Tasmanian Freight Survey

Discussion Paper – DP14-03

February 2014

Tasmania
Explore the possibilities

STATE GRANTS COMMISSION

Contents

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. However, this policy does not apply to the method used to determine shares of State Government Heavy Vehicle Motor Tax Revenue (HVMTR) funds.

Table 1: 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

This paper seeks to address issues arising from the most recent update of the Tasmanian Freight Survey (TFS). The TFS is used in the calculation of the road grant component of the FAGs, and the HVMTR distributions. The Commission views the TFS as a data update, which means it can be adopted within the assessment methodologies at the next distribution.

There have been major movements in the TFS data between surveys that, if adopted outright, would cause significant shifts in grant outcome. There has also been a change in the classification of what is viewed as urban and rural populations as a result of the Australian Bureau of Statistics (ABS) move from the Australian Standard Geographical Classification (ASGC) to the Australian Statistical Geography Standard (ASGS). This impacts on relativities used in the Urban and Rural Road type categories of the Road Grant Model Traffic Cost Adjustor.

The purpose of this paper is to detail the issues, and put forward the Commission's suggested position for council consultation.

Tasmanian Freight Survey

The Tasmanian Freight Survey (TFS) is a survey compiled by the Department of Infrastructure, Energy and Resources (DIER). The survey gathers origin, destination and tonnage data from the largest freight demanders in Tasmania. From the raw survey data, DIER can construct a picture of the quantity of goods transported over specific roads throughout the State, and hence provide valuable strategic management information to inform planning decisions on current and future transport infrastructure needs.

The TFS provides a measure of tonne-kilometres (T-K) – being the product of the tonnage carried over roads, and the distance over which it is carried, as identified by the largest freight demanders.

Collection Methods

DIER has conducted this survey four times in recent years. The data are collected through a combination of posted surveys and face-to-face interviews with the freight demanders. However, some differences in the detail of the collection have occurred from year to year. A brief summary of the collection method used for each survey follows.

2002-03 Survey

The first freight demander survey was based on information gathered in the 2002-03 financial year. DIER collected data from the largest 120 freight demanders in Tasmania. This was a relatively unsophisticated survey, as local road lengths were measured manually from maps, then incorporated to provide the tonne-kilometre measure for council local road networks. (See Appendix 3 for summary results).

2005-06 Survey

The second survey was conducted in the 2005-06 financial year. It was more comprehensive than the first, with 200 of the largest freight demanders providing information. Furthermore, DIER greatly enhanced the accuracy of road length reporting as it was able to utilise data from the Geographic Information System (GIS) administered by the then Department of Primary Industries, Water and the Environment (DPIWE). The GIS provided more accurate road length data and provided the Commission and councils with greater confidence in the tonne-kilometre survey results. (See Appendix 3 for summary results).

2008-09 Survey

The third survey used data collected during the 2008-09 financial year. In a similar manner to the 2005-06 survey, the 2008-09 survey uses data from the largest 200 freight demanders and road lengths provided through GIS information. However, budgetary constraints within DIER resulted in only the 100 largest freight demanders providing updated data from the last survey. The remaining freight demander data from the 100 smallest freight demanders were 'rolled-over' from the previous survey as resources were not available to properly capture a full updated survey. (See Appendix 1).

2011-12 Survey

The 2011-12 survey gathered information relating to freight movements on the Tasmanian land transport network for the 2011-12 financial year. It surveyed approximately 150 major companies within Tasmania examining a range of factors including tonnage, value and commodity type. In some cases freight movements were 'rolled over' over from an earlier Tasmanian Freight Survey without re-interview of the companies involved. This was done where the either the freight tonnage involved with that movement was relatively low or verification of the information was possible through a third party. (See Appendix 2).

A comparison of all four surveys is also provided at Appendix 3.

Council Consultation

The degree of council consultation by DIER in relation to each of these surveys has varied. This is primarily due to survey data being commercial-in-confidence. Therefore, DIER has exercised caution when providing disaggregated data to councils, due to the possibility of identifying survey respondents.

The Commission has previously queried with DIER whether council consultation would occur for the survey, but advice from DIER is that the core use of the data, and the design of the survey, is to allow it to provide detailed freight movement analysis for input into strategies and projects involving the State road and rail networks. As a result, DIER does not provide councils with summaries of movements on the local council road network.

Notwithstanding DIER policy, the significant movements between surveys and the change in the Commission's treatment of the TFS necessitates the Commission consulting with councils on the issues.

Commission Methods

The Commission uses the Tasmanian Freight Survey (TFS) as a measure of the damage caused by heavy freight vehicles travelling on local government roads. The Commission understands that heavy vehicles cause the vast majority of damage to roads and as such, the TFS is a significant dataset within the Commission methodologies. The Commission uses the TFS data in two areas.

Traffic Cost Adjustor

The Traffic Cost Adjustor (Traffic CA) is used within the Roads Preservation Model (RPM). The RPM calculates a theoretical cost for each council to maintain its road network, and then distributes the road grant component of the Australian Government financial assistance grants based on council shares of the state total cost. The Traffic CA is used as a measure of the relative advantage or disadvantage experienced by councils with volumes of heavy vehicle traffic on local road networks. The Traffic CA for each road type used in the 2013-14 RPM is detailed at Appendix 8.

The TFS allows the calculation of tonne-kilometres for each council by road type, which is the product of the tonnage carried over each road type and the distance over which it is carried. Relative positions are determined for each council based on the tonne-kilometres per kilometre of each road type. The distribution of the Traffic CA is controlled by the application of limits based closely on those determined by the Australian Road Research Board in 1989.

Table 2 below, shows the Traffic CA limits. The council that has the greatest number of tonne-kilometres per kilometre travelling on a particular road type is awarded the upper limit or maximum cost adjustment for that road type. Similarly, the council with the least tonne-kilometres per kilometre is given the minimum cost adjustment. All other council results are spread between the limits depending on their relative position between the maximum and minimum results.

Table 2: Traffic Cost Adjustor Limits

	Urban sealed	Rural sealed	Unsealed
Upper limit (maximum cost adjustment)	1.11	1.25	1.25
Lower limit (minimum cost adjustment)	0.93	0.96	0.91

The 2013-14 RPM used the 2008-09 TFS results. This is because the results from the 2011-12 TFS did not arrive until late 2013, several months after the 2013-14 FAG recommendations had been forwarded to the Commonwealth Minister for approval.

The Commission views the TFS results as a data update within the RPM, meaning it may be incorporated for distributions when received and not deferred in line with the Triennial Review period. However, the Traffic CA has the largest redistributive effect on the roads assessment and any movements in the data informing the cost adjustor will have a significant impact on road grant outcomes.

Heavy Vehicle Motor Tax Revenue

The Commission also provides annual recommendations for the distribution of State Government Heavy Vehicle Motor Tax Revenue (HVMTR) that has been provided to councils each year since 1996-97.

Heavy vehicle motor taxes were increased as part of national transport reform processes in 1996. The revised motor tax rates were formulated as a cost recovery measure in recognition of the increased damage to road infrastructure arising from heavier vehicles sanctioned through the same reform process. As part of these reforms, legislative changes made in 1996 required the abolition of council road tolls. In consultation with the Local Government Association of Tasmania (LGAT), a funding arrangement was devised to compensate councils for both road toll revenue foregone, and the additional costs arising from the registration of council-owned heavy vehicles.

The Commission was given the task of developing a method for distributing the HVMTR in 2000. The Commission tested various distribution methods in consultation with councils, and this resulted in the freight demander survey being adopted and phased-in for the HVMTR distribution from 2004-05. Subsequently, the Commission proposed a further change by basing the distribution wholly on heavy vehicle road usage, thereby excluding any reimbursement of motor taxes paid by councils. This change received general agreement from councils and was adopted for the 2007-08 distribution. Thus since 2007-08 the HVMTR distribution has been calculated solely on the basis of freight demander data.

The Commission excludes Flinders and King Island Councils when calculating the HVMTR distribution. The basis for this lies in the *Roads and Jetties Act 1935*, under which these councils alone receive full reimbursement from the State Government of all motor tax paid in respect of vehicles registered to addresses within their boundaries. In light of this long-standing arrangement, the Commission considers it inequitable for Flinders and King Island to also receive a share of the local government heavy vehicle motor tax revenues.

In a similar manner to the Traffic CA within the RPM, the HVMTR distribution is also highly sensitive to movements in data.

Road type classifications

The TFS has, to date, used the ASGC classification of Statistical Subdivisions (SSD) for determining whether a road is classed as an urban road or a rural road. The SSD basically recognises three 'urban' zones in Tasmania, being Burnie-Devonport (encompassing Wynyard), greater Launceston which encompasses the Tamar Valley and greater Hobart, which encompasses a significant zone in the Hobart region. Based on this classification of urban status, all freight movements along roads within these zones have been classed as freight movements on urban roads. These zones are represented as the light blue shading on the map of Tasmania provided at Appendix 9.

The ABS now uses the /Section of State/Urban Centre and Locality (SOS/UCL) structures of the ASGS to define what is regarded as Urban and Rural. The SOS aggregates the Urban Centre and Locality (UCL) on the basis of population ranges i.e. all UCLs in a State/Territory within a particular population range are combined into a single SOS. There are 4 SOS identifiers and names. These are listed below with definitions.

SOS Identifiers and Names

Identifier	Name	Definition
0	Major Urban	Major Urban represents a combination of all Urban Centres with a population of 100,000 or more
1	Other Urban	Other Urban represents a combination of all Urban Centres with a population between 1,000 and 99,999
2	Bounded Locality	Bounded Localities represents a combination of all Bounded Localities
3	Rural Balance	Rural Balance represents the Remainder of State/Territory

In Tasmania, the UCL classification identifies 99 urban centres/localities of differing size (eg 200-499 in population up to 100,00-249,999 in population). The classification of the road type can now be linked to the classification of these populations (major urban, other urban, or bounded locality). These areas are represented as the Green highlighted areas on the map at Appendix 9 and Appendix 10. Areas that are not classified as either major urban, other urban or bounded locality are treated by default, as "rural".

This change in definition is relevant for the TFS as it impacts on the classification of road type used by the freight demanders and impacts on the Traffic CA relativities. Consistent definition and classification of road types as being urban or rural will ensure the RPM Traffic CA relativities (Refer Appendix 8) reflect the correct road usage demands placed on council road network.

DIER has provided the 2011-12 TFS results using both SSD and SOS/UCL classifications. The 2011-12 TFS data has been provided based on two cut-offs for the UCL data, being:

1. All urban centres and 'Bounded Locality' considered URBAN. Rural Balance considered RURAL (UCL_1)

2. All urban centres considered URBAN. Rural Balance AND 'Bounded Locality' considered RURAL (UCL_2)

A comparison of the 2011-12 freight task by road type, using the current SSD classification, and the two SOS/UCL classifications provided by DIER (where Bounded Localities are classed as either Urban or Rural) is provided at Appendix 7.

Data Movements

In December 2013, DIER released an updated TFS utilising data collected in 2011-12. This updated survey arrived too late to be incorporated into the 2013-14 FAG distribution. The Commission has been able to consider the data for the 2013-14 HVMTR distribution.

Freight Task movements

There have been some significant movements between surveys. Table 3 shows the total tonne-kilometre results for each council from the last two surveys, and the percentage movements. The table shows a decrease of approximately 40 per cent in the total tonne-kilometres recorded on local road networks in the 2011-12 survey compared to the 2008-09 survey.

Seventeen councils experienced a greater than 40 per cent negative change in tonne-kilometres in based on the 2011-12 survey results. The primary reason for this significant movement was a general decline in freight movement activity caused by the economic downturn and a marked (64%) decline in forestry activity, particularly due to a decline in demand and hence decline in the transportation of hardwood logs. Only one council experienced positive gains in tonne-kilometres in the 2011-12 survey, being Brighton Council.

The largest percentage declines between the 2011-12 and 2008-09 surveys were:

Break O'Day (-62 per cent)

Flinders[1] (-66 per cent)

Glamorgan Spring Bay (-96 per cent)

Huon Valley (-51 per cent)

Kentish (-55 per cent)

Meander Valley (-55 per cent)

Northern Midlands (-54 per cent)

Sorell (-56 per cent)

Southern Midlands (-78 per cent)

Tasman (-59 per cent)

West Coast (-62 per cent)

- [1] Flinders Island has a low volume so is more subject to material changes

This represents almost 40% of councils experiencing declines in freight movement of 50% or greater. Refer to Appendix 11 for a graphical representation of the most affected councils.

When evaluating the change in freight task movements over the 2005-06, 2008-09 and 2011-12 surveys, the most significant movements were:

Break O'Day (-75 per cent)

Burnie (-65 per cent)

Central Highlands (-62 per cent)

Dorset (-65 per cent)

Glamorgan Spring Bay (-97 per cent)

Latrobe (-65 per cent)

Meander Valley (-60 per cent)

Northern Midlands (-70 per cent)

Sorell (-73 per cent)

Southern Midlands (-80 per cent)

West Coast (-69 per cent)

The inherent nature of freight movements within the state results in large fluctuations in tonne-kilometres between surveys. However, the significant structural changes in the economy, and in particular the forestry industry is responsible for a significant portion of the fluctuations experienced in the 2011-12 TFS results.

Table 3: Change between Surveys

	2008-09 Data T-K	% share	2011-12 Data T-K	% share	Change in T-K T-K	change between 2008-09 and 2011-12 TFS %	change between 2005-06 and 2011-12 TFS %
Break O'Day	7 160 641	3.93%	2 733 186	2.50%	-4 427 455	-61.83%	-75.10%
Brighton	256 135	0.14%	311 528	0.28%	55 393	21.63%	-24.12%
Burnie	4 427 614	2.43%	2 549 384	2.33%	-1 878 230	-42.42%	-64.79%
Central Coast	13 177 789	7.23%	9 260 307	8.46%	-3 917 482	-29.73%	-29.78%
Central Highlands	5 828 854	3.20%	3 247 702	2.97%	-2 581 152	-44.28%	-62.41%
Circular Head	21 472 982	11.78%	15 257 515	13.94%	-6 215 467	-28.95%	-37.45%
Clarence	3 107 137	1.71%	1 859 573	1.70%	-1 247 564	-40.15%	-26.64%
Derwent Valley	4 222 460	2.32%	3 540 204	3.23%	- 682 256	-16.16%	-30.78%
Devonport	6 314 306	3.46%	6 211 827	5.68%	- 102 479	-1.62%	-12.18%
Dorset	13 762 896	7.55%	8 805 354	8.05%	-4 957 542	-36.02%	-64.59%
Flinders	2 457 281	1.35%	826 545	0.76%	-1 630 736	-66.36%	16.62%
George Town	3 776 256	2.07%	3 437 331	3.14%	- 338 925	-8.98%	-15.71%
Glamorgan-Spring Bay	2 325 803	1.28%	88 956	0.08%	-2 236 847	-96.18%	-96.93%
Glenorchy	3 397 583	1.86%	2 489 878	2.28%	- 907 705	-26.72%	-38.49%
Hobart	9 162 864	5.03%	5 117 524	4.68%	-4 045 340	-44.15%	-49.73%
Huon Valley	6 165 691	3.38%	2 993 171	2.73%	-3 172 520	-51.45%	-27.63%
Kentish	10 528 884	5.78%	4 699 223	4.29%	-5 829 661	-55.37%	-44.40%
King Island	1 870 832	1.03%	1 659 030	1.52%	- 211 802	-11.32%	-6.62%
Kingborough	1 559 875	0.86%	815 285	0.74%	- 744 590	-47.73%	-51.93%
Latrobe	1 463 938	0.80%	1 230 548	1.12%	- 233 390	-15.94%	-64.89%
Launceston	23 639 108	12.97%	13 799 890	12.61%	-9 839 218	-41.62%	-52.73%
Meander Valley	9 594 136	5.26%	4 347 706	3.97%	-5 246 430	-54.68%	-60.10%
Northern Midlands	10 508 363	5.77%	4 878 303	4.46%	-5 630 060	-53.58%	-69.62%
Sorell	1 944 967	1.07%	859 572	0.79%	-1 085 395	-55.81%	-73.28%
Southern Midlands	2 451 339	1.35%	539 707	0.49%	-1 911 632	-77.98%	-80.41%
Tasman	1 785 020	0.98%	737 762	0.67%	-1 047 258	-58.67%	-44.20%
Waratah-Wynyard	5 793 661	3.18%	4 201 926	3.84%	-1 591 735	-27.47%	-32.04%
West Coast	546 504	0.30%	210 283	0.19%	- 336 221	-61.52%	-68.52%
West Tamar	3 529 478	1.94%	2 730 633	2.50%	- 798 845	-22.63%	-42.70%
TOTAL	**182 232 397**	**100%**	**109 439 855**	**100%**	**-72 792 542**	**-39.94%**	**-50.47%**

Road Classifications

The SOS/UCL definition of urban versus rural populations compared to the previous SSD classification, results in some councils that were within the boundaries of the greater urban zone areas, having a greater portion of the freight task recognised as occurring on rural roads than previously. The highlighted sections in Appendix 9 and Appendix 10 provides a graphical representation of those areas that are classed as urban compared to council boundaries. Areas that are not highlighted are classed as Rural using the SOS/UCL classifications.

Adoption of the SOS/UCL definition of urban versus rural results in the classification of freight task by road type which is believed to be more reflective of actual circumstances.

Commission Position

The Commission aims to control year-to-year movements in its recommendations to ensure changes in grant outcomes are manageable for all councils.

Freight movement changes

Due to the significant movements in tonne-kilometres between the 2005-06 and 2008-09 surveys, the Commission considered it unreasonable to approve the standalone use of the 2008-09 survey data, as it was expected to result in significant detrimental movements in funding shares to both the HVMTR and road grant distributions.

As a result, the Commission opted to use an average of tonne-kilometres from the 2005-06 and 2008-09 surveys as the basis for the 2010-11 and subsequent HVMTR distributions.

As part of its previous investigations into the best method of smoothing the HVMTR movements, the Commission also considered using a three-survey average. The 2002-03 survey was considered less robust when compared to the more recent surveys due to the inadequacy of the road length data used. As the Commission had more confidence in the 2005-06 and 2008-09 surveys, which employed GIS road length data, the Commission considered an average of these surveys to be the most appropriate measure to apply.

Table 4 shows the councils shares of total tonne-kilometres when calculating a two survey average based on 2008-09 and 2011-12 TFS data.

The HVMTR distribution is based on the total tonne-kilometres usage results. It is thus unaffected by any road classification changes.

The Commission intends to again use a two-survey (2008-09 and 2011-12) average of tonne-kilometres for the calculation of the 2013-14 HVMTR distributions to ensure changes to the HVMTR outcomes are manageable.

Road classification changes

The SOS/UCL definition of Urban versus Rural results in the classification of freight task by road type which is believed to be more reflective of actual circumstances than the SSD classification.

Populations greater than 1000 are considered sufficiently concentrated to be regarded as having a degree of urbanisation and hence are classed under the SOS/UCL approach as "other urban populations". However, the classification of "bounded localities" with populations between 200 and 499 and populations of between 500 and 999 is less clear.

Subject to discussion with councils, the Commission is inclined to classify all bounded localities with populations over 200 as Urban and all remaining localities by default will be classified as Rural. As such, the Commission proposes to adopt the SOS 0, 1 and 2 identifiers as Urban ie the classification of major urban, other urban population sizes and all bounded localities as Urban for the purposes of the Traffic CA for the RPM.

The 2008-09 TFS data was based on the SSD classification of urban. As such, the split of tonne-kilometre by road type for the 2008-09 TFS and 2011-12 TFS is not comparable. The Commission does not consider it appropriate to use an average of the two survey results by road type for determining the respective road type Traffic CA because the classifications of "urban" differs so markedly. Therefore, subject to discussion with councils, the Commission also considers it most appropriate to adopt the most recent survey data only for the calculation of the each road type's Traffic CA in the RPM.

Points for discussion

1. *Is the classification of Bounded Localities with "populations of 200+" as Urban appropriate for determining the road category split between Urban and Rural for the Road Preservation Model Traffic Cost Adjustor?*

2. *If no, is the classification of Bounded Localities with "populations of 1000+" as Urban appropriate for determining the road category split between Urban and Rural for the Road Preservation Model Traffic Cost Adjustor?*

3. *Is the Commission's position to only use the latest Tasmanian Freight Survey data for the calculation of the Traffic Cost Adjustor in the RPM appropriate?*

Table 4: Council Shares of State Total Tonne-Kilometres using a Two-Survey Average

	2008-09 Survey		2011-12 Survey		Average	
	Data T-K	share of T-K %	Data T-K	share of T-K %	Data T-K	share of T-K %
Break O'Day	7 160 641	3.93%	2 733 186	2.50%	4 946 913	3.39%
Brighton	256 135	0.14%	311 528	0.28%	283 831	0.19%
Burnie	4 427 614	2.43%	2 549 384	2.33%	3 488 499	2.39%
Central Coast	13 177 789	7.23%	9 260 307	8.46%	11 219 048	7.69%
Central Highlands	5 828 854	3.20%	3 247 702	2.97%	4 538 278	3.11%
Circular Head	21 472 982	11.78%	15 257 515	13.94%	18 365 248	12.59%
Clarence	3 107 137	1.71%	1 859 573	1.70%	2 483 355	1.70%
Derwent Valley	4 222 460	2.32%	3 540 204	3.23%	3 881 332	2.66%
Devonport	6 314 306	3.46%	6 211 827	5.68%	6 263 066	4.29%
Dorset	13 762 896	7.55%	8 805 354	8.05%	11 284 125	7.74%
Flinders	2 457 281	1.35%	826 545	0.76%	1 641 913	1.13%
George Town	3 776 256	2.07%	3 437 331	3.14%	3 606 794	2.47%
Glamorgan-Spring Bay	2 325 803	1.28%	88 956	0.08%	1 207 380	0.83%
Glenorchy	3 397 583	1.86%	2 489 878	2.28%	2 943 731	2.02%
Hobart	9 162 864	5.03%	5 117 524	4.68%	7 140 194	4.90%
Huon Valley	6 165 691	3.38%	2 993 171	2.73%	4 579 431	3.14%
Kentish	10 528 884	5.78%	4 699 223	4.29%	7 614 053	5.22%
King Island	1 870 832	1.03%	1 659 030	1.52%	1 764 931	1.21%
Kingborough	1 559 875	0.86%	815 285	0.74%	1 187 580	0.81%
Latrobe	1 463 938	0.80%	1 230 548	1.12%	1 347 243	0.92%
Launceston	23 639 108	12.97%	13 799 890	12.61%	18 719 499	12.84%
Meander Valley	9 594 136	5.26%	4 347 706	3.97%	6 970 921	4.78%
Northern Midlands	10 508 363	5.77%	4 878 303	4.46%	7 693 333	5.28%
Sorell	1 944 967	1.07%	859 572	0.79%	1 402 270	0.96%
Southern Midlands	2 451 339	1.35%	539 707	0.49%	1 495 523	1.03%
Tasman	1 785 020	0.98%	737 762	0.67%	1 261 391	0.86%
Waratah-Wynyard	5 793 661	3.18%	4 201 926	3.84%	4 997 793	3.43%
West Coast	546 504	0.30%	210 283	0.19%	378 394	0.26%
West Tamar	3 529 478	1.94%	2 730 633	2.50%	3 130 056	2.15%
TOTAL	**182 232 397**	**100%**	**109 439 855**	**100%**	**145 836 126**	**100%**

Submissions and Timeframes

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

Submissions should be forwarded to the Commission as follows:

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

Further details regarding the annual assessments can be found in the 2013-14 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 Commission 'Quick Link', then follow the link to publications.

Submissions close on Friday 14 March 2014.

If you have any queries please contact the Secretary, Pam Marriott, on 6166 4274.

2014 Hearings and Visits

The Commission will provide councils the opportunity to discuss this paper and any other council concerns during the 2014 Hearings and Visits program that will begin in March 2014.

APPENDICES

Appendix 1

2008-09 Tasmanian Freight Survey by LGA (Tonne-Kilometres) – SSD classification

	Urban Sealed	Urban Unsealed	Rural Sealed	Rural Unsealed	Total T-K
Break O'Day	0	0	5 646 243	1 514 398	**7 160 641**
Brighton	251 646	4 489	0	0	**256 135**
Burnie	1 035 880	0	2 983 325	408 409	**4 427 614**
Central Coast	6 421 172	0	6 484 230	272 387	**13 177 789**
Central Highlands	0	0	2 449 445	3 379 409	**5 828 854**
Circular Head	0	0	20 373 499	1 099 483	**21 472 982**
Clarence	3 104 633	2 504	0	0	**3 107 137**
Derwent Valley	704 229	782	1 948 849	1 568 600	**4 222 460**
Devonport	6 314 306	0	0	0	**6 314 306**
Dorset	0	0	9 164 752	4 598 144	**13 762 896**
Flinders	0	0	1 111 762	1 345 519	**2 457 281**
George Town	1 963 174	62 525	1 648 294	102 263	**3 776 256**
Glamorgan/Spring Bay	0	0	726 442	1 599 361	**2 325 803**
Glenorchy	3 335 566	62 017	0	0	**3 397 583**
Hobart	9 150 440	12 424	0	0	**9 162 864**
Huon Valley	0	0	1 484 508	4 681 183	**6 165 691**
Kentish	61 731	0	9 352 206	1 114 947	**10 528 884**
King Island	0	0	825 857	1 044 975	**1 870 832**
Kingborough	1 182 667	33 029	290 145	54 034	**1 559 875**
Latrobe	1 083 257	7 708	368 345	4 628	**1 463 938**
Launceston	15 124 480	1 981 741	4 300 848	2 232 039	**23 639 108**
Meander	633 276	0	8 826 654	134 206	**9 594 136**
Northern Midlands	2 356 585	0	6 108 431	2 043 347	**10 508 363**
Sorell	649 063	499 124	114 953	681 827	**1 944 967**
Southern Midlands	99 144	0	926 282	1 425 913	**2 451 339**
Tasman	0	0	1 228 103	556 917	**1 785 020**
Waratah/Wynyard	3 687 894	77 559	1 589 540	438 668	**5 793 661**
West Coast	0	0	457 104	89 400	**546 504**
West Tamar	1 430 196	63 760	1 904 235	131 287	**3 529 478**
Total	**58 589 339**	**2 807 662**	**90 314 052**	**30 521 344**	**182 232 397**

Appendix 2

2011-12 Tasmanian Freight Survey by LGA (Tonne-Kilometres) – SSD classification

	Urban Sealed	Urban Unsealed[2]	Rural Sealed	Rural Unsealed	Total T-K
Break O'Day	0	0	2 079 934	653 252	2 733 186
Brighton	310 759	769	0	0	311 528
Burnie	1 288 126	163	1 241 002	20 093	2 549 384
Central Coast	3 411 614	2 648	5 806 908	39 137	9 260 307
Central Highlands	0	0	1 242 806	2 004 897	3 247 702
Circular Head	0	0	14 712 104	545 411	15 257 515
Clarence	1 850 992	8 581	0	0	1 859 573
Derwent Valley	295 020	3 297	1 776 151	1 465 736	3 540 204
Devonport	6 211 767	60	0	0	6 211 827
Dorset	0	0	3 855 298	4 950 056	8 805 354
Flinders	0	0	531 443	295 102	826 545
George Town	2 397 316	62 486	816 509	161 020	3 437 331
Glamorgan/Spring Bay	0	0	36 287	52 669	88 956
Glenorchy	2 419 863	70 016	0	0	2 489 878
Hobart	5 111 700	5 824	0	0	5 117 524
Huon Valley	0	0	1 317 017	1 676 154	2 993 171
Kentish	0	0	4 298 414	400 809	4 699 223
King Island	0	0	602 022	1 057 008	1 659 030
Kingborough	685 749	76 416	43 542	9 579	815 285
Latrobe	510 441	8 183	570 486	141 438	1 230 548
Launceston	9 550 725	326 626	1 863 459	2 059 080	13 799 890
Meander Valley	395 863	0	3 881 039	70 804	4 347 706
Northern Midlands	790 043	3 487	3 724 987	359 786	4 878 303
Sorell	182 291	326 344	42 123	308 813	859 572
Southern Midlands	0	0	323 817	215 890	539 707
Tasman	0	0	513 841	223 921	737 762
Waratah/Wynyard	2 662 917	63 274	1 278 760	196 975	4 201 926
West Coast	0	0	166 274	44 009	210 283
West Tamar	788 297	7 051	1 740 502	194 783	2 730 633
Total	**38 863 483**	**965 225**	**52 464 725**	**17 146 422**	**109 439 855**

[2] Urban unsealed and rural unsealed are now treated in the Road Grant Model collectively as "Unsealed Roads

Appendix 3

Council Shares of Tonne-Kilometres from Tasmanian Freight Surveys

	2002-03		2005-06		2008-09		2011-12	
	Tonne-Kilometres (T-K)	% Share Total T-K	Tonne-Kilometres (T-K)	% Share Total T-K	Tonne-Kilometres (T-K)	% Share Total T-K	Tonne-Kilometres (T-K)	% Share Total T-K
Break O'Day	15 575 025	5.47%	10 978 807	4.97%	7 160 641	3.93%	2 733 186	2.50%
Brighton	289 619	0.10%	410 537	0.19%	256 135	0.14%	311 528	0.28%
Burnie	12 790 870	4.49%	7 240 019	3.28%	4 427 614	2.43%	2 549 384	2.33%
Central Coast	15 713 897	5.52%	13 187 138	5.97%	13 177 789	7.23%	9 260 307	8.46%
Central Highlands	18 331 671	6.43%	8 640 343	3.91%	5 828 854	3.20%	3 247 702	2.97%
Circular Head	36 792 094	12.91%	24 391 204	11.04%	21 472 982	11.78%	15 257 515	13.94%
Clarence	2 053 152	0.72%	2 534 990	1.15%	3 107 137	1.71%	1 859 573	1.70%
Derwent Valley	6 205 048	2.18%	5 114 715	2.31%	4 222 460	2.32%	3 540 204	3.23%
Devonport	10 855 514	3.81%	7 073 345	3.20%	6 314 306	3.46%	6 211 827	5.68%
Dorset	32 314 525	11.34%	24 865 863	11.25%	13 762 896	7.55%	8 805 354	8.05%
Flinders	1 343 897	0.47%	708 747	0.32%	2 457 281	1.35%	826 545	0.76%
George Town	7 435 225	2.61%	4 077 769	1.85%	3 776 256	2.07%	3 437 331	3.14%
Glamorgan/Spring Bay	1 175 444	0.41%	2 900 788	1.31%	2 325 803	1.28%	88 956	0.08%
Glenorchy	6 519 229	2.29%	4 048 064	1.83%	3 397 583	1.86%	2 489 878	2.28%
Hobart	9 737 821	3.42%	10 179 273	4.61%	9 162 864	5.03%	5 117 524	4.68%
Huon Valley	7 526 113	2.64%	4 135 658	1.87%	6 165 691	3.38%	2 993 171	2.73%
Kentish	5 785 736	2.03%	8 452 580	3.83%	10 528 884	5.78%	4 699 223	4.29%
King Island	3 631 990	1.27%	1 776 683	0.80%	1 870 832	1.03%	1 659 030	1.52%
Kingborough	1 778 956	0.62%	1 696 142	0.77%	1 559 875	0.86%	815 285	0.74%
Latrobe	2 630 656	0.92%	3 505 199	1.59%	1 463 938	0.80%	1 230 548	1.12%
Launceston	37 700 409	13.23%	29 193 386	13.21%	23 639 108	12.97%	13 799 890	12.61%
Meander	10 574 944	3.71%	10 896 490	4.93%	9 594 136	5.26%	4 347 706	3.97%
Northern Midlands	13 449 317	4.72%	16 057 725	7.27%	10 508 363	5.77%	4 878 303	4.46%
Sorell	3 718 963	1.31%	3 216 721	1.46%	1 944 967	1.07%	859 572	0.79%
Southern Midlands	2 037 930	0.72%	2 754 375	1.25%	2 451 339	1.35%	539 707	0.49%
Tasman	1 454 278	0.51%	1 322 109	0.60%	1 785 020	0.98%	737 762	0.67%
Waratah/Wynyard	5 343 265	1.88%	6 183 389	2.80%	5 793 661	3.18%	4 201 926	3.84%
West Coast	235 376	0.08%	667 993	0.30%	546 504	0.30%	210 283	0.19%
West Tamar	11 895 717	4.18%	4 765 642	2.16%	3 529 478	1.94%	2 730 633	2.50%
Total	**284 896 678**	**100.00**	**220 975 696**	**100.00**	**182 232 397**	**100.00**	**109 439 855**	**100.00**

Appendix 4

2011-12 Tasmanian Freight Survey - SSD road classification – 3 Greater Urban zones

	Urban		Rural		Total	% share	Urban	Rural	
	Sealed	Unsealed	Sealed	Unsealed		Total T-K	Sealed	Sealed	Unsealed
Break O'Day	0	0	2 079 934	653 252	2 733 186	2.50%	0.00%	3.96%	3.61%
Brighton	310 759	769	0	0	311 528	0.28%	0.80%	0.00%	0.00%
Burnie	1 288 126	163	1 241 002	20 093	2 549 384	2.33%	3.31%	2.37%	0.11%
Central Coast	3 411 614	2 648	5 806 908	39 137	9 260 307	8.46%	8.78%	11.07%	0.23%
Central Highlands	0	0	1 242 806	2 004 897	3 247 702	2.97%	0.00%	2.37%	11.07%
Circular Head	0	0	14 712 104	545 411	15 257 515	13.94%	0.00%	28.04%	3.01%
Clarence	1 850 992	8 581	0	0	1 859 573	1.70%	4.76%	0.00%	0.05%
Derwent Valley	295 020	3 297	1 776 151	1 465 736	3 540 204	3.23%	0.76%	3.39%	8.11%
Devonport	6 211 767	60	0	0	6 211 827	5.68%	15.98%	0.00%	0.00%
Dorset	0	0	3 855 298	4 950 056	8 805 354	8.05%	0.00%	7.35%	27.33%
Flinders	0	0	531 443	295 102	826 545	0.76%	0.00%	1.01%	1.63%
George Town	2 397 316	62 486	816 509	161 020	3 437 331	3.14%	6.17%	1.56%	1.23%
Glamorgan/Spring Bay	0	0	36 287	52 669	88 956	0.08%	0.00%	0.07%	0.29%
Glenorchy	2 419 863	70 016	0	0	2 489 878	2.28%	6.23%	0.00%	0.39%
Hobart	5 111 700	5 824	0	0	5 117 524	4.68%	13.15%	0.00%	0.03%
Huon Valley	0	0	1 317 017	1 676 154	2 993 171	2.73%	0.00%	2.51%	9.25%
Kentish	0	0	4 298 414	400 809	4 699 223	4.29%	0.00%	8.19%	2.21%
King Island	0	0	602 022	1 057 008	1 659 030	1.52%	0.00%	1.15%	5.84%
Kingborough	685 749	76 416	43 542	9 579	815 285	0.74%	1.76%	0.08%	0.47%
Latrobe	510 441	8 183	570 486	141 438	1 230 548	1.12%	1.31%	1.09%	0.83%
Launceston	9 550 725	326 626	1 863 459	2 059 080	13 799 890	12.61%	24.58%	3.55%	13.17%
Meander Valley	395 863	0	3 881 039	70 804	4 347 706	3.97%	1.02%	7.40%	0.39%
Northern Midlands	790 043	3 487	3 724 987	359 786	4 878 303	4.46%	2.03%	7.10%	2.01%
Sorell	182 291	326 344	42 123	308 813	859 572	0.79%	0.47%	0.08%	3.51%
Southern Midlands	0	0	323 817	215 890	539 707	0.49%	0.00%	0.62%	1.19%
Tasman	0	0	513 841	223 921	737 762	0.67%	0.00%	0.98%	1.24%
Waratah/Wynyard	2 662 917	63 274	1 278 760	196 975	4 201 926	3.84%	6.85%	2.44%	1.44%
West Coast	0	0	166 274	44 009	210 283	0.19%	0.00%	0.32%	0.24%
West Tamar	788 297	7 051	1 740 502	194 783	2 730 633	2.50%	2.03%	3.32%	1.11%
Grand Total	38 863 483	965 225	52 464 725	17 146 422	109 439 855	100.00%	100.00%	100.00%	100.00%

Appendix 5

2011-12 Tasmanian Freight Survey - UCL boundaries – All Urban Centres and Bounded Localities (pop'n>200) classed as Urban

	Urban		Rural		Total	% share	Urban	Rural	
	Sealed	Unsealed	Sealed	Unsealed		Total T-K	Sealed	Sealed	Unsealed
Break O'Day	62 025	2 294	2 017 909	650 957	2 733 186	2.50%	0.18%	3.50%	3.61%
Brighton	276 592	769	34 168		311 528	0.28%	0.82%	0.06%	0.00%
Burnie	1 223 031	163	1 306 097	20 093	2 549 384	2.33%	3.64%	2.26%	0.11%
Central Coast	1 524 766	252	7 693 757	41 533	9 260 307	8.46%	4.53%	13.33%	0.23%
Central Highlands	71 577	0	1 171 229	2 004 897	3 247 702	2.97%	0.21%	2.03%	11.07%
Circular Head	1 263 552	0	13 448 552	545 411	15 257 515	13.94%	3.76%	23.31%	3.01%
Clarence	1 397 844	4 040	453 148	4 541	1 859 573	1.70%	4.16%	0.79%	0.05%
Derwent Valley	249 262	4 436	1 821 908	1 464 598	3 540 204	3.23%	0.74%	3.16%	8.11%
Devonport	4 450 298	0	1 761 469	60	6 211 827	5.68%	13.23%	3.05%	0.00%
Dorset	228 976	0	3 626 322	4 950 056	8 805 354	8.05%	0.68%	6.28%	27.33%
Flinders	0	0	531 443	295 102	826 545	0.76%	0.00%	0.92%	1.63%
George Town	2 216 980	15 743	996 845	207 763	3 437 331	3.14%	6.59%	1.73%	1.23%
Glamorgan/Spring Bay	6 777	0	29 510	52 669	88 956	0.08%	0.02%	0.05%	0.29%
Glenorchy	2 409 109	57 554	10 754	12 461	2 489 878	2.28%	7.16%	0.02%	0.39%
Hobart	5 108 107	2 738	3 594	3 086	5 117 524	4.68%	15.19%	0.01%	0.03%
Huon Valley	263 365	9 621	1 053 652	1 666 533	2 993 171	2.73%	0.78%	1.83%	9.25%
Kentish	411 006	65	3 887 408	400 744	4 699 223	4.29%	1.22%	6.74%	2.21%
King Island	26 480	2 078	575 541	1 054 930	1 659 030	1.52%	0.08%	1.00%	5.84%
Kingborough	360 517	29 190	368 774	56 805	815 285	0.74%	1.07%	0.64%	0.47%
Latrobe	93 048	1 193	987 879	148 428	1 230 548	1.12%	0.28%	1.71%	0.83%
Launceston	9 362 127	441	2 052 057	2 385 265	13 799 890	12.61%	27.84%	3.56%	13.17%
Meander Valley	636 233	0	3 640 669	70 804	4 347 706	3.97%	1.89%	6.31%	0.39%
Northern Midlands	207 609	1 182	4 307 421	362 091	4 878 303	4.46%	0.62%	7.46%	2.01%
Sorell	116 472	15 075	107 943	620 083	859 572	0.79%	0.35%	0.19%	3.51%
Southern Midlands	19 313	0	304 504	215 890	539 707	0.49%	0.06%	0.53%	1.19%
Tasman	30 669	6 102	483 172	217 819	737 762	0.67%	0.09%	0.84%	1.24%
Waratah/Wynyard	1 120 817	3 215	2 820 861	257 033	4 201 926	3.84%	3.33%	4.89%	1.44%
West Coast	148 065	95	18 209	43 914	210 283	0.19%	0.44%	0.03%	0.24%
West Tamar	340 667	171	2 188 132	201 663	2 730 633	2.50%	1.01%	3.79%	1.11%
Grand Total	33 625 282	156 418	57 702 927	17 955 229	109 439 855	100.00%	100.00%	100.00%	100.00%

Appendix 6

2011-12 Tasmanian Freight Survey - UCL boundaries –Bounded Localities (pop'n<1000) classed as Rural

	Urban		Rural		Total	% share	Urban	Rural	
	Sealed	Unsealed	Sealed	Unsealed		Total T-K	Sealed	Sealed	Unsealed
Break O'Day	11 157	58	2 068 777	653 194	2 733 186	2.50%	0.03%	3.48%	3.61%
Brighton	276 592	769	34 168		311 528	0.28%	0.87%	0.06%	0.00%
Burnie	1 073 440	163	1 455 687	20 093	2 549 384	2.33%	3.37%	2.45%	0.11%
Central Coast	1 159 226	252	8 059 297	41 533	9 260 307	8.46%	3.64%	13.56%	0.23%
Central Highlands	0	0	1 242 806	2 004 897	3 247 702	2.97%	0.00%	2.09%	11.07%
Circular Head	1 262 203	0	13 449 901	545 411	15 257 515	13.94%	3.96%	22.63%	3.01%
Clarence	1 389 499	2 228	461 493	6 353	1 859 573	1.70%	4.36%	0.78%	0.05%
Derwent Valley	249 262	4 436	1 821 908	1 464 598	3 540 204	3.23%	0.78%	3.07%	8.11%
Devonport	4 450 298	0	1 761 469	60	6 211 827	5.68%	13.96%	2.96%	0.00%
Dorset	124 660	0	3 730 638	4 950 056	8 805 354	8.05%	0.39%	6.28%	27.33%
Flinders	0	0	531 443	295 102	826 545	0.76%	0.00%	0.89%	1.63%
George Town	2 200 724	15 743	1 013 101	207 763	3 437 331	3.14%	6.90%	1.70%	1.23%
Glamorgan/Spring Bay	0	0	36 287	52 669	88 956	0.08%	0.00%	0.06%	0.29%
Glenorchy	2 408 779	57 554	11 084	12 461	2 489 878	2.28%	7.55%	0.02%	0.39%
Hobart	5 108 107	2 738	3 594	3 086	5 117 524	4.68%	16.02%	0.01%	0.03%
Huon Valley	42 763	7 234	1 274 254	1 668 920	2 993 171	2.73%	0.13%	2.14%	9.25%
Kentish	114 998	0	4 183 416	400 809	4 699 223	4.29%	0.36%	7.04%	2.21%
King Island	0	0	602 022	1 057 008	1 659 030	1.52%	0.00%	1.01%	5.84%
Kingborough	311 753	25 938	417 538	60 056	815 285	0.74%	0.98%	0.70%	0.47%
Latrobe	93 048	1 193	987 879	148 428	1 230 548	1.12%	0.29%	1.66%	0.83%
Launceston	9 322 602	441	2 091 582	2 385 265	13 799 890	12.61%	29.24%	3.52%	13.17%
Meander Valley	596 489	0	3 680 412	70 804	4 347 706	3.97%	1.87%	6.19%	0.39%
Northern Midlands	147 807	0	4 367 223	363 273	4 878 303	4.46%	0.46%	7.35%	2.01%
Sorell	93 801	3 248	130 614	631 910	859 572	0.79%	0.29%	0.22%	3.51%
Southern Midlands	0	0	323 817	215 890	539 707	0.49%	0.00%	0.54%	1.19%
Tasman	0	0	513 841	223 921	737 762	0.67%	0.00%	0.86%	1.24%
Waratah/Wynyard	1 116 743	2 423	2 824 934	257 826	4 201 926	3.84%	3.50%	4.75%	1.44%
West Coast	71 502	0	94 772	44 009	210 283	0.19%	0.22%	0.16%	0.24%
West Tamar	260 524	171	2 268 276	201 663	2 730 633	2.50%	0.82%	3.82%	1.11%
Total	31 885 978	124 589	59 442 231	17 987 057	109 439 855	100.00%	100.00%	100.00%	100.00%

Appendix 7

2011-12 Tasmanian Freight Survey - Road type proportions based on different urban/rural definitions

	SSD classification % share Total T-K			UCL Bounded localities (pop'n>200) classed as Urban % share Total T-K			UCL - Bounded localities (pop'n <1000) classed as Rural % share Total T-K		
	Urban Sealed	Rural Sealed	Unsealed	Urban Sealed	Rural Sealed	Unsealed	Urban Sealed	Rural Sealed	Unsealed
Break O'Day	0.00%	3.96%	3.61%	0.18%	3.50%	3.61%	0.03%	3.48%	3.61%
Brighton	0.80%	0.00%	0.00%	0.82%	0.06%	0.00%	0.87%	0.06%	0.00%
Burnie	3.31%	2.37%	0.11%	3.64%	2.26%	0.11%	3.37%	2.45%	0.11%
Central Coast	8.78%	11.07%	0.23%	4.53%	13.33%	0.23%	3.64%	13.56%	0.23%
Central Highlands	0.00%	2.37%	11.07%	0.21%	2.03%	11.07%	0.00%	2.09%	11.07%
Circular Head	0.00%	28.04%	3.01%	3.76%	23.31%	3.01%	3.96%	22.63%	3.01%
Clarence	4.76%	0.00%	0.05%	4.16%	0.79%	0.05%	4.36%	0.78%	0.05%
Derwent Valley	0.76%	3.39%	8.11%	0.74%	3.16%	8.11%	0.78%	3.07%	8.11%
Devonport	15.98%	0.00%	0.00%	13.23%	3.05%	0.00%	13.96%	2.96%	0.00%
Dorset	0.00%	7.35%	27.33%	0.68%	6.28%	27.33%	0.39%	6.28%	27.33%
Flinders	0.00%	1.01%	1.63%	0.00%	0.92%	1.63%	0.00%	0.89%	1.63%
George Town	6.17%	1.56%	1.23%	6.59%	1.73%	1.23%	6.90%	1.70%	1.23%
Glamorgan/Spring Bay	0.00%	0.07%	0.29%	0.02%	0.05%	0.29%	0.00%	0.06%	0.29%
Glenorchy	6.23%	0.00%	0.39%	7.16%	0.02%	0.39%	7.55%	0.02%	0.39%
Hobart	13.15%	0.00%	0.03%	15.19%	0.01%	0.03%	16.02%	0.01%	0.03%
Huon Valley	0.00%	2.51%	9.25%	0.78%	1.83%	9.25%	0.13%	2.14%	9.25%
Kentish	0.00%	8.19%	2.21%	1.22%	6.74%	2.21%	0.36%	7.04%	2.21%
King Island	0.00%	1.15%	5.84%	0.08%	1.00%	5.84%	0.00%	1.01%	5.84%
Kingborough	1.76%	0.08%	0.47%	1.07%	0.64%	0.47%	0.98%	0.70%	0.47%
Latrobe	1.31%	1.09%	0.83%	0.28%	1.71%	0.83%	0.29%	1.66%	0.83%
Launceston	24.58%	3.55%	13.17%	27.84%	3.56%	13.17%	29.24%	3.52%	13.17%
Meander Valley	1.02%	7.40%	0.39%	1.89%	6.31%	0.39%	1.87%	6.19%	0.39%
Northern Midlands	2.03%	7.10%	2.01%	0.62%	7.46%	2.01%	0.46%	7.35%	2.01%
Sorell	0.47%	0.08%	3.51%	0.35%	0.19%	3.51%	0.29%	0.22%	3.51%
Southern Midlands	0.00%	0.62%	1.19%	0.06%	0.53%	1.19%	0.00%	0.54%	1.19%
Tasman	0.00%	0.98%	1.24%	0.09%	0.84%	1.24%	0.00%	0.86%	1.24%
Waratah/Wynyard	6.85%	2.44%	1.44%	3.33%	4.89%	1.44%	3.50%	4.75%	1.44%
West Coast	0.00%	0.32%	0.24%	0.44%	0.03%	0.24%	0.22%	0.16%	0.24%
West Tamar	2.03%	3.32%	1.11%	1.01%	3.79%	1.11%	0.82%	3.82%	1.11%
Grand Total	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

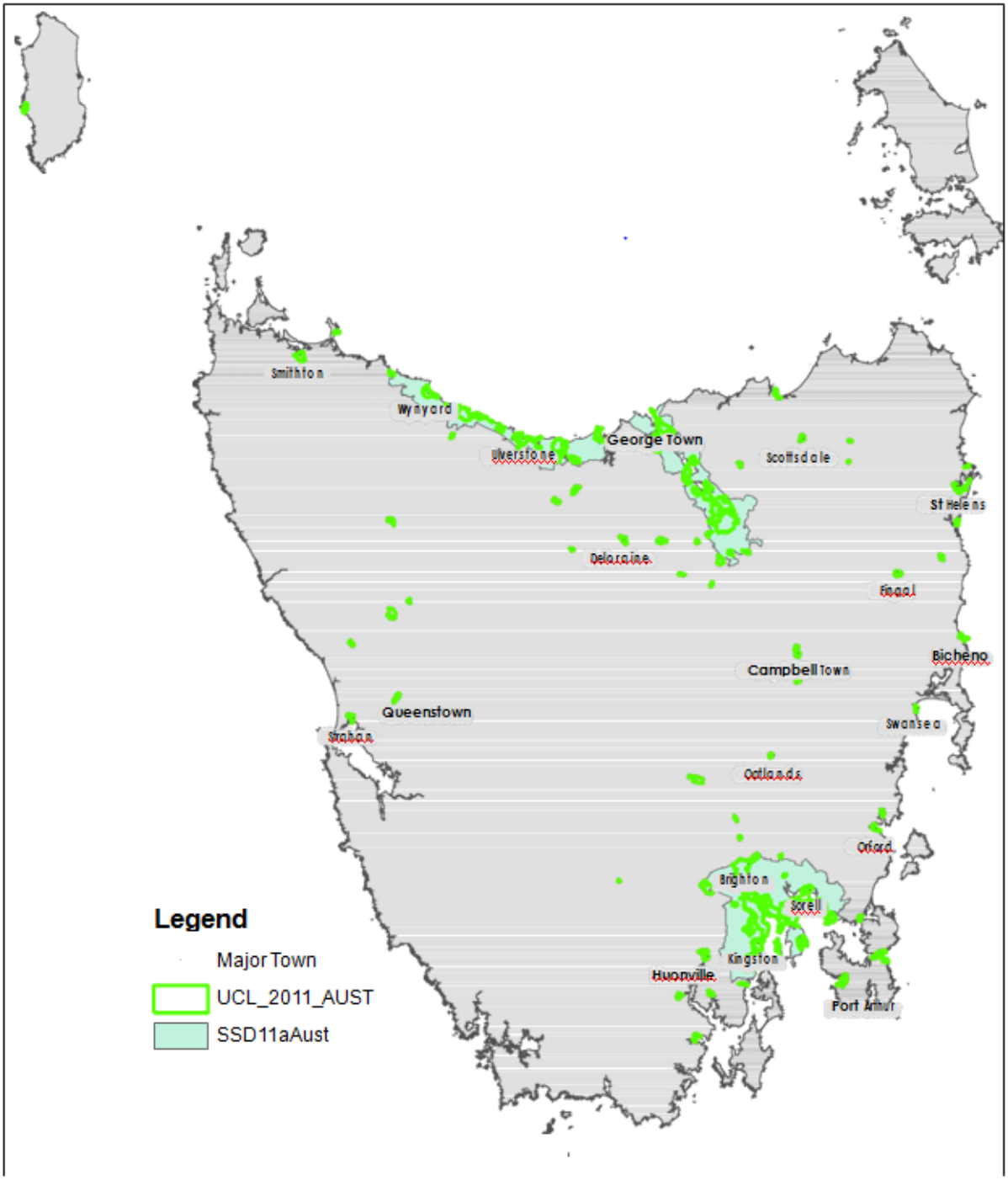
Appendix 8

Existing Traffic Cost Adjustors – Road Preservation Model

	Urban Roads CA		Rural Sealed Roads CA		Unsealed Roads CA	
	RELATIVE POSITION (RTI)	**TRAFFIC COST ADJUSTOR**	RELATIVE POSITION (RTI)	**TRAFFIC COST ADJUSTOR**	RELATIVE POSITION (RTI)	**TRAFFIC COST ADJUSTOR**
	SET LOWER -->	**0.93**	SET LOWER -->	**0.96**	SET LOWER -->	**0.91**
	SET UPPER -->	**1.11**	SET UPPER -->	**1.25**	SET UPPER -->	**1.25**
BREAK O'DAY	0	0.930	51 011	1.133	7 457	1.015
BRIGHTON	4 030	0.944	0	0.960	2 047	0.939
BURNIE	10 181	0.965	22 602	1.037	12 981	1.093
CENTRAL COAST	51 649	1.110	14 481	1.009	2 250	0.941
CENTRAL HIGHLANDS	0	0.930	30 197	1.063	7 381	1.014
CIRCULAR HEAD	0	0.930	85 369	1.250	2 617	0.947
CLARENCE	10 568	0.967	0	0.960	197	0.912
DERWENT VALLEY	17 664	0.992	35 550	1.081	7 694	1.018
DEVONPORT	33 534	1.047	0	0.960	27	0.910
DORSET	0	0.930	66 474	1.186	12 320	1.084
FLINDERS	0	0.930	11 877	1.000	2 527	0.945
GEORGE TOWN	30 964	1.038	15 183	1.012	1 848	0.936
GLAMORGAN/SPRING BAY	0	0.930	10 568	0.996	9 670	1.046
GLENORCHY	13 885	0.978	0	0.960	3 549	0.960
HOBART	30 088	1.035	0	0.960	6 127	0.996
HUON VALLEY	0	0.930	10 487	0.996	7 098	1.010
KENTISH	1 125	0.934	37 794	1.088	4 406	0.972
KING ISLAND	0	0.930	21 705	1.034	2 666	0.947
KINGBOROUGH	9 102	0.962	2 072	0.967	622	0.918
LATROBE	27 520	1.026	4 639	0.976	1 929	0.937
LAUNCESTON	40 186	1.070	44 205	1.110	24 098	1.250
MEANDER VALLEY	5 784	0.950	19 475	1.026	773	0.921
NORTHERN MIDLANDS	14 216	0.980	19 370	1.026	6 874	1.007
SORELL	6 889	0.954	1 850	0.966	9 032	1.037
SOUTHERN MIDLANDS	1 659	0.936	6 008	0.980	2 635	0.947
TASMAN	0	0.930	33 082	1.072	4 202	0.969
WARATAH/WYNYARD	46 295	1.091	9 639	0.993	2 523	0.945
WEST COAST	0	0.930	21 357	1.033	1 209	0.927
WEST TAMAR	13 939	0.979	12 400	1.002	2 343	0.943
	MIN 0	MIN 0.93	MIN 0	MIN 0.96	MIN 27	MIN 0.91
	MAX 51649	MAX 1.11	MAX 85369	MAX 1.25	MAX 24098	MAX 1.25

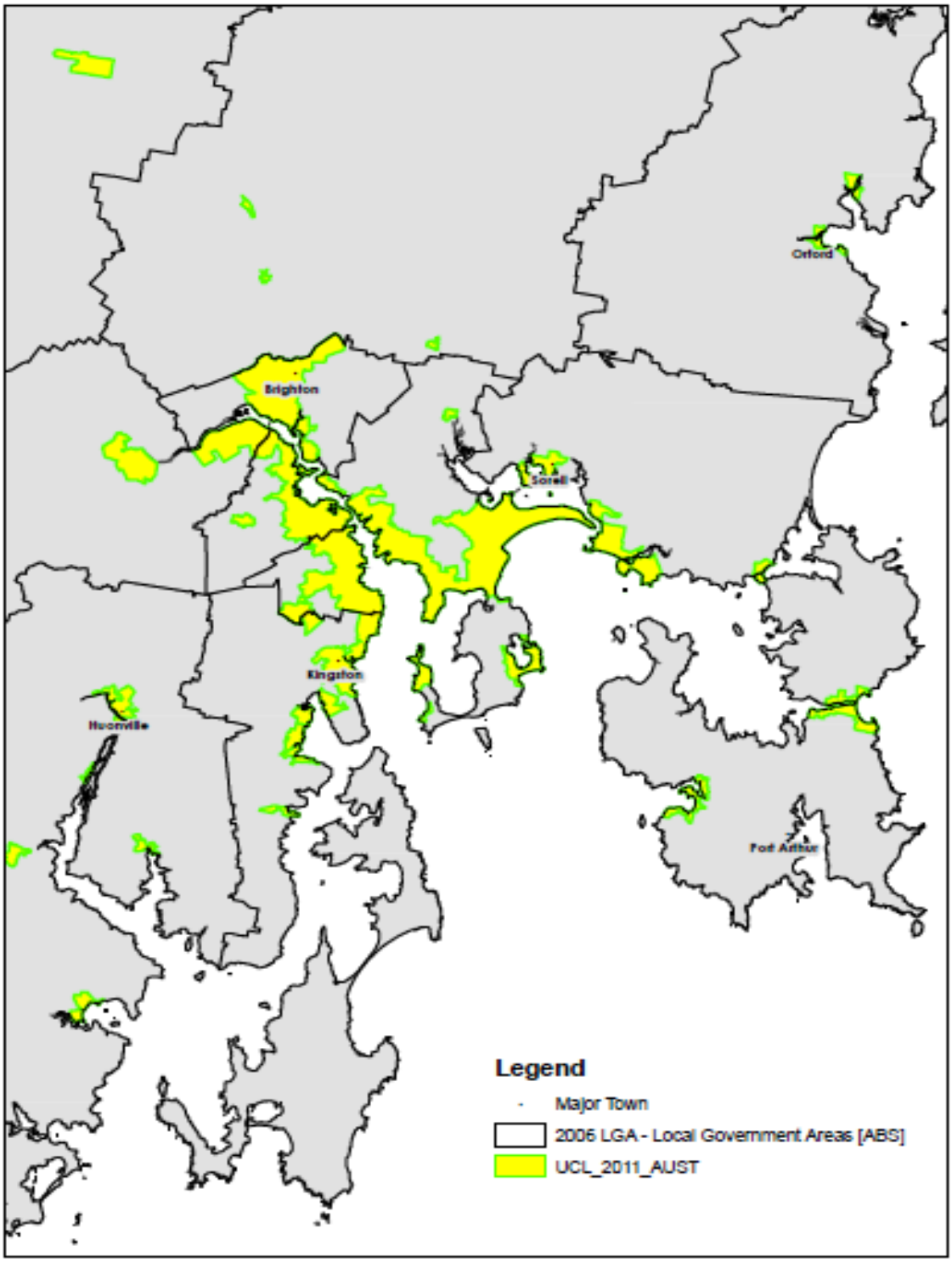
Appendix 9

Comparison - SSD Urban Zoning and SOS/UCL Urban Zoning



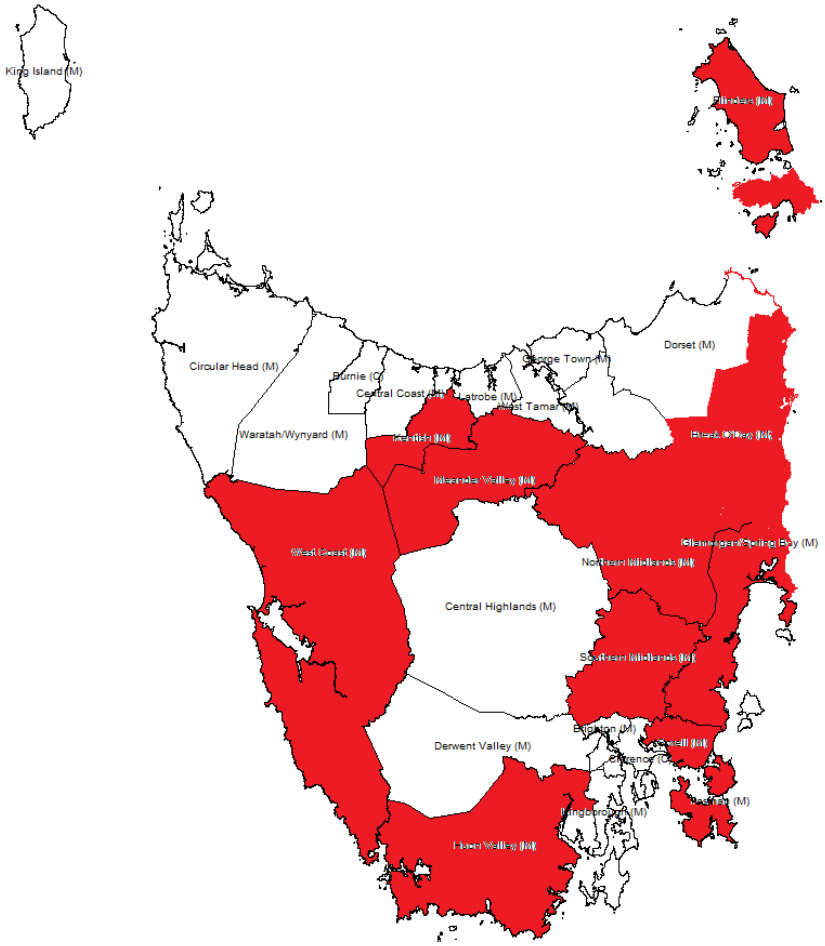
Appendix 10

Comparison – Example - UCL Urban Zoning and Council Boundaries – Southern



Appendix 11

Municipalities experiencing Freight Task decline of 50% + – 2008-09 to 2011-12 surveys

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