

Review of cost adjustors in the Base Grant Model

Discussion Paper – DPI3-02

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Tasmania
Explore the possibilities

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Background

The State Grants Commission is an independent statutory body responsible for recommending the distribution of Australian Government and State Government funds to Tasmanian local government authorities. To ensure that the distribution of available funds is as equitable and contemporary as possible, the Commission continually monitors council practices and updates assessment methods and data where appropriate.

To provide some structure to updating the distribution methods of the Australian Government Financial Assistance Grants (FAGs), the Commission operates a triennial review policy whereby major method changes are introduced only every three years, with data updates and minor changes applied every year.

Overview of Triennial Review Period (FAGs)

Distribution	Action
2012-13	Method Changes + Data Updates
2013-14	Data Updates
2014-15	Data Updates
2015-16	Method Changes + Data Updates

The Commission's triennial review period to 2012-13 primarily focussed on the Commission's Roads Preservation Model (used to calculate the Commission's Road Grant recommendations) and a review of the Regional Responsibility Cost Adjustor in the Commission's Base Grant Model (BGM).

The Commission has resolved to review all Cost Adjustors in the BGM in the first and second years of the triennial review to 2015-16, excluding the Regional Responsibility Cost Adjustor which was closely scrutinised during the triennial review to 2012-13.

Cost Adjustors to be examined in year one:

- Absentee population
- Dispersion
- Isolation
- Worker influx
- Unemployment

The dispersion and worker influx cost adjustors are influenced by estimated resident population data that is newly available following the release of 2011 Census data.

Cost Adjustors to be examined in year two of the triennial review to 2015-16:

- Climate
- Scale (Administration)
- Scale (Other)
- Population Decline
- Tourism

The method used by the Commission to aggregate cost adjustors into expenditure functions will be examined in detail over the second year of the triennial review to 2015-16.

The application of cost adjustors to each expenditure category is detailed Appendix I.

Range factors

The Commission uses range factors in its modelling to control the relative spread of the outputs of each cost adjustor. This results in a level of control whereby the Commission can set the cost adjustor to redistribute a determined level of funding across councils.

The range factor is set with reference to the most affected council. The Commission decides an appropriate cap on the maximum shift for the most affected council. Once the most affected council has been adjusted, cost adjustors of all other councils are automatically adjusted. The level of the cap applied is determined using broad judgement.

Absentee population

The Commission makes an allowance for additional populations that are not captured in the Census statistics, but nevertheless must be serviced by Council. Specific reference is made to those municipalities that have a significant number of holiday residences.

This calculation of the absentee population cost adjustor is based on the proportion of unoccupied dwellings in each municipality. The Commission's 2012-13 recommendations were based on 2006 Census estimates. As relevant 2011 Census data were released by the ABS on 30 October 2012, these updated data will be incorporated in the Commission's 2013-14 assessment as a data update.

1. Background

The absentee population cost adjustor is used in the assessment of standardised expenditure for the expenditure functions of General administration, Planning and community amenities, Waste management and environment, and Recreation and culture. These expenditure functions account for around 57 per cent of assessed expenditure in the BGM.

2. Approach of other Local Government Commissions

No other jurisdiction employs a cost adjustor to account for the concept of absentee population, as used by the Tasmanian Commission. However, Victoria uses the estimated vacancy rate of properties to adjust the population estimates used in that Commission's assessment of three expenditure functions (Governance, Environmental Protection Services and Business & Economic Services). Victoria use the same data source for these adjustments as Tasmania uses to quantify the absentee population cost adjustor.

Victoria takes account of vacant dwellings because it believes that population data alone may not accurately capture the population that is serviced by a particular council. Councils with a vacancy rate above the State average are assumed to have a population higher than the Census-based estimate.

The method employed by Victoria also allows for fixed costs associated with certain functional areas:

- For the Governance function, councils with an actual population of less than 20 000 are deemed to have a population of 20 000.
- For the Environmental Protection Services function, a minimum population of 15 000 is assumed.

- For the Business and Economic Services function, councils with a population of less than 7 500 are assumed to have double their actual population, to a maximum of 15 000. Populations between 7 500 and 15 000 are assumed to have a population of 15 000 persons.

3. Application of the range factor

The range factor used for the absentee population cost adjustor caps the movement of the most affected council, Central Highlands, at +33.8 per cent.

4. Data summary

A data summary is provided over the following two pages which details absentee population data used in the Commission's 2012-13 recommendations.

5. Points for discussion

Is there continued merit in this cost adjustor that seeks to identify additional population not picked up in the Census?

Does the data source used by the Commission remain appropriate and contemporary?

Is the amount redistributed after application of the cost adjustor reasonable?

Is there merit in exploring an alternate method of quantifying the absentee population cost adjustor in preference to the Commission's existing method? If so, what might be an alternative approach?

Absentee population – Calculation of the cost adjustor

	DATA				Pop Weighted Avg (PWA)	COST ADJUSTOR		
	Population	Total	Unoccupied	Proportion		RAW CA	Ranged	Rank
	2011 p	Dwellings	Dwellings	Dwellings		(PWA)	CA	
	<i>a</i>	<i>b</i>	<i>c</i>	<i>d = c / b</i>	<i>e = a x d</i>	<i>g = d / f</i>	<i>h = (d+RF)/(f+RF)</i>	
Break O'Day	6 512	4 232	1 612	0.38	2 480	3.331	1.178	4
Brighton	16 654	5 087	176	0.03	576	0.303	0.947	29
Burnie	19 921	8 275	655	0.08	1 577	0.692	0.976	23
Central Coast	21 779	8 870	699	0.08	1 716	0.689	0.976	24
Central Highlands	2 303	2 609	1 615	0.62	1 426	5.413	1.338	1
Circular Head	8 242	3 747	673	0.18	1 480	1.571	1.044	12
Clarence	53 558	20 737	1 532	0.07	3 957	0.646	0.973	27
Derwent Valley	10 184	3 906	342	0.09	892	0.766	0.982	22
Devonport	25 639	10 427	771	0.07	1 896	0.647	0.973	26
Dorset	7 351	3 633	835	0.23	1 690	2.010	1.077	7
Flinders	884	616	218	0.35	313	3.095	1.160	5
George Town	6 894	3 285	692	0.21	1 452	1.842	1.064	9
Glamorgan-Spring Bay	4 497	3 611	1 789	0.50	2 228	4.333	1.255	3
Glenorchy	44 792	19 297	1 200	0.06	2 785	0.544	0.965	28
Hobart	50 190	22 331	2 212	0.10	4 972	0.866	0.990	20
Huon Valley	15 544	6 497	1 212	0.19	2 900	1.631	1.048	10
Kentish	6 229	2 412	260	0.11	671	0.943	0.996	18
King Island	1 674	876	192	0.22	367	1.917	1.070	8
Kingborough	34 825	13 121	1 519	0.12	4 032	1.012	1.001	17
Latrobe	10 239	4 025	640	0.16	1 628	1.390	1.030	13
Launceston	66 029	27 632	2 172	0.08	5 190	0.687	0.976	25
Meander Valley	19 747	7 800	710	0.09	1 797	0.796	0.984	21
Northern Midlands	12 726	5 337	683	0.13	1 629	1.119	1.009	16
Sorell	13 647	5 801	1 073	0.18	2 524	1.618	1.047	11
Southern Midlands	6 152	2 378	248	0.10	642	0.912	0.993	19
Tasman	2 411	2 128	1 135	0.53	1 286	4.664	1.280	2
Waratah-Wynyard	14 058	6 070	796	0.13	1 844	1.147	1.011	15
West Coast	5 139	2 985	797	0.27	1 372	2.335	1.102	6
West Tamar	22 699	9 019	1 215	0.13	3 058	1.178	1.014	14
STATE TOTAL	510 519	216 744	27 673	0.128	58 379	PWA = 1.000	PWA = 1.000	

$$f = \sum e / \sum a$$

PWA = 0.114

max = 5.413
min = 0.303

max = 1.338
min = 0.947

Absentee population – The effect on each expenditure category (2010-11 data)

	GENERAL ADMINISTRATION	EDUCATION HEALTH HOUSING AND WELFARE	LAW ORDER AND PUBLIC SAFETY	PLANNING & COMMUNITY AMENITIES	WASTE MANAGEMENT AND ENVIRONMENT	RECREATION AND CULTURE	OTHER	TOTAL EXPENDITURE EFFECT	IMPACT ON APPLICABLE EXPENDITURE CATEGORIES	IMPACT ON NON-ROADS EXPENDITURE	RANK - % IMPACT ON NON-ROADS EXP
Break O'Day	+ 220 622	+ 0	+ 0	+ 115 156	+ 162 863	+ 219 782	+ 0	+ 718 423	+17.8%	+14.6%	4
Brighton	- 168 818	+ 0	+ 0	- 88 117	- 124 621	- 168 175	+ 0	- 549 731	-5.3%	-4.4%	29
Burnie	- 89 120	+ 0	+ 0	- 46 517	- 65 788	- 88 781	+ 0	- 290 207	-2.4%	-1.9%	23
Central Coast	- 98 399	+ 0	+ 0	- 51 360	- 72 638	- 98 024	+ 0	- 320 421	-2.4%	-2.0%	24
Central Highlands	+ 147 720	+ 0	+ 0	+ 77 104	+ 109 047	+ 147 157	+ 0	+ 481 028	+33.8%	+27.7%	1
Circular Head	+ 68 362	+ 0	+ 0	+ 35 682	+ 50 465	+ 68 102	+ 0	+ 222 611	+4.4%	+3.6%	12
Clarence	- 275 519	+ 0	+ 0	- 143 811	- 203 388	- 274 470	+ 0	- 897 189	-2.7%	-2.2%	27
Derwent Valley	- 34 682	+ 0	+ 0	- 18 103	- 25 603	- 34 550	+ 0	- 112 939	-1.8%	-1.5%	22
Devonport	- 131 683	+ 0	+ 0	- 68 734	- 97 209	- 131 182	+ 0	- 428 807	-2.7%	-2.2%	26
Dorset	+ 107 900	+ 0	+ 0	+ 56 320	+ 79 652	+ 107 489	+ 0	+ 351 360	+7.7%	+6.3%	7
Flinders	+ 26 914	+ 0	+ 0	+ 14 048	+ 19 868	+ 26 812	+ 0	+ 87 643	+16.0%	+13.2%	5
George Town	+ 84 383	+ 0	+ 0	+ 44 045	+ 62 292	+ 84 062	+ 0	+ 274 781	+6.4%	+5.3%	9
Glamorgan-Spring Bay	+ 217 813	+ 0	+ 0	+ 113 690	+ 160 790	+ 216 984	+ 0	+ 709 277	+25.5%	+20.9%	3
Glenorchy	- 296 986	+ 0	+ 0	- 155 016	- 219 235	- 295 856	+ 0	- 967 094	-3.5%	-2.9%	28
Hobart	- 97 582	+ 0	+ 0	- 50 934	- 72 035	- 97 210	+ 0	- 317 761	-1.0%	-0.8%	20
Huon Valley	+ 142 633	+ 0	+ 0	+ 74 449	+ 105 292	+ 142 090	+ 0	+ 464 464	+4.8%	+4.0%	10
Kentish	- 5 192	+ 0	+ 0	- 2 710	- 3 833	- 5 172	+ 0	- 16 906	-0.4%	-0.4%	18
King Island	+ 22 303	+ 0	+ 0	+ 11 642	+ 16 464	+ 22 218	+ 0	+ 72 628	+7.0%	+5.8%	8
Kingborough	+ 6 270	+ 0	+ 0	+ 3 273	+ 4 628	+ 6 246	+ 0	+ 20 417	+0.1%	+0.1%	17
Latrobe	+ 58 112	+ 0	+ 0	+ 30 332	+ 42 898	+ 57 891	+ 0	+ 189 233	+3.0%	+2.5%	13
Launceston	- 300 004	+ 0	+ 0	- 156 591	- 221 463	- 298 862	+ 0	- 976 922	-2.4%	-2.0%	25
Meander Valley	- 58 546	+ 0	+ 0	- 30 559	- 43 219	- 58 323	+ 0	- 190 646	-1.6%	-1.3%	21
Northern Midlands	+ 22 034	+ 0	+ 0	+ 11 501	+ 16 266	+ 21 950	+ 0	+ 71 751	+0.9%	+0.7%	16
Sorell	+ 122 486	+ 0	+ 0	+ 63 933	+ 90 419	+ 122 020	+ 0	+ 398 859	+4.7%	+3.9%	11
Southern Midlands	- 7 868	+ 0	+ 0	- 4 107	- 5 808	- 7 838	+ 0	- 25 622	-0.7%	-0.6%	19
Tasman	+ 128 402	+ 0	+ 0	+ 67 021	+ 94 786	+ 127 913	+ 0	+ 418 122	+28.0%	+23.0%	2
Waratah-Wynyard	+ 29 990	+ 0	+ 0	+ 15 654	+ 22 139	+ 29 876	+ 0	+ 97 660	+1.1%	+0.9%	15
West Coast	+ 99 706	+ 0	+ 0	+ 52 043	+ 73 603	+ 99 326	+ 0	+ 324 678	+10.2%	+8.4%	6
West Tamar	+ 58 750	+ 0	+ 0	+ 30 665	+ 43 369	+ 58 526	+ 0	+ 191 310	+1.4%	+1.1%	14
SUM REDISTRIBUTED	1 564 400	0	0	816 559	1 154 841	1 558 445	0	5 094 244			
AS PROPN OF CAT EXP	1.614%	0.000%	0.000%	1.614%	1.614%	1.614%	0.000%		1.614%	0.911%	

Dispersion

The dispersion cost adjustor relates to the additional costs incurred in servicing a widely scattered population within a municipality. The Commission recognises that additional costs arise through the need to service a dispersed population, through increased travelling and communication costs and duplication of facilities.

The cost adjustor is determined according to:

- the number of population centres in each council area (25 per cent);
- the population-weighted distance between those centres and the council's administrative centre (37.5 per cent); and
- the dwelling-weighted distance between those centres and the council's administrative centre (37.5 per cent).

This calculation of the dispersion cost adjustor for the Commission's 2012-13 recommendations was based on population and dwelling numbers at collector district (CD) level as at the 2006 Census. As relevant 2011 Census data were released by the ABS on 30 October 2012, these updated data will be incorporated into the Commission's 2013-14 assessment as a data update.

1. Background

The dispersion cost adjustor is used in the assessment of standardised expenditure for the expenditure functions of Law, order and public safety, Planning and community amenities, Waste management and environment, and Recreation and culture. These expenditure functions account for around 40 per cent of assessed expenditure in the BGM.

2. Approach of other Local Government Commissions

Most jurisdictions apply a similar cost adjustor to the dispersion cost adjustor – the Northern Territory ("Dispersion"), Western Australia ("Population Dispersion") and Victoria ("Population Dispersion") use a very similar conceptual approach and data sources to the existing dispersion cost adjustor, however, with a notable difference. The existing Tasmanian method uses both dwelling and population weighted data, while the other jurisdictions use population weighted distance only.

3. Application of the range factor

The range factor used for the dispersion cost adjustor caps the movement of the most affected council, Central Highlands, at +20.0 per cent.

4. Data summary

A data summary is provided over the following two pages which details dispersion data used in the Commission's 2012-13 recommendations.

A one page insert is provided within this paper, showing your council-specific 2006 Census data used by the Commission for its 2012-13 recommendations. The Commission intends to distribute an updated dataset to your council based on the 2011 Census during the 2013 Hearings and Visits.

5. Points for discussion

Is there continued merit in a cost adjustor that seeks to capture the effect of population dispersion on the cost of delivering services for councils?

Does the data source used by the Commission remain appropriate and contemporary?

Is the amount redistributed after application of the cost adjustor reasonable?

Is there merit in exploring an alternate method of quantifying the dispersion cost adjustor in preference to the Commission's existing method? If so, what might be an alternative approach?

Dispersion – Calculation of the cost adjustor

Break O'Day
Brighton
Burnie
Central Coast
Central Highlands
Circular Head
Clarence
Derwent Valley
Devonport
Dorset
Flinders
George Town
Glamorgan-Spring Bay
Glenorchy
Hobart
Huon Valley
Kentish
King Island
Kingborough
Latrobe
Launceston
Meander Valley
Northern Midlands
Sorell
Southern Midlands
Tasman
Waratah-Wynyard
West Coast
West Tamar
STATE AVERAGE

	DATA							
	Population 2011p	Population Centres		Population Weighted Distance		Dwelling Weighted Distance		TOTAL WEIGHTED INDEX
		Number	Index	Number	Index	Number	Index	
	<i>a</i>	<i>b</i>	<i>c = b / Avg b</i>	<i>d</i>	<i>e = d / Avg d</i>	<i>f</i>	<i>g = f / Avg f</i>	<i>h = Wc+We+Wf</i>
Break O'Day	6 512	12	1.27	18.94	1.50	18.67	18.67	1.36
Brighton	16 654	6	0.64	3.49	0.28	3.45	3.45	0.35
Burnie	19 921	6	0.64	1.58	0.12	1.40	1.40	0.24
Central Coast	21 779	11	1.17	4.64	0.37	4.57	4.57	0.55
Central Highlands	2 303	10	1.06	33.36	2.64	56.54	56.54	2.72
Circular Head	8 242	12	1.27	10.73	0.85	14.41	14.41	1.01
Clarence	53 558	15	1.59	6.34	0.50	6.36	6.36	0.75
Derwent Valley	10 184	9	0.96	4.18	0.33	4.70	4.70	0.48
Devonport	25 639	2	0.21	0.18	0.01	0.15	0.15	0.06
Dorset	7 351	10	1.06	13.07	1.04	14.44	14.44	1.03
Flinders	884	2	0.21	16.95	1.34	16.92	16.92	0.99
George Town	6 894	8	0.85	6.44	0.51	10.05	10.05	0.66
Glamorgan-Spring Bay	4 497	7	0.74	36.23	2.87	44.03	44.03	2.40
Glenorchy	44 792	3	0.32	0.24	0.02	0.19	0.19	0.09
Hobart	50 190	2	0.21	0.11	0.01	0.10	0.10	0.06
Huon Valley	15 544	21	2.23	16.32	1.29	19.03	19.03	1.53
Kentish	6 229	8	0.85	14.38	1.14	15.33	15.33	1.04
King Island	1 674	3	0.32	10.75	0.85	11.55	11.55	0.70
Kingborough	34 825	18	1.91	6.21	0.49	12.22	12.22	0.98
Latrobe	10 239	6	0.64	7.54	0.60	8.75	8.75	0.61
Launceston	66 029	10	1.06	1.41	0.11	1.26	1.26	0.34
Meander Valley	19 747	16	1.70	21.82	1.73	21.74	21.74	1.63
Northern Midlands	12 726	8	0.85	12.97	1.03	14.35	14.35	0.97
Sorell	13 647	13	1.38	9.43	0.75	10.91	10.91	0.91
Southern Midlands	6 152	9	0.96	39.19	3.11	36.40	36.40	2.34
Tasman	2 411	7	0.74	16.01	1.27	16.72	16.72	1.09
Waratah-Wynyard	14 058	15	1.59	8.95	0.71	9.85	9.85	0.92
West Coast	5 139	5	0.53	24.85	1.97	27.08	27.08	1.57
West Tamar	22 699	19	2.02	19.67	1.56	19.85	19.85	1.60
STATE AVERAGE	510 519	AVG -->9.4	1.00	AVG -->12.6	1.00	AVG -->14.5	1.00	1.00

Weight – 25 per cent

Weight – 37.5 per cent

Weight – 37.5 per cent

Pop Weighted Avg (PWA)
<i>i = a x h</i>
8 881
5 864
4 826
11 936
6 258
8 321
40 211
4 934
1 601
7 550
879
4 572
10 792
4 108
2 967
23 849
6 452
1 168
34 061
6 240
22 454
32 281
12 326
12 380
14 419
2 637
12 916
8 072
36 360
349 315
$j = \sum i / \sum a$
PWA = 0.684

COST ADJUSTOR		
RAW CA	Ranged CA	Rank
<i>k = h / j</i>	<i>l = (h+RF)/(j+RF)</i>	
1.993	1.067	8
0.515	0.967	24
0.354	0.957	26
0.801	0.987	22
3.971	1.200	1
1.476	1.032	12
1.097	1.007	18
0.708	0.980	23
0.091	0.939	28
1.501	1.034	11
1.452	1.030	13
0.969	0.998	20
3.507	1.169	2
0.134	0.942	27
0.086	0.939	29
2.242	1.084	7
1.514	1.035	10
1.019	1.001	19
1.429	1.029	14
0.891	0.993	21
0.497	0.966	25
2.389	1.093	4
1.416	1.028	15
1.326	1.022	17
3.425	1.163	3
1.598	1.040	9
1.343	1.023	16
2.296	1.087	6
2.341	1.090	5
PWA = 1.000	PWA = 1.000	
max = 3.971	max = 1.200	
min = 0.086	min = 0.939	

Dispersion – The effect on each expenditure category (2010-11 data)

	GENERAL ADMINISTRATION	EDUCATION HEALTH HOUSING AND WELFARE	LAW ORDER AND PUBLIC SAFETY	PLANNING & COMMUNITY AMENITIES	WASTE MANAGEMENT AND ENVIRONMENT	RECREATION AND CULTURE	OTHER	TOTAL EXPENDITURE EFFECT	IMPACT ON APPLICABLE EXPENDITURE CATEGORIES	IMPACT ON NON-ROADS EXPENDITURE	RANK - % IMPACT ON NON-ROADS EXP
Break O'Day	+ 0	+ 0	+ 5 409	+ 43 105	+ 60 963	+ 82 269	+ 0	+ 191 747	+6.7%	+3.9%	8
Brighton	+ 0	+ 0	- 6 760	- 53 872	- 76 189	- 102 817	+ 0	- 239 637	-3.3%	-1.9%	24
Burnie	+ 0	+ 0	- 10 762	- 85 763	- 121 292	- 163 682	+ 0	- 381 499	-4.3%	-2.5%	26
Central Coast	+ 0	+ 0	- 3 626	- 28 892	- 40 862	- 55 142	+ 0	- 128 522	-1.3%	-0.8%	22
Central Highlands	+ 0	+ 0	+ 5 723	+ 45 604	+ 64 497	+ 87 038	+ 0	+ 202 861	+20.0%	+11.7%	1
Circular Head	+ 0	+ 0	+ 3 278	+ 26 120	+ 36 941	+ 49 851	+ 0	+ 116 190	+3.2%	+1.9%	12
Clarence	+ 0	+ 0	+ 4 357	+ 34 722	+ 49 106	+ 66 268	+ 0	+ 154 452	+0.7%	+0.4%	18
Derwent Valley	+ 0	+ 0	- 2 486	- 19 815	- 28 024	- 37 818	+ 0	- 88 143	-2.0%	-1.1%	23
Devonport	+ 0	+ 0	- 19 485	- 155 278	- 219 606	- 296 356	+ 0	- 690 724	-6.1%	-3.6%	28
Dorset	+ 0	+ 0	+ 3 080	+ 24 545	+ 34 713	+ 46 845	+ 0	+ 109 184	+3.4%	+2.0%	11
Flinders	+ 0	+ 0	+ 335	+ 2 666	+ 3 770	+ 5 088	+ 0	+ 11 859	+3.0%	+1.8%	13
George Town	+ 0	+ 0	- 177	- 1 409	- 1 993	- 2 690	+ 0	- 6 270	-0.2%	-0.1%	20
Glamorgan-Spring Bay	+ 0	+ 0	+ 9 430	+ 75 150	+ 106 283	+ 143 427	+ 0	+ 334 290	+16.9%	+9.9%	2
Glenorchy	+ 0	+ 0	- 32 439	- 258 509	- 365 604	- 493 378	+ 0	-1 149 931	-5.8%	-3.4%	27
Hobart	+ 0	+ 0	- 38 348	- 305 598	- 432 200	- 583 249	+ 0	-1 359 395	-6.1%	-3.6%	29
Huon Valley	+ 0	+ 0	+ 16 150	+ 128 703	+ 182 022	+ 245 637	+ 0	+ 572 512	+8.4%	+4.9%	7
Kentish	+ 0	+ 0	+ 2 677	+ 21 330	+ 30 167	+ 40 710	+ 0	+ 94 883	+3.5%	+2.0%	10
King Island	+ 0	+ 0	+ 27	+ 216	+ 305	+ 412	+ 0	+ 960	+0.1%	+0.1%	19
Kingborough	+ 0	+ 0	+ 12 507	+ 99 668	+ 140 959	+ 190 222	+ 0	+ 443 356	+2.9%	+1.7%	14
Latrobe	+ 0	+ 0	- 936	- 7 462	- 10 553	- 14 241	+ 0	- 33 191	-0.7%	-0.4%	21
Launceston	+ 0	+ 0	- 27 776	- 221 352	- 313 053	- 422 461	+ 0	- 984 642	-3.4%	-2.0%	25
Meander Valley	+ 0	+ 0	+ 22 940	+ 182 815	+ 258 551	+ 348 911	+ 0	+ 813 217	+9.3%	+5.5%	4
Northern Midlands	+ 0	+ 0	+ 4 422	+ 35 240	+ 49 840	+ 67 258	+ 0	+ 156 760	+2.8%	+1.6%	15
Sorell	+ 0	+ 0	+ 3 719	+ 29 637	+ 41 915	+ 56 564	+ 0	+ 131 835	+2.2%	+1.3%	17
Southern Midlands	+ 0	+ 0	+ 12 479	+ 99 447	+ 140 645	+ 189 799	+ 0	+ 442 370	+16.3%	+9.5%	3
Tasman	+ 0	+ 0	+ 1 206	+ 9 613	+ 13 595	+ 18 346	+ 0	+ 42 760	+4.0%	+2.4%	9
Waratah-Wynyard	+ 0	+ 0	+ 4 030	+ 32 113	+ 45 416	+ 61 289	+ 0	+ 142 847	+2.3%	+1.3%	16
West Coast	+ 0	+ 0	+ 5 568	+ 44 376	+ 62 760	+ 84 694	+ 0	+ 197 398	+8.7%	+5.1%	6
West Tamar	+ 0	+ 0	+ 25 458	+ 202 880	+ 286 928	+ 387 206	+ 0	+ 902 473	+9.0%	+5.3%	5
SUM REDISTRIBUTED	0	0	142 795	1 137 949	1 609 376	2 171 834	0	5 061 954			
AS PROPN OF CAT EXP	0.000%	0.000%	2.249%	2.249%	2.249%	2.249%	0.000%		2.249%	0.905%	

Isolation

This cost adjustor recognises the increased costs that arise from geographical isolation. Such costs include attracting staff to remote areas, communicating with relevant bodies, travel and the supply of necessary construction and maintenance materials.

The cost adjustor is calculated according to a weighted sum of distances between each council's administrative (or most populous) centre, the relevant regional centres and Hobart, being the focus for administrative and political activity within the State. The weighting of distances for each council to calculate this cost adjustor is:

Distance weighting for the isolation cost adjustor

Southern Councils	Hobart (100%)
Northern Councils	Hobart (10%), Launceston (90%)
North-western Councils	
- closer to Devonport than to Burnie	Hobart (10%), Launceston (20%), Devonport (70%)
- closer to Burnie than to Devonport	Hobart (10%), Launceston (20%), Burnie (70%)

For the purposes of calculating this cost adjustor, the distances from King Island to Burnie and from Flinders Island to Launceston are inflated by 100 per cent in order to reflect the additional expense of travelling by air.

I. Background

The isolation cost adjustor is used in the assessment of standardised expenditure for the expenditure functions of General administration, Planning and community amenities, and Recreation and culture. These expenditure functions account for around 44 per cent of assessed expenditure in the BGM.

The existing data source used by the Commission will only change if the location of the administrative centre or most populous area of a local government area shifts.

2. Approach of other Local Government Commissions

Most jurisdictions apply a similar approach to quantifying the concept of isolation. The Northern Territory (“Location”), Queensland (“Location”), Western Australia (“Location”) and Victoria (“Remoteness”) all use a very similar conceptual approach to the existing Tasmanian method. However, these jurisdictions use a common data source to quantify isolation, ARIA (Accessibility/Remoteness Index of Australia) or ARIA+, which differs from the existing Tasmanian data source used.

The ARIA indexes assesses the remoteness of a town/location based on access via road networks to five different categories of service centres. Localities that are more remote have less access to these service centres and this is recognised as a disability. A score is assigned to every service centre in Australia, of which there were 738 recognised in the 2006 publication of ARIA data.

A detailed description of ARIA data is provided in Appendix 2.

3. Application of the range factor

The range factor used for the isolation cost adjustor caps the movement of the most affected council, King Island Council, at +30.0 per cent.

4. Data summary

A data summary is provided over the following four pages which details isolation data used in the Commission’s 2012-13 recommendations.

5. Points for discussion

Is there continued merit in this cost adjustor?

Does the data source used by the Commission remain appropriate and contemporary? If so, do the distance weightings for the isolation cost adjustor remain appropriate?

Is the amount redistributed after application of the cost adjustor reasonable?

Is there merit in exploring an alternate method of quantifying the isolation cost adjustor in preference to the Commission’s existing method?

Isolation – Data used in the calculation of the cost adjustor

Council	Administration centre	Distance to:				Distance for isolation CA
		Hobart	Launceston	Devonport	Burnie	
NORTHERN COUNCILS (N)						
90%	Weight applied to distance to LAUNCESTON					
10%	Weight applied to distance to HOBART					
Break O'Day	<i>St Helens</i>	265	163			173
Dorset	<i>Scottsdale</i>	260	60			80
Flinders *	<i>Whitemark</i>	358	185			375
George Town	<i>Georgetown</i>	253	51			71
Launceston	<i>Launceston</i>	198	0			20
Meander Valley	<i>Westbury</i>	244	34			55
Northern Midlands	<i>Longford</i>	187	25			41
West Tamar	<i>R'side/B'field</i>	223	23			43

Council	Administration centre	Distance to:				Distance for isolation CA
		Hobart	Launceston	Devonport	Burnie	
NORTH WESTERN COUNCILS CLOSER TO BUR THAN DEV (NW)						
70%	Weight applied to distance to BURNIE					
20%	Weight applied to distance to LAUNCESTON					
10%	Weight applied to distance to HOBART					
Burnie	<i>Burnie</i>	326	148		0	62
Circular Head	<i>Smithton</i>	411	233		85	147
King Island *	<i>Currie</i>	527	349		222	508
Waratah-Wynyard	<i>Wynyard</i>	345	167		19	81
West Coast	<i>Queenstown</i>	260	251		176	199
STATE TOTAL					AVG -->89.3	

* A 100 per cent premium is applied to the distances for King and Flinders Islands.

Continued on next page

Isolation – Data used in the calculation of the cost adjustor (continued)

Council	Administration centre	Distance to:				Distance for isolation CA
		Hobart	Launceston	Devonport	Burnie	
NORTH WESTERN COUNCILS CLOSER TO DEV THAN BUR (NWI)						
70%	Weight applied to distance to DEVONPORT					
20%	Weight applied to distance to LAUNCESTON					
10%	Weight applied to distance to HOBART					
Devonport	<i>Devonport</i>	277	99	0		48
Kentish	<i>Sheffield</i>	263	85	29		63
Latrobe	<i>Latrobe</i>	277	99	10		55

Council	Administration centre	Distance to:				Distance for isolation CA
		Hobart	Launceston	Devonport	Burnie	
SOUTHERN COUNCILS (S)						
100%	Weight applied to distance to HOBART					
Brighton	<i>Bridgewater</i>	22				22
Central Highlands	<i>Hamilton</i>	73				73
Clarence	<i>Rosny Park</i>	8				8
Derwent Valley	<i>New Norfolk</i>	38				38
Glamorgan-Spring Bay	<i>Triabunna</i>	87				87
Glenorchy	<i>Glenorchy</i>	12				12
Hobart	<i>Hobart</i>	0				0
Huon Valley	<i>Huonville</i>	38				38
Kingborough	<i>Kingston</i>	11				11
Sorell	<i>Sorell</i>	25				25
Southern Midlands	<i>Oatlands</i>	85				85
Tasman	<i>Nubeena</i>	100				100

STATE TOTAL

AVG -->89.3

Isolation – Calculation of the cost adjustor

	DATA			Pop Weighted Avg (PWA)	COST ADJUSTOR		
	Population 2011p <i>a</i>	Weighted Dist. to Centres <i>b</i>	Isolation Index <i>c = b / Avg b</i>		RAW CA <i>f = c / e</i>	Ranged CA <i>g = (c+RF)/(e+RF)</i>	Rank
Break O'Day	6 512	173	1.94	12 629	4.436	1.086	4
Brighton	16 654	22	0.25	4 102	0.563	0.989	24
Burnie	19 921	62	0.70	13 874	1.593	1.015	15
Central Coast	21 779	70	0.78	16 948	1.780	1.020	13
Central Highlands	2 303	73	0.82	1 882	1.870	1.022	11
Circular Head	8 242	147	1.65	13 585	3.770	1.069	5
Clarence	53 558	8	0.09	4 798	0.205	0.980	28
Derwent Valley	10 184	38	0.43	4 333	0.973	0.999	21
Devonport	25 639	48	0.53	13 636	1.217	1.005	18
Dorset	7 351	80	0.90	6 585	2.049	1.026	10
Flinders	884	375	4.20	3 710	9.600	1.215	2
George Town	6 894	71	0.80	5 496	1.824	1.021	12
Glamorgan-Spring Bay	4 497	87	0.97	4 381	2.228	1.031	7
Glenorchy	44 792	12	0.13	6 019	0.307	0.983	26
Hobart	50 190	0	0.00	0	0.000	0.975	29
Huon Valley	15 544	38	0.43	6 614	0.973	0.999	21
Kentish	6 229	63	0.71	4 425	1.625	1.016	14
King Island	1 674	508	5.69	9 528	13.019	1.301	1
Kingborough	34 825	11	0.12	4 289	0.282	0.982	27
Latrobe	10 239	55	0.61	6 248	1.396	1.010	17
Launceston	66 029	20	0.22	14 639	0.507	0.988	25
Meander Valley	19 747	55	0.62	12 161	1.409	1.010	16
Northern Midlands	12 726	41	0.46	5 871	1.055	1.001	20
Sorell	13 647	25	0.28	3 820	0.640	0.991	23
Southern Midlands	6 152	85	0.95	5 855	2.177	1.029	8
Tasman	2 411	100	1.12	2 700	2.561	1.039	6
Waratah-Wynyard	14 058	81	0.91	12 782	2.080	1.027	9
West Coast	5 139	199	2.23	11 474	5.107	1.103	3
West Tamar	22 699	43	0.48	10 802	1.089	1.002	19
STATE TOTAL	510 519	AVG = 89		223 186	PWA = 1.000	PWA = 1.000	

$e = \sum d / \sum a$
PWA = 0.437

max = 13.019	max = 1.300
min = 0.000	min = 0.975

Isolation – The effect on each expenditure category (2010-11 data)

	GENERAL ADMINISTRATION	EDUCATION HEALTH HOUSING AND WELFARE	LAW ORDER AND PUBLIC SAFETY	PLANNING & COMMUNITY AMENITIES	WASTE MANAGEMENT AND ENVIRONMENT	RECREATION AND CULTURE	OTHER	TOTAL EXPENDITURE EFFECT	IMPACT ON APPLICABLE EXPENDITURE CATEGORIES	IMPACT ON NON-ROADS EXPENDITURE	RANK - % IMPACT ON NON-ROADS EXP
Break O'Day	+ 106 431	+ 0	+ 0	+ 55 553	+ 0	+ 106 026	+ 0	+ 268 011	+8.6%	+5.5%	4
Brighton	- 34 580	+ 0	+ 0	- 18 049	+ 0	- 34 448	+ 0	- 87 077	-1.1%	-0.7%	24
Burnie	+ 56 199	+ 0	+ 0	+ 29 334	+ 0	+ 55 985	+ 0	+ 141 518	+1.5%	+0.9%	15
Central Coast	+ 80 809	+ 0	+ 0	+ 42 179	+ 0	+ 80 502	+ 0	+ 203 490	+2.0%	+1.2%	13
Central Highlands	+ 9 527	+ 0	+ 0	+ 4 973	+ 0	+ 9 491	+ 0	+ 23 991	+2.2%	+1.4%	11
Circular Head	+ 108 600	+ 0	+ 0	+ 56 685	+ 0	+ 108 186	+ 0	+ 273 471	+6.9%	+4.4%	5
Clarence	- 202 553	+ 0	+ 0	- 105 725	+ 0	- 201 782	+ 0	- 510 059	-2.0%	-1.3%	28
Derwent Valley	- 1 295	+ 0	+ 0	- 676	+ 0	- 1 290	+ 0	- 3 260	-0.1%	-0.0%	21
Devonport	+ 26 414	+ 0	+ 0	+ 13 787	+ 0	+ 26 314	+ 0	+ 66 515	+0.5%	+0.3%	18
Dorset	+ 36 679	+ 0	+ 0	+ 19 145	+ 0	+ 36 539	+ 0	+ 92 362	+2.6%	+1.7%	10
Flinders	+ 36 159	+ 0	+ 0	+ 18 874	+ 0	+ 36 022	+ 0	+ 91 055	+21.5%	+13.7%	2
George Town	+ 27 007	+ 0	+ 0	+ 14 097	+ 0	+ 26 905	+ 0	+ 68 009	+2.1%	+1.3%	12
Glamorgan-Spring Bay	+ 26 273	+ 0	+ 0	+ 13 714	+ 0	+ 26 173	+ 0	+ 66 160	+3.1%	+2.0%	7
Glenorchy	- 147 573	+ 0	+ 0	- 77 028	+ 0	- 147 011	+ 0	- 371 611	-1.7%	-1.1%	26
Hobart	- 238 731	+ 0	+ 0	- 124 609	+ 0	- 237 822	+ 0	- 601 162	-2.5%	-1.6%	29
Huon Valley	- 1 976	+ 0	+ 0	- 1 031	+ 0	- 1 968	+ 0	- 4 976	-0.1%	-0.0%	21
Kentish	+ 18 521	+ 0	+ 0	+ 9 667	+ 0	+ 18 451	+ 0	+ 46 639	+1.6%	+1.0%	14
King Island	+ 95 699	+ 0	+ 0	+ 49 952	+ 0	+ 95 335	+ 0	+ 240 986	+30.1%	+19.1%	1
Kingborough	- 118 978	+ 0	+ 0	- 62 102	+ 0	- 118 525	+ 0	- 299 605	-1.8%	-1.1%	27
Latrobe	+ 19 280	+ 0	+ 0	+ 10 064	+ 0	+ 19 207	+ 0	+ 48 551	+1.0%	+0.6%	17
Launceston	- 154 797	+ 0	+ 0	- 80 798	+ 0	- 154 207	+ 0	- 389 802	-1.2%	-0.8%	25
Meander Valley	+ 38 387	+ 0	+ 0	+ 20 037	+ 0	+ 38 241	+ 0	+ 96 664	+1.0%	+0.6%	16
Northern Midlands	+ 3 343	+ 0	+ 0	+ 1 745	+ 0	+ 3 331	+ 0	+ 8 419	+0.1%	+0.1%	20
Sorell	- 23 348	+ 0	+ 0	- 12 187	+ 0	- 23 259	+ 0	- 58 795	-0.9%	-0.6%	23
Southern Midlands	+ 34 443	+ 0	+ 0	+ 17 978	+ 0	+ 34 312	+ 0	+ 86 734	+2.9%	+1.9%	8
Tasman	+ 17 904	+ 0	+ 0	+ 9 345	+ 0	+ 17 836	+ 0	+ 45 086	+3.9%	+2.5%	6
Waratah-Wynyard	+ 72 199	+ 0	+ 0	+ 37 685	+ 0	+ 71 924	+ 0	+ 181 808	+2.7%	+1.7%	9
West Coast	+ 100 394	+ 0	+ 0	+ 52 402	+ 0	+ 100 012	+ 0	+ 252 808	+10.3%	+6.5%	3
West Tamar	+ 9 558	+ 0	+ 0	+ 4 989	+ 0	+ 9 522	+ 0	+ 24 070	+0.2%	+0.1%	19
SUM REDISTRIBUTED	923 830	0	0	482 205	0	920 313	0	2 326 347			
AS PROPN OF CAT EXP	0.953%	0.000%	0.000%	0.953%	0.000%	0.953%	0.000%		0.953%	0.416%	

Unemployment

The Commission calculates a cost adjustor to reflect the rate of unemployment within a municipality, using labour force data published by the Commonwealth Department of Education, Employment and Workplace Relations (DEEWR). This cost adjustor is calculated to capture the additional costs that councils incur by having a higher than average proportion of unemployed working-age residents.

1. Background

The unemployment cost adjustor is used in the assessment of standardised expenditure for the expenditure functions of Health, housing and welfare and Law and order and public safety. These expenditure functions account for around 6 per cent of assessed expenditure in the BGM.

The Commission uses the smoothed quarterly estimate for the unemployment rate by LGA published by DEEWR to assist in calculating a cost adjustor for unemployment. These data are published on a quarterly basis.

It should be noted that the data are original labour market data for a relatively small sample size. As a result, the data tends to be volatile due to seasonal variation and due to the relatively high standard error associated with the estimates. In using these data for the unemployment cost adjustor, the Commission averages quarterly estimates for a two year time period to minimise this data volatility.

2. Approach of other Local Government Commissions

Victoria, South Australia and Western Australia employ a similar cost adjustor that uses ABS Socio-Economic Indexes for Area (SEIFA) data. Queensland also used SEIFA data in its revenue assessment. SEIFA data are published following each Census.

Western Australia apply a Socio-economic Disadvantage disability which recognises the socio-economic circumstances of local governments and the impact on their operating costs. Under the West Australian methodology, only councils with a SEIFA score less than 1 000 (the national average SEIFA score) receive an assessment for socio-economic disadvantage. The Commission uses only SEIFA data for Western Australian local governments and ranks them relative to each other.

The Commonwealth Grants Commission (CGC) also uses SEIFA data in its assessments as an indicator of the prevalence of disadvantaged people in a State and to allow the CGC to recognise the higher costs incurred by States in providing services for these groups. The CGC uses the ABS's SEIFA Index of Relative Socio-economic Disadvantage (IRSD) in four assessments, Schools education, Admitted patients, Community and other health and Justice services.

A more detailed overview of SEIFA data is provided in Appendix 3.

The relative merits of SEIFA data relative to unemployment data were considered by the Commission in 2008-09. In comparing the two measures, the Commission concluded that they provided similar recognition of socioeconomic disadvantage. As the two measures provided such similar results, the Commission resolved to use unemployment data in preference to SEIFA data, as unemployment data (updated quarterly) is updated much more frequently than SEIFA data (updated every five years, post Census).

The key issues that arise when comparing unemployment and SEIFA data:

- Frequency of data – SEIFA data is released every five years, while unemployment is released quarterly.
- Which measure is more appropriate from a conceptual perspective?
- Are the two measures closely aligned enough to be considered equivalent in describing the same phenomena?

3. Application of the range factor

The range factor used for the unemployment cost adjustor caps the movement of the most affected council, Burnie City Council, at +14.4 per cent.

4. Data summary

A data summary is provided over the following two pages which details unemployment data used in the Commission's 2012-13 recommendations.

5. Points for discussion

Is there continued merit in a cost adjustor that recognises unemployment?

How does unemployment/socioeconomic disadvantage impact on council expenditure?

Does the data source used by the Commission remain appropriate and contemporary?

Is the amount redistributed after application of the cost adjustor reasonable?

Is there merit in exploring an alternate method of quantifying the unemployment/socioeconomic disadvantage in preference to the Commission's existing method?

Unemployment – Calculation of the cost adjustor

	DATA			Pop Weighted Avg (PWA)	COST ADJUSTOR		
	Population 2011p <i>a</i>	Unemployment Rate <i>b</i>	Unemployment Index <i>c = b / Avg b</i>		RAW CA <i>f = c / e</i>	Ranged CA <i>g = (c+RF)/(e+RF)</i>	Rank
Break O'Day	6 512	9.28%	1.65	10 742	1.623	1.140	2
Brighton	16 654	7.36%	1.31	21 782	1.287	1.065	8
Burnie	19 921	9.36%	1.66	33 162	1.638	1.144	1
Central Coast	21 779	6.98%	1.24	27 035	1.221	1.050	12
Central Highlands	2 303	7.35%	1.31	3 009	1.286	1.064	9
Circular Head	8 242	4.37%	0.78	6 400	0.764	0.947	23
Clarence	53 558	4.14%	0.74	39 406	0.724	0.938	24
Derwent Valley	10 184	7.36%	1.31	13 328	1.288	1.065	7
Devonport	25 639	7.73%	1.37	35 220	1.351	1.079	6
Dorset	7 351	5.50%	0.98	7 183	0.961	0.991	20
Flinders	884	2.24%	0.40	351	0.391	0.863	28
George Town	6 894	8.75%	1.56	10 730	1.531	1.120	3
Glamorgan-Spring Bay	4 497	5.89%	1.05	4 709	1.030	1.007	18
Glenorchy	44 792	7.11%	1.26	56 650	1.244	1.055	11
Hobart	50 190	3.52%	0.63	31 375	0.615	0.913	26
Huon Valley	15 544	5.99%	1.07	16 563	1.048	1.011	16
Kentish	6 229	8.70%	1.55	9 636	1.522	1.117	4
King Island	1 674	2.18%	0.39	649	0.382	0.861	29
Kingborough	34 825	2.73%	0.49	16 927	0.478	0.883	27
Latrobe	10 239	6.08%	1.08	11 075	1.064	1.014	15
Launceston	66 029	5.99%	1.07	70 338	1.048	1.011	17
Meander Valley	19 747	4.51%	0.80	15 833	0.789	0.952	22
Northern Midlands	12 726	4.04%	0.72	9 144	0.707	0.934	25
Sorell	13 647	5.53%	0.98	13 418	0.967	0.993	19
Southern Midlands	6 152	7.19%	1.28	7 861	1.257	1.058	10
Tasman	2 411	6.49%	1.15	2 781	1.135	1.030	14
Waratah-Wynyard	14 058	6.92%	1.23	17 292	1.210	1.047	13
West Coast	5 139	8.20%	1.46	7 488	1.433	1.098	5
West Tamar	22 699	4.66%	0.83	18 823	0.816	0.959	21
STATE TOTAL	510 519	AVG = 5.62%		518 913	PWA = 1.000	PWA = 1.000	

$e = \sum d / \sum a$	max = 1.638	max = 1.144
PWA = 1.016	min = 0.382	min = 0.861

Unemployment – The effect on each expenditure category (2010-11 data)

	GENERAL ADMINISTRATION	EDUCATION HEALTH HOUSING AND WELFARE	LAW ORDER AND PUBLIC SAFETY	PLANNING & COMMUNITY AMENITIES	WASTE MANAGEMENT AND ENVIRONMENT	RECREATION AND CULTURE	OTHER	TOTAL EXPENDITURE EFFECT	IMPACT ON APPLICABLE EXPENDITURE CATEGORIES	IMPACT ON NON-ROADS EXPENDITURE	RANK - % IMPACT ON NON-ROADS EXP
Break O'Day	+ 0	+ 46 521	+ 11 355	+ 0	+ 0	+ 0	+ 0	+ 57 876	+14.0%	+1.2%	6
Brighton	+ 0	+ 54 766	+ 13 367	+ 0	+ 0	+ 0	+ 0	+ 68 133	+6.5%	+1.4%	5
Burnie	+ 0	+ 145 700	+ 35 562	+ 0	+ 0	+ 0	+ 0	+ 181 262	+14.4%	+3.7%	1
Central Coast	+ 0	+ 55 256	+ 13 487	+ 0	+ 0	+ 0	+ 0	+ 68 743	+5.0%	+1.4%	4
Central Highlands	+ 0	+ 7 541	+ 1 841	+ 0	+ 0	+ 0	+ 0	+ 9 382	+6.4%	+0.2%	15
Circular Head	+ 0	- 22 308	- 5 445	+ 0	+ 0	+ 0	+ 0	- 27 753	-5.3%	-0.6%	23
Clarence	+ 0	- 169 604	- 41 397	+ 0	+ 0	+ 0	+ 0	- 211 000	-6.2%	-4.3%	27
Derwent Valley	+ 0	+ 33 582	+ 8 197	+ 0	+ 0	+ 0	+ 0	+ 41 779	+6.5%	+0.9%	11
Devonport	+ 0	+ 103 342	+ 25 224	+ 0	+ 0	+ 0	+ 0	+ 128 566	+7.9%	+2.6%	3
Dorset	+ 0	- 3 258	- 795	+ 0	+ 0	+ 0	+ 0	- 4 053	-0.9%	-0.1%	19
Flinders	+ 0	- 6 174	- 1 507	+ 0	+ 0	+ 0	+ 0	- 7 681	-13.7%	-0.2%	21
George Town	+ 0	+ 42 003	+ 10 252	+ 0	+ 0	+ 0	+ 0	+ 52 256	+12.0%	+1.1%	7
Glamorgan-Spring Bay	+ 0	+ 1 562	+ 381	+ 0	+ 0	+ 0	+ 0	+ 1 943	+0.7%	+0.0%	18
Glenorchy	+ 0	+ 125 480	+ 30 627	+ 0	+ 0	+ 0	+ 0	+ 156 107	+5.5%	+3.2%	2
Hobart	+ 0	- 221 589	- 54 085	+ 0	+ 0	+ 0	+ 0	- 275 674	-8.7%	-5.6%	29
Huon Valley	+ 0	+ 8 610	+ 2 102	+ 0	+ 0	+ 0	+ 0	+ 10 712	+1.1%	+0.2%	14
Kentish	+ 0	+ 37 289	+ 9 101	+ 0	+ 0	+ 0	+ 0	+ 46 390	+11.7%	+0.9%	8
King Island	+ 0	- 11 873	- 2 898	+ 0	+ 0	+ 0	+ 0	- 14 771	-13.9%	-0.3%	22
Kingborough	+ 0	- 208 393	- 50 864	+ 0	+ 0	+ 0	+ 0	- 259 257	-11.7%	-5.3%	28
Latrobe	+ 0	+ 7 533	+ 1 839	+ 0	+ 0	+ 0	+ 0	+ 9 372	+1.4%	+0.2%	16
Launceston	+ 0	+ 36 368	+ 8 877	+ 0	+ 0	+ 0	+ 0	+ 45 245	+1.1%	+0.9%	9
Meander Valley	+ 0	- 47 820	- 11 672	+ 0	+ 0	+ 0	+ 0	- 59 491	-4.8%	-1.2%	25
Northern Midlands	+ 0	- 42 772	- 10 440	+ 0	+ 0	+ 0	+ 0	- 53 212	-6.6%	-1.1%	24
Sorell	+ 0	- 5 114	- 1 248	+ 0	+ 0	+ 0	+ 0	- 6 362	-0.7%	-0.1%	20
Southern Midlands	+ 0	+ 18 142	+ 4 428	+ 0	+ 0	+ 0	+ 0	+ 22 570	+5.8%	+0.5%	13
Tasman	+ 0	+ 3 730	+ 910	+ 0	+ 0	+ 0	+ 0	+ 4 640	+3.0%	+0.1%	17
Waratah-Wynyard	+ 0	+ 33 877	+ 8 269	+ 0	+ 0	+ 0	+ 0	+ 42 146	+4.7%	+0.9%	10
West Coast	+ 0	+ 25 546	+ 6 235	+ 0	+ 0	+ 0	+ 0	+ 31 781	+9.8%	+0.6%	12
West Tamar	+ 0	- 47 944	- 11 702	+ 0	+ 0	+ 0	+ 0	- 59 645	-4.1%	-1.2%	26
SUM REDISTRIBUTED	0	786 850	192 053	0	0	0	0	978 902			
AS PROPN OF CAT EXP	0.000%	3.025%	3.025%	0.000%	0.000%	0.000%	0.000%		3.025%	0.175%	

Worker influx

I. Background

This cost adjustor reflects the additional costs imposed on municipalities that have a significant daily net influx of non-resident workers. These workers do not directly contribute to the local council revenue raised through rates.

This calculation of the worker influx cost adjustor for the Commission's 2012-13 recommendations was based on 2006 Census data for both the number of residents working outside the municipality and the number of non-residents working within the municipality. The difference, or the net worker inflow, is used to derive a cost adjustor in relation to actual total population.

2. Approach of other Local Government Commissions

Victoria employs the Regional Significance cost adjustor, which “recognises that some municipalities provide a range of services to a larger than average catchment area, increasing the demand on certain council services.”¹

Victoria uses ABS data to estimate the percentage of people working in service industries in each municipality as a proportion of the total estimated resident population of the municipality.

Councils with a ratio of service industry employment to population above the Victorian average are said to be net service providers (providing services to more than just their own residents) while those below the average could be said to be net service users, providing fewer services than their population requires. A maximum service employment to population ratio of 35 per cent is applied to the areas of inner Melbourne and a number of major Victorian regional centres.

A more detailed examination of Victoria's Regional Significance cost adjustor is provided in the Tasmanian Commission's discussion paper DP12-01 Regional Responsibility, which is currently available via the Commission's website.

¹ Victoria Grants Commission, *Annual report 2010-11*

3. Application of the range factor

The range factor used for the worker influx cost adjustor caps the movement of the most affected council, Hobart City Council, at +6.0 per cent.

4. Data summary

A data summary is provided over the following two pages which details worker influx data used in the Commission's 2012-13 recommendations.

5. Points for discussion

Is there continued merit in this cost adjustor that seeks to recognise the use of some services that are provided by councils by residents of other Tasmanian councils?

Does the data source used by the Commission remain appropriate and contemporary?

Is the amount redistributed after application of the cost adjustor reasonable?

Is there merit in exploring an alternate method in preference to the Commission's existing method?

Worker influx – Calculation of the cost adjustor

	DATA							Pop Weighted Avg (PWA) $h = a \times g$	COST ADJUSTOR		
	Population 2011p <i>a</i>	Total Outflow <i>b</i>	Total Inflow <i>c</i>	Outflow Scaled to Match Inflow $d = b * \Sigma c / \Sigma b$	Net Inflow <i>e = c - d</i>	Ranged Net Inflow (Relative to Min) $f = -\text{Min } e + e$	Worker Influx Index $g = f / \text{Avg } f$		RAW CA $k = h / j$	Ranged CA $l = (h+RF)/(j+RF)$	Rank
Break O'Day	6 512	423	80	341	- 261	7 500	0.966	6 293	0.809	0.995	15
Brighton	16 654	4 417	978	3 560	- 2 582	5 179	0.667	11 113	0.559	0.988	26
Burnie	19 921	1 830	4 583	1 475	3 108	10 869	1.400	27 899	1.173	1.005	3
Central Coast	21 779	4 426	1 115	3 568	- 2 453	5 308	0.684	14 896	0.573	0.989	24
Central Highlands	2 303	322	128	260	- 132	7 629	0.983	2 264	0.823	0.995	11
Circular Head	8 242	448	174	361	- 187	7 574	0.976	8 043	0.817	0.995	13
Clarence	53 558	15 257	4 537	12 298	- 7 761	0	0.000	0	0.000	0.973	29
Derwent Valley	10 184	2 154	743	1 736	- 993	6 768	0.872	8 881	0.730	0.993	18
Devonport	25 639	2 894	4 192	2 333	1 859	9 620	1.240	31 782	1.038	1.001	4
Dorset	7 351	564	260	455	- 195	7 566	0.975	7 167	0.816	0.995	14
Flinders	884	67	6	54	- 48	7 713	0.994	879	0.832	0.995	8
George Town	6 894	830	1 103	669	434	8 195	1.056	7 280	0.884	0.997	6
Glamorgan-Spring Bay	4 497	415	176	335	- 159	7 602	0.980	4 405	0.820	0.995	12
Glenorchy	44 792	10 715	10 258	8 637	1 621	9 382	1.209	54 149	1.012	1.000	5
Hobart	50 190	6 542	27 515	5 273	22 242	30 003	3.866	194 031	3.237	1.060	1
Huon Valley	15 544	2 271	480	1 831	- 1 351	6 410	0.826	12 839	0.692	0.992	21
Kentish	6 229	1 353	352	1 091	- 739	7 022	0.905	5 636	0.758	0.993	17
King Island	1 674	114	16	92	- 76	7 685	0.990	1 658	0.829	0.995	9
Kingborough	34 825	9 654	2 022	7 782	- 5 760	2 001	0.258	8 980	0.216	0.979	28
Latrobe	10 239	2 307	1 344	1 860	- 516	7 245	0.934	9 559	0.782	0.994	16
Launceston	66 029	5 694	11 400	4 590	6 810	14 571	1.878	123 972	1.572	1.015	2
Meander Valley	19 747	5 030	1 534	4 054	- 2 520	5 240	0.675	13 334	0.565	0.988	25
Northern Midlands	12 726	2 845	1 295	2 293	- 998	6 763	0.871	11 089	0.730	0.993	19
Sorell	13 647	3 672	589	2 960	- 2 371	5 390	0.695	9 478	0.581	0.989	23
Southern Midlands	6 152	1 487	180	1 199	- 1 019	6 742	0.869	5 345	0.727	0.993	20
Tasman	2 411	225	72	181	- 109	7 651	0.986	2 377	0.825	0.995	10
Waratah-Wynyard	14 058	2 963	898	2 388	- 1 490	6 270	0.808	11 358	0.676	0.991	22
West Coast	5 139	258	222	208	14	7 775	1.002	5 148	0.839	0.996	7
West Tamar	22 699	6 561	917	5 288	- 4 371	3 389	0.437	9 913	0.366	0.983	27
STATE TOTAL	510 519	95 738	77 169	77 169	0	AVG -->7 761		609 766	PWA = 1.000	PWA = 1.000	
								$j = \Sigma i / \Sigma a$	max = 3.237	max = 1.060	
								PWA = 1.194	min = 0.000	min = 0.973	

Worker influx – The effect on each expenditure category (2010-11 data)

	GENERAL ADMINISTRATION	EDUCATION HEALTH HOUSING AND WELFARE	LAW ORDER AND PUBLIC SAFETY	PLANNING & COMMUNITY AMENITIES	WASTE MANAGEMENT AND ENVIRONMENT	RECREATION AND CULTURE	OTHER	TOTAL EXPENDITURE EFFECT	IMPACT ON APPLICABLE EXPENDITURE CATEGORIES	IMPACT ON NON-ROADS EXPENDITURE	RANK - % IMPACT ON NON-ROADS EXP
Break O'Day	+ 0	+ 0	+ 0	- 3 314	- 4 688	- 6 326	+ 0	- 14 328	-0.5%	-0.3%	13
Brighton	+ 0	+ 0	+ 0	- 19 595	- 27 713	- 37 399	+ 0	- 84 708	-1.2%	-1.7%	24
Burnie	+ 0	+ 0	+ 0	+ 9 163	+ 12 958	+ 17 487	+ 0	+ 39 608	+0.5%	+0.8%	3
Central Coast	+ 0	+ 0	+ 0	- 24 813	- 35 092	- 47 357	+ 0	- 107 262	-1.1%	-2.2%	26
Central Highlands	+ 0	+ 0	+ 0	- 1 086	- 1 537	- 2 074	+ 0	- 4 697	-0.5%	-0.1%	8
Circular Head	+ 0	+ 0	+ 0	- 4 020	- 5 685	- 7 672	+ 0	- 17 378	-0.5%	-0.4%	15
Clarence	+ 0	+ 0	+ 0	- 142 786	- 201 939	- 272 515	+ 0	- 617 240	-2.7%	-12.6%	29
Derwent Valley	+ 0	+ 0	+ 0	- 7 328	- 10 364	- 13 986	+ 0	- 31 679	-0.7%	-0.6%	19
Devonport	+ 0	+ 0	+ 0	+ 2 585	+ 3 656	+ 4 934	+ 0	+ 11 175	+0.1%	+0.2%	4
Dorset	+ 0	+ 0	+ 0	- 3 601	- 5 093	- 6 873	+ 0	- 15 568	-0.5%	-0.3%	14
Flinders	+ 0	+ 0	+ 0	- 396	- 560	- 755	+ 0	- 1 711	-0.5%	-0.0%	6
George Town	+ 0	+ 0	+ 0	- 2 131	- 3 014	- 4 067	+ 0	- 9 212	-0.3%	-0.2%	10
Glamorgan-Spring Bay	+ 0	+ 0	+ 0	- 2 156	- 3 050	- 4 116	+ 0	- 9 322	-0.5%	-0.2%	11
Glenorchy	+ 0	+ 0	+ 0	+ 1 449	+ 2 050	+ 2 766	+ 0	+ 6 265	+0.0%	+0.1%	5
Hobart	+ 0	+ 0	+ 0	+ 299 285	+ 423 272	+ 571 201	+ 0	+1 293 759	+6.0%	+26.4%	1
Huon Valley	+ 0	+ 0	+ 0	- 12 783	- 18 078	- 24 396	+ 0	- 55 257	-0.8%	-1.1%	22
Kentish	+ 0	+ 0	+ 0	- 4 026	- 5 694	- 7 684	+ 0	- 17 404	-0.7%	-0.4%	16
King Island	+ 0	+ 0	+ 0	- 763	- 1 079	- 1 456	+ 0	- 3 298	-0.5%	-0.1%	7
Kingborough	+ 0	+ 0	+ 0	- 72 799	- 102 958	- 138 941	+ 0	- 314 698	-2.1%	-6.4%	28
Latrobe	+ 0	+ 0	+ 0	- 5 961	- 8 431	- 11 377	+ 0	- 25 769	-0.6%	-0.5%	18
Launceston	+ 0	+ 0	+ 0	+ 100 681	+ 142 391	+ 192 156	+ 0	+ 435 228	+1.5%	+8.9%	2
Meander Valley	+ 0	+ 0	+ 0	- 22 883	- 32 363	- 43 674	+ 0	- 98 920	-1.2%	-2.0%	25
Northern Midlands	+ 0	+ 0	+ 0	- 9 176	- 12 977	- 17 512	+ 0	- 39 665	-0.7%	-0.8%	20
Sorell	+ 0	+ 0	+ 0	- 15 227	- 21 535	- 29 062	+ 0	- 65 825	-1.1%	-1.3%	23
Southern Midlands	+ 0	+ 0	+ 0	- 4 472	- 6 324	- 8 535	+ 0	- 19 331	-0.7%	-0.4%	17
Tasman	+ 0	+ 0	+ 0	- 1 122	- 1 587	- 2 141	+ 0	- 4 850	-0.5%	-0.1%	9
Waratah-Wynyard	+ 0	+ 0	+ 0	- 12 126	- 17 149	- 23 143	+ 0	- 52 418	-0.9%	-1.1%	21
West Coast	+ 0	+ 0	+ 0	- 2 209	- 3 124	- 4 216	+ 0	- 9 550	-0.4%	-0.2%	12
West Tamar	+ 0	+ 0	+ 0	- 38 389	- 54 292	- 73 267	+ 0	- 165 947	-1.7%	-3.4%	27
SUM REDISTRIBUTED	0	0	0	413 164	584 328	788 544	0	1 786 036			
AS PROPN OF CAT EXP	0.000%	0.000%	0.000%	0.817%	0.817%	0.817%	0.000%		0.817%	0.319%	

Submissions and timeframes

The Commission invites comments and input from councils on the issues raised within this discussion paper. However, council input need not be confined to the issues identified. Councils should feel free to provide comments on other pertinent issues regarding the Commission assessment methodologies.

Submissions should be forwarded to the Commission Secretary, Mr John Wise as follows:

- By post:Secretary
State Grants Commission
GPO Box 147
HOBART TAS 7001
- By email: John.Wise@treasury.tas.gov.au

Further details regarding the annual assessments can be found in the 2012-13 Annual Report that is available on the Commission website. Go to the Department of Treasury and Finance webpage (www.treasury.tas.gov.au) and click the State Grants Commission 'Quick Link', then click Publications.

Submissions close on Friday 22 February 2013.

Any queries should be directed to the Secretary on 6233 5037.

2013 Hearings and Visits

The Commission will provide councils with an opportunity to discuss this paper and any other concerns during the 2013 Hearings and Visits program that will begin in March 2013.

APPENDICES

APPENDIX I – Cost adjustors in the Base Grant Model

Application of council-specific cost adjustors

Cost adjustors are used to reflect the inherent relative cost advantages or disadvantages faced by councils in providing services. A range of cost adjustors has been developed to quantify differences in the demand for services between councils, as well as variations in the per unit cost of supplying that service.

An adjustor is calculated for each municipality by comparing its demand or supply disadvantage with the State average. Any council that demonstrates the State average level of advantage/disadvantage is assigned a cost adjustor of 1.00. Cost adjustors are always less than 1.00 if the council is assessed to enjoy a cost advantage and greater than 1.00 if the council is assessed to suffer a relative cost disadvantage.

The following cost adjustors are recognised by the Commission:

- Absentee population
- Climate
- Dispersion
- Isolation
- Population decline
- Regional responsibility
- Scale (administration)
- Scale (other)
- Tourism
- Unemployment
- Worker influx

The application of cost adjustors to each expenditure category is detailed below.

Base Grant Assessment: Allocation of Cost Adjustors to Expenditure Functions

Expenditure Function	Cost Adjustors
General administration	Absentee population Isolation Population decline Scale (administration)
Health, housing & welfare	Population decline Unemployment
Law, order & public safety	Dispersion Population decline Tourism Unemployment
Planning & community amenities	Absentee population Climate Dispersion Isolation Population decline Scale (other) Tourism Worker influx
Recreation & culture	Absentee population Climate Dispersion Isolation Population decline Regional responsibility Scale (other) Tourism Worker influx
Roads	See Section 7.1
Waste management & environment	Absentee population Climate Dispersion Population decline Scale-other Tourism Worker influx
Other	No cost adjustors are applied to 'other' expenditure

APPENDIX 2 – ARIA data (Accessibility/Remoteness Index of Australia)

Sourced from http://www.adelaide.edu.au/apmrc/research/projects/category/about_aria.html

ARIA and its successors ARIA+ and ARIA++, are indexes of remoteness derived from measures of road distance between populated localities and service centres. These road distance measures are then used to generate a remoteness score for any location in Australia. ARIA+ is the standard Australian Bureau of Statistics (ABS) endorsed measure of remoteness.

Data calculation

ARIA is based on road distance measurements from populated localities to the nearest service centres in five size categories based on population size.

Service Centre Category	Urban Centre Population
A	250 000 persons or more
B	48 000 – 249 999 persons
C	18 000 – 47 999 persons
D	5 000 – 17 999 persons
E	1 000 – 4 999 persons

The five distance measurements from a population centre to each level of service centre recorded for each populated locality are standardised to a ratio by dividing by the Australian mean for that category.

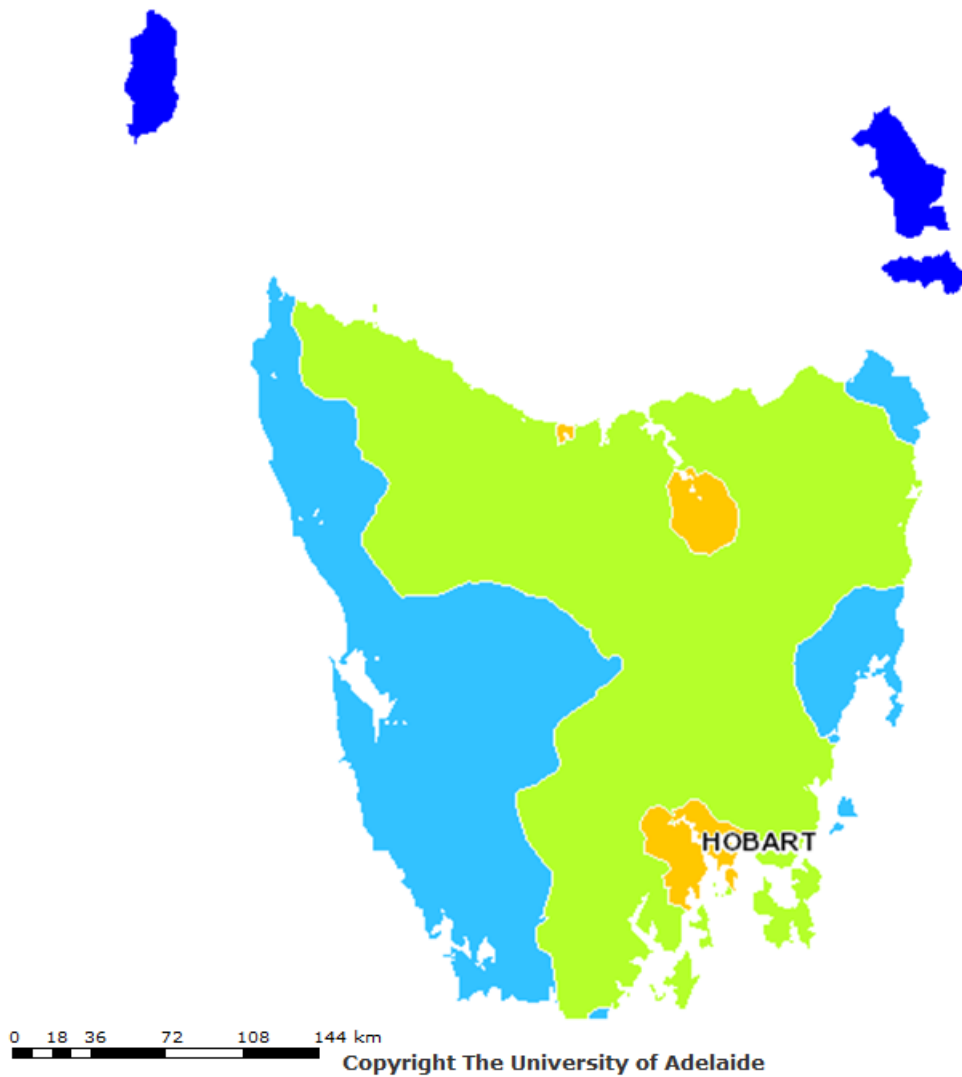
The major advantages of ARIA are purported to be:

- it is a purely geographic measure of remoteness, which excludes any consideration of socio-economic status, rurality and populations size factors ;
- it is precise; and
- it is stable over time.

As a comparable index of remoteness that covers the whole of Australia, ARIA+ provides a measure of remoteness that is suitable for a broad range of applications including assisting in service planning, demographic analysis and resource allocation.

Although ARIA+ provides a measure of accessibility and remoteness for the whole of Australia, including metropolitan and non-metropolitan areas, the principal focus of the index is to quantify accessibility in non-metropolitan Australia.

Tasmanian ARIA scores



- 0 - 0.2 - Highly Accessible
- > 0.2 - 2.4 - Accessible
- > 2.4 - 5.92 - Moderately Accessible
- > 5.92 - 10.53 - Remote
- > 10.53 - 15 - Very Remote

APPENDIX 3 – SEIFA data

According to the ABS²:

The concept of relative socio-economic disadvantage is abstract and difficult to capture. The SEIFA indexes are trying to capture socio-economic disadvantage, in terms of relative: access to material and social resources; and ability to participate in society.

Though four SEIFA indexes are published by the ABS, the Relative Socio-economic Disadvantage is the most aligned to the concept that is currently captured in the unemployment cost adjustor:

The Index of Relative Socio-economic Disadvantage (IRSD) is a general socio-economic index that summarises a range of information about the economic and social resources of people and households within an area. Unlike the other indexes, this index includes only measures of relative disadvantage.

The SEIFA indexes are rankings. Each index ranks different geographic areas of Australia according to a 'score' that is created for the area based on characteristics of people, families and dwellings within that area.

The ABS also notes a number of conceptual issues relative to the concept of socio-economic disadvantage:

- Disadvantage is a social construct
- Disadvantage is subjective
- Disadvantage has no perfect measure

There are two key points to note in regard to the way SEIFA indexes are constructed:

1. SEIFA is a summary measure

A SEIFA index summarises the characteristics of people and households within an area. A SEIFA score therefore reflects this group of people as a whole; it does not reflect any one person or household within that area. In addition, areas are often quite diverse and so can have both high income and low income households, for example. It is possible for a high income household to reside in a relatively disadvantaged area.

2. SEIFA is a relative measure

² ABS Cat no. 2039.0, Information Paper: An Introduction to Socio-Economic Indexes for Areas (SEIFA), 2006, 26/03/2008

It is incorrect to state that an area with a low SEIFA score is disadvantaged. It can only be determined that an area is disadvantaged relative to other areas.