



Australian Government

Department of Transport and Regional Services

Bureau of Transport and Regional Economics



Passenger movements between Australian cities, 1970–71 to 2030–31

Information sheet 26

BTRE has recently completed estimates of passenger movements by various modes (i.e. air, car, coach and rail) between major Australian cities (covering ten main routes) from 1970–71 to 2003–04 and predicted passenger flows up to 2030–31.

An examination of this data shows some interesting results emerging.

Passenger movements between 1970–71 and 2003–04

1. Intercity passenger movements (in terms of passenger-kilometres) have grown over the period from 1970–71 to 2003–04 at an average annual growth rate of 3.9 per cent (Figure 1). However, travel on each of the three long corridors (Eastern States–Perth, Eastern States–Northern Territory and Melbourne–Brisbane) has grown at more than five per cent per year, while travel on each of the other seven routes has grown at less than four per cent annually. The faster growth on the longer routes reflects the fact that, after deregulation, the airlines cut fares more on longer routes than on shorter routes. As well, Perth, Brisbane and the Northern Territory have had faster population growth.

2. Air travel grew at 5.9 per cent per annum from 1970–71 to 2003–04, faster than the growth in total passenger kilometres.
3. Car travel grew at 2.0 per cent per annum from 1970–71 to 2003–04.
4. Coach travel grew only 1.1 per cent per annum from 1970–71 to 2003–04. From 1970–71 until 1988–89, coach travel grew at 7.4 per cent per annum (deregulation of the coach companies occurred during this period). Following air deregulation in 1990–91, coach travel declined at 6.3 per cent per annum to 2003–04.
5. Rail travel declined 0.9 per cent per annum between 1970–71 and 2003–04.

Passenger forecasts between 2004–05 and 2030–31

Forecasts by route to 2030–31 were made using a gravity model, with total passenger travel growing slightly more than one to one with growth of national Gross Domestic Product (GDP) per capita and 0.5 to one with real cost of travel declines. Mode shares were then determined by trend extrapolation. Details will be provided in a forthcoming BTRE publication on its OZPASS model.

1. Total passenger kilometres are forecast to grow at an average annual rate of 2.5 per cent, slower than the past growth rate. In the 1990s, travel growth was boosted by airline deregulation and by economic growth that was faster than what is forecast to 2030–31.
2. Between 2004–05 and 2030–31, air travel is expected to grow annually by 2.9 per cent, car travel by 1.6 per cent and rail travel by 0.6 per cent. By contrast, coach travel is expected to decline by 0.6 per cent per year.
4. Passenger travel on the Melbourne–Adelaide route (643 km) grew 2.7 per cent per annum. The forecast growth rate is 2.2 per cent each year.
5. Travel on the Sydney–Adelaide route (1167 km) grew annually by 3.5 per cent, while the forecast growth rate is 2.1 per cent per annum. The modal share of air has grown from 37 per cent in 1970–71 to 82 per cent in 2003–04 and is expected to grow to 91 per cent by 2030–31.
6. Passenger movements on the Melbourne and Sydney–Gold Coast route (average about 1000 km) grew 3.8 per cent per annum. The modal share of air has grown from 20 per cent in 1970–71 to 66 per cent in 2003–04. The Gold Coast being a predominantly tourist destination, the shift from car to air following deregulation was faster on this corridor than on other corridors. The forecast growth rate is expected to drop to 3.0 per cent, with further gains in air mode share at the expense of car.
7. Passenger movements on the Canberra–Sydney route (236 km) grew 3.8 per cent per annum during 1970–71 to 2003–04. Following the construction of the new Hume Highway in the early 1980s, passenger movement grew sharply. The forecast growth rate is 2.0 per cent.
8. On the longer routes (Eastern States–Perth, Eastern States–Tasmania and Eastern States–Northern Territory), the average annual growth rate of passenger travel varied between 3.9 and 6.2 per cent. The forecast growth rate is expected to vary from 2.3 to 2.8 per cent. The modal share of air should continue to grow for Eastern States–Northern Territory and Eastern States–Perth. On the Eastern States–Tasmania route, mode shares should remain relatively constant after 2004–05, which saw the introduction of discount airfares.

Estimate and forecast of passenger movements for individual routes

The key results from the data presented in Table 1 are highlighted below:

1. Travel on the Sydney–Melbourne route (air distance 706 km) grew 3.0 per cent per annum from 1970–71 to 2003–04, while the forecast growth is 2.4 per cent per annum. The modal share of air has grown from 41 per cent in 1970–71 to 78 per cent in 2003–04, and should be very similar (83 per cent) in 2030–31.
2. Passenger movements on the Sydney–Brisbane route (753 km) grew 2.8 per cent per annum, while the forecast growth is unchanged at 2.8 per cent. The modal share of air has grown from 38 per cent in 1970–71 to 69 per cent in 2003–04, and should increase slightly (up to 80 per cent) until 2030–31.
3. Travel on the Melbourne–Brisbane corridor (1381 km) grew 5.9 per cent per annum and the forecast growth is 2.9 per cent. The modal share of air has risen from 59 per cent in 1970–71 to 88 per cent in 2003–04, and is expected to increase to 95 per cent by 2030–31.

In conclusion, on all routes, except the short Canberra–Sydney route, air travel has been progressively taking mode share from car plus coach and rail. This effect will be less important in the future as the rate of mode share capture by air slows.

Overall, the rate of total passenger travel growth on the corridors is expected to continue to grow more quickly than Gross Domestic Product (GDP).

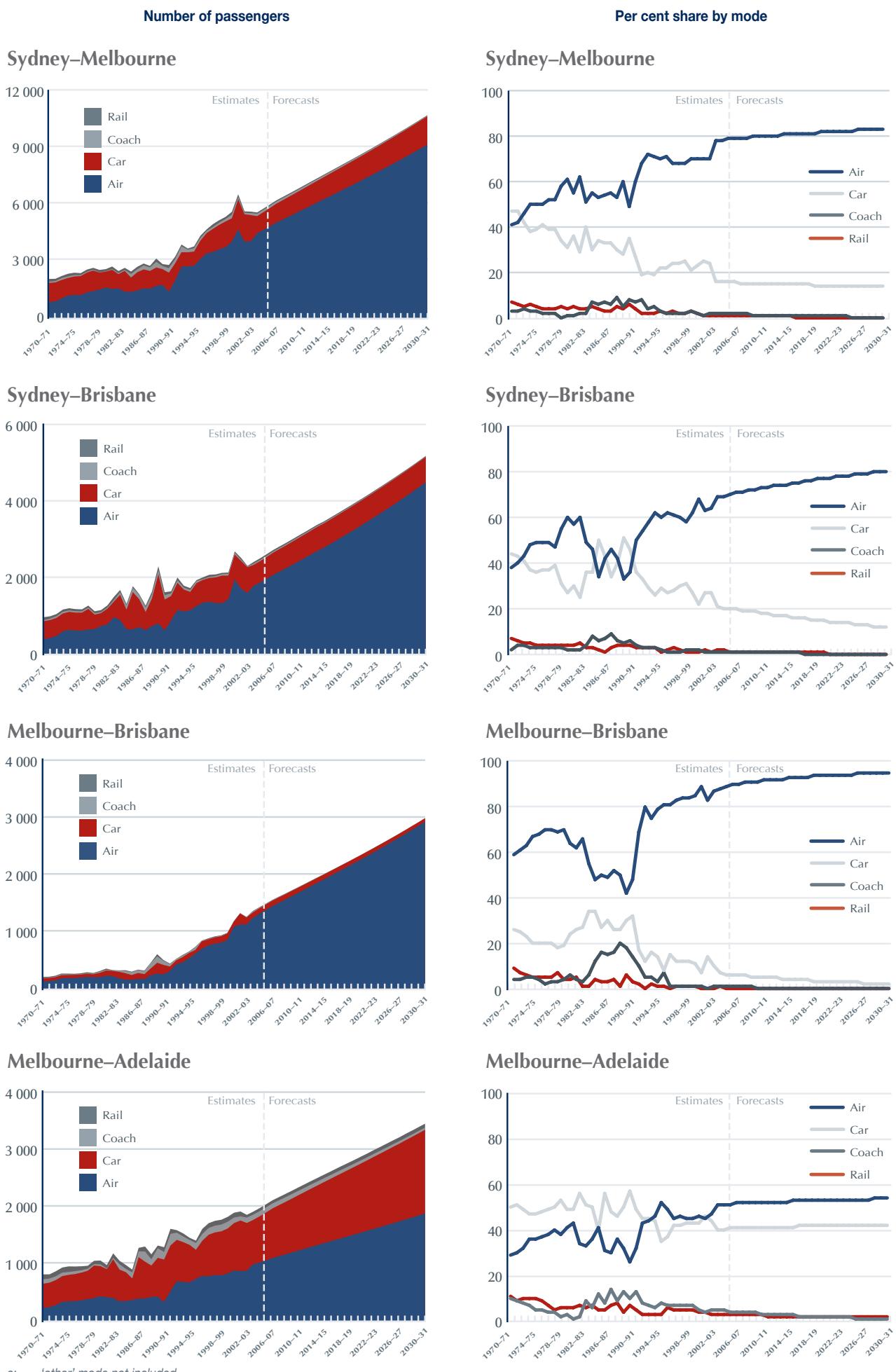
Figure 1 The ten routes in graphs^a^a: 'other' mode not included.

Figure 1 The ten routes in graphs (continued)^a

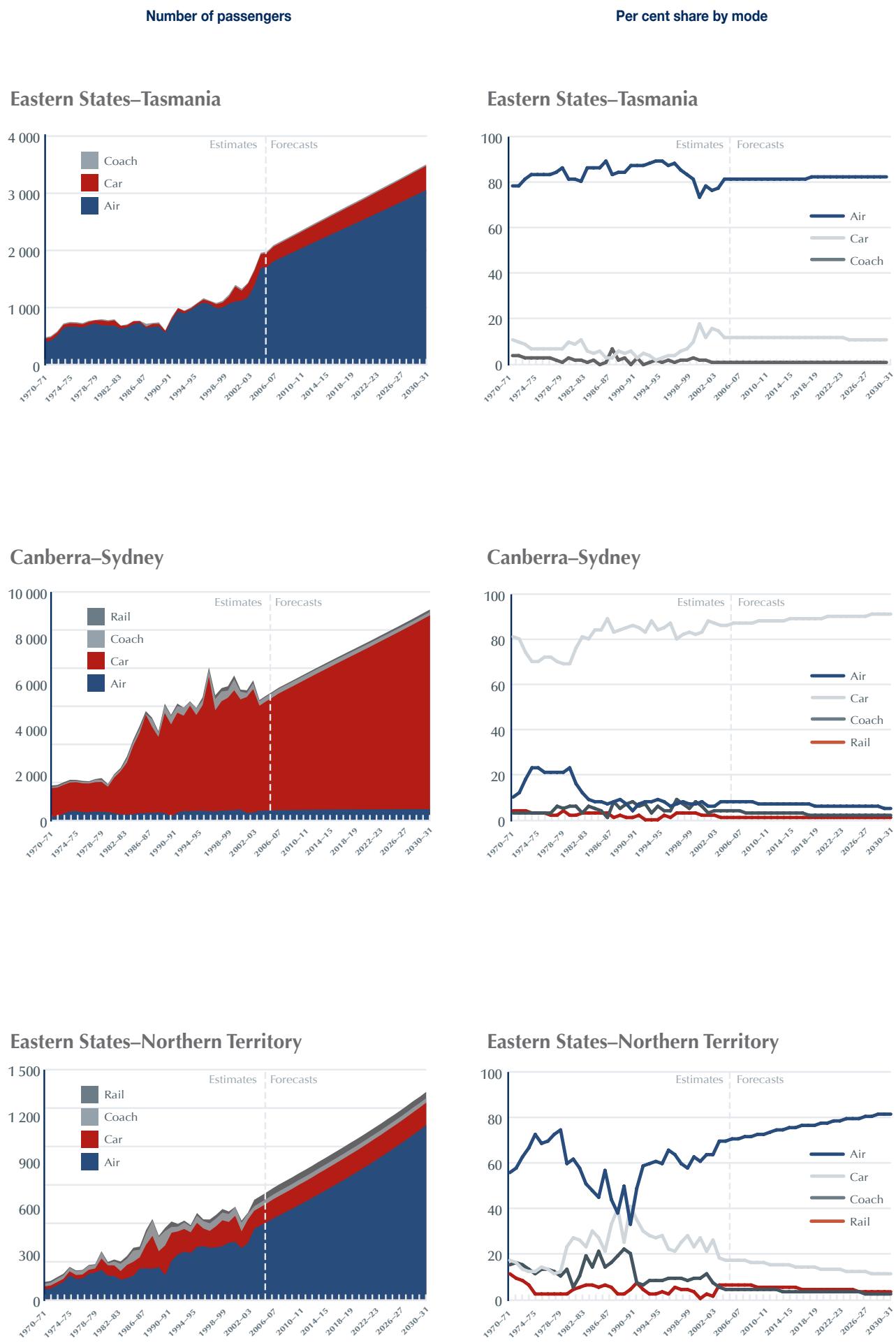
Figure 1 The ten routes in graphs (continued)

Table 1 Annual passenger movements ('000) for the ten corridors.

Year	Sydney-Melbourne						Sydney-Brisbane						Melbourne-Brisbane						Melbourne-Adelaide						Eastern States-Perth						
	Air	Car	Coach	Rail	Other	Total	Air	Car	Coach	Rail	Other	Total	Air	Car	Coach	Rail	Other	Total	Air	Car	Coach	Rail	Other	Total	Air	Car	Coach	Rail	Other	Total	
1970-71	878	1010	71	142	63	2163	405	469	26	78	78	1056	122	54	8	19	6	208	230	402	77	87	8	803	196	21	28	38	8	291	
1971-72	907	1010	71	121	63	2172	434	469	38	60	80	1056	129	54	8	14	6	211	241	410	73	73	8	803	196	21	28	34	9	301	
1972-73	1075	974	95	114	68	2326	490	469	44	57	85	1145	144	54	11	14	7	229	275	422	67	88	9	861	218	21	28	39	9	315	
1973-74	1257	937	83	139	71	2447	606	469	44	59	94	1272	179	54	14	14	8	268	333	433	62	89	9	927	267	21	28	35	11	362	
1974-75	1257	976	71	128	73	2505	648	469	38	57	97	1309	183	54	10	14	8	268	343	445	51	98	9	946	287	21	28	32	11	379	
1975-76	1238	1015	52	104	72	2482	628	469	38	54	95	1265	185	54	6	13	8	266	346	456	51	82	9	944	289	21	28	29	11	378	
1976-77	1054	1054	46	112	78	2678	628	469	35	51	95	1279	191	54	9	12	8	274	359	468	42	70	9	948	305	21	28	27	11	392	
1977-78	1453	1092	46	100	81	2771	657	538	35	51	103	1384	202	54	8	20	9	292	380	486	38	66	9	957	340	21	28	24	14	488	
1978-79	1537	905	13	126	77	2657	667	578	35	53	91	1223	196	54	11	8	7	229	398	554	24	59	10	1046	354	21	28	23	14	497	
1979-80	1646	845	21	112	79	2702	748	337	24	55	93	1257	200	74	20	12	9	315	430	511	33	66	10	1051	385	21	28	43	17	535	
1980-81	1573	1013	39	138	83	2845	781	413	31	55	103	1390	222	92	15	19	10	359	414	474	11	61	10	970	398	21	28	73	29	589	
1981-82	1599	757	51	115	76	2597	981	402	38	84	120	1625	218	90	11	3	10	332	401	660	26	79	12	178	427	63	45	40	17	592	
1982-83	1425	1106	51	109	81	2771	902	660	75	53	135	1825	180	112	20	5	10	326	344	535	94	62	10	1046	389	21	28	24	21	504	
1983-84	1415	762	191	127	75	2571	971	660	515	113	36	1430	157	111	40	12	10	331	347	488	57	65	19	957	340	21	28	24	14	488	
1984-85	1493	967	161	127	82	2830	663	971	113	42	143	1931	153	83	50	9	9	304	385	359	24	59	10	1046	354	21	28	23	14	497	
1985-86	1611	996	213	102	88	3010	720	727	113	21	127	1708	168	103	50	9	10	341	430	511	13	66	10	1051	385	21	28	43	17	535	
1986-87	1574	954	187	81	84	2881	639	475	120	46	102	1833	168	83	50	12	9	321	391	629	178	88	11	1299	533	21	28	30	22	749	
1987-88	1738	971	300	176	96	3280	748	719	113	67	132	1778	233	119	95	5	14	666	418	534	109	88	11	1160	560	21	28	39	24	821	
1988-89	1790	834	161	106	87	2978	818	1281	113	99	185	2496	261	188	114	37	18	619	425	661	171	46	13	1317	579	21	28	53	23	791	
1989-90	1424	1012	171	95	85	2830	635	806	113	76	130	1760	247	165	69	14	15	510	330	728	131	95	13	1287	418	21	28	30	18	622	
1990-91	227	909	223	129	99	3387	896	636	70	53	132	1788	308	76	45	7	13	26	449	514	791	204	88	16	1613	683	21	28	46	24	827
1991-92	2762	760	218	102	88	3010	711	688	71	54	127	1716	426	67	26	0	16	18	534	688	715	126	44	16	1589	1012	21	28	44	14	1124
1992-93	2772	748	139	60	112	3830	1131	570	51	144	1947	455	94	29	9	18	27	387	799	799	126	44	16	1589	1012	21	28	44	14	1124	
1993-94	2806	752	182	92	115	3948	1160	479	51	49	139	1878	529	92	19	7	19	18	666	670	645	88	37	14	1454	1033	21	28	34	14	1157
1994-95	3163	976	140	118	132	4528	1271	601	51	25	166	2103	611	63	52	4	22	752	732	497	119	42	14	1404	65	21	28	37	13	1271	
1995-96	3468	1074	116	80	142	4880	1360	593	22	46	162	1813	694	130	247	166	69	25	861	783	604	119	50	16	1612	1217	21	28	42	40	1371
1996-97	3536	1232	102	147	151	5168	1384	620	26	57	167	2253	750	107	6	13	26	902	779	799	119	84	17	1712	1292	21	28	46	24	827	
1997-98	3860	1300	117	130	157	5384	1348	672	33	44	168	2265	783	109	9	9	27	985	796	796	119	85	17	1766	1324	21	28	46	24	827	
1998-99	3791	1369	131	113	162	5567	1343	722	41	32	171	2309	800	111	11	6	28	985	796	796	119	85	18	1775	1355	21	28	46	24	827	
1999-2000	4097	1231	151	170	170	5843	1446	621	48	32	172	2318	848	113	6	6	29	1002	826	777	119	86	18	1826	1443	21	28	46	15	1672	
2000-2001	4744	1598	124	137	198	6801	1970	647	50	32	216	1076	88	9	0	35	1208	878	820	99	84	19	1901	1524	21	28	46	13	1646		
2001-2002	4085	1456	76	171	171	5866	1979	615	1615	80	170	5866	223	116	123	11	0	38	1288	875	875	93	86	15	1922	1426	21	28	46	8	1530
2002-2003	4106	1390	105	80	170	5850	1615	670	19	15	188	2305	205	1116	123	11	0	38	1288	875	875	93	86	4	1664	1664	21	28	46	5	1832
2003-2004	4529	913	126	69	169	3807	1804	546	32	44	194	2303	94	19	8	41	1396	985	768	93	19	19	1917	1947	21	28	46	5	1836		
2004-2005	4711	942	122	67	175	6018	1889	557	32	43	202	2271	1304	95	17	2	43	1460	1015	801	91	54	20	1980	2028	21	28	46	22	13	
2005-2006	4896	971	118	65	182	6233	1983	568	31	42	210	2334	1369	95	15	0	44	1524	1053	830	89	55	20	2048	2115	22	28	46	22	13	
2006-2007	5091	1002	114	63	188	6461	2168	590	29	39	226	3051	1492	94	12	0	46	1645	1124	886	85	57	22	2173	2285	23	28	46	24	1294	
2007-2008	5251	1026	110	61	193	6641	2255	597	28	37	233	3152	1548	93	10	0	50	1701	1155	911	83	58	22	2229	2361	23	28	46	24	1294	
2008-2009	5414	1049	105	58	199	6825	2255	597	28	37	233	3152	1548	93	10	0	50	1701	1155	911	83	58	22	2229	2361	23	28	46	24	1294	
2009-2010	5578	1072	101	56	204	2345	605	605	27	36	241	3254	1606	92	9	0	51	1757	1187	936	81	58	23	2286	2440	23	28	46	24	1294	
2010-2011	5743	1096	97	54	210	2346	612	612	35	249	3437	1663	91	8	0	53	1814	12													

Table 1 Annual passenger movements ('000) for the ten corridors (continued).

Year	Sydney-Adelaide						Melbourne and Sydney-Gold Coast						Eastern States-Tasmania						Canberra-Sydney						Eastern States-Northern Territory					
	Air	Car	Coach	Rail	Other	Total	Air	Car	Coach	Rail	Other	Total	Air	Car	Coach	Rail	Other	Total	Air	Car	Coach	Rail	Other	Total						
1970-71	130	157	21	35	3	347	156	578	4	35	8	780	400	55	22	31	508	162	1260	47	64	15	1548	65	20	17	12	2	117	
1971-72	157	23	32	3	3	346	183	578	4	35	8	808	423	55	22	32	532	188	1260	47	64	16	1515	71	20	19	11	2	123	
1972-73	143	157	23	36	4	363	239	578	4	35	9	864	506	55	22	38	621	307	1260	47	64	17	1695	92	20	22	11	3	147	
1973-74	173	157	23	33	4	391	269	578	4	35	9	895	645	55	22	47	768	409	1260	55	60	18	1803	114	20	23	11	3	170	
1974-75	217	157	21	29	4	423	294	621	4	35	10	963	671	55	22	49	796	420	1260	47	52	18	1797	158	26	24	5	4	216	
1975-76	234	157	16	27	4	438	302	664	4	35	10	1015	667	55	22	48	792	372	1260	60	45	17	1754	134	26	25	5	4	193	
1976-77	249	157	16	24	4	451	288	708	4	35	10	1045	652	55	22	47	776	365	1260	60	36	17	1739	137	26	26	4	3	197	
1977-78	266	157	20	28	5	476	356	739	4	35	11	1145	695	55	20	50	821	394	1260	68	26	18	1688	168	26	28	4	4	230	
1978-79	276	157	38	12	5	487	380	670	11	35	11	1107	722	55	6	51	835	388	1303	90	77	19	1877	176	27	24	4	4	235	
1979-80	297	193	11	19	5	524	432	719	16	15	12	1194	693	82	22	52	848	371	1109	93	26	16	1616	194	74	43	5	6	322	
1980-81	314	125	13	22	5	479	518	632	24	27	12	1212	685	75	19	51	831	323	1561	118	33	20	2056	155	69	13	9	4	250	
1981-82	294	166	25	16	5	506	527	746	21	35	13	1342	686	90	19	52	847	281	1876	78	63	23	2321	154	69	26	13	5	267	
1982-83	251	172	27	14	5	469	434	538	34	38	10	1055	633	47	6	45	731	266	2265	179	91	28	2828	129	57	48	15	4	253	
1983-84	248	122	19	23	4	416	440	628	40	42	12	1202	653	55	20	50	821	394	1260	68	26	18	1688	168	26	28	4	4	230	
1984-85	258	280	48	12	6	603	488	900	88	38	15	1529	709	52	2	50	812	328	3501	166	41	4166	155	92	74	18	6	345		
1985-86	274	178	32	5	528	575	1002	117	63	18	1775	735	27	7	50	819	337	4296	28	128	48	4837	202	74	50	21	6	353		
1986-87	269	159	55	21	5	508	672	881	91	39	17	1700	644	22	50	50	763	342	3754	343	58	45	4543	204	155	74	23	8	464	
1987-88	288	229	76	14	6	613	809	1058	175	47	21	2110	665	49	17	48	778	355	3035	182	61	39	3842	202	215	102	9	10	538	
1988-89	295	140	69	14	5	523	896	1102	219	29	22	2268	673	43	26	48	790	338	343	644	211	105	95	7	8	425				
1989-90	247	162	59	23	5	496	443	891	191	66	16	1646	558	38	2	30	638	189	4019	272	46	46	4871	156	87	41	18	5	290	
1990-91	328	143	19	9	5	504	777	866	60	18	1777	786	24	26	54	891	350	4369	291	106	51	5168	254	184	36	9	9	521		
1991-92	423	143	12	6	598	1159	707	76	83	18	2044	933	56	5	65	1059	421	14164	355	0	49	4890	296	151	31	18	9	506		
1992-93	434	156	67	25	7	688	1230	830	35	42	21	2159	896	40	12	62	1010	413	166	24	52	5068	314	149	43	12	9	527		
1993-94	516	118	17	7	664	1370	1010	72	34	25	2510	960	25	17	48	1067	432	4184	287	21	49	4974	305	136	38	17	9	496		
1994-95	584	139	9	23	8	762	1479	1005	61	58	26	2628	1038	31	11	70	1149	432	4615	217	130	54	5448	344	159	48	17	10	577	
1995-96	628	142	22	21	8	821	1581	890	46	37	26	2620	1087	53	24	76	1240	414	5983	301	67	6767	350	116	49	11	9	534		
1996-97	617	147	22	20	8	813	1539	884	51	25	25	2524	1061	47	13	73	1193	401	4423	492	162	55	5332	340	110	50	25	9	534	
1997-98	674	181	22	19	9	904	1463	884	67	37	25	2475	991	67	22	70	1150	439	4779	430	147	58	5854	341	140	51	24	10	605	
1998-99	721	214	22	17	10	983	1447	883	82	48	25	2495	1001	88	29	73	1190	440	4931	313	191	59	5835	350	170	51	23	11	605	
1999-2000	761	300	9	13	11	1093	1512	901	42	53	25	2534	1066	126	35	80	1307	462	5235	482	164	63	6405	373	136	52	17	10	588	
2000-01	819	456	52	15	13	1355	1419	696	62	51	25	2250	1107	261	30	91	1489	484	4816	339	90	57	5787	379	170	58	2	10	621	
2001-02	740	194	13	10	9	902	1514	885	52	50	25	2527	1121	23	35	21	1212	175	32	86	1415	341	5064	177	116	57	527	13	9	
2002-03	811	69	0	13	9	102	1764	849	32	21	27	2622	1084	259	26	108	1777	430	4593	207	42	53	5225	465	118	30	42	12	667	
2003-04	897	153	11	21	11	1126	1860	870	32	21	28	2811	1693	240	25	103	2061	438	4766	207	44	55	5511	486	121	31	42	12	692	
2004-05	933	155	5	21	12	1162	1956	890	31	22	29	2929	1712	246	25	106	2089	445	4924	207	46	56	5679	533	126	31	43	13	719	
2005-06	970	157	3	21	12	1200	2057	911	31	23	30	3156	1861	265	26	113	2263	457	5235	205	50	59	6007	554	126	32	44	13	747	
2006-07	1037	159	1	20	12	1229	2147	925	30	24	32	3262	1912	270	26	116	2325	461	5374	203	52	59	6007	554	126	32	44	14	771	
2007-08	1067	159	0	20	12	1259	2238	938	30	24	33	3266	1964	277	26	116	2387	465	5374	203	52	59	6007	554	126	32	44	14	795	
2008-09	1097	159	0	20	13	1289	2332	950	29	24	33	3369	2014	287	26	117	2449	469	5655	201	54	59	6007	554	126	32	44	14	819	
2009-10	1120	159	0	20	13	1320	2428	962	28	25	34	3478	2016	284	26	118	2449	473	5798	197	58	59	6007	554	126	32	44	14	843	
2010-11	1128	159	0	19	13	1350	2528	974	28	25	36	3568	2069	291	26	118	2512	473	5798	197	58	59	6007	554	126	32	44	14	843	
2011-12	1158	159	0	19	13	1350	2528	974	28	25	36	3568	2069	291	26	118	2512	473	5798	197	58	59	6007	554	126	32	44	14	843	
2012-13	1181	159	0	19	14	1381	2626	985	27	26	37	3700	2121	298	26	119	2575	476	6715	195	65	66	6715	665	135	32	44	16	893	
2013-14	1219	159	0	19	14	1410	2727	994	27	26	38																			

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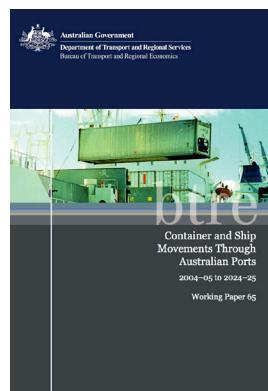
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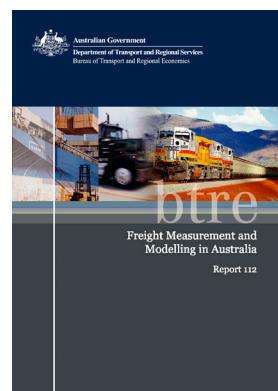
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Avline 8: June 2006



Feature

Previous issues of Avline have examined Australian domestic and regional aviation. The feature article in this issue focuses on the international sector of the Australian aviation industry. The number of passengers carried on flights to and from Australia increased 7.9 per cent higher than 2005 (page 10).

The major domestic airlines carried 5.3 million passengers on flights to and from Australia in 2005. Domestic regional airlines carried 6.6 million, an increase of 1.2 per cent over the same period (page 11).

Passenger numbers and aircraft movements increased 1.2 per cent over the year for all major Australian airports, while the number of passengers and regional traffic at Perth Airport during 2005 grew 1%

During the year the domestic industry increased 523 536 flights. Of these, 491 000 were regional flights, an increase of 5.2 per cent over 2005. The remaining 32 536 flights were domestic flights.

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