# Road freight estimates by state / territory

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## 1 Introduction

The road freight industry is an important industry for the efficient operation of the economy. In Australia, the road freight industry, including ancillary road freight operations, is approximately 3.0 per cent of the total Gross Domestic Product (GDP). Road freight is essential to the urban freight task and carries the majority of inter-urban freight.

Road transport is the predominant mode for moving freight within Australia. Out of more than 2.44 billion tonnes of total freight moved within Australia in 2004–05, about 1.76 billion tonnes (or 72 per cent of the total) was transported via the road system (BITRE 2008).

The ABS Survey of Motor Vehicle Use (SMVU) is the primary data source for road freight task estimates. The interstate (IS) road freight task is defined by ABS as the amount of tonne-kilometres done by other States' trucks on a State's roads. But this definition is limited to 'freight carried by trucks *registered* in other states on a state's roads'. Inclusion in and exclusion from this definition were discussed earlier (see Gargett *et. al*., 2006).

Previously BITRE has produced new *disaggregate* interstate (IS) road freight estimates – 56 State-to-State origin-destination (O-D) time series (Gargett *et. al*., 2006). These new IS estimates resulted in a re-shuffling of the typical matrix of IS freight flows derived from Table 18 of the ABS Survey of Motor Vehicle Use data cube, which presented the origin as 'state/territory of registration' rather than as 'origin of trip'. If these new IS estimates are to be accepted, a way of generating new 'other intrastate' freight estimates needs to be developed, and integrated into a methodology for deriving estimates of freight moving within each state/territory.

The objective of the current paper is to integrate the new disaggregate IS road freight estimates into a framework of estimates of road freight tasks by state/territory, i.e. into interstate ('from', 'to' and 'though'), as well as the 'capital city' and 'other intrastate'.

Thus, the main objectives of this paper are:

1) to develop a methodology for integrating new IS freight estimates into a framework for road freight tasks by state/territory

2) to derive forecasting equations for these road freight estimates using the data estimated for 1971–72 and 2005–06

3) to use these equations to provide forecasts from 2006–07 to 2030–31 for the road freight task within each state/territory.

## 2 Methodology

The protocol used to calculate the estimates of the road freight task within each state/territory is as follows:

1. a three year average of SMVU 2000, 2001 and 2002 interstate freight was taken (Table 18 of the data cube), centred at 2001 for interstate cells (off-diagonal)

2. a cell factor for scaling (i.e. correction factor) was calculated, equal to the 2001 Freight Measurement Survey (FMS) (ABS 2001) cell tonne-kilometres divided by the average 2001 SMVU cell tonne-kilometres (see Table 1).

**Table 1 – Correction table for SMVU data cube Table 18.**

| | *Destination* | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| *Origin* | *NSW* | *VIC* | *QLD* | *SA* | *WA* | *TAS* | *NT* | *ACT* |
| NSW | | 3.56 | 3.78 | 4.01 | 6.79 | 0.00 | 6.79 | 4.53 |
| VIC | 0.70 | | 1.51 | 1.08 | 0.97 | 0.00 | 1.00 | 1.48 |
| QLD | 0.93 | 2.89 | | 1.78 | 2.00 | 0.00 | 1.27 | 1.00 |
| SA | 0.83 | 1.14 | 1.65 | | 2.07 | 0.00 | 2.43 | 2.50 |
| WA | 2.00 | 4.49 | 2.87 | 2.40 | | 0.00 | 4.25 | 1.00 |
| TAS | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | 0.00 | 0.00 |
| NT | 1.67 | 1.00 | 2.19 | 0.85 | 1.96 | 0.00 | | 1.00 |
| ACT | 0.32 | 0.44 | 0.72 | 1.61 | 1.00 | 0.00 | 1.00 | |

*Source: Gargett et al. (2007).*

3. This scaling factor was applied to each O-D cell in each of the SMVU matrices of 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005 and 2006.

4. A similar operation was done to derive the 1982 and 1985 interstate matrices based on the O-D matrix from the 1981 ABS Interstate Freight Movement survey (ABS 1982) in calculating the scaling factor.

5. Then regression analysis was used to smooth these data, i.e. to interpolate between what are scattered interstate road freight estimates. The regressors used were truck tonnage series for the Hume and Eyre highways. Figure 1 and Figure 2 provide examples from Victoria to New South Wales and Eastern States (include New South Wales, Victoria, Queensland and South Australia) to and from Western Australia (prior to splitting to routes), which show the fit of two of the 56 interpolation performed.

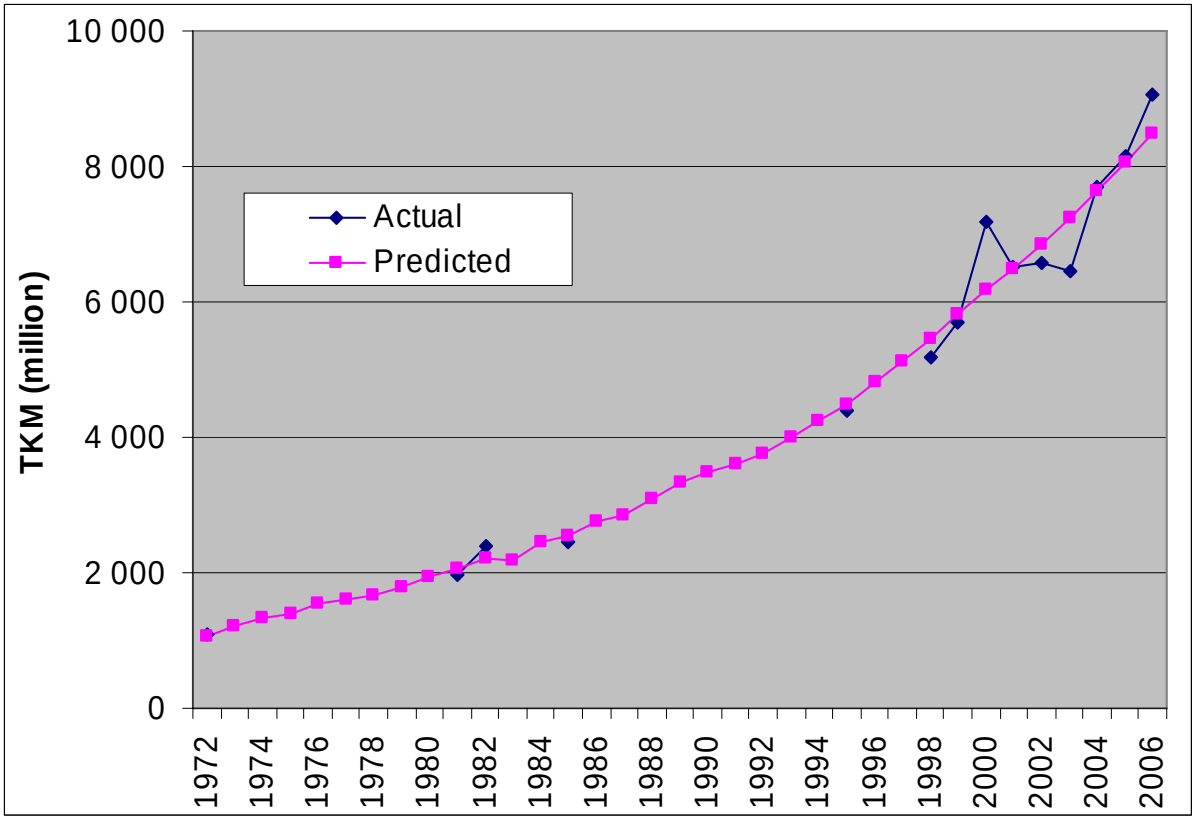



**Figure 1 – Interstate road freight data points and interpolation, Victoria to New South Wales.**

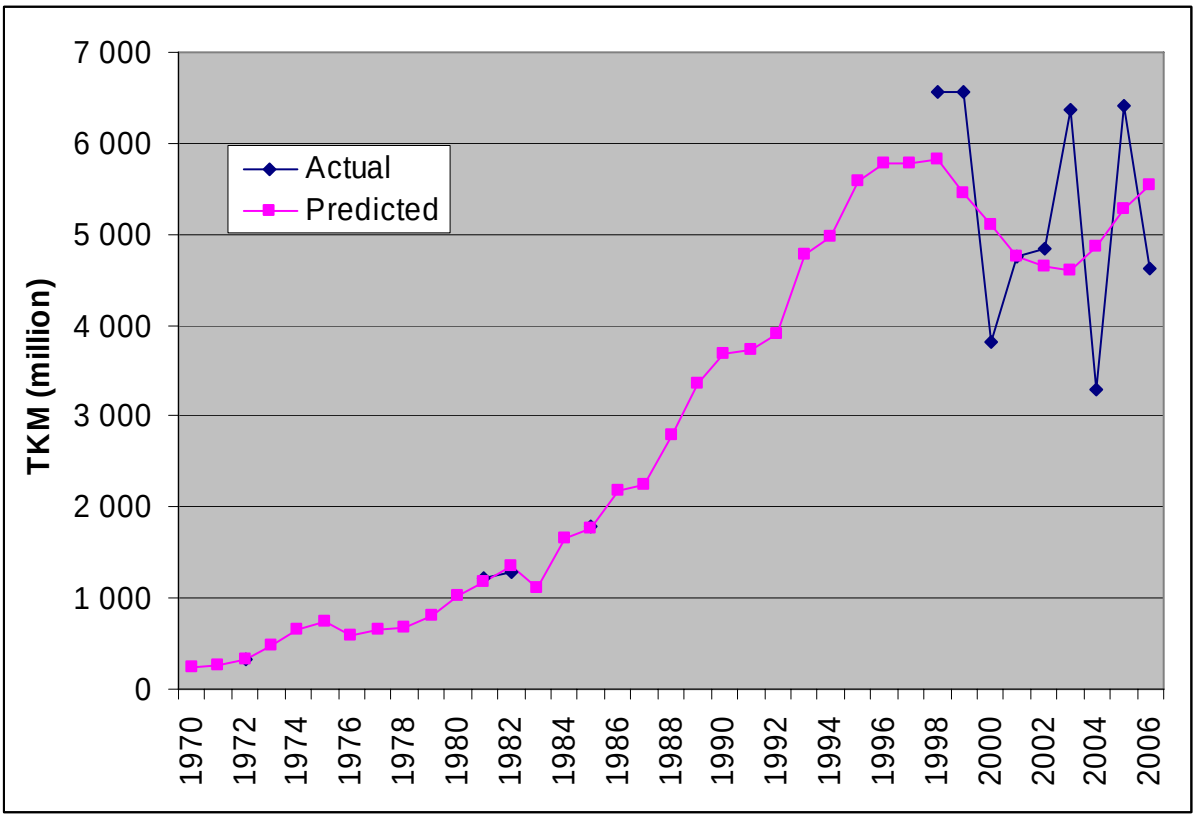



**Figure 2 – Interstate road freight data points and interpolation, Western Australia to and from Eastern States (include New South Wales, Victoria, Queensland and South Australia).**

6. The results from step 5 were the new IS road freight estimates to be integrated within a new framework for estimating road freight within states/territories. In step 6, then these IS road freight estimates were combined with interstate rail and sea freight estimates and summed up as total IS freight on each O-D route (see Soames *et al*. 2007).

7. These IS O-D freight totals were then regressed against real GDP and real freight rates and forecasts derived for the 56 O-D routes.

8. Then these total freight forecasts were separated into mode forecasts using mode share trends.

9. The IS road freight forecast for each O-D pair was then split by the state in which it is performed by using a 'fractions by state' table based on fractions of distance travelling in each state/territory (see Table 2).

10. From each year's SMVU, a corrected total for national tonne-kilometres was derived (see BTRE 2006, Chapter 2).

11. Then the interstate freight total from Step 7 above was subtracted from the total national tonne-kilometres to give the data for intrastate tonne-kilometres (the total for the diagonal in the State-to-State matrix of freight flows).

12. Each year's SMVU capital city tonne-kilometre total was then adjusted (see BTRE 2006, Chapter 2) and forecast using real GDP and real freight rates (see BTRE 2006, Chapter 3). Individual city-adjusted tonne-kilometres were derived by applying a share table (see BTRE 2006, Appendix II, Table II.18).

13. The adjusted capital city total was then subtracted from the adjusted diagonal's total in Step 11 above to give 'other intrastate' total tonne-kilometres for each year.

**Table 2 – Fractions by states/territories from origin to destination.**

| *Origin* | | *Task split by States (fractions)* | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *From* | *To* | *NSW* | *VIC* | *QLD* | *SA* | *WA* | *TAS* | *NT* | *ACT* | *Total* |
| NSW- | VIC | 0.50 | 0.50 | | | | | | | 1.00 |
| | QLD | 0.80 | | 0.20 | | | | | | 1.00 |
| | SA | 0.70 | 0.10 | | 0.20 | | | | | 1.00 |
| | WA | 0.25 | 0.05 | | 0.20 | 0.50 | | | | 1.00 |
| | TAS | | | | | | | | | 0.00 |
| | NT | 0.25 | | | 0.35 | | | 0.40 | | 1.00 |
| | ACT | 0.95 | | | | | | | 0.05 | 1.00 |
| VIC- | NSW | 0.50 | 0.50 | | | | | | | 1.00 |
| | QLD | 0.70 | 0.18 | 0.12 | | | | | | 1.00 |
| | SA | | 0.60 | | 0.40 | | | | | 1.00 |
| | WA | | 0.13 | | 0.45 | 0.42 | | | | 1.00 |
| | TAS | | | | | | | | | 0.00 |
| | NT | | 0.12 | | 0.43 | | | 0.45 | | 1.00 |
| | ACT | 0.54 | 0.45 | | | | | | 0.01 | 1.00 |
| QLD- | NSW | 0.80 | | 0.20 | | | | | | 1.00 |
| | VIC | 0.70 | 0.18 | 0.12 | | | | | | 1.00 |
| | SA | 0.58 | 0.05 | 0.27 | 0.10 | | | | | 1.00 |
| | WA | 0.29 | 0.02 | 0.08 | 0.31 | 0.30 | | | | 1.00 |
| | TAS | | | | | | | | | 0.00 |
| | NT | | | 0.62 | | | | 0.38 | | 1.00 |
| | ACT | | | | | | | | | 0.00 |
| SA- | NSW | 0.70 | 0.10 | | 0.20 | | | | | 1.00 |
| | VIC | | 0.60 | | 0.40 | | | | | 1.00 |
| | QLD | 0.58 | 0.05 | 0.27 | 0.10 | | | | | 1.00 |
| | WA | | | | 0.51 | 0.49 | | | | 1.00 |
| | TAS | | | | | | | | | 0.00 |
| | NT | | | | 0.46 | | | 0.54 | | 1.00 |
| | ACT | | | | | | | | | 0.00 |
| WA- | NSW | 0.25 | 0.05 | | 0.20 | 0.50 | | | | 1.00 |
| | VIC | | 0.13 | | 0.45 | 0.42 | | | | 1.00 |
| | QLD | 0.29 | 0.02 | 0.08 | 0.31 | 0.30 | | | | 1.00 |
| | SA | | | | 0.51 | 0.49 | | | | 1.00 |
| | TAS | | | | | | | | | 0.00 |
| | NT | | | | | 0.85 | | 0.15 | | 1.00 |
| | ACT | | | | | | | | | 0.00 |
| NT- | NSW | 0.25 | | | 0.35 | | | 0.40 | | 1.00 |
| | VIC | | 0.12 | | 0.43 | | | 0.45 | | 1.00 |
| | QLD | | | 0.62 | | | | 0.38 | | 1.00 |
| | SA | | | | 0.46 | | | 0.54 | | 1.00 |
| | WA | | | | | 0.85 | | 0.15 | | 1.00 |
| | TAS | | | | | | | | | 0.00 |
| | ACT | | | | | | | | | 0.00 |
| ACT- | NSW | 0.95 | | | | | | | 0.05 | 1.00 |
| | VIC | 0.54 | 0.45 | | | | | | 0.01 | 1.00 |
| | QLD | | | | | | | | | 0.00 |
| | SA | | | | | | | | | 0.00 |
| | WA | | | | | | | | | 0.00 |
| | TAS | | | | | | | | | 0.00 |
| | NT | | | | | | | | | 0.00 |

*Source: Gargett et al. (2006).*

14. This 'other intrastate' total for each year was split into 'other intrastate' by state using a share table (see Table 3).

**Table 3 – Fraction of total 'other intrastate' road freight task.**

| *Year* | *NSW* | *VIC* | *QLD* | *SA* | *WA* | *TAS* | *NT* | *ACT* |
|---|---|---|---|---|---|---|---|---|
| 1972 | 0.340 | 0.215 | 0.119 | 0.107 | 0.148 | 0.037 | 0.033 | 0.000 |
| 1973 | 0.340 | 0.215 | 0.119 | 0.109 | 0.145 | 0.037 | 0.035 | 0.000 |
| 1974 | 0.340 | 0.216 | 0.118 | 0.110 | 0.141 | 0.037 | 0.037 | 0.000 |
| 1975 | 0.340 | 0.218 | 0.117 | 0.111 | 0.137 | 0.038 | 0.039 | 0.000 |
| 1976 | 0.340 | 0.220 | 0.117 | 0.113 | 0.133 | 0.038 | 0.041 | 0.000 |
| 1977 | 0.346 | 0.211 | 0.128 | 0.109 | 0.130 | 0.037 | 0.040 | 0.000 |
| 1978 | 0.351 | 0.202 | 0.139 | 0.106 | 0.128 | 0.036 | 0.039 | 0.000 |
| 1979 | 0.355 | 0.194 | 0.149 | 0.102 | 0.126 | 0.035 | 0.038 | 0.000 |
| 1980 | 0.352 | 0.192 | 0.151 | 0.103 | 0.127 | 0.035 | 0.039 | 0.000 |
| 1981 | 0.349 | 0.191 | 0.153 | 0.104 | 0.127 | 0.036 | 0.039 | 0.000 |
| 1982 | 0.346 | 0.190 | 0.155 | 0.105 | 0.128 | 0.036 | 0.040 | 0.000 |
| 1983 | 0.340 | 0.189 | 0.161 | 0.105 | 0.130 | 0.036 | 0.040 | 0.000 |
| 1984 | 0.333 | 0.188 | 0.167 | 0.105 | 0.132 | 0.036 | 0.040 | 0.000 |
| 1985 | 0.326 | 0.187 | 0.173 | 0.105 | 0.133 | 0.036 | 0.039 | 0.000 |
| 1986 | 0.314 | 0.187 | 0.181 | 0.099 | 0.142 | 0.038 | 0.039 | 0.000 |
| 1987 | 0.301 | 0.186 | 0.190 | 0.094 | 0.151 | 0.039 | 0.039 | 0.000 |
| 1988 | 0.289 | 0.186 | 0.198 | 0.088 | 0.160 | 0.040 | 0.039 | 0.000 |
| 1989 | 0.280 | 0.189 | 0.206 | 0.084 | 0.160 | 0.040 | 0.041 | 0.000 |
| 1990 | 0.272 | 0.192 | 0.215 | 0.080 | 0.160 | 0.039 | 0.042 | 0.000 |
| 1991 | 0.263 | 0.195 | 0.223 | 0.077 | 0.160 | 0.039 | 0.044 | 0.000 |
| 1992 | 0.262 | 0.197 | 0.226 | 0.076 | 0.159 | 0.038 | 0.042 | 0.000 |
| 1993 | 0.260 | 0.200 | 0.228 | 0.075 | 0.158 | 0.038 | 0.041 | 0.000 |
| 1994 | 0.259 | 0.202 | 0.231 | 0.074 | 0.157 | 0.037 | 0.039 | 0.000 |
| 1995 | 0.258 | 0.205 | 0.233 | 0.073 | 0.156 | 0.037 | 0.038 | 0.000 |
| 1996 | 0.257 | 0.207 | 0.234 | 0.074 | 0.157 | 0.036 | 0.034 | 0.000 |
| 1997 | 0.256 | 0.210 | 0.236 | 0.074 | 0.158 | 0.036 | 0.031 | 0.000 |
| 1998 | 0.255 | 0.212 | 0.237 | 0.074 | 0.160 | 0.035 | 0.027 | 0.000 |
| 1999 | 0.262 | 0.211 | 0.235 | 0.074 | 0.159 | 0.034 | 0.025 | 0.000 |
| 2000 | 0.258 | 0.216 | 0.237 | 0.077 | 0.156 | 0.033 | 0.024 | 0.000 |
| 2001 | 0.249 | 0.218 | 0.244 | 0.078 | 0.153 | 0.034 | 0.024 | 0.000 |
| 2002 | 0.239 | 0.217 | 0.248 | 0.079 | 0.161 | 0.032 | 0.023 | 0.000 |
| 2003 | 0.234 | 0.220 | 0.247 | 0.084 | 0.164 | 0.032 | 0.019 | 0.000 |
| 2004 | 0.230 | 0.225 | 0.247 | 0.085 | 0.164 | 0.032 | 0.018 | 0.000 |
| 2005 | 0.234 | 0.228 | 0.244 | 0.082 | 0.164 | 0.031 | 0.017 | 0.000 |
| 2006 | 0.226 | 0.236 | 0.241 | 0.082 | 0.175 | 0.027 | 0.013 | 0.000 |

*Source: BTRE (2006) (Appendix II, Table II.20).*

15. Forecasts for each State's 'other intrastate' were derived from a regression on real GDP and real freight rates (for coefficients for regression analysis, ANOVA and $R^2$, see Table 4 and Table 5). The assumptions about future GDP growth were drawn from the 'Treasury Intergenerational Report' which had an average annual growth rate of 2.7 per cent up to 2031, incorporating the effects of expected lower population growth rates. Freight rates were assumed to remain constant in real terms over the period.

16. Finally, road freight estimates (as billion tonne-kilometres) between 1972 and 2006 were assembled in the final tables (see Tables 8 to 11 at the end of this paper). These tables also contained the road freight forecasts for 2007 to 2031.

**Table 4 – Coefficients for regressions for 'other intrastate' road freight tasks (in billion tonne-kilometres).**

| | *NSW* | *VIC* | *QLD* | *SA* | *WA* | *TAS* | *NT* |
|---|---|---|---|---|---|---|---|
| Intercept | 7.2464 | -5.7452 | -4.3274 | 2.8363 | -4.2350 | 3.4919 | 20.7819 |
| Real GDP | 0.3297 | 1.2059 | 1.2472 | 0.5367 | 1.1239 | 0.4894 | -0.6840 |
| Real Freight rate | -1.4291 | -0.7366 | -1.9982 | -1.1113 | -1.2013 | -1.6959 | -2.8989 |

*Note: No data for Australian Capital Territory.* *Source: BITRE estimates.*

**Table 5 – ANOVA and R square ($R^2$) for 'other intrastate' road freight tasks.**

| | | *df* | *SS* | *MS* | *F* | *Significance F* | $R^2$ |
|---|---|---|---|---|---|---|---|
| NSW | Regression | 2 | 4.893 | 2.446 | 320.410 | 6.855E-22 | 0.952 |
| | Residual | 32 | 0.244 | 0.008 | | | |
| | Total | 34 | 5.137 | | | | |
| VIC | Regression | 2 | 9.504 | 4.752 | 952.872 | 3.060E-29 | 0.983 |
| | Residual | 32 | 0.160 | 0.005 | | | |
| | Total | 34 | 9.664 | | | | |
| QLD | Regression | 2 | 20.521 | 10.260 | 865.914 | 1.378E-28 | 0.982 |
| | Residual | 32 | 0.379 | 0.012 | | | |
| | Total | 34 | 20.900 | | | | |
| SA | Regression | 2 | 4.967 | 2.483 | 256.735 | 1.968E-20 | 0.941 |
| | Residual | 32 | 0.310 | 0.010 | | | |
| | Total | 34 | 5.276 | | | | |
| WA | Regression | 2 | 11.732 | 5.866 | 720.492 | 2.462E-27 | 0.978 |
| | Residual | 32 | 0.261 | 0.008 | | | |
| | Total | 34 | 11.993 | | | | |
| TAS | Regression | 2 | 7.842 | 3.921 | 648.741 | 1.269E-26 | 0.976 |
| | Residual | 32 | 0.193 | 0.006 | | | |
| | Total | 34 | 8.036 | | | | |
| NT | Regression | 2 | 5.360 | 2.680 | 122.381 | 1.020E-15 | 0.884 |
| | Residual | 32 | 0.701 | 0.022 | | | |
| | Total | 34 | 6.061 | | | | |

*Note: No data for Australian Capital Territory.* *Source: BITRE estimates.*

## 3 Results

### 3.1 Road freight estimates and forecasts by State/Territory

Tables 8 to 11 (at the end of the paper) assemble the final road freight estimates (in billion tonne-kilometres) as interstate (split by 'from', 'to, and 'through' as well as total), capital cities and 'other intrastate' for each State and Territory between 1972 and 2006. These tables also contain the road freight forecasts (also in billion tonne-kilometres) from 2007 to 2031 for each State and Territory.

Between 1972 and 2006, total interstate (total IS) road freight estimates dominated, when compared to capital cities and 'other intrastate' road freight estimates, in New South Wales, South Australia and Northern Territory (see Tables 8, 9 and 11). On the other hand, 'other intrastate' road freight estimates dominated in Victoria, Queensland, Western Australia and Tasmania (see Tables 8 to 10). In the Australian Capital Territory, Canberra naturally had a higher road freight task than total IS (with 'other intrastate' assumed zero).

The forecast (2007–2031) road freight tasks showed similar patterns when compared to the historical period (1972–2006), except for Victoria. The road freight task in Victoria is forecast to be dominated in the future by interstate movement, rather 'other intrastate' movement.

Irrespective of States and Territories, most of the interstate road freight movements during 1972 to 2006 occurred 'from' and 'to' (except Tasmania, where interstate road freight is assumed to be all by sea). The same pattern can be seen during the forecast period.

Table 6 presents the average annual growth rates for the road freight estimates and forecasts, interstate ('from', 'to', 'through' and total), 'capital city', 'other intrastate' and total state, for each State and Territory, between 1972 and 2031. The forecast growth rate of road freight between 2007 and 2031 is expected to be slower in all States and Territories when compared to the historical growth rate (e.g. 1972–2006). This is due to lower assumed economic growth and no declines in real freight rates as was the case before 2007.

**Table 6 – Average annual growth rates (per cent) of estimated and forecast road freight, interstate, capital city, 'other intrastate' and total State, 1972–2031.**

| *Year*[a] | *Interstate (IS)* | | | | *Capital city* | *'Other intrastate'* | *Total State* |
|---|---|---|---|---|---|---|---|
| | *IS 'from'* | *IS 'to'* | *IS 'Thru'* | *IS total* | | | |
| | New South Wales | | | | | | |
| 1972-2006 | 7.7 | 7.2 | 7.5 | 7.4 | 3.8 | 3.6 | 5.1 |
| 2007-2031 | 4.4 | 4.6 | 4.4 | 4.5 | 2.5 | 0.9 | 3.4 |
| | Victoria | | | | | | |
| 1972-2006 | 6.6 | 7.8 | 6.5 | 7.1 | 4.9 | 5.2 | 5.6 |
| 2007-2031 | 4.7 | 4.8 | 3.0 | 4.7 | 2.5 | 3.3 | 3.7 |
| | Queensland | | | | | | |
| 1972-2006 | 8.4 | 7.4 | nd | 7.8 | 7.2 | 7.1 | 7.2 |
| 2007-2031 | 4.8 | 4.6 | nd | 4.7 | 3.6 | 3.4 | 3.6 |
| | South Australia | | | | | | |
| 1972-2006 | 8.4 | 8.1 | 6.4 | 7.9 | 3.7 | 4.1 | 5.2 |
| 2007-2031 | 4.9 | 4.8 | 3.7 | 4.7 | 1.9 | 1.4 | 3.4 |
| | Western Australia | | | | | | |
| 1972-2006 | 8.7 | 9.1 | nd | 8.9 | 5.0 | 5.4 | 5.7 |
| 2007-2031 | 5.0 | 4.5 | nd | 4.7 | 2.9 | 3.0 | 3.4 |
| | Tasmania | | | | | | |
| 1972-2006 | Nd | nd | nd | nd | 3.6 | 4.0 | 3.9 |
| 2007-2031 | Nd | nd | nd | nd | 1.8 | 1.3 | 1.4 |
| | Northern Territory | | | | | | |
| 1972-2006 | 6.2 | 6.8 | nd | 6.5 | 5.2 | 2.0 | 4.1 |
| 2007-2031 | 4.5 | 4.0 | nd | 4.3 | 3.1 | -1.8 | 2.7 |
| | Australian Capital Territory | | | | | | |
| 1972-2006 | 7.2 | 6.3 | nd | 6.5 | 3.0 | nd | 3.3 |
| 2007-2031 | 4.6 | 2.9 | nd | 4.3 | 2.3 | nd | 2.6 |

[a] *1972 to 2006 are estimates, and 2007 to 2031 are forecasts.* *Source: Tables 8 to 11.*

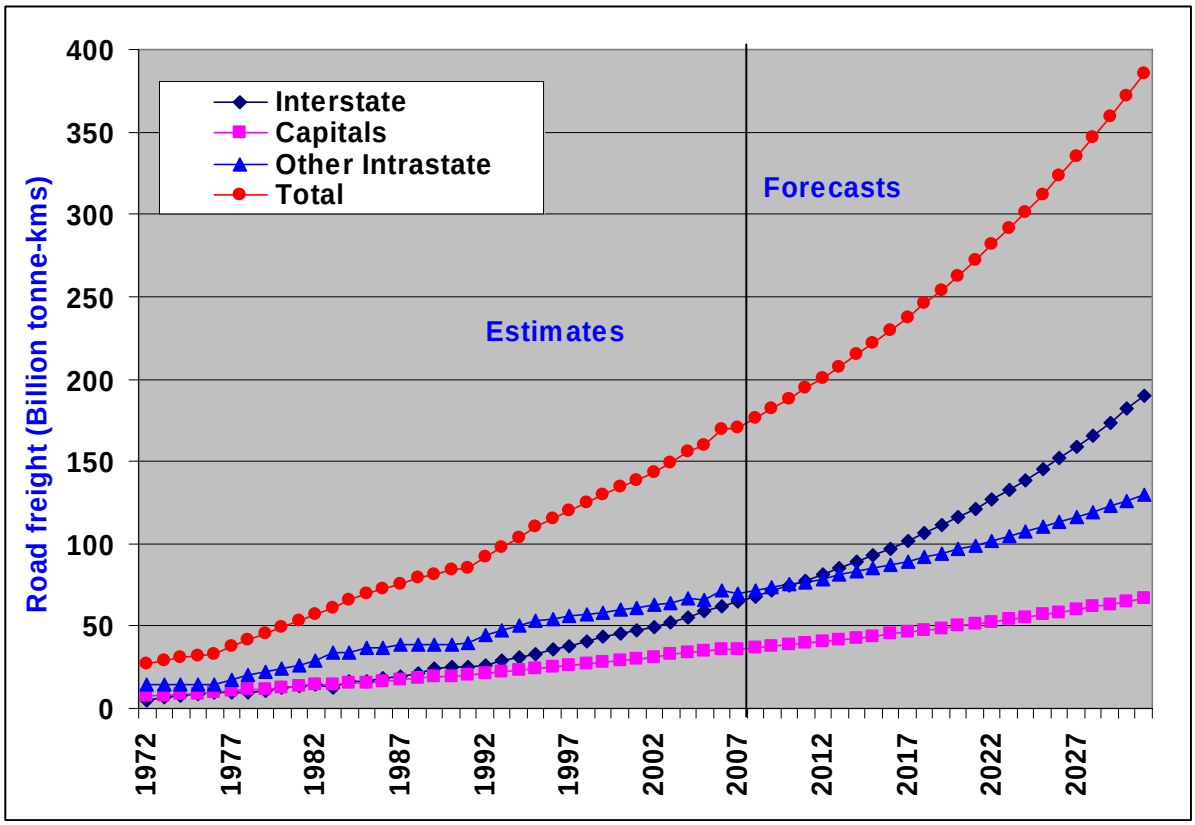
nd *Not determined due to either no data or too small.*

### 3.2 National road freight estimates and forecasts

Interstate road freight tasks provide estimates of the amount of different types of interstate freight being carried on each State's roads, which included 'from', 'to' and 'through' freight movements. In 1972, the total interstate freight estimate in Australia was 5.32 billion tonne-kilometres (tkm) and this estimate increased to 61.87 billion tkm in 2006 (Figure 3). Similarly, total road freight task in the eight capital cities was 7.63 billion tkm in 1972, which increased to 36.24 billion tkm in 2006. Within the state ('other intrastate'), the road freight estimate was 14.17 billion tkm in 1972, which increased to 71.77 billion tkm in 2006. Thus the total road freight estimate was 27.11 billion tkm in 1972 and 169.88 billion tkm in 2006.

Figure 3 also provides road freight forecast data for the next twenty-five years, from 2007 to 2031, for 'interstate', 'capitals' and 'other intrastate' components, as well as the national total.

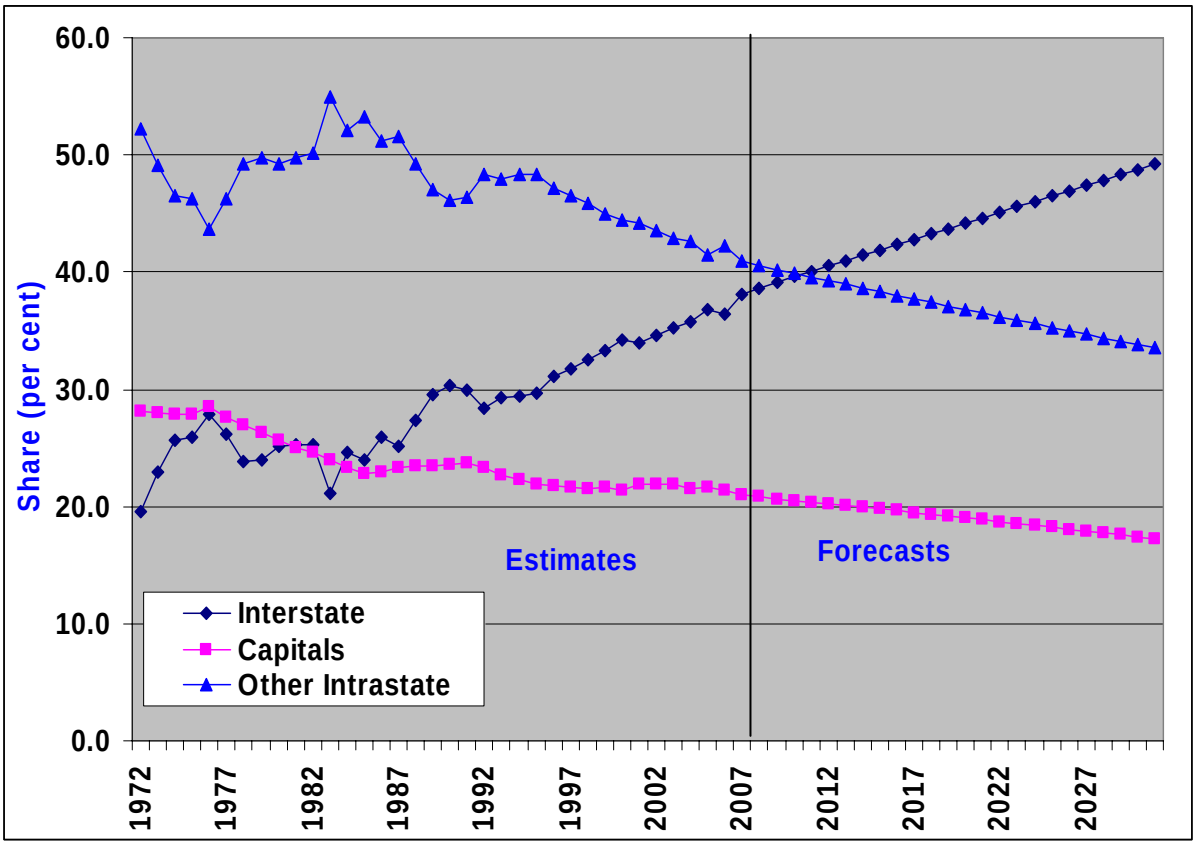
In tonne-kilometre terms, the total interstate road freight task in Australia is forecast to grow from 62.92 billion tkm in 2007 to 190.01 billion tkm in 2031, which is nearly a three-fold increase over the next twenty-five years. Similarly, the tonne-kilometre road freight tasks in capitals and in 'other intrastate' are also forecast to grow, but a slower pace, nearly doubling during the forecast period. The forecast shares for 'interstate', 'capitals' and 'other intrastate' road freight show much the same trends as shown for historical estimates.




*Note: Data from 1972 to 2006 are estimates, while data from 2007 to 2031 are forecasts.*
*Source: BITRE estimates.*

**Figure 3 – Road freight estimates and forecasts (billion tonne-kilometres) by total interstate (sum of 'from', 'to' and 'through'), capital cities and 'other intrastate', Australia, 1972–2031.**

The shares of national road freight estimates and forecasts by total interstate (combination of 'from', 'to' and 'through'), 'capitals' and 'other intrastate' from 1972 to 2031 are illustrated in Figure 4. Between 1972 and 2006, total interstate road freight share increased from 19.6 per cent to 36.4 per cent, and continues to increase during the forecast period. This increase in share is driven partly by the tendency to centralise production in a few locations and distribute nationally (e.g. fertilizer), and also by the increasing frequency of national distribution from local production centres (e.g. wines). By contrast to the increasing share of interstate, road freight shares during 1972 to 2006 for 'capital cities' and 'other intrastate' decreased and are expected to continue to decrease during the forecast period. However, the decrease in share of the road freight task for 'other intrastate' forecast will be steeper than for the 'capital cities'.




*Note: Data from 1972 to 2006 are estimates, while data from 2007 to 2031 are forecasts.*
*Source: BITRE estimates.*

**Figure 4 – Share (per cent) of road freight estimates and forecasts by total interstate (combination of 'from', 'to' and 'through'), capital city and 'other intrastate', Australia, 1972–2031.**

For Australia as a whole, the interstate road freight task increased at an average annual growth of 7.5 per cent per annum (Table 7). This interstate road freight task grew faster than the average annual growth of freight tasks in capitals (4.7 per cent per annum) and within the state ('other intrastate') (4.9 per cent per annum) during this period (Table 7). Overall, the average annual growth rate in the total road freight task in Australia was 5.5 per cent between 1972 and 2006.

Table 7 also shows the forecast growth rates for interstate, capital cities and 'other intrastate' road freight tasks between 2007 and 2031. The average annual forecast growth rate of interstate freight is 4.6 per cent, which is below the 35-year historical (1972 to 2006) average annual growth rate (7.5 per cent). The average annual forecast growth rates of road freight in

capitals and 'other intrastate' are both 2.6 per cent per annum. Overall, the forecast average annual growth rate of total road freight in Australia is 3.5 per cent between 2007 and 2031.

**Table 7 – Average annual growth rates (per cent) of road freight, segmented by interstate (combination of 'from', 'to' and 'through'), capitals and 'other intrastate', Australia, 1972–2031.**

| | *Interstate* | *Capitals* | *'Other intrastate'* | *Total* |
|---|---|---|---|---|
| 1972–2006 (estimates) | 7.5 | 4.7 | 4.9 | 5.5 |
| 2007–2031 (forecasts) | 4.6 | 2.6 | 2.6 | 3.5 |

*Source: Figure 3.*

## 4 Conclusions

Using this new method, it is possible to derive detailed estimates of road freight flows within States/Territories, incorporating new interstate 'from', 'to', and 'through' estimates.

The paper also presents forecasts from 2007 to 2031 of road freight (in billion tonne-kilometres), for each State/Territory. When these forecasts are aggregated, the resulting total interstate road freight task is forecast to almost triple over the next 25 years. Road freight tasks in capitals and in 'other intrastate' areas are forecast to double during the 2007–2031 period.

These 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. But the methodology developed here allows for systematic variation in all these assumptions for scenario testing.

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**Table 8 – Road freight estimates and forecasts (billion tkm), interstate ('from', 'to', 'through' and total), capitals, 'other intrastate' and total NSW and total VIC, 1972–2031.**

| Year | New South Wales | | | | | | | Victoria | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Interstate (IS) | | | | SYD | Other intra-state | Total NSW | Interstate (IS) | | | | MEL | Other intra-state | Total VIC |
| | From | To | Thru | Total | | | | From | To | Thru | Total | | | |
| 1972 | 1.05 | 1.10 | 0.53 | 2.67 | 3.00 | 4.82 | 10.50 | 0.78 | 0.54 | 0.07 | 1.39 | 2.10 | 3.04 | 6.53 |
| 1973 | 1.30 | 1.31 | 0.73 | 3.33 | 3.16 | 4.82 | 11.31 | 0.91 | 0.67 | 0.09 | 1.67 | 2.23 | 3.05 | 6.95 |
| 1974 | 1.53 | 1.50 | 0.92 | 3.95 | 3.31 | 4.85 | 12.11 | 1.04 | 0.80 | 0.10 | 1.93 | 2.36 | 3.09 | 7.38 |
| 1975 | 1.63 | 1.60 | 0.97 | 4.21 | 3.46 | 5.09 | 12.76 | 1.10 | 0.85 | 0.11 | 2.06 | 2.49 | 3.26 | 7.81 |
| 1976 | 1.85 | 1.78 | 1.14 | 4.77 | 3.61 | 4.94 | 13.32 | 1.21 | 0.97 | 0.12 | 2.29 | 2.61 | 3.19 | 8.10 |
| 1977 | 1.95 | 1.88 | 1.18 | 5.01 | 3.86 | 5.98 | 14.85 | 1.27 | 1.02 | 0.12 | 2.41 | 2.84 | 3.65 | 8.91 |
| 1978 | 1.99 | 1.93 | 1.12 | 5.04 | 4.11 | 7.17 | 16.31 | 1.30 | 1.04 | 0.12 | 2.46 | 3.07 | 4.14 | 9.66 |
| 1979 | 2.19 | 2.11 | 1.26 | 5.55 | 4.34 | 8.07 | 17.97 | 1.41 | 1.15 | 0.14 | 2.69 | 3.29 | 4.40 | 10.38 |
| 1980 | 2.48 | 2.35 | 1.48 | 6.31 | 4.56 | 8.60 | 19.46 | 1.56 | 1.30 | 0.15 | 3.01 | 3.49 | 4.69 | 11.20 |
| 1981 | 2.67 | 2.53 | 1.59 | 6.79 | 4.76 | 9.28 | 20.83 | 1.67 | 1.40 | 0.16 | 3.24 | 3.69 | 5.07 | 12.00 |
| 1982 | 2.87 | 2.70 | 1.69 | 7.25 | 4.96 | 9.96 | 22.18 | 1.77 | 1.51 | 0.17 | 3.46 | 3.89 | 5.45 | 12.79 |
| 1983 | 2.58 | 2.52 | 1.29 | 6.39 | 5.13 | 11.38 | 22.90 | 1.66 | 1.36 | 0.16 | 3.17 | 4.06 | 6.33 | 13.56 |
| 1984 | 3.19 | 3.01 | 1.79 | 8.00 | 5.29 | 11.33 | 24.62 | 1.95 | 1.68 | 0.19 | 3.83 | 4.24 | 6.40 | 14.46 |
| 1985 | 3.30 | 3.13 | 1.78 | 8.21 | 5.46 | 12.04 | 25.71 | 2.02 | 1.74 | 0.20 | 3.96 | 4.41 | 6.91 | 15.29 |
| 1986 | 3.70 | 3.47 | 2.06 | 9.23 | 5.74 | 11.67 | 26.64 | 2.22 | 1.95 | 0.22 | 4.40 | 4.72 | 6.94 | 16.06 |
| 1987 | 3.75 | 3.55 | 1.97 | 9.28 | 6.02 | 11.78 | 27.08 | 2.27 | 1.98 | 0.23 | 4.47 | 5.04 | 7.28 | 16.79 |
| 1988 | 4.23 | 3.94 | 2.30 | 10.48 | 6.29 | 11.27 | 28.04 | 2.50 | 2.23 | 0.25 | 4.99 | 5.36 | 7.25 | 17.59 |
| 1989 | 4.66 | 4.31 | 2.59 | 11.56 | 6.45 | 10.76 | 28.77 | 2.71 | 2.47 | 0.28 | 5.45 | 5.58 | 7.24 | 18.27 |
| 1990 | 4.90 | 4.54 | 2.66 | 12.10 | 6.61 | 10.50 | 29.21 | 2.84 | 2.59 | 0.29 | 5.73 | 5.80 | 7.40 | 18.92 |
| 1991 | 4.97 | 4.63 | 2.56 | 12.16 | 6.76 | 10.46 | 29.38 | 2.89 | 2.63 | 0.30 | 5.81 | 6.02 | 7.73 | 19.56 |
| 1992 | 5.04 | 4.74 | 2.47 | 12.24 | 7.04 | 11.57 | 30.85 | 2.96 | 2.66 | 0.30 | 5.92 | 6.35 | 8.72 | 20.98 |
| 1993 | 5.49 | 5.13 | 2.72 | 13.33 | 7.33 | 12.23 | 32.89 | 3.18 | 2.90 | 0.33 | 6.40 | 6.68 | 9.39 | 22.47 |
| 1994 | 5.85 | 5.45 | 2.88 | 14.18 | 7.61 | 12.98 | 34.77 | 3.36 | 3.09 | 0.34 | 6.80 | 7.01 | 10.14 | 23.95 |
| 1995 | 6.23 | 5.79 | 3.04 | 15.07 | 7.89 | 13.73 | 36.68 | 3.55 | 3.29 | 0.37 | 7.21 | 7.35 | 10.90 | 25.46 |
| 1996 | 6.90 | 6.33 | 3.44 | 16.66 | 8.17 | 13.94 | 38.77 | 3.85 | 3.64 | 0.39 | 7.89 | 7.65 | 11.25 | 26.79 |
| 1997 | 7.46 | 6.79 | 3.73 | 17.97 | 8.44 | 14.28 | 40.69 | 4.11 | 3.94 | 0.41 | 8.47 | 7.96 | 11.70 | 28.12 |
| 1998 | 8.03 | 7.27 | 4.02 | 19.33 | 8.72 | 14.58 | 42.63 | 4.38 | 4.25 | 0.43 | 9.07 | 8.26 | 12.14 | 29.46 |
| 1999 | 8.72 | 7.84 | 4.39 | 20.94 | 8.98 | 15.35 | 45.27 | 4.70 | 4.63 | 0.45 | 9.78 | 8.64 | 12.33 | 30.75 |
| 2000 | 9.39 | 8.40 | 4.73 | 22.53 | 9.01 | 15.39 | 46.93 | 5.02 | 5.01 | 0.47 | 10.50 | 8.86 | 12.85 | 32.21 |
| 2001 | 9.73 | 8.72 | 4.78 | 23.23 | 9.51 | 15.26 | 48.00 | 5.22 | 5.20 | 0.48 | 10.90 | 9.34 | 13.40 | 33.63 |
| 2002 | 10.33 | 9.25 | 5.04 | 24.63 | 9.66 | 14.94 | 49.23 | 5.53 | 5.54 | 0.50 | 11.56 | 9.70 | 13.57 | 34.82 |
| 2003 | 11.03 | 9.85 | 5.37 | 26.25 | 9.94 | 14.91 | 51.11 | 5.87 | 5.93 | 0.52 | 12.32 | 9.92 | 14.05 | 36.29 |
| 2004 | 11.69 | 10.43 | 5.66 | 27.78 | 10.10 | 15.25 | 53.14 | 6.21 | 6.29 | 0.55 | 13.05 | 10.06 | 14.93 | 38.05 |
| 2005 | 12.31 | 10.98 | 5.91 | 29.20 | 10.32 | 15.45 | 54.97 | 6.54 | 6.64 | 0.57 | 13.75 | 10.24 | 15.07 | 39.05 |
| 2006 | 12.98 | 11.58 | 6.19 | 30.75 | 10.62 | 16.19 | 57.55 | 6.89 | 7.01 | 0.60 | 14.50 | 10.62 | 16.91 | 42.03 |
| 2007 | 13.01 | 12.30 | 6.53 | 31.83 | 11.46 | 15.10 | 58.39 | 7.22 | 7.58 | 0.65 | 15.45 | 10.84 | 16.44 | 42.73 |
| 2008 | 13.57 | 12.86 | 6.87 | 33.30 | 11.74 | 15.23 | 60.27 | 7.56 | 7.97 | 0.67 | 16.20 | 11.11 | 16.98 | 44.29 |
| 2009 | 14.16 | 13.44 | 7.23 | 34.83 | 12.03 | 15.37 | 62.23 | 7.93 | 8.38 | 0.69 | 16.99 | 11.39 | 17.53 | 45.92 |
| 2010 | 14.77 | 14.05 | 7.54 | 36.37 | 12.33 | 15.50 | 64.20 | 8.30 | 8.77 | 0.71 | 17.78 | 11.68 | 18.11 | 47.56 |
| 2011 | 15.41 | 14.69 | 7.86 | 37.97 | 12.64 | 15.64 | 66.24 | 8.68 | 9.19 | 0.73 | 18.60 | 11.96 | 18.70 | 49.26 |
| 2012 | 16.08 | 15.36 | 8.20 | 39.65 | 12.96 | 15.78 | 68.38 | 9.08 | 9.62 | 0.75 | 19.46 | 12.27 | 19.31 | 51.03 |
| 2013 | 16.78 | 16.06 | 8.55 | 41.40 | 13.28 | 15.92 | 70.60 | 9.50 | 10.08 | 0.77 | 20.35 | 12.58 | 19.94 | 52.87 |
| 2014 | 17.52 | 16.80 | 8.92 | 43.23 | 13.61 | 16.06 | 72.90 | 9.95 | 10.55 | 0.80 | 21.30 | 12.90 | 20.59 | 54.78 |
| 2015 | 18.28 | 17.56 | 9.31 | 45.15 | 13.95 | 16.20 | 75.30 | 10.41 | 11.05 | 0.82 | 22.28 | 13.21 | 21.26 | 56.76 |
| 2016 | 19.08 | 18.36 | 9.71 | 47.16 | 14.30 | 16.34 | 77.80 | 10.89 | 11.58 | 0.84 | 23.31 | 13.55 | 21.96 | 58.82 |
| 2017 | 19.92 | 19.20 | 10.13 | 49.25 | 14.66 | 16.48 | 80.39 | 11.40 | 12.13 | 0.87 | 24.39 | 13.89 | 22.67 | 60.96 |
| 2018 | 20.79 | 20.08 | 10.57 | 51.44 | 15.03 | 16.63 | 83.10 | 11.93 | 12.70 | 0.90 | 25.53 | 14.24 | 23.41 | 63.17 |
| 2019 | 21.71 | 21.00 | 11.03 | 53.74 | 15.40 | 16.78 | 85.91 | 12.48 | 13.30 | 0.92 | 26.71 | 14.59 | 24.18 | 65.48 |
| 2020 | 22.66 | 21.96 | 11.51 | 56.13 | 15.78 | 16.92 | 88.84 | 13.07 | 13.93 | 0.95 | 27.95 | 14.96 | 24.97 | 67.87 |
| 2021 | 23.66 | 22.96 | 12.02 | 58.64 | 16.17 | 17.07 | 91.88 | 13.68 | 14.59 | 0.98 | 29.25 | 15.34 | 25.78 | 70.37 |
| 2022 | 24.70 | 24.01 | 12.54 | 61.26 | 16.57 | 17.22 | 95.05 | 14.31 | 15.28 | 1.01 | 30.61 | 15.73 | 26.62 | 72.96 |
| 2023 | 25.79 | 25.11 | 13.10 | 64.00 | 16.98 | 17.38 | 98.36 | 14.98 | 16.01 | 1.04 | 32.03 | 16.13 | 27.49 | 75.65 |
| 2024 | 26.93 | 26.26 | 13.67 | 66.87 | 17.41 | 17.53 | 101.80 | 15.68 | 16.77 | 1.07 | 33.52 | 16.53 | 28.39 | 78.44 |
| 2025 | 28.13 | 27.46 | 14.28 | 69.86 | 17.84 | 17.68 | 105.39 | 16.41 | 17.56 | 1.11 | 35.08 | 16.95 | 29.32 | 81.34 |
| 2026 | 29.37 | 28.72 | 14.91 | 73.00 | 18.28 | 17.84 | 109.12 | 17.18 | 18.39 | 1.14 | 36.71 | 17.38 | 30.27 | 84.36 |
| 2027 | 30.68 | 30.04 | 15.57 | 76.28 | 18.74 | 18.00 | 113.01 | 17.98 | 19.27 | 1.18 | 38.42 | 17.81 | 31.26 | 87.50 |
| 2028 | 32.04 | 31.41 | 16.26 | 79.71 | 19.20 | 18.16 | 117.07 | 18.82 | 20.18 | 1.21 | 40.21 | 18.26 | 32.28 | 90.76 |
| 2029 | 33.46 | 32.85 | 16.98 | 83.30 | 19.68 | 18.32 | 121.30 | 19.70 | 21.14 | 1.25 | 42.09 | 18.72 | 33.34 | 94.15 |
| 2030 | 34.95 | 34.36 | 17.74 | 87.05 | 20.17 | 18.48 | 125.70 | 20.62 | 22.14 | 1.29 | 44.05 | 19.19 | 34.43 | 97.67 |
| 2031 | 36.51 | 35.94 | 18.53 | 90.98 | 20.67 | 18.64 | 130.29 | 21.59 | 23.19 | 1.33 | 46.11 | 19.68 | 35.55 | 101.33 |

*Note: From 1972–2006 are estimates, while from 2007–2031 are forecasts.* *Source: BITRE estimates.*

**Table 9 – Road freight estimates and forecasts (billion tkm), interstate ('from', 'to', 'through' and total), capitals, 'other intrastate' and total QLD and total SA, 1972–2031.**

| Year | Queensland | | | | | | | South Australia | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Interstate (IS) | | | | BNE | Other intra-state | Total QLD | Interstate (IS) | | | | ADL | Other intra-state | Total SA |
| | From | To | Thru | Total | | | | From | To | Thru | Total | | | |
| 1972 | 0.16 | 0.22 | 0.00 | 0.38 | 0.60 | 1.69 | 2.76 | 0.19 | 0.20 | 0.12 | 0.51 | 0.71 | 1.52 | 2.75 |
| 1973 | 0.21 | 0.28 | 0.00 | 0.49 | 0.77 | 1.68 | 2.92 | 0.23 | 0.25 | 0.17 | 0.65 | 0.75 | 1.54 | 2.95 |
| 1974 | 0.24 | 0.34 | 0.00 | 0.59 | 0.93 | 1.68 | 3.09 | 0.28 | 0.29 | 0.22 | 0.79 | 0.79 | 1.57 | 3.15 |
| 1975 | 0.26 | 0.36 | 0.00 | 0.63 | 0.99 | 1.76 | 3.27 | 0.30 | 0.31 | 0.25 | 0.86 | 0.83 | 1.67 | 3.36 |
| 1976 | 0.30 | 0.42 | 0.00 | 0.72 | 1.14 | 1.70 | 3.38 | 0.33 | 0.33 | 0.21 | 0.88 | 0.87 | 1.64 | 3.39 |
| 1977 | 0.32 | 0.44 | 0.00 | 0.76 | 1.20 | 2.22 | 4.10 | 0.35 | 0.36 | 0.23 | 0.94 | 0.94 | 1.89 | 3.76 |
| 1978 | 0.33 | 0.43 | 0.00 | 0.76 | 1.19 | 2.84 | 4.90 | 0.36 | 0.37 | 0.24 | 0.96 | 1.01 | 2.16 | 4.13 |
| 1979 | 0.36 | 0.48 | 0.00 | 0.84 | 1.32 | 3.40 | 5.73 | 0.39 | 0.40 | 0.28 | 1.08 | 1.07 | 2.33 | 4.48 |
| 1980 | 0.41 | 0.55 | 0.00 | 0.96 | 1.52 | 3.69 | 6.33 | 0.45 | 0.45 | 0.35 | 1.25 | 1.05 | 2.52 | 4.83 |
| 1981 | 0.45 | 0.59 | 0.00 | 1.04 | 1.63 | 4.07 | 6.97 | 0.48 | 0.49 | 0.40 | 1.38 | 1.03 | 2.77 | 5.17 |
| 1982 | 0.48 | 0.63 | 0.00 | 1.11 | 1.75 | 4.46 | 7.62 | 0.52 | 0.53 | 0.45 | 1.50 | 1.00 | 3.02 | 5.51 |
| 1983 | 0.43 | 0.53 | 0.00 | 0.96 | 1.49 | 5.40 | 8.51 | 0.47 | 0.50 | 0.37 | 1.34 | 1.04 | 3.51 | 5.89 |
| 1984 | 0.54 | 0.69 | 0.00 | 1.23 | 1.91 | 5.68 | 9.15 | 0.60 | 0.60 | 0.53 | 1.73 | 1.08 | 3.57 | 6.38 |
| 1985 | 0.56 | 0.69 | 0.00 | 1.26 | 1.95 | 6.39 | 9.98 | 0.64 | 0.63 | 0.55 | 1.82 | 1.12 | 3.88 | 6.82 |
| 1986 | 0.64 | 0.79 | 0.00 | 1.43 | 2.21 | 6.74 | 10.64 | 0.74 | 0.72 | 0.65 | 2.11 | 1.19 | 3.70 | 6.99 |
| 1987 | 0.65 | 0.78 | 0.00 | 1.43 | 2.20 | 7.41 | 11.45 | 0.76 | 0.76 | 0.64 | 2.16 | 1.26 | 3.66 | 7.08 |
| 1988 | 0.74 | 0.89 | 0.00 | 1.62 | 2.51 | 7.73 | 12.11 | 0.89 | 0.88 | 0.76 | 2.53 | 1.33 | 3.43 | 7.28 |
| 1989 | 0.82 | 0.98 | 0.00 | 1.80 | 2.78 | 7.92 | 12.55 | 1.02 | 1.00 | 0.87 | 2.89 | 1.36 | 3.23 | 7.48 |
| 1990 | 0.86 | 1.02 | 0.00 | 1.89 | 2.91 | 8.29 | 13.09 | 1.11 | 1.09 | 0.91 | 3.11 | 1.40 | 3.10 | 7.61 |
| 1991 | 0.88 | 1.01 | 0.00 | 1.89 | 2.89 | 8.85 | 13.74 | 1.15 | 1.14 | 0.88 | 3.17 | 1.43 | 3.04 | 7.65 |
| 1992 | 0.89 | 1.00 | 0.00 | 1.89 | 2.89 | 9.98 | 15.03 | 1.20 | 1.21 | 0.88 | 3.29 | 1.50 | 3.34 | 8.13 |
| 1993 | 0.98 | 1.09 | 0.00 | 2.07 | 3.15 | 10.73 | 16.12 | 1.39 | 1.39 | 1.02 | 3.80 | 1.56 | 3.51 | 8.87 |
| 1994 | 1.05 | 1.15 | 0.00 | 2.20 | 3.36 | 11.56 | 17.25 | 1.50 | 1.50 | 1.01 | 4.02 | 1.62 | 3.71 | 9.35 |
| 1995 | 1.13 | 1.22 | 0.00 | 2.35 | 3.57 | 12.40 | 18.39 | 1.67 | 1.67 | 1.07 | 4.41 | 1.68 | 3.90 | 9.99 |
| 1996 | 1.26 | 1.36 | 0.00 | 2.62 | 3.98 | 12.73 | 19.19 | 1.84 | 1.83 | 1.05 | 4.72 | 1.75 | 3.99 | 10.46 |
| 1997 | 1.37 | 1.47 | 0.00 | 2.84 | 4.31 | 13.18 | 20.07 | 1.98 | 1.96 | 0.99 | 4.93 | 1.82 | 4.12 | 10.88 |
| 1998 | 1.48 | 1.58 | 0.00 | 3.07 | 4.65 | 13.60 | 20.94 | 2.12 | 2.09 | 0.95 | 5.16 | 1.89 | 4.26 | 11.31 |
| 1999 | 1.62 | 1.72 | 0.00 | 3.34 | 5.06 | 13.74 | 21.74 | 2.20 | 2.15 | 0.91 | 5.26 | 1.93 | 4.35 | 11.54 |
| 2000 | 1.76 | 1.85 | 0.00 | 3.62 | 5.47 | 14.10 | 22.58 | 2.27 | 2.21 | 0.87 | 5.35 | 1.93 | 4.56 | 11.85 |
| 2001 | 1.83 | 1.89 | 0.00 | 3.73 | 5.62 | 14.98 | 24.00 | 2.28 | 2.24 | 0.83 | 5.35 | 2.02 | 4.80 | 12.17 |
| 2002 | 1.96 | 2.00 | 0.00 | 3.96 | 5.97 | 15.52 | 25.16 | 2.37 | 2.33 | 0.82 | 5.52 | 2.07 | 4.94 | 12.53 |
| 2003 | 2.11 | 2.13 | 0.00 | 4.24 | 6.37 | 15.75 | 26.06 | 2.49 | 2.45 | 0.82 | 5.76 | 2.17 | 5.38 | 13.31 |
| 2004 | 2.25 | 2.24 | 0.00 | 4.49 | 6.74 | 16.39 | 27.27 | 2.64 | 2.60 | 0.87 | 6.11 | 2.23 | 5.68 | 14.01 |
| 2005 | 2.38 | 2.34 | 0.00 | 4.72 | 7.07 | 16.17 | 27.65 | 2.80 | 2.77 | 0.93 | 6.50 | 2.35 | 5.44 | 14.29 |
| 2006 | 2.53 | 2.46 | 0.00 | 4.98 | 7.44 | 17.32 | 29.38 | 2.95 | 2.94 | 0.98 | 6.87 | 2.48 | 5.89 | 15.23 |
| 2007 | 2.51 | 2.59 | 0.00 | 5.10 | 7.69 | 17.90 | 29.07 | 3.35 | 3.12 | 0.92 | 7.39 | 2.30 | 5.09 | 14.78 |
| 2008 | 2.64 | 2.71 | 0.00 | 5.35 | 8.06 | 18.51 | 30.11 | 3.53 | 3.30 | 0.95 | 7.78 | 2.35 | 5.16 | 15.28 |
| 2009 | 2.78 | 2.83 | 0.00 | 5.61 | 8.44 | 19.13 | 31.20 | 3.72 | 3.48 | 0.99 | 8.18 | 2.39 | 5.23 | 15.81 |
| 2010 | 2.91 | 2.96 | 0.00 | 5.87 | 8.82 | 19.78 | 32.31 | 3.89 | 3.64 | 1.03 | 8.56 | 2.44 | 5.31 | 16.31 |
| 2011 | 3.05 | 3.09 | 0.00 | 6.14 | 9.23 | 20.45 | 33.47 | 4.08 | 3.81 | 1.06 | 8.95 | 2.48 | 5.39 | 16.82 |
| 2012 | 3.20 | 3.23 | 0.00 | 6.43 | 9.65 | 21.14 | 34.66 | 4.28 | 3.99 | 1.10 | 9.37 | 2.54 | 5.46 | 17.37 |
| 2013 | 3.35 | 3.37 | 0.00 | 6.73 | 10.10 | 21.85 | 35.90 | 4.48 | 4.18 | 1.14 | 9.80 | 2.59 | 5.54 | 17.93 |
| 2014 | 3.51 | 3.53 | 0.00 | 7.04 | 10.57 | 22.59 | 37.18 | 4.70 | 4.38 | 1.18 | 10.25 | 2.64 | 5.62 | 18.51 |
| 2015 | 3.68 | 3.69 | 0.00 | 7.37 | 11.06 | 23.35 | 38.50 | 4.92 | 4.58 | 1.22 | 10.73 | 2.69 | 5.70 | 19.12 |
| 2016 | 3.86 | 3.86 | 0.00 | 7.71 | 11.57 | 24.14 | 39.88 | 5.16 | 4.80 | 1.27 | 11.23 | 2.74 | 5.78 | 19.75 |
| 2017 | 4.04 | 4.03 | 0.00 | 8.07 | 12.10 | 24.96 | 41.31 | 5.41 | 5.03 | 1.31 | 11.75 | 2.79 | 5.87 | 20.41 |
| 2018 | 4.23 | 4.22 | 0.00 | 8.45 | 12.67 | 25.80 | 42.79 | 5.67 | 5.27 | 1.36 | 12.30 | 2.85 | 5.95 | 21.10 |
| 2019 | 4.44 | 4.41 | 0.00 | 8.85 | 13.26 | 26.67 | 44.32 | 5.94 | 5.52 | 1.41 | 12.87 | 2.91 | 6.04 | 21.81 |
| 2020 | 4.65 | 4.61 | 0.00 | 9.26 | 13.87 | 27.58 | 45.92 | 6.23 | 5.78 | 1.46 | 13.47 | 2.96 | 6.13 | 22.56 |
| 2021 | 4.87 | 4.82 | 0.00 | 9.70 | 14.52 | 28.51 | 47.57 | 6.53 | 6.06 | 1.52 | 14.10 | 3.01 | 6.21 | 23.33 |
| 2022 | 5.10 | 5.05 | 0.00 | 10.15 | 15.20 | 29.47 | 49.28 | 6.84 | 6.35 | 1.57 | 14.77 | 3.07 | 6.30 | 24.14 |
| 2023 | 5.35 | 5.28 | 0.00 | 10.63 | 15.91 | 30.47 | 51.06 | 7.18 | 6.65 | 1.63 | 15.46 | 3.13 | 6.39 | 24.98 |
| 2024 | 5.61 | 5.52 | 0.00 | 11.13 | 16.65 | 31.49 | 52.90 | 7.52 | 6.97 | 1.69 | 16.19 | 3.18 | 6.49 | 25.86 |
| 2025 | 5.88 | 5.78 | 0.00 | 11.65 | 17.43 | 32.56 | 54.81 | 7.89 | 7.31 | 1.75 | 16.95 | 3.24 | 6.58 | 26.77 |
| 2026 | 6.16 | 6.05 | 0.00 | 12.20 | 18.25 | 33.66 | 56.79 | 8.27 | 7.66 | 1.82 | 17.75 | 3.30 | 6.67 | 27.73 |
| 2027 | 6.45 | 6.33 | 0.00 | 12.78 | 19.11 | 34.80 | 58.84 | 8.68 | 8.03 | 1.89 | 18.59 | 3.36 | 6.77 | 28.73 |
| 2028 | 6.76 | 6.62 | 0.00 | 13.38 | 20.01 | 35.97 | 60.97 | 9.10 | 8.41 | 1.96 | 19.47 | 3.43 | 6.87 | 29.76 |
| 2029 | 7.09 | 6.93 | 0.00 | 14.02 | 20.95 | 37.19 | 63.18 | 9.54 | 8.82 | 2.03 | 20.39 | 3.49 | 6.97 | 30.85 |
| 2030 | 7.43 | 7.25 | 0.00 | 14.68 | 21.93 | 38.44 | 65.48 | 10.01 | 9.25 | 2.11 | 21.36 | 3.55 | 7.07 | 31.98 |
| 2031 | 7.78 | 7.59 | 0.00 | 15.38 | 22.97 | 39.74 | 67.86 | 10.50 | 9.69 | 2.18 | 22.38 | 3.62 | 7.17 | 33.16 |

*Note: From 1972–2006 are estimates, while from 2007–2031 are forecasts.* *Source: BITRE estimates.*

**Table 10 – Road freight estimates and forecasts (billion tkm), interstate ('from', 'to', 'through' and total), capitals, 'other intrastate' and total WA and total TAS, 1972–2031.**

| Year | Western Australia | | | | | | | Tasmania | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Interstate (IS) | | | | PER | Other intra-state | Total WA | Interstate (IS) | | | | HOB | Other intra-state | Total TAS |
| | From | To | Thru | Total | | | | From | To | Thru | Total | | | |
| 1972 | 0.10 | 0.08 | 0.00 | 0.17 | 0.84 | 2.10 | 3.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.52 | 0.65 |
| 1973 | 0.14 | 0.11 | 0.00 | 0.25 | 0.90 | 2.06 | 3.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.53 | 0.66 |
| 1974 | 0.18 | 0.16 | 0.00 | 0.34 | 0.95 | 2.02 | 3.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.53 | 0.68 |
| 1975 | 0.21 | 0.18 | 0.00 | 0.38 | 1.00 | 2.05 | 3.44 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.57 | 0.73 |
| 1976 | 0.18 | 0.15 | 0.00 | 0.32 | 1.06 | 1.93 | 3.31 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.55 | 0.73 |
| 1977 | 0.20 | 0.16 | 0.00 | 0.36 | 1.15 | 2.25 | 3.76 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.64 | 0.83 |
| 1978 | 0.20 | 0.17 | 0.00 | 0.37 | 1.25 | 2.61 | 4.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.73 | 0.94 |
| 1979 | 0.24 | 0.20 | 0.00 | 0.44 | 1.34 | 2.86 | 4.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 | 0.80 | 1.03 |
| 1980 | 0.29 | 0.25 | 0.00 | 0.54 | 1.42 | 3.09 | 5.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.87 | 1.10 |
| 1981 | 0.34 | 0.29 | 0.00 | 0.62 | 1.50 | 3.38 | 5.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.95 | 1.20 |
| 1982 | 0.38 | 0.32 | 0.00 | 0.70 | 1.58 | 3.68 | 5.96 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 1.04 | 1.29 |
| 1983 | 0.32 | 0.27 | 0.00 | 0.59 | 1.63 | 4.35 | 6.56 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 1.21 | 1.49 |
| 1984 | 0.46 | 0.40 | 0.00 | 0.85 | 1.67 | 4.48 | 7.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 1.24 | 1.53 |
| 1985 | 0.48 | 0.42 | 0.00 | 0.91 | 1.72 | 4.93 | 7.55 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 | 1.35 | 1.67 |
| 1986 | 0.59 | 0.52 | 0.00 | 1.12 | 1.82 | 5.29 | 8.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 | 1.40 | 1.73 |
| 1987 | 0.61 | 0.54 | 0.00 | 1.15 | 1.93 | 5.91 | 8.98 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 1.52 | 1.86 |
| 1988 | 0.75 | 0.67 | 0.00 | 1.42 | 2.04 | 6.25 | 9.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 1.57 | 1.91 |
| 1989 | 0.89 | 0.81 | 0.00 | 1.69 | 2.12 | 6.14 | 9.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 1.52 | 1.87 |
| 1990 | 0.97 | 0.89 | 0.00 | 1.86 | 2.20 | 6.18 | 10.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 1.52 | 1.87 |
| 1991 | 0.98 | 0.90 | 0.00 | 1.88 | 2.29 | 6.35 | 10.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 1.54 | 1.90 |
| 1992 | 1.03 | 0.94 | 0.00 | 1.97 | 2.40 | 7.03 | 11.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 1.70 | 2.05 |
| 1993 | 1.25 | 1.16 | 0.00 | 2.40 | 2.51 | 7.43 | 12.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 1.78 | 2.13 |
| 1994 | 1.30 | 1.21 | 0.00 | 2.51 | 2.63 | 7.87 | 13.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 1.88 | 2.21 |
| 1995 | 1.46 | 1.36 | 0.00 | 2.82 | 2.74 | 8.28 | 13.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 | 1.97 | 2.30 |
| 1996 | 1.52 | 1.42 | 0.00 | 2.94 | 2.85 | 8.53 | 14.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.31 | 1.98 | 2.29 |
| 1997 | 1.54 | 1.44 | 0.00 | 2.98 | 2.96 | 8.85 | 14.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 2.01 | 2.30 |
| 1998 | 1.57 | 1.47 | 0.00 | 3.03 | 3.07 | 9.15 | 15.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 2.03 | 2.29 |
| 1999 | 1.50 | 1.40 | 0.00 | 2.90 | 3.18 | 9.31 | 15.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 1.96 | 2.24 |
| 2000 | 1.44 | 1.33 | 0.00 | 2.77 | 3.28 | 9.27 | 15.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 1.98 | 2.25 |
| 2001 | 1.37 | 1.26 | 0.00 | 2.63 | 3.47 | 9.42 | 15.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 2.06 | 2.35 |
| 2002 | 1.36 | 1.25 | 0.00 | 2.60 | 3.62 | 10.06 | 16.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 2.02 | 2.31 |
| 2003 | 1.37 | 1.26 | 0.00 | 2.62 | 3.74 | 10.49 | 16.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.31 | 2.04 | 2.34 |
| 2004 | 1.45 | 1.33 | 0.00 | 2.78 | 3.98 | 10.90 | 17.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 | 2.11 | 2.44 |
| 2005 | 1.56 | 1.44 | 0.00 | 3.00 | 4.10 | 10.86 | 17.96 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 2.06 | 2.40 |
| 2006 | 1.64 | 1.52 | 0.00 | 3.16 | 4.47 | 12.58 | 20.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.42 | 1.97 | 2.39 |
| 2007 | 1.73 | 1.80 | 0.00 | 3.53 | 4.20 | 11.99 | 19.73 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 2.12 | 2.46 |
| 2008 | 1.83 | 1.89 | 0.00 | 3.72 | 4.33 | 12.36 | 20.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 2.15 | 2.49 |
| 2009 | 1.94 | 1.99 | 0.00 | 3.93 | 4.45 | 12.73 | 21.11 | 0.00 | 0.00 | 0.00 | 0.00 | 0.35 | 2.18 | 2.53 |
| 2010 | 2.03 | 2.07 | 0.00 | 4.11 | 4.58 | 13.12 | 21.81 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 2.21 | 2.57 |
| 2011 | 2.13 | 2.16 | 0.00 | 4.29 | 4.72 | 13.52 | 22.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 2.23 | 2.60 |
| 2012 | 2.24 | 2.26 | 0.00 | 4.49 | 4.85 | 13.93 | 23.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 2.26 | 2.63 |
| 2013 | 2.34 | 2.35 | 0.00 | 4.70 | 4.99 | 14.35 | 24.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 2.29 | 2.67 |
| 2014 | 2.46 | 2.46 | 0.00 | 4.91 | 5.14 | 14.79 | 24.84 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 2.32 | 2.71 |
| 2015 | 2.58 | 2.56 | 0.00 | 5.14 | 5.29 | 15.24 | 25.67 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 2.35 | 2.75 |
| 2016 | 2.70 | 2.68 | 0.00 | 5.38 | 5.44 | 15.70 | 26.52 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 2.39 | 2.79 |
| 2017 | 2.83 | 2.80 | 0.00 | 5.63 | 5.60 | 16.18 | 27.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 2.42 | 2.82 |
| 2018 | 2.97 | 2.92 | 0.00 | 5.89 | 5.75 | 16.67 | 28.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 2.45 | 2.86 |
| 2019 | 3.12 | 3.05 | 0.00 | 6.17 | 5.92 | 17.18 | 29.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.42 | 2.48 | 2.90 |
| 2020 | 3.27 | 3.19 | 0.00 | 6.45 | 6.09 | 17.70 | 30.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.43 | 2.51 | 2.94 |
| 2021 | 3.43 | 3.33 | 0.00 | 6.76 | 6.27 | 18.24 | 31.26 | 0.00 | 0.00 | 0.00 | 0.00 | 0.43 | 2.55 | 2.98 |
| 2022 | 3.59 | 3.48 | 0.00 | 7.07 | 6.45 | 18.79 | 32.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 2.58 | 3.02 |
| 2023 | 3.77 | 3.64 | 0.00 | 7.40 | 6.64 | 19.37 | 33.41 | 0.00 | 0.00 | 0.00 | 0.00 | 0.45 | 2.61 | 3.06 |
| 2024 | 3.95 | 3.80 | 0.00 | 7.75 | 6.83 | 19.95 | 34.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.46 | 2.65 | 3.10 |
| 2025 | 4.15 | 3.97 | 0.00 | 8.12 | 7.03 | 20.56 | 35.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.46 | 2.68 | 3.15 |
| 2026 | 4.35 | 4.15 | 0.00 | 8.50 | 7.23 | 21.19 | 36.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.47 | 2.72 | 3.19 |
| 2027 | 4.56 | 4.34 | 0.00 | 8.90 | 7.44 | 21.83 | 38.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 2.75 | 3.23 |
| 2028 | 4.78 | 4.54 | 0.00 | 9.32 | 7.65 | 22.49 | 39.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 2.79 | 3.28 |
| 2029 | 5.02 | 4.75 | 0.00 | 9.77 | 7.87 | 23.18 | 40.82 | 0.00 | 0.00 | 0.00 | 0.00 | 0.50 | 2.83 | 3.32 |
| 2030 | 5.26 | 4.97 | 0.00 | 10.23 | 8.10 | 23.88 | 42.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 | 2.86 | 3.37 |
| 2031 | 5.52 | 5.20 | 0.00 | 10.72 | 8.33 | 24.61 | 43.66 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 | 2.90 | 3.41 |

*Note: From 1972–2006 are estimates, while from 2007–2031 are forecasts.* *Source: BITRE estimates.*

**Table 11 – Road freight estimates and forecasts (billion tkm), interstate ('from', 'to', 'through' and total), capitals, 'other intrastate' and total NT and total ACT, 1972–2031.**

| Year | Northern Territory | | | | | | | Australian Capital Territory | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Interstate (IS) | | | | DRW | Other intra-state | Total NT | Interstate (IS) | | | | CBR | Other intra-state | Total ACT |
| | From | To | Thru | Total | | | | From | To | Thru | Total | | | |
| 1972 | 0.08 | 0.10 | 0.00 | 0.18 | 0.05 | 0.47 | 0.70 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.11 |
| 1973 | 0.10 | 0.12 | 0.00 | 0.22 | 0.05 | 0.50 | 0.77 | 0.00 | 0.00 | 0.00 | 0.01 | 0.11 | 0.00 | 0.12 |
| 1974 | 0.11 | 0.14 | 0.00 | 0.25 | 0.06 | 0.53 | 0.84 | 0.00 | 0.01 | 0.00 | 0.01 | 0.12 | 0.00 | 0.13 |
| 1975 | 0.12 | 0.15 | 0.00 | 0.27 | 0.06 | 0.58 | 0.91 | 0.00 | 0.01 | 0.00 | 0.01 | 0.13 | 0.00 | 0.13 |
| 1976 | 0.13 | 0.17 | 0.00 | 0.30 | 0.06 | 0.59 | 0.95 | 0.00 | 0.01 | 0.00 | 0.01 | 0.13 | 0.00 | 0.14 |
| 1977 | 0.13 | 0.18 | 0.00 | 0.31 | 0.06 | 0.68 | 1.06 | 0.00 | 0.01 | 0.00 | 0.01 | 0.15 | 0.00 | 0.15 |
| 1978 | 0.14 | 0.18 | 0.00 | 0.32 | 0.06 | 0.79 | 1.17 | 0.00 | 0.01 | 0.00 | 0.01 | 0.16 | 0.00 | 0.16 |
| 1979 | 0.15 | 0.20 | 0.00 | 0.34 | 0.06 | 0.87 | 1.27 | 0.00 | 0.01 | 0.00 | 0.01 | 0.17 | 0.00 | 0.18 |
| 1980 | 0.16 | 0.22 | 0.00 | 0.38 | 0.09 | 0.95 | 1.42 | 0.00 | 0.01 | 0.00 | 0.01 | 0.18 | 0.00 | 0.19 |
| 1981 | 0.17 | 0.23 | 0.00 | 0.41 | 0.13 | 1.05 | 1.59 | 0.00 | 0.01 | 0.00 | 0.01 | 0.19 | 0.00 | 0.20 |
| 1982 | 0.18 | 0.25 | 0.00 | 0.43 | 0.17 | 1.15 | 1.76 | 0.00 | 0.01 | 0.00 | 0.01 | 0.20 | 0.00 | 0.21 |
| 1983 | 0.17 | 0.23 | 0.00 | 0.40 | 0.18 | 1.33 | 1.91 | 0.00 | 0.01 | 0.00 | 0.01 | 0.20 | 0.00 | 0.21 |
| 1984 | 0.20 | 0.27 | 0.00 | 0.47 | 0.19 | 1.35 | 2.01 | 0.00 | 0.01 | 0.00 | 0.01 | 0.21 | 0.00 | 0.22 |
| 1985 | 0.20 | 0.28 | 0.00 | 0.49 | 0.21 | 1.45 | 2.14 | 0.00 | 0.01 | 0.00 | 0.01 | 0.22 | 0.00 | 0.23 |
| 1986 | 0.22 | 0.31 | 0.00 | 0.54 | 0.21 | 1.46 | 2.21 | 0.00 | 0.01 | 0.00 | 0.01 | 0.23 | 0.00 | 0.25 |
| 1987 | 0.23 | 0.32 | 0.00 | 0.54 | 0.21 | 1.54 | 2.30 | 0.00 | 0.01 | 0.00 | 0.01 | 0.24 | 0.00 | 0.26 |
| 1988 | 0.25 | 0.35 | 0.00 | 0.60 | 0.21 | 1.54 | 2.35 | 0.00 | 0.01 | 0.00 | 0.02 | 0.26 | 0.00 | 0.27 |
| 1989 | 0.27 | 0.38 | 0.00 | 0.65 | 0.22 | 1.57 | 2.44 | 0.00 | 0.01 | 0.00 | 0.02 | 0.26 | 0.00 | 0.28 |
| 1990 | 0.28 | 0.40 | 0.00 | 0.68 | 0.23 | 1.63 | 2.54 | 0.00 | 0.01 | 0.00 | 0.02 | 0.27 | 0.00 | 0.29 |
| 1991 | 0.28 | 0.40 | 0.00 | 0.69 | 0.24 | 1.73 | 2.66 | 0.00 | 0.01 | 0.00 | 0.02 | 0.28 | 0.00 | 0.30 |
| 1992 | 0.29 | 0.41 | 0.00 | 0.69 | 0.24 | 1.87 | 2.81 | 0.00 | 0.01 | 0.00 | 0.02 | 0.27 | 0.00 | 0.29 |
| 1993 | 0.31 | 0.44 | 0.00 | 0.75 | 0.24 | 1.93 | 2.91 | 0.00 | 0.02 | 0.00 | 0.02 | 0.27 | 0.00 | 0.29 |
| 1994 | 0.32 | 0.47 | 0.00 | 0.79 | 0.23 | 1.98 | 3.00 | 0.00 | 0.02 | 0.00 | 0.02 | 0.26 | 0.00 | 0.28 |
| 1995 | 0.34 | 0.49 | 0.00 | 0.83 | 0.23 | 2.01 | 3.07 | 0.00 | 0.02 | 0.00 | 0.02 | 0.25 | 0.00 | 0.27 |
| 1996 | 0.37 | 0.54 | 0.00 | 0.91 | 0.23 | 1.86 | 3.00 | 0.01 | 0.02 | 0.00 | 0.02 | 0.24 | 0.00 | 0.27 |
| 1997 | 0.39 | 0.58 | 0.00 | 0.97 | 0.24 | 1.71 | 2.91 | 0.01 | 0.02 | 0.00 | 0.03 | 0.24 | 0.00 | 0.27 |
| 1998 | 0.42 | 0.62 | 0.00 | 1.03 | 0.24 | 1.54 | 2.82 | 0.01 | 0.02 | 0.00 | 0.03 | 0.24 | 0.00 | 0.27 |
| 1999 | 0.45 | 0.66 | 0.00 | 1.11 | 0.23 | 1.45 | 2.79 | 0.01 | 0.02 | 0.00 | 0.03 | 0.24 | 0.00 | 0.27 |
| 2000 | 0.48 | 0.71 | 0.00 | 1.19 | 0.22 | 1.44 | 2.84 | 0.01 | 0.02 | 0.00 | 0.03 | 0.24 | 0.00 | 0.27 |
| 2001 | 0.49 | 0.73 | 0.00 | 1.22 | 0.21 | 1.46 | 2.89 | 0.01 | 0.03 | 0.00 | 0.03 | 0.23 | 0.00 | 0.26 |
| 2002 | 0.52 | 0.77 | 0.00 | 1.29 | 0.19 | 1.46 | 2.93 | 0.01 | 0.03 | 0.00 | 0.03 | 0.24 | 0.00 | 0.27 |
| 2003 | 0.54 | 0.82 | 0.00 | 1.36 | 0.18 | 1.18 | 2.73 | 0.01 | 0.03 | 0.00 | 0.04 | 0.25 | 0.00 | 0.29 |
| 2004 | 0.57 | 0.86 | 0.00 | 1.43 | 0.18 | 1.17 | 2.79 | 0.01 | 0.03 | 0.00 | 0.04 | 0.26 | 0.00 | 0.30 |
| 2005 | 0.59 | 0.90 | 0.00 | 1.50 | 0.21 | 1.10 | 2.80 | 0.01 | 0.03 | 0.00 | 0.04 | 0.27 | 0.00 | 0.31 |
| 2006 | 0.62 | 0.95 | 0.00 | 1.57 | 0.27 | 0.92 | 2.75 | 0.01 | 0.03 | 0.00 | 0.04 | 0.30 | 0.00 | 0.34 |
| 2007 | 0.89 | 0.68 | 0.00 | 1.57 | 0.22 | 1.12 | 2.91 | 0.01 | 0.03 | 0.00 | 0.04 | 0.29 | 0.00 | 0.33 |
| 2008 | 0.93 | 0.71 | 0.00 | 1.64 | 0.23 | 1.10 | 2.97 | 0.01 | 0.03 | 0.00 | 0.04 | 0.30 | 0.00 | 0.34 |
| 2009 | 0.97 | 0.74 | 0.00 | 1.70 | 0.24 | 1.08 | 3.03 | 0.01 | 0.03 | 0.00 | 0.04 | 0.31 | 0.00 | 0.35 |
| 2010 | 1.01 | 0.77 | 0.00 | 1.78 | 0.25 | 1.06 | 3.09 | 0.01 | 0.03 | 0.00 | 0.04 | 0.31 | 0.00 | 0.36 |
| 2011 | 1.05 | 0.80 | 0.00 | 1.85 | 0.26 | 1.04 | 3.15 | 0.01 | 0.03 | 0.00 | 0.05 | 0.32 | 0.00 | 0.37 |
| 2012 | 1.10 | 0.83 | 0.00 | 1.93 | 0.26 | 1.02 | 3.21 | 0.01 | 0.03 | 0.00 | 0.05 | 0.33 | 0.00 | 0.38 |
| 2013 | 1.15 | 0.86 | 0.00 | 2.01 | 0.27 | 1.01 | 3.28 | 0.01 | 0.04 | 0.00 | 0.05 | 0.34 | 0.00 | 0.39 |
| 2014 | 1.20 | 0.90 | 0.00 | 2.10 | 0.27 | 0.99 | 3.36 | 0.01 | 0.04 | 0.00 | 0.05 | 0.35 | 0.00 | 0.40 |
| 2015 | 1.25 | 0.93 | 0.00 | 2.19 | 0.28 | 0.97 | 3.44 | 0.01 | 0.04 | 0.00 | 0.05 | 0.36 | 0.00 | 0.41 |
| 2016 | 1.31 | 0.97 | 0.00 | 2.28 | 0.29 | 0.95 | 3.52 | 0.01 | 0.04 | 0.00 | 0.05 | 0.36 | 0.00 | 0.41 |
| 2017 | 1.37 | 1.01 | 0.00 | 2.37 | 0.30 | 0.93 | 3.61 | 0.02 | 0.04 | 0.00 | 0.05 | 0.37 | 0.00 | 0.42 |
| 2018 | 1.43 | 1.05 | 0.00 | 2.48 | 0.31 | 0.92 | 3.70 | 0.02 | 0.04 | 0.00 | 0.06 | 0.38 | 0.00 | 0.44 |
| 2019 | 1.49 | 1.09 | 0.00 | 2.58 | 0.33 | 0.90 | 3.81 | 0.02 | 0.04 | 0.00 | 0.06 | 0.39 | 0.00 | 0.45 |
| 2020 | 1.56 | 1.13 | 0.00 | 2.69 | 0.34 | 0.88 | 3.91 | 0.02 | 0.04 | 0.00 | 0.06 | 0.40 | 0.00 | 0.46 |
| 2021 | 1.63 | 1.18 | 0.00 | 2.81 | 0.34 | 0.87 | 4.02 | 0.02 | 0.04 | 0.00 | 0.06 | 0.41 | 0.00 | 0.47 |
| 2022 | 1.70 | 1.22 | 0.00 | 2.92 | 0.35 | 0.85 | 4.13 | 0.02 | 0.05 | 0.00 | 0.06 | 0.42 | 0.00 | 0.48 |
| 2023 | 1.78 | 1.27 | 0.00 | 3.05 | 0.36 | 0.84 | 4.25 | 0.02 | 0.05 | 0.00 | 0.07 | 0.43 | 0.00 | 0.49 |
| 2024 | 1.86 | 1.32 | 0.00 | 3.18 | 0.37 | 0.82 | 4.38 | 0.02 | 0.05 | 0.00 | 0.07 | 0.44 | 0.00 | 0.51 |
| 2025 | 1.94 | 1.38 | 0.00 | 3.32 | 0.39 | 0.81 | 4.51 | 0.02 | 0.05 | 0.00 | 0.07 | 0.45 | 0.00 | 0.52 |
| 2026 | 2.03 | 1.43 | 0.00 | 3.46 | 0.40 | 0.79 | 4.65 | 0.02 | 0.05 | 0.00 | 0.07 | 0.46 | 0.00 | 0.53 |
| 2027 | 2.12 | 1.49 | 0.00 | 3.61 | 0.41 | 0.78 | 4.79 | 0.02 | 0.05 | 0.00 | 0.08 | 0.47 | 0.00 | 0.54 |
| 2028 | 2.21 | 1.55 | 0.00 | 3.76 | 0.42 | 0.76 | 4.95 | 0.03 | 0.05 | 0.00 | 0.08 | 0.48 | 0.00 | 0.56 |
| 2029 | 2.31 | 1.61 | 0.00 | 3.92 | 0.44 | 0.75 | 5.11 | 0.03 | 0.06 | 0.00 | 0.08 | 0.49 | 0.00 | 0.57 |
| 2030 | 2.41 | 1.68 | 0.00 | 4.09 | 0.45 | 0.74 | 5.28 | 0.03 | 0.06 | 0.00 | 0.08 | 0.50 | 0.00 | 0.59 |
| 2031 | 2.52 | 1.74 | 0.00 | 4.27 | 0.46 | 0.72 | 5.45 | 0.03 | 0.06 | 0.00 | 0.09 | 0.51 | 0.00 | 0.60 |

*Note: From 1972–2006 are estimates, while from 2007–2031 are forecasts.* *Source: BITRE estimates*