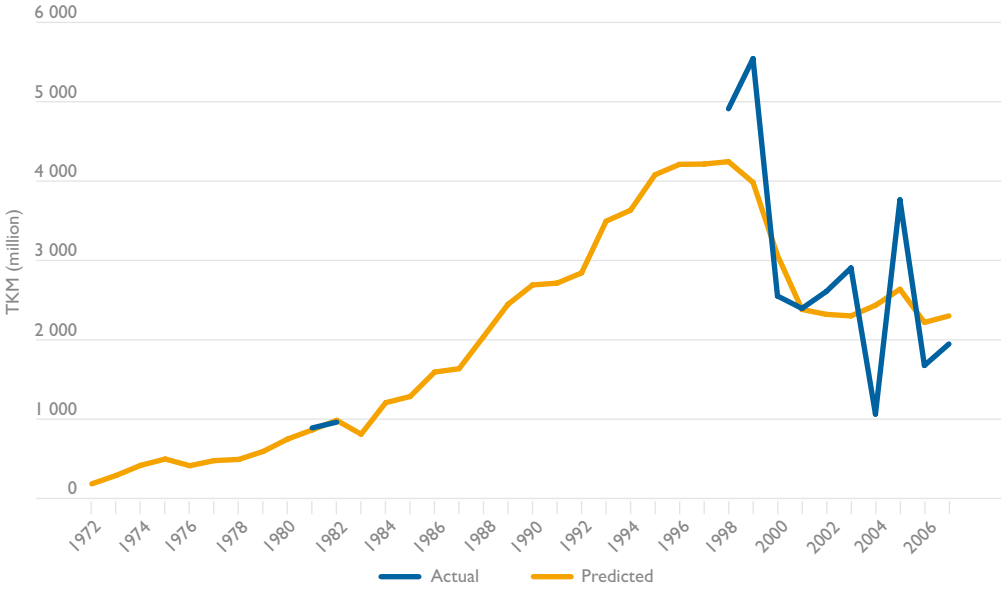
FC.2 ES–WA route share of both ways (ES–WA and WA–ES), 1972–2007



Source : BITRE estimates.

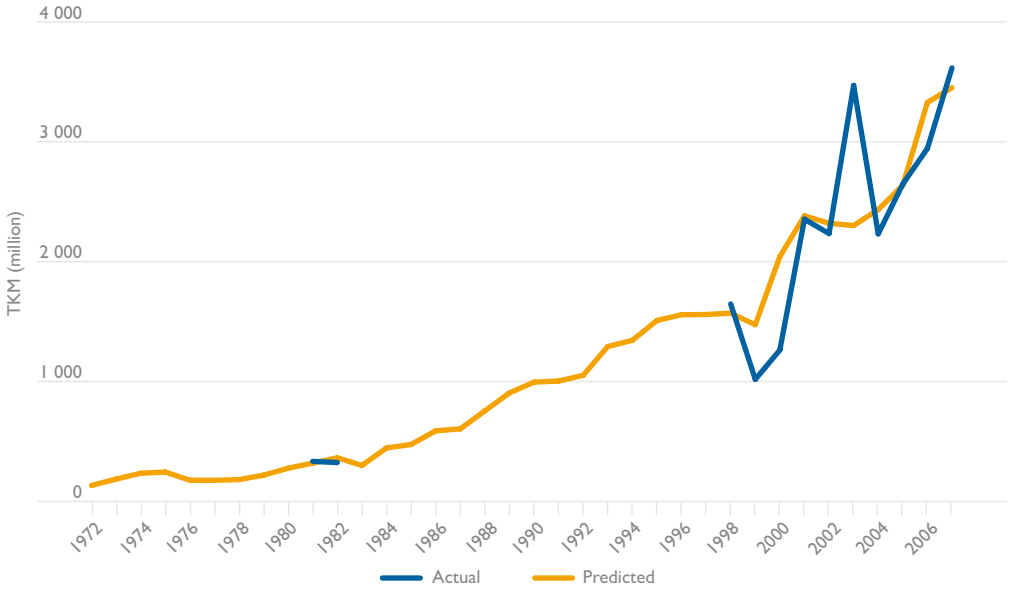
Using these shares for each route (i.e. ES–WA and WA–ES), road freight task was estimated and the actual and predicted (interpolated) road freight estimates are shown in Figure C.3 and Figure C.4.

FC.3 Interstate road freight data points (actual) and interpolation (predicted), ES–WA origin–destination route, 1972–2007



Source: BITRE estimates.

FC.4 Interstate road freight data points (actual) and interpolation (predicted), WA–ES origin–destination route, 1972–2007



Source: BITRE estimates.

Table C.3 shows the predicted and normalised share (per cent) of origin–destination (OD) routes between ES–WA and WA–ES from 1972 to 2007, based on the nature of the road freight task carried out during this period. These shares were used to separate total road freight estimates for ES–WA and WA–ES routes into individual OD routes and the final road freight results are presented in Table C.4.

TC.3 Predicted and normalised share (per cent), ES–WA and WA–ES, 1972–2007

Year	Eastern states–Western Australia					Western Australia–eastern states				
	NSW	VIC	QLD	SA	Total	NSW	VIC	QLD	SA	Total
1972	40	30	10	20	100	20	60	10	10	100
1973	40	30	10	20	100	20	60	10	10	100
1974	40	30	10	20	100	20	60	10	10	100
1975	40	30	10	20	100	20	60	10	10	100
1976	40	30	10	20	100	20	60	10	10	100
1977	40	30	10	20	100	20	60	10	10	100
1978	40	30	10	20	100	20	60	10	10	100
1979	40	30	10	20	100	20	60	10	10	100
1980	40	30	10	20	100	20	60	10	10	100
1981	40	30	10	20	100	20	60	10	10	100
1982	40	30	10	20	100	21	59	10	10	100
1983	40	30	10	20	100	21	56	10	13	100
1984	40	30	10	20	100	21	54	10	15	100
1985	40	30	10	20	100	21	51	10	18	100
1986	39	29	10	22	100	21	48	10	21	100
1987	38	27	10	25	100	21	46	10	23	100
1988	37	26	10	27	100	21	43	10	26	100
1989	36	24	10	30	100	21	40	10	29	100
1990	35	23	10	32	100	21	38	10	31	100
1991	34	21	10	35	100	21	35	10	34	100
1992	33	20	10	37	100	21	32	10	37	100
1993	32	18	10	40	100	21	29	10	39	100
1994	31	17	10	42	100	21	27	10	42	100
1995	30	15	10	45	100	21	24	10	45	100
1996	29	14	10	47	100	21	21	10	47	100
1997	27	12	10	50	100	21	19	11	50	100
1998	26	11	11	53	100	21	16	11	53	100
1999	26	11	11	53	100	21	16	11	53	100
2000	26	11	11	53	100	21	16	11	53	100
2001	26	11	11	53	100	21	16	11	53	100
2002	26	11	11	53	100	21	16	11	53	100
2003	26	11	11	53	100	21	16	11	53	100
2004	26	11	11	53	100	21	16	11	53	100
2005	26	11	11	53	100	21	16	11	53	100
2006	26	11	11	53	100	21	16	11	53	100
2007	26	11	11	53	100	21	16	11	53	100

Source: BITRE estimates.

TC.4 Road freight estimates (million tkm), ES–WA and WA–ES, 1972–2007

Year	Eastern states–Western Australia					Western Australia–eastern states				
	NSW	VIC	QLD	SA	Total	NSW	VIC	QLD	SA	Total
1972	37	110	18	18	184	53	40	13	27	133
1973	58	175	29	29	291	74	56	19	37	186
1974	84	251	42	42	418	94	70	23	47	235
1975	99	298	50	50	497	98	73	24	49	245
1976	83	248	41	41	413	71	53	18	35	177
1977	95	286	48	48	477	71	53	18	35	177
1978	98	295	49	49	492	73	55	18	36	182
1979	119	356	59	59	593	88	66	22	44	219
1980	150	449	75	75	749	111	83	28	55	277
1981	173	519	86	86	864	128	96	32	64	320
1982	202	580	101	101	985	146	109	36	73	364
1983	167	456	83	104	810	120	90	30	60	300
1984	249	647	124	186	1 207	178	134	45	89	446
1985	265	655	133	232	1 285	190	143	48	95	475
1986	329	770	165	329	1 593	230	168	59	132	589
1987	339	747	169	381	1 636	230	164	61	150	605
1988	423	878	212	529	2 041	279	194	76	206	755
1989	508	987	254	699	2 448	325	219	92	269	906
1990	560	1 012	280	839	2 691	347	226	101	320	995
1991	565	948	283	919	2 714	340	213	103	348	1 004
1992	593	916	297	1 038	2 843	345	208	108	391	1 052
1993	730	1 031	365	1 369	3 494	410	236	133	513	1 292
1994	760	973	380	1 520	3 633	412	225	139	568	1 344
1995	855	981	428	1 817	4 080	447	229	157	676	1 509
1996	884	897	442	1 989	4 211	444	213	163	738	1 558
1997	886	782	443	2 104	4 215	428	189	163	780	1 559
1998	894	670	447	2 234	4 245	413	165	165	826	1 570
1999	839	629	419	2 097	3 984	388	155	155	776	1 474
2000	645	484	323	1 613	3 064	538	215	215	1 075	2 043
2001	501	376	251	1 254	2 382	627	251	251	1 254	2 382
2002	489	366	244	1 221	2 321	611	244	244	1 221	2 321
2003	485	363	242	1 211	2 302	606	242	242	1 211	2 302
2004	512	384	256	1 281	2 434	640	256	256	1 281	2 434
2005	555	416	278	1 388	2 638	694	278	278	1 388	2 638
2006	467	350	234	1 168	2 219	876	350	350	1 752	3 329
2007	484	363	242	1 211	2 301	908	363	363	1 817	3 452

Source: BITRE estimates.

APPENDIX D

Aggregate mode share trends for origin–destination routes, 1972–2030

This appendix shows aggregate transport mode share trends for 56 interstate origin–destination routes between 1972 and 2030. These mode share forecasts were used to separate total interstate freight task into road, rail and coastal shipping freight.

TD.1 Aggregate mode share for all 56 OD routes

Year	NSW–VIC			VIC–NSW			NSW–QLD			QLD–NSW		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.473	0.463	0.064	0.696	0.281	0.023	0.440	0.485	0.075	0.596	0.347	0.057
1973	0.533	0.426	0.041	0.725	0.241	0.033	0.483	0.454	0.063	0.650	0.303	0.047
1974	0.581	0.398	0.021	0.745	0.213	0.042	0.512	0.433	0.055	0.688	0.272	0.040
1975	0.600	0.386	0.014	0.757	0.203	0.040	0.522	0.439	0.038	0.707	0.263	0.030
1976	0.633	0.360	0.007	0.778	0.185	0.037	0.550	0.427	0.023	0.738	0.242	0.020
1977	0.645	0.349	0.006	0.801	0.183	0.016	0.557	0.423	0.020	0.738	0.238	0.024
1978	0.650	0.346	0.005	0.802	0.182	0.016	0.555	0.428	0.017	0.731	0.241	0.028
1979	0.671	0.326	0.004	0.814	0.171	0.015	0.575	0.411	0.013	0.742	0.229	0.029
1980	0.696	0.301	0.003	0.829	0.158	0.013	0.602	0.387	0.010	0.758	0.212	0.030
1981	0.712	0.286	0.002	0.837	0.150	0.013	0.608	0.384	0.008	0.778	0.190	0.032
1982	0.765	0.233	0.001	0.844	0.144	0.012	0.648	0.346	0.006	0.776	0.191	0.033
1983	0.796	0.204	0.001	0.831	0.156	0.013	0.645	0.351	0.005	0.740	0.221	0.039
1984	0.800	0.199	0.001	0.860	0.140	0.000	0.677	0.316	0.008	0.810	0.165	0.025
1985	0.810	0.190	0.001	0.851	0.147	0.002	0.685	0.306	0.009	0.814	0.181	0.005
1986	0.820	0.179	0.000	0.872	0.128	0.000	0.689	0.305	0.006	0.789	0.210	0.001
1987	0.786	0.213	0.000	0.869	0.131	0.000	0.688	0.312	0.001	0.780	0.219	0.002
1988	0.817	0.182	0.000	0.864	0.136	0.000	0.695	0.304	0.000	0.814	0.185	0.001
1989	0.813	0.187	0.000	0.858	0.142	0.000	0.685	0.314	0.001	0.826	0.174	0.000
1990	0.821	0.178	0.000	0.873	0.127	0.000	0.706	0.293	0.001	0.828	0.170	0.002
1991	0.839	0.160	0.000	0.879	0.120	0.001	0.739	0.259	0.002	0.847	0.153	0.001
1992	0.842	0.157	0.000	0.910	0.089	0.000	0.756	0.243	0.001	0.845	0.154	0.001
1993	0.840	0.160	0.000	0.911	0.088	0.001	0.769	0.230	0.001	0.860	0.139	0.002
1994	0.836	0.163	0.000	0.909	0.086	0.005	0.778	0.220	0.002	0.872	0.126	0.001
1995	0.833	0.167	0.000	0.914	0.085	0.001	0.787	0.211	0.002	0.882	0.115	0.003
1996	0.826	0.173	0.000	0.926	0.071	0.003	0.808	0.189	0.004	0.898	0.101	0.001
1997	0.832	0.163	0.005	0.927	0.070	0.004	0.839	0.159	0.002	0.911	0.088	0.001
1998	0.837	0.154	0.009	0.932	0.064	0.004	0.845	0.145	0.010	0.893	0.101	0.006
1999	0.855	0.143	0.002	0.945	0.055	0.001	0.859	0.134	0.007	0.921	0.078	0.001
2000	0.850	0.144	0.007	0.946	0.051	0.002	0.878	0.113	0.009	0.921	0.074	0.005
2001	0.848	0.149	0.003	0.948	0.050	0.003	0.894	0.099	0.007	0.903	0.070	0.027
2002	0.856	0.140	0.004	0.952	0.048	0.000	0.905	0.093	0.002	0.930	0.067	0.003
2003	0.864	0.131	0.005	0.954	0.045	0.001	0.905	0.086	0.009	0.936	0.063	0.001
2004	0.875	0.124	0.001	0.955	0.043	0.001	0.903	0.080	0.017	0.920	0.058	0.022
2005	0.880	0.118	0.002	0.957	0.041	0.002	0.913	0.076	0.012	0.937	0.056	0.007
2006	0.913	0.085	0.002	0.959	0.040	0.001	0.911	0.079	0.010	0.936	0.064	0.000
2007	0.895	0.102	0.003	0.961	0.038	0.001	0.893	0.089	0.018	0.975	0.025	0.000
Forecasts												
2008	0.897	0.101	0.002	0.956	0.042	0.002	0.896	0.091	0.013	0.975	0.018	0.007
2009	0.899	0.099	0.002	0.950	0.048	0.002	0.899	0.088	0.013	0.975	0.018	0.007
2010	0.901	0.097	0.002	0.945	0.053	0.002	0.902	0.086	0.013	0.975	0.017	0.007
2011	0.903	0.095	0.002	0.939	0.059	0.002	0.904	0.083	0.013	0.976	0.017	0.007
2012	0.904	0.094	0.002	0.934	0.064	0.002	0.907	0.080	0.013	0.976	0.017	0.007
2013	0.906	0.092	0.002	0.928	0.070	0.002	0.910	0.077	0.013	0.976	0.017	0.007
2014	0.908	0.090	0.002	0.923	0.075	0.002	0.913	0.075	0.013	0.976	0.017	0.007
2015	0.910	0.088	0.002	0.917	0.080	0.002	0.916	0.072	0.013	0.976	0.016	0.007
2016	0.912	0.086	0.002	0.912	0.086	0.002	0.918	0.069	0.013	0.977	0.016	0.007
2017	0.914	0.084	0.002	0.907	0.091	0.002	0.921	0.066	0.013	0.977	0.016	0.007
2018	0.916	0.082	0.002	0.901	0.097	0.002	0.924	0.063	0.013	0.977	0.016	0.007
2019	0.918	0.080	0.002	0.896	0.102	0.002	0.927	0.061	0.013	0.977	0.015	0.007
2020	0.919	0.079	0.002	0.890	0.108	0.002	0.929	0.058	0.013	0.978	0.015	0.007
2021	0.921	0.077	0.002	0.885	0.113	0.002	0.932	0.055	0.013	0.978	0.015	0.007
2022	0.923	0.075	0.002	0.879	0.119	0.002	0.935	0.052	0.013	0.978	0.015	0.007
2023	0.925	0.073	0.002	0.874	0.124	0.002	0.938	0.050	0.013	0.978	0.015	0.007
2024	0.927	0.071	0.002	0.868	0.130	0.002	0.941	0.047	0.013	0.978	0.014	0.007
2025	0.929	0.069	0.002	0.863	0.135	0.002	0.943	0.044	0.013	0.979	0.014	0.007
2026	0.931	0.067	0.002	0.857	0.141	0.002	0.946	0.041	0.013	0.979	0.014	0.007
2027	0.933	0.065	0.002	0.852	0.146	0.002	0.949	0.038	0.013	0.979	0.014	0.007
2028	0.934	0.064	0.002	0.846	0.152	0.002	0.952	0.036	0.013	0.979	0.014	0.007
2029	0.936	0.062	0.002	0.841	0.157	0.002	0.954	0.033	0.013	0.980	0.013	0.007
2030	0.938	0.060	0.002	0.835	0.162	0.002	0.957	0.030	0.013	0.980	0.013	0.007

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	NSW–SA			SA–NSW			NSW–WA			WA–NSW		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.603	0.389	0.007	0.570	0.425	0.005	0.037	0.418	0.546	0.095	0.087	0.818
1973	0.644	0.349	0.007	0.612	0.384	0.004	0.052	0.491	0.457	0.131	0.262	0.607
1974	0.674	0.320	0.006	0.643	0.353	0.004	0.068	0.550	0.382	0.163	0.433	0.405
1975	0.685	0.309	0.006	0.657	0.343	0.000	0.077	0.620	0.303	0.158	0.566	0.276
1976	0.707	0.287	0.005	0.680	0.320	0.000	0.062	0.700	0.238	0.112	0.715	0.172
1977	0.693	0.302	0.005	0.658	0.342	0.000	0.069	0.707	0.224	0.147	0.853	0.000
1978	0.673	0.322	0.005	0.632	0.368	0.000	0.069	0.719	0.212	0.164	0.836	0.000
1979	0.670	0.326	0.004	0.624	0.376	0.000	0.080	0.721	0.199	0.210	0.790	0.000
1980	0.673	0.323	0.004	0.624	0.376	0.000	0.097	0.718	0.185	0.276	0.724	0.000
1981	0.703	0.293	0.004	0.620	0.380	0.000	0.112	0.707	0.181	0.303	0.697	0.000
1982	0.733	0.263	0.004	0.655	0.345	0.000	0.138	0.678	0.184	0.266	0.734	0.000
1983	0.731	0.255	0.014	0.647	0.334	0.018	0.126	0.677	0.197	0.190	0.810	0.000
1984	0.739	0.260	0.001	0.657	0.343	0.000	0.144	0.609	0.247	0.299	0.607	0.094
1985	0.737	0.263	0.000	0.671	0.329	0.000	0.146	0.571	0.284	0.293	0.577	0.130
1986	0.814	0.185	0.001	0.713	0.287	0.000	0.157	0.584	0.259	0.324	0.653	0.023
1987	0.693	0.307	0.000	0.713	0.287	0.000	0.178	0.666	0.156	0.346	0.654	0.000
1988	0.685	0.315	0.000	0.679	0.321	0.000	0.177	0.821	0.001	0.400	0.600	0.000
1989	0.675	0.325	0.000	0.671	0.311	0.018	0.185	0.786	0.028	0.417	0.562	0.021
1990	0.647	0.351	0.003	0.685	0.315	0.000	0.230	0.768	0.002	0.431	0.569	0.000
1991	0.675	0.322	0.003	0.738	0.262	0.000	0.240	0.749	0.011	0.448	0.552	0.000
1992	0.739	0.260	0.001	0.726	0.274	0.000	0.231	0.745	0.024	0.413	0.583	0.005
1993	0.674	0.322	0.004	0.704	0.296	0.000	0.260	0.724	0.016	0.408	0.584	0.008
1994	0.625	0.373	0.002	0.702	0.298	0.000	0.253	0.716	0.032	0.374	0.622	0.004
1995	0.586	0.412	0.002	0.701	0.299	0.000	0.254	0.675	0.071	0.358	0.629	0.013
1996	0.581	0.417	0.003	0.752	0.248	0.000	0.260	0.679	0.060	0.461	0.535	0.004
1997	0.582	0.418	0.000	0.792	0.206	0.001	0.254	0.690	0.056	0.365	0.635	0.000
1998	0.613	0.386	0.000	0.815	0.183	0.002	0.246	0.680	0.074	0.302	0.697	0.001
1999	0.623	0.377	0.000	0.836	0.164	0.000	0.251	0.747	0.002	0.232	0.748	0.019
2000	0.642	0.357	0.001	0.843	0.155	0.002	0.179	0.701	0.120	0.281	0.630	0.089
2001	0.641	0.346	0.013	0.846	0.152	0.002	0.136	0.690	0.175	0.333	0.618	0.049
2002	0.660	0.339	0.001	0.847	0.144	0.009	0.132	0.696	0.172	0.274	0.607	0.119
2003	0.670	0.327	0.004	0.860	0.139	0.001	0.127	0.682	0.191	0.235	0.597	0.167
2004	0.681	0.317	0.001	0.865	0.134	0.001	0.136	0.694	0.170	0.267	0.719	0.014
2005	0.689	0.308	0.002	0.871	0.129	0.000	0.144	0.688	0.168	0.253	0.697	0.049
2006	0.698	0.300	0.003	0.875	0.125	0.000	0.122	0.645	0.233	0.271	0.718	0.011
2007	0.701	0.295	0.003	0.881	0.119	0.000	0.109	0.628	0.263	0.335	0.644	0.021
Forecasts												
2008	0.713	0.285	0.002	0.884	0.116	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2009	0.724	0.274	0.002	0.888	0.112	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2010	0.735	0.263	0.002	0.891	0.109	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2011	0.746	0.252	0.002	0.894	0.106	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2012	0.757	0.240	0.002	0.897	0.103	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2013	0.769	0.229	0.002	0.901	0.099	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2014	0.780	0.218	0.002	0.904	0.096	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2015	0.791	0.207	0.002	0.907	0.093	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2016	0.802	0.196	0.002	0.911	0.089	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2017	0.813	0.185	0.002	0.914	0.086	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2018	0.824	0.173	0.002	0.917	0.083	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2019	0.836	0.162	0.002	0.920	0.080	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2020	0.847	0.151	0.002	0.924	0.076	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2021	0.858	0.140	0.002	0.927	0.073	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2022	0.869	0.129	0.002	0.930	0.070	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2023	0.880	0.117	0.002	0.934	0.066	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2024	0.892	0.106	0.002	0.937	0.063	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2025	0.903	0.095	0.002	0.940	0.060	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2026	0.914	0.084	0.002	0.944	0.056	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2027	0.925	0.073	0.002	0.947	0.053	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2028	0.936	0.061	0.002	0.950	0.050	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2029	0.948	0.050	0.002	0.953	0.047	0.000	0.110	0.660	0.230	0.290	0.700	0.014
2030	0.959	0.039	0.002	0.957	0.043	0.000	0.110	0.660	0.230	0.290	0.700	0.014

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	NSW–ACT			ACT–NSW			NSW–NT			NT–NSW		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.323	0.677	0.000	0.934	0.066	0.000	0.347	0.086	0.567	0.539	0.000	0.461
1973	0.408	0.592	0.000	0.946	0.054	0.000	0.374	0.089	0.537	0.537	0.036	0.428
1974	0.497	0.503	0.000	0.953	0.047	0.000	0.400	0.092	0.507	0.531	0.067	0.402
1975	0.576	0.424	0.000	0.956	0.044	0.000	0.423	0.096	0.481	0.596	0.110	0.294
1976	0.684	0.316	0.000	0.961	0.039	0.000	0.451	0.100	0.449	0.679	0.161	0.161
1977	0.700	0.300	0.000	0.963	0.037	0.000	0.478	0.104	0.418	0.811	0.189	0.000
1978	0.709	0.291	0.000	0.964	0.036	0.000	0.505	0.110	0.385	0.812	0.188	0.000
1979	0.733	0.267	0.000	0.967	0.033	0.000	0.539	0.115	0.346	0.817	0.183	0.000
1980	0.760	0.240	0.000	0.970	0.030	0.000	0.578	0.120	0.301	0.823	0.177	0.000
1981	0.781	0.219	0.000	0.972	0.028	0.000	0.619	0.127	0.254	0.826	0.174	0.000
1982	0.808	0.192	0.000	0.974	0.026	0.000	0.664	0.134	0.201	0.829	0.171	0.000
1983	0.809	0.191	0.000	0.971	0.029	0.000	0.708	0.146	0.146	0.883	0.117	0.000
1984	0.813	0.187	0.000	0.977	0.023	0.000	0.802	0.159	0.040	0.872	0.128	0.000
1985	0.812	0.188	0.000	0.977	0.023	0.000	0.836	0.164	0.000	0.878	0.122	0.000
1986	0.873	0.127	0.000	0.980	0.020	0.000	0.839	0.161	0.000	0.891	0.109	0.000
1987	0.867	0.133	0.000	0.980	0.020	0.000	0.839	0.161	0.000	0.866	0.134	0.000
1988	0.874	0.126	0.000	0.982	0.018	0.000	0.843	0.157	0.000	0.846	0.154	0.000
1989	0.887	0.113	0.000	0.984	0.016	0.000	0.845	0.155	0.000	0.850	0.150	0.000
1990	0.895	0.105	0.000	0.984	0.016	0.000	0.846	0.154	0.000	0.852	0.148	0.000
1991	0.900	0.100	0.000	0.984	0.016	0.000	0.847	0.153	0.000	0.853	0.147	0.000
1992	0.905	0.095	0.000	0.985	0.015	0.000	0.847	0.153	0.000	0.853	0.147	0.000
1993	0.922	0.078	0.000	0.986	0.014	0.000	0.849	0.151	0.000	0.856	0.144	0.000
1994	0.937	0.063	0.000	0.987	0.013	0.000	0.741	0.130	0.130	0.753	0.124	0.124
1995	0.951	0.049	0.000	0.987	0.013	0.000	0.853	0.147	0.000	0.756	0.122	0.122
1996	0.953	0.047	0.000	0.989	0.011	0.000	0.701	0.119	0.180	0.756	0.118	0.127
1997	0.950	0.050	0.000	0.989	0.011	0.000	0.652	0.109	0.239	0.868	0.132	0.000
1998	0.948	0.052	0.000	0.990	0.010	0.000	0.721	0.118	0.161	0.860	0.127	0.013
1999	0.950	0.050	0.000	0.991	0.009	0.000	0.776	0.125	0.099	0.835	0.121	0.045
2000	0.951	0.049	0.000	0.992	0.008	0.000	0.674	0.107	0.219	0.874	0.123	0.002
2001	0.950	0.050	0.000	0.992	0.008	0.000	0.750	0.118	0.132	0.878	0.122	0.000
2002	0.968	0.032	0.000	1.000	0.000	0.000	0.834	0.130	0.036	0.879	0.120	0.001
2003	0.985	0.015	0.000	1.000	0.000	0.000	0.694	0.120	0.185	0.899	0.101	0.000
2004	0.986	0.014	0.000	1.000	0.000	0.000	0.793	0.136	0.071	0.901	0.099	0.000
2005	0.986	0.014	0.000	1.000	0.000	0.000	0.719	0.122	0.159	0.881	0.095	0.024
2006	0.987	0.013	0.000	1.000	0.000	0.000	0.773	0.129	0.097	1.000	0.000	0.000
2007	0.988	0.012	0.000	1.000	0.000	0.000	0.776	0.128	0.096	1.000	0.000	0.000
Forecasts												
2008	1.000	0.000	0.000	1.000	0.000	0.000	0.880	0.053	0.068	0.947	0.043	0.011
2009	1.000	0.000	0.000	1.000	0.000	0.000	0.880	0.053	0.067	0.947	0.043	0.010
2010	1.000	0.000	0.000	1.000	0.000	0.000	0.881	0.053	0.066	0.947	0.043	0.010
2011	1.000	0.000	0.000	1.000	0.000	0.000	0.882	0.053	0.066	0.947	0.043	0.010
2012	1.000	0.000	0.000	1.000	0.000	0.000	0.882	0.052	0.065	0.947	0.043	0.010
2013	1.000	0.000	0.000	1.000	0.000	0.000	0.883	0.052	0.065	0.947	0.042	0.010
2014	1.000	0.000	0.000	1.000	0.000	0.000	0.883	0.052	0.064	0.948	0.042	0.010
2015	1.000	0.000	0.000	1.000	0.000	0.000	0.884	0.052	0.064	0.948	0.042	0.010
2016	1.000	0.000	0.000	1.000	0.000	0.000	0.885	0.052	0.063	0.948	0.042	0.010
2017	1.000	0.000	0.000	1.000	0.000	0.000	0.885	0.052	0.063	0.948	0.042	0.010
2018	1.000	0.000	0.000	1.000	0.000	0.000	0.886	0.052	0.062	0.948	0.042	0.010
2019	1.000	0.000	0.000	1.000	0.000	0.000	0.887	0.052	0.062	0.948	0.042	0.010
2020	1.000	0.000	0.000	1.000	0.000	0.000	0.887	0.052	0.061	0.948	0.042	0.010
2021	1.000	0.000	0.000	1.000	0.000	0.000	0.888	0.052	0.061	0.949	0.042	0.010
2022	1.000	0.000	0.000	1.000	0.000	0.000	0.888	0.052	0.060	0.949	0.042	0.009
2023	1.000	0.000	0.000	1.000	0.000	0.000	0.889	0.052	0.060	0.949	0.042	0.009
2024	1.000	0.000	0.000	1.000	0.000	0.000	0.890	0.051	0.059	0.949	0.042	0.009
2025	1.000	0.000	0.000	1.000	0.000	0.000	0.890	0.051	0.059	0.949	0.042	0.009
2026	1.000	0.000	0.000	1.000	0.000	0.000	0.891	0.051	0.058	0.949	0.041	0.009
2027	1.000	0.000	0.000	1.000	0.000	0.000	0.891	0.051	0.058	0.950	0.041	0.009
2028	1.000	0.000	0.000	1.000	0.000	0.000	0.892	0.051	0.057	0.950	0.041	0.009
2029	1.000	0.000	0.000	1.000	0.000	0.000	0.892	0.051	0.057	0.950	0.041	0.009
2030	1.000	0.000	0.000	1.000	0.000	0.000	0.893	0.051	0.056	0.950	0.041	0.009

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	NSW–TAS			TAS–NSW			VIC–QLD			QLD–VIC		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.000	0.000	1.000	0.000	0.000	1.000	0.457	0.214	0.329	0.424	0.281	0.295
1973	0.000	0.000	1.000	0.000	0.000	1.000	0.515	0.221	0.264	0.505	0.238	0.258
1974	0.000	0.000	1.000	0.000	0.000	1.000	0.564	0.229	0.207	0.567	0.204	0.229
1975	0.000	0.000	1.000	0.000	0.000	1.000	0.593	0.244	0.163	0.602	0.189	0.209
1976	0.000	0.000	1.000	0.000	0.000	1.000	0.633	0.251	0.116	0.657	0.165	0.178
1977	0.000	0.000	1.000	0.000	0.000	1.000	0.641	0.261	0.098	0.741	0.180	0.079
1978	0.000	0.000	1.000	0.000	0.000	1.000	0.643	0.275	0.082	0.739	0.183	0.077
1979	0.000	0.000	1.000	0.000	0.000	1.000	0.659	0.277	0.064	0.760	0.171	0.069
1980	0.000	0.000	1.000	0.000	0.000	1.000	0.679	0.274	0.047	0.786	0.155	0.060
1981	0.000	0.000	1.000	0.000	0.000	1.000	0.704	0.264	0.033	0.816	0.128	0.056
1982	0.000	0.000	1.000	0.000	0.000	1.000	0.750	0.230	0.020	0.822	0.127	0.051
1983	0.000	0.000	1.000	0.000	0.000	1.000	0.775	0.217	0.008	0.790	0.153	0.057
1984	0.000	0.000	1.000	0.000	0.000	1.000	0.782	0.209	0.009	0.751	0.164	0.084
1985	0.000	0.000	1.000	0.000	0.000	1.000	0.792	0.203	0.006	0.794	0.189	0.017
1986	0.000	0.000	1.000	0.000	0.000	1.000	0.786	0.209	0.004	0.828	0.170	0.002
1987	0.000	0.000	1.000	0.000	0.000	1.000	0.811	0.187	0.002	0.826	0.174	0.000
1988	0.000	0.000	1.000	0.000	0.000	1.000	0.798	0.202	0.000	0.848	0.152	0.000
1989	0.000	0.000	1.000	0.000	0.000	1.000	0.771	0.229	0.001	0.827	0.173	0.000
1990	0.000	0.000	1.000	0.000	0.000	1.000	0.779	0.221	0.000	0.815	0.185	0.000
1991	0.000	0.000	1.000	0.000	0.000	1.000	0.758	0.242	0.000	0.805	0.195	0.000
1992	0.000	0.000	1.000	0.000	0.000	1.000	0.690	0.308	0.003	0.764	0.236	0.000
1993	0.000	0.000	1.000	0.000	0.000	1.000	0.690	0.306	0.004	0.729	0.213	0.058
1994	0.000	0.000	1.000	0.000	0.000	1.000	0.687	0.307	0.006	0.775	0.219	0.006
1995	0.000	0.000	1.000	0.000	0.000	1.000	0.688	0.309	0.004	0.785	0.214	0.001
1996	0.000	0.000	1.000	0.000	0.000	1.000	0.715	0.276	0.010	0.824	0.169	0.006
1997	0.000	0.000	1.000	0.000	0.000	1.000	0.705	0.287	0.008	0.812	0.179	0.009
1998	0.000	0.000	1.000	0.000	0.000	1.000	0.705	0.269	0.026	0.796	0.199	0.005
1999	0.000	0.000	1.000	0.000	0.000	1.000	0.670	0.318	0.012	0.827	0.160	0.013
2000	0.000	0.000	1.000	0.000	0.000	1.000	0.665	0.301	0.035	0.820	0.168	0.012
2001	0.000	0.000	1.000	0.000	0.000	1.000	0.680	0.303	0.017	0.799	0.179	0.022
2002	0.000	0.000	1.000	0.000	0.000	1.000	0.677	0.291	0.032	0.808	0.187	0.004
2003	0.000	0.000	1.000	0.000	0.000	1.000	0.674	0.279	0.047	0.806	0.190	0.004
2004	0.000	0.000	1.000	0.000	0.000	1.000	0.657	0.262	0.081	0.805	0.193	0.002
2005	0.000	0.000	1.000	0.000	0.000	1.000	0.669	0.260	0.071	0.803	0.196	0.001
2006	0.000	0.000	1.000	0.000	0.000	1.000	0.681	0.262	0.057	0.760	0.239	0.001
2007	0.000	0.000	1.000	0.000	0.000	1.000	0.701	0.264	0.034	0.790	0.210	0.001
Forecasts												
2008	0.000	0.000	1.000	0.000	0.000	1.000	0.696	0.228	0.075	0.783	0.217	0.001
2009	0.000	0.000	1.000	0.000	0.000	1.000	0.691	0.233	0.075	0.775	0.224	0.001
2010	0.000	0.000	1.000	0.000	0.000	1.000	0.686	0.238	0.075	0.768	0.231	0.001
2011	0.000	0.000	1.000	0.000	0.000	1.000	0.681	0.243	0.075	0.761	0.238	0.001
2012	0.000	0.000	1.000	0.000	0.000	1.000	0.676	0.249	0.075	0.754	0.245	0.001
2013	0.000	0.000	1.000	0.000	0.000	1.000	0.671	0.254	0.075	0.747	0.252	0.001
2014	0.000	0.000	1.000	0.000	0.000	1.000	0.666	0.259	0.075	0.740	0.259	0.001
2015	0.000	0.000	1.000	0.000	0.000	1.000	0.661	0.264	0.075	0.733	0.266	0.001
2016	0.000	0.000	1.000	0.000	0.000	1.000	0.656	0.269	0.075	0.726	0.273	0.001
2017	0.000	0.000	1.000	0.000	0.000	1.000	0.651	0.274	0.075	0.719	0.280	0.001
2018	0.000	0.000	1.000	0.000	0.000	1.000	0.646	0.279	0.075	0.712	0.287	0.001
2019	0.000	0.000	1.000	0.000	0.000	1.000	0.641	0.284	0.075	0.705	0.294	0.001
2020	0.000	0.000	1.000	0.000	0.000	1.000	0.636	0.289	0.075	0.698	0.301	0.001
2021	0.000	0.000	1.000	0.000	0.000	1.000	0.631	0.294	0.075	0.691	0.308	0.001
2022	0.000	0.000	1.000	0.000	0.000	1.000	0.626	0.299	0.075	0.684	0.316	0.001
2023	0.000	0.000	1.000	0.000	0.000	1.000	0.620	0.304	0.075	0.677	0.323	0.001
2024	0.000	0.000	1.000	0.000	0.000	1.000	0.615	0.309	0.075	0.669	0.330	0.001
2025	0.000	0.000	1.000	0.000	0.000	1.000	0.610	0.314	0.075	0.662	0.337	0.001
2026	0.000	0.000	1.000	0.000	0.000	1.000	0.605	0.319	0.075	0.655	0.344	0.001
2027	0.000	0.000	1.000	0.000	0.000	1.000	0.600	0.324	0.075	0.648	0.351	0.001
2028	0.000	0.000	1.000	0.000	0.000	1.000	0.595	0.329	0.075	0.641	0.358	0.001
2029	0.000	0.000	1.000	0.000	0.000	1.000	0.590	0.334	0.075	0.634	0.365	0.001
2030	0.000	0.000	1.000	0.000	0.000	1.000	0.585	0.340	0.075	0.627	0.372	0.001

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	VIC–SA			SA–VIC			VIC–WA			WA–VIC		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.459	0.535	0.006	0.372	0.610	0.018	0.080	0.380	0.541	0.060	0.048	0.892
1973	0.517	0.476	0.007	0.433	0.551	0.016	0.112	0.418	0.470	0.078	0.112	0.810
1974	0.561	0.432	0.008	0.481	0.504	0.014	0.143	0.446	0.411	0.093	0.168	0.740
1975	0.573	0.412	0.015	0.505	0.488	0.007	0.174	0.531	0.295	0.116	0.276	0.608
1976	0.603	0.377	0.020	0.546	0.454	0.000	0.157	0.658	0.185	0.109	0.460	0.431
1977	0.614	0.367	0.019	0.549	0.451	0.000	0.184	0.644	0.171	0.177	0.788	0.035
1978	0.615	0.367	0.018	0.543	0.457	0.000	0.197	0.643	0.160	0.174	0.793	0.034
1979	0.637	0.346	0.017	0.560	0.440	0.000	0.237	0.620	0.143	0.194	0.775	0.031
1980	0.665	0.320	0.015	0.585	0.415	0.000	0.293	0.584	0.123	0.225	0.747	0.029
1981	0.664	0.323	0.013	0.591	0.409	0.000	0.306	0.599	0.096	0.199	0.779	0.022
1982	0.676	0.312	0.012	0.632	0.368	0.000	0.334	0.588	0.078	0.189	0.793	0.018
1983	0.646	0.342	0.012	0.627	0.371	0.002	0.286	0.644	0.070	0.140	0.843	0.017
1984	0.661	0.336	0.003	0.644	0.356	0.000	0.351	0.601	0.048	0.204	0.721	0.075
1985	0.660	0.338	0.002	0.663	0.337	0.000	0.313	0.544	0.143	0.239	0.654	0.107
1986	0.718	0.282	0.000	0.707	0.286	0.007	0.360	0.521	0.119	0.291	0.672	0.037
1987	0.721	0.279	0.000	0.691	0.309	0.000	0.339	0.577	0.084	0.244	0.725	0.032
1988	0.724	0.276	0.000	0.691	0.309	0.000	0.346	0.557	0.097	0.283	0.707	0.010
1989	0.716	0.284	0.000	0.694	0.306	0.000	0.342	0.601	0.056	0.282	0.700	0.018
1990	0.722	0.278	0.000	0.744	0.252	0.003	0.373	0.599	0.029	0.298	0.698	0.005
1991	0.715	0.285	0.000	0.759	0.241	0.000	0.378	0.607	0.015	0.270	0.721	0.009
1992	0.711	0.289	0.000	0.750	0.250	0.000	0.374	0.598	0.028	0.230	0.770	0.000
1993	0.728	0.272	0.000	0.745	0.255	0.000	0.404	0.535	0.061	0.235	0.751	0.014
1994	0.758	0.241	0.001	0.738	0.261	0.001	0.355	0.572	0.073	0.216	0.781	0.003
1995	0.787	0.212	0.001	0.733	0.267	0.000	0.321	0.579	0.101	0.205	0.782	0.013
1996	0.801	0.191	0.008	0.753	0.247	0.000	0.294	0.613	0.094	0.220	0.776	0.004
1997	0.775	0.224	0.001	0.789	0.210	0.000	0.249	0.644	0.108	0.202	0.798	0.000
1998	0.731	0.267	0.002	0.784	0.215	0.001	0.209	0.678	0.113	0.151	0.827	0.022
1999	0.754	0.245	0.001	0.834	0.166	0.000	0.183	0.678	0.139	0.133	0.854	0.013
2000	0.764	0.235	0.002	0.837	0.163	0.000	0.130	0.668	0.202	0.151	0.833	0.015
2001	0.765	0.232	0.003	0.827	0.164	0.009	0.100	0.701	0.199	0.148	0.810	0.041
2002	0.770	0.225	0.005	0.837	0.163	0.000	0.090	0.690	0.220	0.124	0.789	0.087
2003	0.779	0.217	0.004	0.840	0.160	0.000	0.081	0.655	0.265	0.105	0.752	0.144
2004	0.784	0.210	0.006	0.841	0.158	0.000	0.083	0.671	0.245	0.114	0.861	0.025
2005	0.786	0.204	0.010	0.842	0.157	0.001	0.087	0.683	0.230	0.111	0.845	0.044
2006	0.780	0.209	0.010	0.872	0.128	0.000	0.090	0.660	0.250	0.124	0.857	0.019
2007	0.786	0.199	0.015	0.872	0.128	0.000	0.079	0.703	0.217	0.112	0.867	0.021
Forecasts												
2008	0.785	0.205	0.009	0.865	0.135	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2009	0.784	0.206	0.009	0.866	0.133	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2010	0.783	0.208	0.009	0.868	0.131	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2011	0.782	0.209	0.009	0.869	0.130	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2012	0.781	0.210	0.009	0.871	0.128	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2013	0.780	0.211	0.009	0.872	0.127	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2014	0.779	0.212	0.009	0.874	0.125	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2015	0.778	0.213	0.009	0.875	0.124	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2016	0.777	0.214	0.009	0.877	0.122	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2017	0.775	0.215	0.009	0.878	0.121	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2018	0.774	0.216	0.009	0.880	0.120	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2019	0.773	0.217	0.009	0.881	0.118	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2020	0.772	0.218	0.009	0.883	0.117	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2021	0.771	0.220	0.009	0.884	0.115	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2022	0.770	0.221	0.009	0.885	0.114	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2023	0.769	0.222	0.009	0.887	0.113	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2024	0.768	0.223	0.009	0.888	0.111	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2025	0.767	0.224	0.009	0.889	0.110	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2026	0.766	0.225	0.009	0.891	0.109	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2027	0.764	0.226	0.009	0.892	0.107	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2028	0.763	0.227	0.009	0.893	0.106	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2029	0.762	0.228	0.009	0.894	0.105	0.001	0.105	0.670	0.225	0.110	0.870	0.020
2030	0.761	0.229	0.009	0.896	0.104	0.001	0.105	0.670	0.225	0.110	0.870	0.020

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	VIC–ACT			ACT–VIC			VIC–NT			NT–VIC		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.951	0.049	0.000	1.000	0.000	0.000	0.000	0.246	0.754	0.114	0.000	0.886
1973	0.945	0.055	0.000	1.000	0.000	0.000	0.001	0.282	0.717	0.129	0.000	0.871
1974	0.938	0.062	0.000	1.000	0.000	0.000	0.001	0.322	0.677	0.144	0.000	0.856
1975	0.932	0.068	0.000	1.000	0.000	0.000	0.002	0.324	0.674	0.157	0.000	0.843
1976	0.925	0.075	0.000	1.000	0.000	0.000	0.002	0.326	0.672	0.174	0.000	0.826
1977	0.917	0.083	0.000	1.000	0.000	0.000	0.003	0.328	0.670	0.192	0.000	0.808
1978	0.909	0.091	0.000	1.000	0.000	0.000	0.003	0.329	0.668	0.211	0.000	0.789
1979	0.901	0.099	0.000	1.000	0.000	0.000	0.003	0.331	0.666	0.238	0.000	0.762
1980	0.893	0.107	0.000	1.000	0.000	0.000	0.005	0.331	0.664	0.274	0.000	0.726
1981	0.885	0.115	0.000	1.000	0.000	0.000	0.006	0.329	0.665	0.314	0.000	0.686
1982	0.878	0.122	0.000	1.000	0.000	0.000	0.007	0.326	0.667	0.364	0.000	0.636
1983	0.872	0.128	0.000	1.000	0.000	0.000	0.005	0.321	0.674	0.416	0.000	0.584
1984	0.847	0.153	0.000	1.000	0.000	0.000	0.021	0.805	0.174	0.606	0.000	0.394
1985	0.836	0.164	0.000	1.000	0.000	0.000	0.027	0.973	0.000	1.000	0.000	0.000
1986	0.847	0.153	0.000	1.000	0.000	0.000	0.045	0.955	0.000	1.000	0.000	0.000
1987	0.868	0.132	0.000	1.000	0.000	0.000	0.041	0.959	0.000	0.619	0.381	0.000
1988	0.881	0.119	0.000	1.000	0.000	0.000	0.053	0.947	0.000	0.459	0.541	0.000
1989	0.888	0.112	0.000	1.000	0.000	0.000	0.066	0.934	0.000	0.467	0.533	0.000
1990	0.894	0.106	0.000	1.000	0.000	0.000	0.076	0.924	0.000	0.472	0.528	0.000
1991	0.902	0.098	0.000	1.000	0.000	0.000	0.074	0.926	0.000	0.473	0.527	0.000
1992	0.909	0.091	0.000	1.000	0.000	0.000	0.077	0.923	0.000	0.474	0.526	0.000
1993	1.000	0.000	0.000	1.000	0.000	0.000	0.091	0.909	0.000	0.382	0.618	0.000
1994	1.000	0.000	0.000	1.000	0.000	0.000	0.102	0.898	0.000	0.363	0.637	0.000
1995	1.000	0.000	0.000	1.000	0.000	0.000	0.115	0.885	0.000	0.347	0.653	0.000
1996	1.000	0.000	0.000	1.000	0.000	0.000	0.124	0.732	0.144	0.298	0.591	0.111
1997	1.000	0.000	0.000	1.000	0.000	0.000	0.189	0.811	0.000	0.408	0.592	0.000
1998	1.000	0.000	0.000	1.000	0.000	0.000	0.241	0.759	0.000	0.998	0.000	0.002
1999	1.000	0.000	0.000	1.000	0.000	0.000	0.251	0.749	0.000	0.523	0.477	0.000
2000	1.000	0.000	0.000	1.000	0.000	0.000	0.337	0.663	0.000	0.474	0.526	0.000
2001	1.000	0.000	0.000	1.000	0.000	0.000	0.410	0.590	0.000	0.426	0.560	0.015
2002	1.000	0.000	0.000	1.000	0.000	0.000	0.460	0.540	0.001	0.437	0.563	0.000
2003	1.000	0.000	0.000	1.000	0.000	0.000	0.342	0.658	0.000	0.670	0.330	0.000
2004	1.000	0.000	0.000	1.000	0.000	0.000	0.386	0.614	0.001	0.674	0.326	0.000
2005	1.000	0.000	0.000	1.000	0.000	0.000	0.426	0.574	0.000	0.678	0.322	0.000
2006	1.000	0.000	0.000	1.000	0.000	0.000	0.469	0.531	0.000	0.682	0.318	0.000
2007	1.000	0.000	0.000	1.000	0.000	0.000	0.480	0.520	0.000	1.000	0.000	0.000
Forecasts												
2008	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2009	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2010	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2011	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2012	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2013	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2014	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2015	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2016	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2017	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2018	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2019	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2020	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2021	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2022	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2023	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2024	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2025	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2026	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2027	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2028	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2029	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000
2030	1.000	0.000	0.000	1.000	0.000	0.000	0.000	1.000	0.000	0.940	0.060	0.000

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	VIC–TAS			TAS–VIC			QLD–SA			SA–QLD		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.000	0.000	1.000	0.000	0.000	1.000	0.642	0.294	0.064	0.601	0.399	0.000
1973	0.000	0.000	1.000	0.000	0.000	1.000	0.697	0.247	0.056	0.658	0.340	0.002
1974	0.000	0.000	1.000	0.000	0.000	1.000	0.737	0.213	0.050	0.707	0.290	0.003
1975	0.000	0.000	1.000	0.000	0.000	1.000	0.771	0.201	0.028	0.745	0.251	0.005
1976	0.000	0.000	1.000	0.000	0.000	1.000	0.820	0.180	0.000	0.791	0.206	0.003
1977	0.000	0.000	1.000	0.000	0.000	1.000	0.838	0.162	0.000	0.720	0.280	0.000
1978	0.000	0.000	1.000	0.000	0.000	1.000	0.851	0.149	0.000	0.658	0.342	0.000
1979	0.000	0.000	1.000	0.000	0.000	1.000	0.873	0.127	0.000	0.618	0.382	0.000
1980	0.000	0.000	1.000	0.000	0.000	1.000	0.896	0.104	0.000	0.591	0.409	0.000
1981	0.000	0.000	1.000	0.000	0.000	1.000	0.903	0.097	0.000	0.658	0.342	0.000
1982	0.000	0.000	1.000	0.000	0.000	1.000	0.944	0.056	0.000	0.688	0.312	0.000
1983	0.000	0.000	1.000	0.000	0.000	1.000	0.968	0.021	0.011	0.696	0.304	0.000
1984	0.000	0.000	1.000	0.000	0.000	1.000	0.926	0.074	0.000	0.685	0.315	0.000
1985	0.000	0.000	1.000	0.000	0.000	1.000	0.853	0.081	0.066	0.689	0.307	0.004
1986	0.000	0.000	1.000	0.000	0.000	1.000	0.916	0.084	0.000	0.732	0.268	0.000
1987	0.000	0.000	1.000	0.000	0.000	1.000	0.880	0.120	0.000	0.728	0.272	0.000
1988	0.000	0.000	1.000	0.000	0.000	1.000	0.838	0.151	0.011	0.688	0.312	0.000
1989	0.000	0.000	1.000	0.000	0.000	1.000	0.771	0.229	0.000	0.641	0.359	0.000
1990	0.000	0.000	1.000	0.000	0.000	1.000	0.677	0.280	0.043	0.593	0.407	0.000
1991	0.000	0.000	1.000	0.000	0.000	1.000	0.693	0.307	0.000	0.636	0.364	0.000
1992	0.000	0.000	1.000	0.000	0.000	1.000	0.739	0.261	0.000	0.625	0.375	0.000
1993	0.000	0.000	1.000	0.000	0.000	1.000	0.724	0.224	0.052	0.606	0.394	0.000
1994	0.000	0.000	1.000	0.000	0.000	1.000	0.774	0.214	0.011	0.588	0.412	0.000
1995	0.000	0.000	1.000	0.000	0.000	1.000	0.801	0.199	0.000	0.572	0.428	0.000
1996	0.000	0.000	1.000	0.000	0.000	1.000	0.840	0.160	0.000	0.617	0.381	0.002
1997	0.000	0.000	1.000	0.000	0.000	1.000	0.827	0.173	0.000	0.625	0.375	0.000
1998	0.000	0.000	1.000	0.000	0.000	1.000	0.833	0.167	0.000	0.635	0.363	0.002
1999	0.000	0.000	1.000	0.000	0.000	1.000	0.895	0.105	0.000	0.625	0.374	0.001
2000	0.000	0.000	1.000	0.000	0.000	1.000	0.869	0.126	0.005	0.642	0.357	0.001
2001	0.000	0.000	1.000	0.000	0.000	1.000	0.849	0.148	0.003	0.651	0.345	0.004
2002	0.000	0.000	1.000	0.000	0.000	1.000	0.855	0.145	0.000	0.667	0.326	0.007
2003	0.000	0.000	1.000	0.000	0.000	1.000	0.859	0.140	0.001	0.686	0.309	0.005
2004	0.000	0.000	1.000	0.000	0.000	1.000	0.863	0.137	0.000	0.705	0.292	0.003
2005	0.000	0.000	1.000	0.000	0.000	1.000	0.865	0.134	0.002	0.723	0.277	0.000
2006	0.000	0.000	1.000	0.000	0.000	1.000	0.858	0.129	0.013	0.739	0.260	0.002
2007	0.000	0.000	1.000	0.000	0.000	1.000	0.848	0.147	0.005	0.666	0.325	0.009
Forecasts												
2008	0.000	0.000	1.000	0.000	0.000	1.000	0.853	0.145	0.002	0.690	0.310	0.000
2009	0.000	0.000	1.000	0.000	0.000	1.000	0.859	0.140	0.002	0.740	0.260	0.000
2010	0.000	0.000	1.000	0.000	0.000	1.000	0.864	0.134	0.002	0.747	0.253	0.000
2011	0.000	0.000	1.000	0.000	0.000	1.000	0.870	0.129	0.002	0.755	0.245	0.000
2012	0.000	0.000	1.000	0.000	0.000	1.000	0.875	0.123	0.002	0.762	0.238	0.000
2013	0.000	0.000	1.000	0.000	0.000	1.000	0.881	0.118	0.002	0.769	0.231	0.000
2014	0.000	0.000	1.000	0.000	0.000	1.000	0.886	0.112	0.002	0.776	0.223	0.000
2015	0.000	0.000	1.000	0.000	0.000	1.000	0.892	0.107	0.002	0.784	0.216	0.000
2016	0.000	0.000	1.000	0.000	0.000	1.000	0.897	0.101	0.002	0.791	0.209	0.000
2017	0.000	0.000	1.000	0.000	0.000	1.000	0.903	0.095	0.002	0.798	0.202	0.000
2018	0.000	0.000	1.000	0.000	0.000	1.000	0.908	0.090	0.002	0.805	0.194	0.000
2019	0.000	0.000	1.000	0.000	0.000	1.000	0.914	0.084	0.002	0.813	0.187	0.000
2020	0.000	0.000	1.000	0.000	0.000	1.000	0.919	0.079	0.002	0.820	0.180	0.000
2021	0.000	0.000	1.000	0.000	0.000	1.000	0.925	0.073	0.002	0.827	0.173	0.000
2022	0.000	0.000	1.000	0.000	0.000	1.000	0.930	0.068	0.002	0.835	0.165	0.000
2023	0.000	0.000	1.000	0.000	0.000	1.000	0.936	0.062	0.002	0.842	0.158	0.000
2024	0.000	0.000	1.000	0.000	0.000	1.000	0.941	0.057	0.002	0.849	0.151	0.000
2025	0.000	0.000	1.000	0.000	0.000	1.000	0.947	0.051	0.002	0.856	0.143	0.000
2026	0.000	0.000	1.000	0.000	0.000	1.000	0.952	0.046	0.002	0.864	0.136	0.000
2027	0.000	0.000	1.000	0.000	0.000	1.000	0.958	0.040	0.002	0.871	0.129	0.000
2028	0.000	0.000	1.000	0.000	0.000	1.000	0.963	0.035	0.002	0.878	0.122	0.000
2029	0.000	0.000	1.000	0.000	0.000	1.000	0.969	0.029	0.002	0.885	0.114	0.000
2030	0.000	0.000	1.000	0.000	0.000	1.000	0.974	0.024	0.002	0.893	0.107	0.000

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	QLD–WA			WA–QLD			QLD–ACT			ACT–QLD		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.073	0.111	0.816	0.201	0.064	0.735	1.000	0.000	0.000	1.000	0.000	0.000
1973	0.119	0.110	0.772	0.192	0.393	0.415	1.000	0.000	0.000	1.000	0.000	0.000
1974	0.174	0.107	0.719	0.188	0.575	0.237	1.000	0.000	0.000	1.000	0.000	0.000
1975	0.253	0.125	0.623	0.164	0.709	0.128	1.000	0.000	0.000	1.000	0.000	0.000
1976	0.301	0.170	0.528	0.107	0.842	0.051	1.000	0.000	0.000	1.000	0.000	0.000
1977	0.569	0.334	0.096	0.132	0.809	0.059	1.000	0.000	0.000	1.000	0.000	0.000
1978	0.547	0.363	0.090	0.179	0.749	0.072	1.000	0.000	0.000	1.000	0.000	0.000
1979	0.566	0.357	0.077	0.300	0.608	0.092	1.000	0.000	0.000	1.000	0.000	0.000
1980	0.599	0.336	0.065	0.596	0.273	0.131	1.000	0.000	0.000	1.000	0.000	0.000
1981	0.705	0.229	0.066	0.588	0.311	0.101	1.000	0.000	0.000	1.000	0.000	0.000
1982	0.763	0.176	0.061	0.529	0.399	0.071	1.000	0.000	0.000	1.000	0.000	0.000
1983	0.757	0.170	0.073	0.415	0.527	0.059	1.000	0.000	0.000	1.000	0.000	0.000
1984	0.846	0.127	0.027	0.430	0.570	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1985	0.904	0.096	0.000	0.445	0.555	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1986	0.946	0.054	0.000	0.400	0.600	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1987	0.948	0.052	0.000	0.357	0.643	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1988	0.819	0.181	0.000	0.354	0.646	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1989	0.848	0.125	0.027	0.326	0.629	0.045	1.000	0.000	0.000	1.000	0.000	0.000
1990	0.923	0.077	0.000	0.522	0.478	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1991	0.812	0.188	0.000	0.351	0.635	0.014	1.000	0.000	0.000	1.000	0.000	0.000
1992	0.711	0.280	0.010	0.217	0.451	0.332	1.000	0.000	0.000	1.000	0.000	0.000
1993	0.676	0.317	0.007	0.342	0.658	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1994	0.578	0.343	0.080	0.325	0.675	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1995	0.572	0.374	0.054	0.325	0.666	0.009	1.000	0.000	0.000	1.000	0.000	0.000
1996	0.510	0.480	0.010	0.286	0.707	0.007	1.000	0.000	0.000	1.000	0.000	0.000
1997	0.495	0.485	0.019	0.267	0.733	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1998	0.465	0.427	0.108	0.240	0.576	0.185	1.000	0.000	0.000	1.000	0.000	0.000
1999	0.429	0.427	0.145	0.220	0.611	0.170	1.000	0.000	0.000	1.000	0.000	0.000
2000	0.343	0.452	0.205	0.304	0.639	0.058	1.000	0.000	0.000	1.000	0.000	0.000
2001	0.253	0.436	0.310	0.344	0.650	0.006	1.000	0.000	0.000	1.000	0.000	0.000
2002	0.287	0.515	0.198	0.302	0.678	0.020	1.000	0.000	0.000	1.000	0.000	0.000
2003	0.238	0.437	0.325	0.255	0.654	0.092	1.000	0.000	0.000	1.000	0.000	0.000
2004	0.206	0.364	0.429	0.252	0.685	0.064	1.000	0.000	0.000	1.000	0.000	0.000
2005	0.284	0.470	0.247	0.262	0.728	0.009	1.000	0.000	0.000	1.000	0.000	0.000
2006	0.223	0.420	0.357	0.247	0.747	0.006	1.000	0.000	0.000	1.000	0.000	0.000
2007	0.160	0.513	0.327	0.340	0.640	0.020	1.000	0.000	0.000	1.000	0.000	0.000
Forecasts												
2008	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2009	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2010	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2011	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2012	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2013	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2014	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2015	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2016	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2017	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2018	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2019	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2020	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2021	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2022	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2023	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2024	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2025	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2026	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2027	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2028	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2029	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2030	0.210	0.480	0.310	0.290	0.700	0.010	1.000	0.000	0.000	1.000	0.000	0.000

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	QLD–NT			NT–QLD			QLD–TAS			TAS–QLD		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.695	0.000	0.305	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1973	0.640	0.000	0.360	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1974	0.603	0.000	0.397	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1975	0.651	0.000	0.349	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1976	0.713	0.000	0.287	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1977	0.723	0.000	0.277	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1978	0.726	0.000	0.274	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1979	0.742	0.000	0.258	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1980	0.762	0.000	0.238	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1981	0.774	0.000	0.226	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1982	0.784	0.000	0.216	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1983	0.765	0.000	0.235	0.872	0.000	0.128	0.000	0.000	1.000	0.000	0.000	1.000
1984	0.712	0.000	0.288	0.777	0.000	0.223	0.000	0.000	1.000	0.000	0.000	1.000
1985	0.916	0.000	0.084	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1986	0.923	0.000	0.077	0.970	0.000	0.030	0.000	0.000	1.000	0.000	0.000	1.000
1987	0.934	0.000	0.066	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1988	0.969	0.000	0.031	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1989	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1990	0.991	0.000	0.009	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1991	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1992	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1993	0.992	0.000	0.008	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1994	1.000	0.000	0.000	0.992	0.000	0.008	0.000	0.000	1.000	0.000	0.000	1.000
1995	0.985	0.000	0.015	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1996	0.922	0.000	0.078	0.999	0.000	0.001	0.000	0.000	1.000	0.000	0.000	1.000
1997	0.855	0.000	0.145	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1998	0.836	0.000	0.164	0.998	0.000	0.002	0.000	0.000	1.000	0.000	0.000	1.000
1999	0.938	0.000	0.062	0.998	0.000	0.002	0.000	0.000	1.000	0.000	0.000	1.000
2000	0.862	0.000	0.138	0.995	0.000	0.005	0.000	0.000	1.000	0.000	0.000	1.000
2001	0.870	0.000	0.130	0.983	0.000	0.017	0.000	0.000	1.000	0.000	0.000	1.000
2002	0.867	0.000	0.133	0.980	0.000	0.020	0.000	0.000	1.000	0.000	0.000	1.000
2003	0.845	0.000	0.155	0.974	0.000	0.026	0.000	0.000	1.000	0.000	0.000	1.000
2004	0.854	0.000	0.146	0.910	0.000	0.090	0.000	0.000	1.000	0.000	0.000	1.000
2005	0.870	0.000	0.130	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2006	0.881	0.000	0.119	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2007	0.887	0.000	0.113	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
Forecasts												
2008	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2009	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2010	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2011	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2012	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2013	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2014	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2015	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2016	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2017	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2018	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2019	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2020	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2021	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2022	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2023	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2024	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2025	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2026	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2027	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2028	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2029	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2030	0.852	0.000	0.148	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	SA–WA			WA–SA			SA–ACT			ACT–SA		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.047	0.919	0.034	0.104	0.744	0.152	0.000	1.000	0.000	1.000	0.000	0.000
1973	0.059	0.918	0.022	0.149	0.769	0.082	0.000	1.000	0.000	1.000	0.000	0.000
1974	0.071	0.915	0.014	0.194	0.798	0.009	0.000	1.000	0.000	1.000	0.000	0.000
1975	0.072	0.916	0.012	0.199	0.796	0.004	0.000	1.000	0.000	1.000	0.000	0.000
1976	0.053	0.936	0.011	0.152	0.848	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1977	0.061	0.939	0.000	0.151	0.849	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1978	0.062	0.938	0.000	0.153	0.847	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1979	0.073	0.927	0.000	0.178	0.822	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1980	0.089	0.911	0.000	0.213	0.787	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1981	0.107	0.893	0.000	0.193	0.807	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1982	0.133	0.867	0.000	0.221	0.779	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1983	0.149	0.851	0.000	0.195	0.805	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1984	0.208	0.792	0.000	0.232	0.762	0.006	0.000	1.000	0.000	1.000	0.000	0.000
1985	0.255	0.745	0.000	0.217	0.783	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1986	0.347	0.653	0.000	0.246	0.754	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1987	0.292	0.708	0.000	0.282	0.718	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1988	0.351	0.646	0.003	0.356	0.641	0.004	0.000	1.000	0.000	1.000	0.000	0.000
1989	0.395	0.603	0.001	0.384	0.607	0.009	0.000	1.000	0.000	1.000	0.000	0.000
1990	0.401	0.599	0.000	0.440	0.560	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1991	0.452	0.546	0.002	0.481	0.519	0.000	0.000	1.000	0.000	1.000	0.000	0.000
1992	0.486	0.508	0.006	0.510	0.445	0.045	0.000	1.000	0.000	1.000	0.000	0.000
1993	0.541	0.454	0.005	0.571	0.422	0.007	1.000	0.000	0.000	1.000	0.000	0.000
1994	0.573	0.427	0.000	0.583	0.417	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1995	0.617	0.380	0.003	0.592	0.378	0.030	1.000	0.000	0.000	1.000	0.000	0.000
1996	0.615	0.382	0.003	0.626	0.364	0.010	1.000	0.000	0.000	1.000	0.000	0.000
1997	0.626	0.369	0.005	0.687	0.313	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1998	0.639	0.355	0.007	0.695	0.297	0.008	1.000	0.000	0.000	1.000	0.000	0.000
1999	0.626	0.370	0.003	0.612	0.383	0.005	1.000	0.000	0.000	1.000	0.000	0.000
2000	0.551	0.444	0.005	0.614	0.352	0.033	1.000	0.000	0.000	1.000	0.000	0.000
2001	0.469	0.509	0.022	0.623	0.370	0.007	1.000	0.000	0.000	1.000	0.000	0.000
2002	0.459	0.533	0.009	0.569	0.409	0.022	1.000	0.000	0.000	1.000	0.000	0.000
2003	0.443	0.540	0.017	0.540	0.449	0.011	1.000	0.000	0.000	1.000	0.000	0.000
2004	0.450	0.539	0.011	0.520	0.463	0.017	1.000	0.000	0.000	1.000	0.000	0.000
2005	0.459	0.527	0.014	0.518	0.473	0.009	1.000	0.000	0.000	1.000	0.000	0.000
2006	0.611	0.383	0.006	0.693	0.300	0.008	1.000	0.000	0.000	1.000	0.000	0.000
2007	0.443	0.547	0.011	0.630	0.363	0.007	1.000	0.000	0.000	1.000	0.000	0.000
Forecasts												
2008	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2009	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2010	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2011	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2012	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2013	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2014	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2015	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2016	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2017	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2018	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2019	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2020	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2021	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2022	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2023	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2024	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2025	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2026	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2027	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2028	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2029	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000
2030	0.480	0.510	0.012	0.600	0.390	0.010	1.000	0.000	0.000	1.000	0.000	0.000

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	SA–NT			NT–SA			SA–TAS			TAS–SA		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.226	0.751	0.023	0.129	0.871	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1973	0.287	0.702	0.012	0.176	0.824	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1974	0.351	0.649	0.000	0.226	0.774	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1975	0.402	0.598	0.000	0.264	0.736	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1976	0.476	0.524	0.000	0.326	0.674	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1977	0.443	0.557	0.000	0.310	0.690	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1978	0.409	0.591	0.000	0.289	0.711	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1979	0.398	0.602	0.000	0.291	0.709	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1980	0.396	0.604	0.000	0.303	0.697	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1981	0.417	0.583	0.000	0.323	0.677	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1982	0.446	0.554	0.000	0.363	0.637	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1983	0.440	0.560	0.000	0.356	0.644	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1984	0.460	0.540	0.000	0.376	0.624	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1985	0.477	0.523	0.000	0.398	0.602	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1986	0.523	0.473	0.004	0.456	0.544	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1987	0.477	0.523	0.000	0.416	0.584	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1988	0.460	0.540	0.000	0.417	0.583	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1989	0.465	0.535	0.000	0.429	0.571	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1990	0.462	0.538	0.000	0.431	0.569	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1991	0.452	0.548	0.000	0.420	0.580	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1992	0.442	0.558	0.000	0.410	0.590	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1993	0.426	0.574	0.000	0.419	0.581	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1994	0.410	0.590	0.000	0.423	0.577	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1995	0.397	0.603	0.000	0.428	0.572	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1996	0.412	0.588	0.000	0.446	0.554	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1997	0.419	0.555	0.027	0.502	0.498	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1998	0.465	0.535	0.000	0.451	0.549	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1999	0.493	0.507	0.000	0.508	0.492	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2000	0.488	0.512	0.000	0.505	0.495	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2001	0.476	0.524	0.000	0.491	0.509	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2002	0.468	0.527	0.005	0.488	0.512	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2003	0.404	0.596	0.000	0.237	0.763	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2004	0.400	0.600	0.000	0.237	0.763	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2005	0.396	0.604	0.000	0.248	0.752	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2006	0.530	0.470	0.000	0.391	0.609	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2007	0.388	0.612	0.000	0.357	0.643	0.000	0.000	0.000	1.000	0.000	0.000	1.000
Forecasts												
2008	0.374	0.626	0.000	0.366	0.634	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2009	0.373	0.627	0.000	0.375	0.625	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2010	0.371	0.629	0.000	0.384	0.616	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2011	0.370	0.630	0.000	0.393	0.607	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2012	0.368	0.632	0.000	0.402	0.598	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2013	0.367	0.633	0.000	0.411	0.589	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2014	0.365	0.635	0.000	0.420	0.580	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2015	0.364	0.636	0.000	0.429	0.571	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2016	0.362	0.638	0.000	0.438	0.562	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2017	0.361	0.639	0.000	0.447	0.553	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2018	0.359	0.641	0.000	0.456	0.544	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2019	0.358	0.642	0.000	0.465	0.535	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2020	0.356	0.644	0.000	0.474	0.526	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2021	0.355	0.645	0.000	0.483	0.517	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2022	0.353	0.647	0.000	0.492	0.508	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2023	0.352	0.648	0.000	0.501	0.499	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2024	0.350	0.650	0.000	0.510	0.490	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2025	0.349	0.651	0.000	0.519	0.481	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2026	0.347	0.653	0.000	0.528	0.472	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2027	0.346	0.654	0.000	0.537	0.463	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2028	0.345	0.655	0.000	0.546	0.454	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2029	0.343	0.657	0.000	0.555	0.445	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2030	0.342	0.658	0.000	0.564	0.436	0.000	0.000	0.000	1.000	0.000	0.000	1.000

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	WA–ACT			ACT–WA			WA–NT			NT–WA		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.000	1.000	0.000	1.000	0.000	0.000	0.334	0.000	0.666	0.211	0.000	0.789
1973	0.000	1.000	0.000	1.000	0.000	0.000	0.391	0.000	0.609	0.254	0.051	0.694
1974	0.000	1.000	0.000	1.000	0.000	0.000	0.438	0.000	0.562	0.290	0.097	0.613
1975	0.000	1.000	0.000	1.000	0.000	0.000	0.459	0.000	0.541	0.275	0.127	0.599
1976	0.000	1.000	0.000	1.000	0.000	0.000	0.498	0.000	0.502	0.278	0.147	0.575
1977	0.000	1.000	0.000	1.000	0.000	0.000	0.516	0.000	0.484	0.302	0.144	0.554
1978	0.000	1.000	0.000	1.000	0.000	0.000	0.524	0.000	0.476	0.319	0.142	0.538
1979	0.000	1.000	0.000	1.000	0.000	0.000	0.554	0.000	0.446	0.359	0.136	0.504
1980	0.000	1.000	0.000	1.000	0.000	0.000	0.590	0.000	0.410	0.409	0.128	0.463
1981	0.000	1.000	0.000	1.000	0.000	0.000	0.614	0.000	0.386	0.451	0.117	0.432
1982	0.000	1.000	0.000	1.000	0.000	0.000	0.635	0.000	0.365	0.493	0.108	0.399
1983	0.000	1.000	0.000	1.000	0.000	0.000	0.613	0.000	0.387	0.486	0.108	0.406
1984	0.000	1.000	0.000	1.000	0.000	0.000	0.640	0.000	0.360	0.754	0.176	0.070
1985	0.000	1.000	0.000	1.000	0.000	0.000	0.673	0.000	0.327	0.781	0.149	0.070
1986	0.000	1.000	0.000	1.000	0.000	0.000	0.642	0.000	0.358	0.788	0.120	0.093
1987	0.000	1.000	0.000	1.000	0.000	0.000	0.646	0.000	0.354	0.814	0.124	0.063
1988	0.000	1.000	0.000	1.000	0.000	0.000	0.728	0.000	0.272	0.832	0.112	0.056
1989	0.000	1.000	0.000	1.000	0.000	0.000	0.727	0.000	0.273	0.826	0.099	0.074
1990	0.000	1.000	0.000	1.000	0.000	0.000	0.656	0.000	0.344	0.876	0.074	0.050
1991	0.000	1.000	0.000	1.000	0.000	0.000	0.857	0.000	0.143	0.856	0.072	0.072
1992	0.000	1.000	0.000	1.000	0.000	0.000	0.846	0.000	0.154	0.802	0.066	0.132
1993	1.000	0.000	0.000	1.000	0.000	0.000	0.845	0.000	0.155	0.851	0.064	0.132
1994	1.000	0.000	0.000	1.000	0.000	0.000	0.754	0.000	0.246	0.844	0.059	0.098
1995	1.000	0.000	0.000	1.000	0.000	0.000	0.792	0.000	0.208	0.886	0.057	0.057
1996	1.000	0.000	0.000	1.000	0.000	0.000	0.814	0.000	0.186	0.909	0.052	0.039
1997	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000	1.000	0.000	0.000
1998	1.000	0.000	0.000	1.000	0.000	0.000	0.849	0.000	0.151	0.583	0.000	0.417
1999	1.000	0.000	0.000	1.000	0.000	0.000	0.832	0.000	0.168	0.948	0.000	0.052
2000	1.000	0.000	0.000	1.000	0.000	0.000	0.906	0.000	0.094	0.965	0.000	0.035
2001	1.000	0.000	0.000	1.000	0.000	0.000	0.902	0.000	0.098	0.937	0.000	0.063
2002	1.000	0.000	0.000	1.000	0.000	0.000	0.912	0.000	0.088	0.947	0.000	0.053
2003	1.000	0.000	0.000	1.000	0.000	0.000	0.902	0.000	0.098	0.938	0.000	0.062
2004	1.000	0.000	0.000	1.000	0.000	0.000	0.892	0.000	0.108	0.525	0.000	0.475
2005	1.000	0.000	0.000	1.000	0.000	0.000	0.939	0.000	0.061	0.975	0.000	0.025
2006	1.000	0.000	0.000	1.000	0.000	0.000	0.950	0.000	0.050	0.932	0.000	0.068
2007	1.000	0.000	0.000	1.000	0.000	0.000	0.942	0.000	0.058	0.983	0.000	0.017
Forecasts												
2008	1.000	0.000	0.000	1.000	0.000	0.000	0.965	0.000	0.035	0.977	0.000	0.023
2009	1.000	0.000	0.000	1.000	0.000	0.000	0.966	0.000	0.034	0.977	0.000	0.023
2010	1.000	0.000	0.000	1.000	0.000	0.000	0.966	0.000	0.034	0.977	0.000	0.023
2011	1.000	0.000	0.000	1.000	0.000	0.000	0.967	0.000	0.033	0.977	0.000	0.023
2012	1.000	0.000	0.000	1.000	0.000	0.000	0.967	0.000	0.033	0.977	0.000	0.023
2013	1.000	0.000	0.000	1.000	0.000	0.000	0.968	0.000	0.032	0.977	0.000	0.023
2014	1.000	0.000	0.000	1.000	0.000	0.000	0.968	0.000	0.032	0.977	0.000	0.023
2015	1.000	0.000	0.000	1.000	0.000	0.000	0.969	0.000	0.031	0.977	0.000	0.023
2016	1.000	0.000	0.000	1.000	0.000	0.000	0.969	0.000	0.031	0.977	0.000	0.023
2017	1.000	0.000	0.000	1.000	0.000	0.000	0.970	0.000	0.030	0.977	0.000	0.023
2018	1.000	0.000	0.000	1.000	0.000	0.000	0.970	0.000	0.030	0.977	0.000	0.023
2019	1.000	0.000	0.000	1.000	0.000	0.000	0.971	0.000	0.029	0.977	0.000	0.023
2020	1.000	0.000	0.000	1.000	0.000	0.000	0.971	0.000	0.029	0.977	0.000	0.023
2021	1.000	0.000	0.000	1.000	0.000	0.000	0.972	0.000	0.028	0.977	0.000	0.023
2022	1.000	0.000	0.000	1.000	0.000	0.000	0.972	0.000	0.028	0.977	0.000	0.023
2023	1.000	0.000	0.000	1.000	0.000	0.000	0.973	0.000	0.027	0.977	0.000	0.023
2024	1.000	0.000	0.000	1.000	0.000	0.000	0.973	0.000	0.027	0.977	0.000	0.023
2025	1.000	0.000	0.000	1.000	0.000	0.000	0.974	0.000	0.026	0.977	0.000	0.023
2026	1.000	0.000	0.000	1.000	0.000	0.000	0.974	0.000	0.026	0.977	0.000	0.023
2027	1.000	0.000	0.000	1.000	0.000	0.000	0.974	0.000	0.026	0.977	0.000	0.023
2028	1.000	0.000	0.000	1.000	0.000	0.000	0.975	0.000	0.025	0.977	0.000	0.023
2029	1.000	0.000	0.000	1.000	0.000	0.000	0.975	0.000	0.025	0.977	0.000	0.023
2030	1.000	0.000	0.000	1.000	0.000	0.000	0.976	0.000	0.024	0.977	0.000	0.023

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	WA–TAS			TAS–WA			ACT–NT			NT–ACT		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1973	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1974	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1975	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1976	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1977	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1978	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1979	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1980	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1981	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1982	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1983	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1984	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1985	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1986	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1987	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1988	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1989	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1990	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1991	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1992	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1993	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1994	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1995	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1996	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1997	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1998	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
1999	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2000	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2001	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2002	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2003	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2004	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2005	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2006	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2007	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
Forecasts												
2008	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2009	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2010	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2011	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2012	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2013	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2014	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2015	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2016	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2017	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2018	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2019	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2020	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2021	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2022	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2023	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2024	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2025	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2026	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2027	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2028	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2029	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000
2030	0.000	0.000	1.000	0.000	0.000	1.000	1.000	0.000	0.000	1.000	0.000	0.000

continued

TD.1 Aggregate mode share for all 56 OD routes (continued)

Year	ACT–TAS			TAS–ACT			NT–TAS			TAS–NT		
	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea	Road	Rail	Sea
Estimates												
1972	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1973	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1974	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1975	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1976	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1977	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1978	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1979	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1980	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1981	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1982	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1983	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1984	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1985	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1986	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1987	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1988	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1989	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1990	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1991	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1992	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1993	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1994	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1995	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1996	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1997	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1998	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
1999	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2000	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2001	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2002	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2003	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2004	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2005	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2006	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2007	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
Forecasts												
2008	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2009	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2010	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2011	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2012	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2013	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2014	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2015	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2016	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2017	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2018	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2019	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2020	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2021	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2022	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2023	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2024	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2025	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2026	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2027	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2028	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2029	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000
2030	1.000	0.000	0.000	1.000	0.000	0.000	0.000	0.000	1.000	0.000	0.000	1.000

Source: BITRE estimates.

APPENDIX E

Interstate freight task estimates and forecasts on the North–South and East–West corridors and mode share, 1972–2030

This appendix provides interstate freight task estimates (1972–2007) and forecasts (2008–2030) on the North–South and East–West corridors. It also provides transport mode share on these two corridors between 1972 and 2030.

TE.1 Interstate freight tasks (billion tkm) and transport mode shares on the North–South corridor, 1972–2030

Year	Freight task (billion tkm)				Mode share (per cent)		
	All modes	Road	Rail	Sea	Road	Rail	Sea
Estimates							
1972	9.9	4.7	3.5	1.7	47	35	17
1973	10.8	5.8	3.6	1.5	53	33	14
1974	11.7	6.7	3.7	1.3	58	31	11
1975	12.0	7.2	3.7	1.1	60	31	9
1976	12.8	8.1	3.8	0.9	63	30	7
1977	13.1	8.5	3.9	0.7	65	30	6
1978	13.4	8.6	4.0	0.7	64	30	6
1979	14.3	9.4	4.2	0.7	66	29	5
1980	15.6	10.6	4.3	0.7	68	27	5
1981	16.4	11.4	4.3	0.8	69	26	5
1982	16.8	12.2	3.9	0.8	72	23	4
1983	15.4	11.0	3.5	0.8	72	23	5
1984	18.2	13.5	3.9	0.9	74	21	5
1985	18.7	13.9	4.0	0.8	75	21	4
1986	20.5	15.5	4.2	0.7	76	21	3
1987	21.1	15.8	4.6	0.7	75	22	3
1988	23.0	17.6	4.9	0.4	77	21	2
1989	25.5	19.4	5.7	0.5	76	22	2
1990	26.3	20.3	5.6	0.3	77	21	1
1991	26.1	20.6	5.2	0.3	79	20	1
1992	26.6	20.9	5.3	0.5	78	20	2
1993	28.7	22.6	5.6	0.5	79	20	2
1994	30.5	24.1	6.0	0.4	79	20	1
1995	32.3	25.6	6.3	0.4	79	20	1
1996	34.9	28.2	6.3	0.4	81	18	1
1997	37.2	30.5	6.4	0.3	82	17	1
1998	40.0	32.8	6.6	0.6	82	17	1
1999	42.6	35.6	6.7	0.3	83	16	1
2000	46.1	38.3	6.9	1.0	83	15	2
2001	47.7	39.7	7.0	1.0	83	15	2
2002	50.0	42.1	7.1	0.7	84	14	1
2003	53.2	44.9	7.2	1.0	84	14	2
2004	56.3	47.5	7.3	1.4	84	13	2
2005	58.8	50.0	7.5	1.4	85	13	2
2006	61.4	52.6	7.7	1.0	86	13	2
2007	65.4	56.2	8.0	1.2	86	12	2
Forecasts							
2008	71.7	61.4	8.8	1.5	86	12	2
2009	72.6	62.3	8.8	1.5	86	12	2
2010	75.1	64.3	9.2	1.6	86	12	2
2011	78.5	67.2	9.7	1.6	86	12	2
2012	83.3	71.2	10.4	1.7	85	12	2
2013	87.6	74.9	11.0	1.8	85	13	2
2014	92.3	78.9	11.6	1.8	85	13	2
2015	97.2	83.0	12.3	1.9	85	13	2
2016	102.7	87.6	13.1	2.0	85	13	2
2017	108.6	92.6	13.9	2.1	85	13	2
2018	113.5	96.8	14.7	2.1	85	13	2
2019	118.1	100.6	15.3	2.2	85	13	2
2020	123.1	104.1	16.8	2.2	85	14	2
2021	127.5	107.7	17.5	2.3	84	14	2
2022	131.8	111.3	18.2	2.3	84	14	2
2023	135.9	114.6	18.9	2.4	84	14	2
2024	140.0	118.0	19.5	2.4	84	14	2
2025	144.2	121.5	20.2	2.5	84	14	2
2026	148.5	125.0	20.9	2.6	84	14	2
2027	152.8	128.5	21.7	2.6	84	14	2
2028	157.1	132.0	22.4	2.7	84	14	2
2029	161.4	135.5	23.2	2.7	84	14	2
2030	165.9	139.2	23.9	2.8	84	14	2

Note: Total mode share may not add to 100, due to rounding.
Source: BITRE estimates.

TE.2 Interstate freight tasks (billion tkm) and transport mode shares on the East–West corridor, 1972–2030

Year	Freight task (billion tkm)				Mode share (per cent)		
	All modes	Road	Rail	Sea	Road	Rail	Sea
Estimates							
1972	3.3	0.2	1.3	1.8	7	40	53
1973	3.7	0.4	1.7	1.6	9	47	44
1974	4.1	0.5	2.1	1.5	12	52	36
1975	4.1	0.5	2.5	1.1	13	61	26
1976	4.0	0.4	2.9	0.7	11	72	17
1977	3.7	0.5	2.9	0.4	13	77	11
1978	3.7	0.5	2.9	0.4	13	77	10
1979	3.8	0.6	2.8	0.3	16	75	9
1980	3.9	0.7	2.8	0.3	19	73	8
1981	4.2	0.9	3.0	0.3	21	72	7
1982	4.2	1.0	3.0	0.3	23	70	7
1983	4.2	0.8	3.0	0.4	20	71	10
1984	5.0	1.2	3.2	0.6	25	64	12
1985	5.3	1.3	3.2	0.8	25	59	16
1986	5.7	1.7	3.3	0.7	29	58	13
1987	6.2	1.8	3.8	0.6	28	62	9
1988	7.1	2.2	4.4	0.4	31	63	6
1989	8.2	2.7	5.0	0.4	33	61	5
1990	8.2	3.0	4.9	0.3	37	60	3
1991	8.0	3.1	4.6	0.2	39	58	3
1992	8.4	3.3	4.8	0.3	39	57	4
1993	9.5	4.1	5.1	0.3	44	54	3
1994	10.1	4.3	5.5	0.3	43	54	3
1995	11.3	5.0	5.8	0.5	44	51	5
1996	11.6	5.2	5.9	0.5	45	51	4
1997	12.0	5.3	6.2	0.5	44	52	4
1998	12.8	5.4	6.5	0.9	42	51	7
1999	13.0	5.1	7.1	0.9	39	54	7
2000	13.6	4.7	7.5	1.3	35	56	10
2001	13.8	4.4	8.0	1.4	32	58	10
2002	15.7	4.3	8.6	2.8	27	55	18
2003	16.3	4.2	9.2	2.8	26	57	17
2004	17.0	4.5	9.9	2.7	26	58	16
2005	16.9	4.9	10.5	1.6	29	62	9
2006	15.9	5.1	8.9	1.9	32	56	12
2007	18.3	5.3	10.7	2.3	29	59	13
Forecasts							
2008	19.1	5.7	11.3	2.0	30	59	11
2009	19.2	5.7	11.4	2.0	30	60	11
2010	19.8	5.9	11.8	2.1	30	60	11
2011	20.5	6.2	12.2	2.2	30	59	11
2012	21.6	6.5	12.8	2.3	30	59	10
2013	22.5	6.9	13.3	2.3	31	59	10
2014	23.5	7.2	13.9	2.4	31	59	10
2015	24.6	7.6	14.5	2.5	31	59	10
2016	25.7	8.1	15.1	2.5	31	59	10
2017	27.0	8.5	15.8	2.6	32	59	10
2018	28.0	8.9	16.4	2.7	32	59	10
2019	29.0	9.3	17.0	2.8	32	59	10
2020	29.9	9.6	17.5	2.8	32	58	9
2021	30.8	9.9	18.0	2.9	32	58	9
2022	31.7	10.3	18.5	2.9	32	58	9
2023	32.5	10.6	18.9	3.0	33	58	9
2024	33.4	10.9	19.4	3.1	33	58	9
2025	34.2	11.3	19.9	3.1	33	58	9
2026	35.1	11.6	20.4	3.2	33	58	9
2027	36.0	11.9	20.8	3.2	33	58	9
2028	36.8	12.3	21.3	3.3	33	58	9
2029	37.7	12.6	21.8	3.3	33	58	9
2030	38.6	13.0	22.3	3.4	34	58	9

Note: Total mode share may not add to 100, due to rounding.
Source: BITRE estimates.

APPENDIX F
Glossary of terms

ACT	Australian Capital Territory
ALC	Australian Logistics Council
ANOVA	Analysis of Variance
ARTC	Australian Rail Track Corporation
ATRF	Australasian Transport Research Forum
BITRE	Bureau of Infrastructure, Transport and Regional Economics
BTE	Bureau of Transport Economics
BTRE	Bureau of Transport and Regional Economics
GDP	Gross Domestic Products
IS	Interstate
NSW	New South Wales
NT	Northern Territory
OD	Origin–destination
QLD	Queensland
SA	South Australia
SMVU	Survey of Motor Vehicle Use
TAS	Tasmania
tkm	Tonne–kilometre. Total tonne–kilometre is the number of tonnes moved multiplied by the distance travelled in kilometres (e.g. 25 tonnes of freight moved a distance of 100 kilometres is 2500 tonne–kilometres (tkm)
VIC	Victoria
WA	Western Australia

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