



## **Greater Wellington Regional Council**

**2013 WTSM Update**

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### **Technical Note 7: Production of WTSM 2013 Land Use Data**

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November 2014

# **Greater Wellington Regional Council**

## **2013 WTSM Update**

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### **Technical Note**

### **Quality Assurance Statement**

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## Table of Contents

1.	Introduction .....	1
2.	Persons.....	1
3.	Households .....	2
4.	Employment.....	2
5.	Education .....	3
6.	Summary by TA .....	4

*Appendix A  
Census Specification for Land Use Data*

A.1	Overview .....	1
A.2	Person Definition .....	1
A.3	Household Definition .....	2
A.4	Employment Definition .....	3

*Appendix B  
2013 WTSU Land Use*

## 1. Introduction

This technical note documents the preparation of the 2013 base year land use data input to WTSU.

Land use includes population, households and employment – all sourced from Census. It also includes education places sourced from the Ministry of Education.

This note includes the specification to obtain the Census land use data (Appendix A), the education data, the post-processing undertaken, and a summary of key issues and how these were resolved. It also presents a summary of the resulting WTSU land use - and how it compares to the 2006 and 2011 land use that was previously input to the model.

Final 2013 land use tables are provided in Appendix B.

## 2. Persons

A table was supplied by Statistics NZ of the WTSU person categories, residuals and totals by age group - all by WTSU zone. The specification supplied to Statistics NZ for this table is in Appendix A.

In some of the cells due to small numbers, Statistics NZ replaced the actual value with "C"s. The "C"s were replaced with a number between 0 and 6 to get the correct zonal total. Sometimes the correct zonal total was greater than the total reached, but as a "C" only represents a number less than 6 it would be incorrect to replace it with a value greater than 6. Where a total was "C" it was replaced with a zero along with the subcategories. For example where the Total Young Adults was "C" (which means that it is 6 or less) it was replaced with a zero, along with all the Young Adult categories in that zone (which would also be "C"). The logic for this is that as there are 3 Young Adult categories each of them would have an average value of less than 2. To quantify the magnitude of the issue, for the data supplied by Statistics NZ, 252 (9.3%) out of 2,700 persons category cells had a "C" in them.

The residual categories were those where their Work and Labour Force Status (WLFS) was unidentifiable, but who could be placed in one of the age categories (e.g. Young Adult). These were initially pro-rated across the relevant sub-categories. For example, if Young Adult Full Time Employed (excluding the residuals) made up 40% of the total Young Adults in that zone it would receive 40% of the Young Adult residual.

This approach resulted in a relatively significant increase in employed persons between 2006 and 2013 which was inconsistent with the much less pronounced growth shown in the Statistics NZ data that was identified (i.e. excluding the "unidentifiable"). In investigating, it was found that the residual category had increased significantly and that the method of allocating this residual was producing more growth in employed persons than the identifiable data (defined as the data that has been allocated, i.e. excluding the WLFS unidentifiable) suggested. The population figures for 2006 and 2013 are shown in the following table including the WLFS unidentifiable.

PERSONS FROM CENSUS			
Category	2006	2013	Growth
Employed	229,485	233,676	1.8%
Adult Other	104,673	117,540	12.3%
WLFS Unidentifiable	9,102	16,038	76.2%
Total	343,260	367,254	7.0%
% Unidentifiable	2.65%	4.37%	

**Table 1: Population for 2006 and 2013 including “Unidentifiable”**

This indicated that the assumption that people with undefined labour status follow the same distribution in Employed and Other as people with known status was incorrect. It appears more likely that these residuals would belong to the Other than to the Employed category.

An alternative method of allocating the residual was therefore adopted for the 2013 land use data. The residual was allocated to either Employed or Other categories such that the observed (from Statistics NZ website) 2006 to 2013 change in share of each category as a proportion of the total was maintained, and this was carried out at a Territorial Authority (TA) level. For example, observed data showed that the share of adults who are employed decreases to 68.6% of all adults in Wellington City in 2013 from 2006, whereas the ratio achieved with the initial “pro-rata” approach was 71.1%. The new approach enabled matching the observed value of 68.6%. The same methodology was used for other TAs. While this approach is still an approximation, as the real breakdown of residual in Employed and Other category is by definition unknown, it was determined to be a better alternative than using the simple ratio of Employed vs Other defined people. It must also be noted that residual amounts to circa 4% of the total adult population, therefore the amount of population that is manually reallocated is actually minimal.

### 3. Households

A table (specification in Appendix A) was supplied by Statistics NZ of the WTSMS household categories with residuals by number of adults.

The residual categories exist as in some cases Statistics NZ doesn't know the employment status of the adults in the household. The residual categories were pro-rated over the relevant categories. For example, for one person households if one adult employed has 40% of the total one adult households then it would get 40% of the residual. There were no issues with the allocation of the residuals for households (unlike for persons) as trip making in the transport model is primarily driven by person types (hence more sensitivity to the allocation of residuals).

### 4. Employment

Two tables (specification in Appendix A) were supplied by Statistics NZ of WTSMS zones by the two types of employment categories ("normal" and HCV).

As well as the WTSMS employment categories there was also a category for missing industry (ANZSIC) code and a considerable number of categories for where the workplace address was incomplete or missing and the person could not be coded to a meshblock - which is needed to code to a WTSMS zone. Therefore, the employment data received included five types of data that required further allocation / processing:

- Missing industry - these were pro-rated across the WTSMS industries, based on the share that each WTSMS industry had of the total;
- Area Unit not further defined (a lot of categories due to the number of area units in Wellington) – these represent 2% of total employment in the final land use;
- Territorial Authority not further defined (NFD) – 3% of total employment;
- Wellington Region not further defined – 1% of total employment; and
- NZ not further defined – 7% of total employment.

The "C"s (see discussion under Persons) were replaced by a value which resulted in the total by industry almost equalling the total for all the zones supplied by Statistics NZ. This also resulted in the zonal total by industry being closer to the zonal total supplied by Statistics NZ. For each zone the industry Missing category was then pro-rated across the other industries in that zone.

For the Manufacturing & Agriculture, Mining & Construction categories the "C"s were replaced with 2.9 and 3.0 respectively for the reasons mentioned in the preceding paragraph. For these categories the Wellington City & Region NFD were then pro-rated across the WTSMS zones. The other TAs were not allocated as the NFD numbers were relatively small.

For the "normal" employment categories the Area Unit NFD employment was allocated to a WTSMS zone based on the fraction of the area unit in each WTSMS zone. The TA NFD, Region NFD and NZ NFD were then pro-rated across the relevant WTSMS zones. For NZ NFD, 11.2% of it was allocated to the WTSMS zones as this is the percentage of New Zealand's employment that is in Wellington.

## 5. Education

School (primary and secondary) and tertiary roll data was provided by the Ministry of Education.

In terms of processing, addresses were provided for schools and meshblocks for tertiary institutions, which enabled coding the location to a WTSMS zone.

The tertiary rolls are segmented by site (for example, Victoria University has a number of sites around Wellington), but do not distinguish between those who travel to that site and those who are taught by someone based at that site. For example, 2489 people were recorded as attending Playcentre Education in Tawa - this is not the case as only their education co-ordinator is based here with the courses being delivered around the country. No adjustment was introduced for this issue as comparisons with the 2011 land use indicated the datasets were consistent (in terms of similar numbers of tertiary places per WTSMS zone). The model coefficients would therefore have been estimated with this anomaly included.

## 6. Summary by TA

Table 2 presents the resulting land use input to WTSU, showing population, household and employment totals per TA and for the whole region. Totals are shown for the updated WTSU land use based on 2013 Census, as well as both the 2006 version of WTSU based on 2006 Census and the 2011 version based on estimates. Percentage growth from 2006 is also reported.

Area	POPULATION				
	2006 Census	2011 Estimate	% Growth from 2006	2013 Census	% Growth from 2006
Wellington	179,941	192,317	6.9%	190,859	6.1%
Porirua	48,667	50,362	3.5%	51,687	6.2%
Kapiti	46,260	49,085	6.1%	49,083	6.1%
Upper Hutt	38,573	40,188	4.2%	40,191	4.2%
Lower Hutt	97,911	99,678	1.8%	98,194	0.3%
Wairarapa	38,669	39,429	2.0%	41,124	6.3%
<b>Region</b>	<b>450,021</b>	<b>471,060</b>	<b>4.7%</b>	<b>471,138</b>	<b>4.7%</b>
Area	HOUSEHOLDS				
	2006 Census	2011 Estimate	% Growth from 2006	2013 Census	% Growth from 2006
Wellington	67,669	72,274	6.8%	70,413	4.1%
Porirua	15,372	15,938	3.7%	16,737	8.9%
Kapiti	19,105	20,283	6.2%	20,295	6.2%
Upper Hutt	14,121	14,673	3.9%	14,907	5.6%
Lower Hutt	35,326	35,936	1.7%	35,652	0.9%
Wairarapa	15,262	15,562	2.0%	16,623	8.9%
<b>Region</b>	<b>166,855</b>	<b>174,665</b>	<b>4.7%</b>	<b>174,627</b>	<b>4.7%</b>
Area	EMPLOYMENT				
	2006 Census	2011 Estimate	% Growth from 2006	2013 Census	% Growth from 2006
Wellington	129,947	135,785	4.5%	137,264	5.6%
Porirua	14,673	15,241	3.9%	15,112	3.0%
Kapiti	14,539	15,206	4.6%	14,037	-3.5%
Upper Hutt	12,099	11,923	-1.5%	11,345	-6.2%
Lower Hutt	44,068	44,135	0.2%	40,464	-8.2%
Wairarapa	18,239	18,208	-0.2%	17,540	-3.8%
<b>Region</b>	<b>233,565</b>	<b>240,498</b>	<b>3.0%</b>	<b>235,760</b>	<b>0.9%</b>

**Table 2: Land Use Totals and Growth Per TA**

Results show that total population and household numbers for the region are very similar between the 2011 estimates and 2013 Census. The fact that figures are similar despite the two-year difference suggests that the 2011 estimates were slightly over-optimistic in terms of population growth, although the difference between the estimate and the actual population in 2011 would have been small.

However the differences are more marked at a TA level, with Wellington and especially Lower Hutt growing less than estimated during this period, while Porirua and Wairarapa population has increased more than what was estimated.

Considering employment, the total growth for the region in 2013 is less than one third of what the estimated growth to 2011 was. This likely results from the 2011 employment being estimated which was achieved by applying growth rates from the Business Demography (Frame) between 2006 and 2010 to the 2006 WTSU employment. This low growth in employment (2006 to 2013) is likely to be related to the economic downturn from 2008 and to public sector job cuts which particularly affected the Wellington region. It must be noted that a decrease in employment was taken into account in the WTSU 2011 land use estimates, but only by reducing the “number of employed adults” in the population component, which drives the numbers of work-related trips in the model. Actual jobs numbers and locations only distribute these trips spatially and were therefore not adjusted. As a result the amount of work-related trips in WTSU 2011 was reflecting the trend of low growth in employment.

For employment at a TA level, there is a marked difference between Wellington and Porirua which have both increased, and the rest of the region which has decreased, particularly in the Hutt Valley. This indicates a further concentration of jobs in what already were the more economically dynamic parts of the region, which is also highlighted by manufacturing and other primary industry employment having decreased significantly (-15%), while services employment have increased by 9%.

For more clarity, the results in Table 2 are illustrated in Figures 1 to 3 below, which show the increase in population, households and employment per TA in 2013, indexed to 2006. The round markers also indicate what the 2011 estimates were.

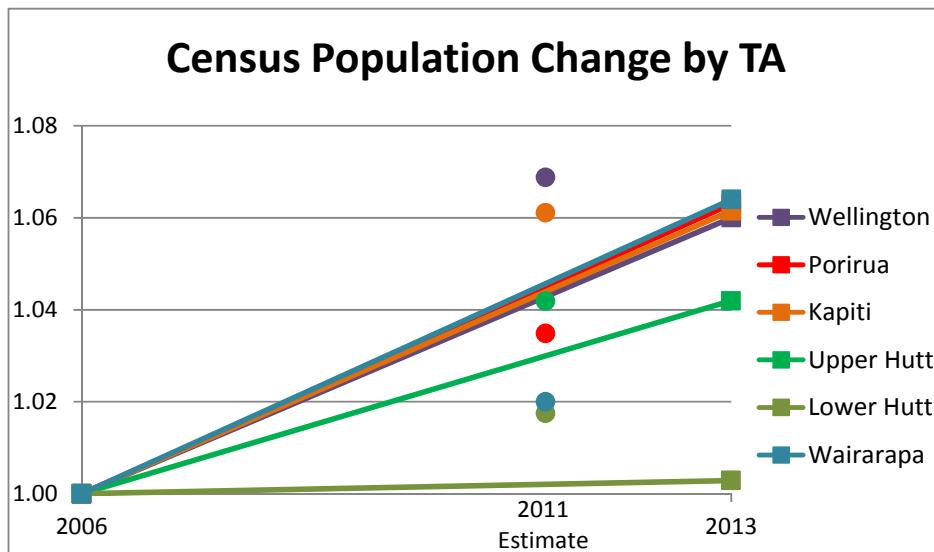


Figure 1: 2006-2013 Population Growth by TA

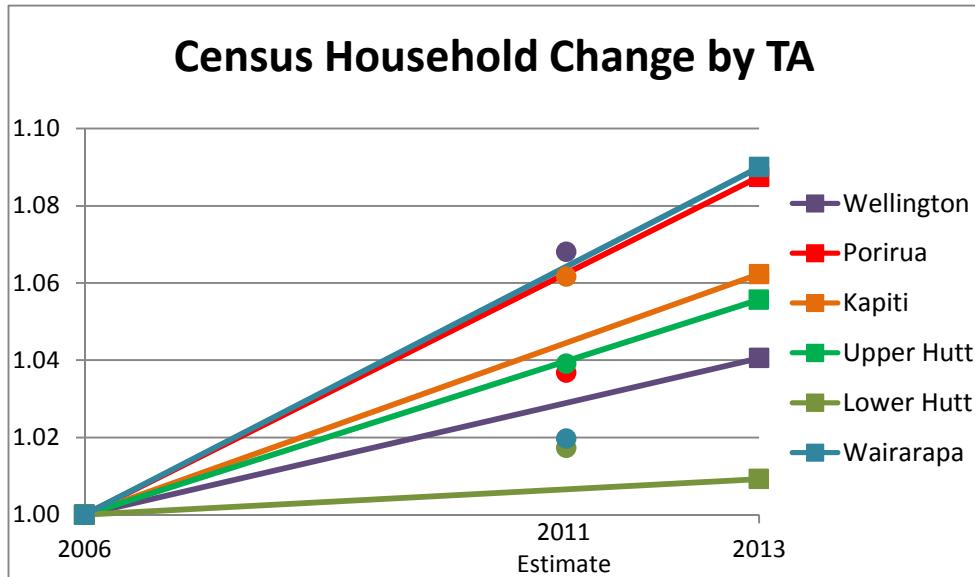


Figure 2: 2006-2013 Households Growth by TA

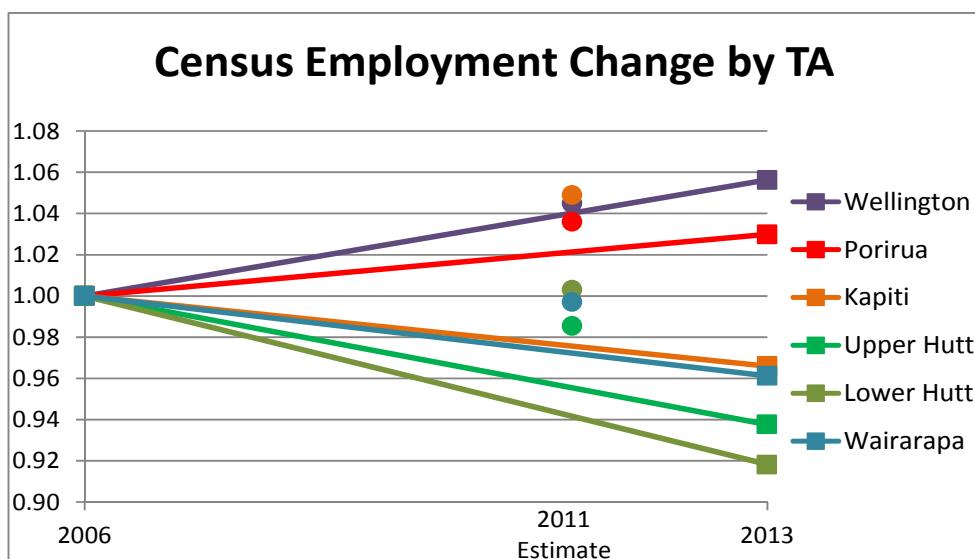


Figure 3: 2006-2013 Employment Growth by TA

## Appendix A

### Census Specification for Land Use Data

## A.1 Overview

- The Census Usually Resident Population Count is used. (WTSU Demographic Projections Report 2006 Base Run, S2.1.1);
- The references are to the 2013 Census Data Dictionary, with the page numbers at the end of many variables. The numbers in brackets after the first part of the variable name {e.g. "Age - Five Year Groups (21)} is the number of categories, in this case there are 21 five year age groups for which the data can be supplied;
- Each variable is required tabulated by WTSU zone; an equivalence table to 2013 meshblocks is attached; and
- Totals by Territorial Authority (TA) and for the whole of the modelled area (Wellington Region) were requested.

## A.2 Person Definition

- Infants (0 to 4 years) - Age – Five Year Groups (21) 01 0-4 Years, p 59;
- Children (5 to 10 years) - Age – Five Year Groups (21) 02 5-9 Years, p 59;
- Children (11 to 16 years) - Age – Single Years (121) 011, 012, 013, 014, 015, 016;
- Total Children (0 to 16 years) - Age – Five Year Groups (21) 01 0-4 Years, 02 5-9 Years, 03 10-14 years, 015, 016 p 59;
- Young Adult (17-25 years) Full Time (work) - Age – Single Years (121) 017, 018, 019, 020, 021, 022, 023, 024, 025 AND Work and Labour Force Status (5) 1 Employed Full-time. (p 94) Note that the Stats definition of Full Time Employment is 30 or more hours per week;
- Young Adult (17-25 years) Part Time (work) - Age – Single Years (121) 017, 018, 019, 020, 021, 022, 023, 024, 025 AND Work and Labour Force Status (5) 2 Employed Part-time; (p 94);
- Young Adult (17-25 years) Other - Age – Single Years (121) 017, 018, 019, 020, 021, 022, 023, 024, 025 AND (Work and Labour Force Status 3 Unemployed OR Work and Labour Force Status 4 Not in the Labour Force);
- Young Adult (17-25 years) total - Age – Single Years (121) 017, 018, 019, 020, 021, 022, 023, 024, 025;
- Adult (26-65 years) Full Time (work) - Age - Single Years (121) , Age 26, 27, 28, to 64, 65. Alternatively an appropriate selection of Age – Ten Year Groups (11) and Age – Five Year Groups (21) and Age - Single Years (121) AND Work and Labour Force Status (5) 1 Employed Full-time. (p 94);
- Adult (26-65 years) Part Time (work) - Age - Single Years (121), Age 26, 27, 28 to 64, 65. Alternatively an appropriate selection of Age – Ten Year Groups (11) and Age – Five Year Groups (21) and Age - Single Years (121) AND Work and Labour Force Status (5) 2 Employed Part-time. (p 94);
- Adult (26-65 years) Other - Age - Single Years (121) , Age 26, 27, 28 to 64, 65. Alternatively an appropriate selection of Age – Ten Year Groups (11) and Age – Five Year Groups (21) and Age - Single Years (121) AND (Work and Labour Force Status 3 Unemployed OR Work and Labour Force Status 4 Not in the Labour Force);

- Adult (26-65 years) Total - Age - Single Years (121), Age 26, 27, 28 to 64, 65. Alternatively an appropriate selection of Age – Ten Year Groups (11) and Age – Five Year Groups (21) and Age - Single Years (121);
- Older Adult (>65 years) Full Time (work) - Age 66, 67, 68 to 119, 120. Alternatively an appropriate selection of Age - Single Years (121), Age – Five Year Groups (21) & Age – Ten Year Groups (11) on p 25 & 26 AND Work and Labour Force Status (5) 1 Employed Full-time. (p 94);
- Older Adult (>65 years) Part Time (work) - Age 66, 67, 68 to 119, 120. Alternatively an appropriate selection of Age - Single Years (121), Age – Five Year Groups (21) & Age – Ten Year Groups (11) AND Work and Labour Force Status (5) 2 Employed Part-time. (p 94);
- Older Adult (>65 years) Other - Age 66, 67, 68 to 119, 120. Alternatively an appropriate selection of Age - Single Years (121), Age – Five Year Groups (21) & Age – Ten Year Groups (11) AND (Work and Labour Force Status (5) 3 Unemployed OR Work and Labour Force Status (5) 4 Not in the labour force;
- Older Adult (>65 years) Total - Age 66, 67, 68 to 119, 120. Alternatively an appropriate selection of Age - Single Years (121), Age – Five Year Groups (21) & Age – Ten Year Groups (11);
- Residual - Work and Labour Force Status - 9 Work and Labour Force Status Unidentifiable by the following age categories; under 17, 17 to 25 years, 26 to 65 years, >65 years and a total for all age categories;
- Total Population.

The specification for the Infant and Children categories were taken from the TripEndInputData spreadsheet. The specification for the Young Adult, Adult & Older Adult categories were taken from TN16.1 Trip End Report, July 2003.

### A.3 Household Definition

- 1 Adult Employed - Household Composition Level 1 (6) - 5 One-person Household, p 26 AND FOR THE ADULT HOUSEHOLD RESIDENT (Work and Labour Force Status (5) 1 Employed Full-time. (p 94) OR Work and Labour Force Status (5) 2 Employed Part-time. (p 94)). Note that the first part refers to the household and the second to the person in the household;
- 1 Adult Non Employed - Household Composition Level 1 (6) - 5 One-person Household, p 26 AND FOR THE ADULT HOUSEHOLD RESIDENT (Work and Labour Force Status (5) 3 Unemployed OR Work and Labour Force Status (5) 4 Not in Labour Force);
- 2 Adults (min of 1 employed) - Usual Residents Aged 15 and Over in the Household, Number of (21) - 02 Two usual residents AND FOR THE ADULT HOUSEHOLD RESIDENTS one or both of them is Work and Labour Force Status (5) 1 Employed Full-time. (p 94) OR Work and Labour Force Status (5) 2 Employed Part-time. (p 94);
- 2 Adults neither employed - Usual Residents Aged 15 and Over in the Household, Number of (21) - 02 Two usual residents AND FOR THE ADULT HOUSEHOLD RESIDENTS both of them (Work and Labour Force Status (5) 3 Unemployed OR Work and Labour Force Status (5) 4 Not in the Labour Force);

- 3+ Adults - Usual Residents Aged 15 and Over in the Household, Number of (21) - 03 or greater;
- 1 Adult residual - Household Composition Level 1 (6) - 5 One-person Household, p 7 AND FOR THE ADULT HOUSEHOLD RESIDENT (Work and Labour Force Status (5) 9 Work and Labour Force Status Unidentifiable);
- 2 Adults residual - Usual Residents Aged 15 and Over in the Household, Number of (21) - 02 Two usual residents AND FOR THE ADULT HOUSEHOLD RESIDENTS one or both of them is Work and Labour Force Status (5) 9 Work and Labour Force Status Unidentifiable) AND they don't fall into one of the other categories;
- Household comprising children only;
- Remainder - based on households comprising 15 or 16 year olds only or households where all the usual residents aged 17 years and over are absent (as per revamped table supplied for 2006 data order);
- 3Total Households;

Adults are based on usual residents in household on census night, age 17 years and over (excludes absentees).

Number of employed is based on usual residents in households on census nights, age 15 years and over (excludes absentees). (Unchanged from original specification in August 2013).

## A.4 Employment Definition

We require for the classifications WTSMS Industry (used for person trip generation) and HCV Industry (originally used for HCV trip generation in the 2001 to 2011 model versions) in this table cross tabulated by WTSMS zone using the workplace address for the Census Usually Resident Population count of those aged 15 years & over (Table source: WTSMS Demographic Projections Report 2006 Base Run). For those whose workplace is spatially not sufficiently well defined to assign them to a WTSMS zone, then we require those who are assigned to an Area Unit or higher spatial level (e.g. TA or Wellington Region) not further defined. We also require a total by WTSMS zone and for the whole of Wellington Region.

ANZSIC 2001 Lvl 2	Ind Code	Industry Description	WTSMS Industry	HCV Industry
A01 Agriculture	1	Agriculture, Hunting and Trapping	5 Other	5 Agr/Min/Constr
A02 Services to Agriculture; Hunting and Trapping	2	Other Farming and Services to Agriculture, Hunting and Trapping	5 Other	5 Agr/Min/Constr
A03 Forestry and Logging	3	Forestry and Logging	5 Other	5 Agr/Min/Constr
A04 Commercial Fishing	4	Commercial Fishing	5 Other	5 Agr/Min/Constr
B11 Coal Mining	5	Coal Mining	2 Manuf	5 Agr/Min/Constr
B12 Oil and Gas Extraction	6	Oil and Gas Extraction and Exploration	2 Manuf	5 Agr/Min/Constr

ANZSIC 2001 Lvl 2	Ind Code	Industry Description	WTSU Industry	HCV Industry
B13 Metal Ore Mining	7	Other Mining and Quarrying and services to mining	2 Manuf	5 Agr/Min/Constr
B14 Other Mining	7	Other Mining and Quarrying and Services to Mining	2 Manuf	5 Agr/Min/Constr
B15 Services to Mining	7	Other Mining and Quarrying and Services to Mining	2 Manuf	5 Agr/Min/Constr
C21 Food Beverage and Tobacco	8	Food Beverage and Tobacco	2 Manuf	2 Manuf
C22 Textile Clothing Footwear and Leather Manufacturing	9	Textile Clothing Footwear and Leather Manufacturing	2 Manuf	2 Manuf
C23 Wood and Paper Product Manufacturing	10	Log Sawmilling, Timber Dressing and Other Wood Product Manufacturing	2 Manuf	2 Manuf
C24 Printing Publishing and Recorded Media	11	Printing Publishing and Recorded Media	2 Manuf	2 Manuf
C25 Petroleum Coal Chemical and Associated Product Manufacturing	12	Petroleum Coal Chemical and Associated Product Manufacturing	2 Manuf	2 Manuf
C26 Non-Metallic Mineral Product Manufacturing	13	Non-Metallic Mineral Product Manufacturing	2 Manuf	2 Manuf
C27 Metal Product Manufacturing	14	Metal Product Manufacturing	2 Manuf	2 Manuf
C28 Machinery and Equipment Manufacturing	15	Machinery and Equipment Manufacturing	2 Manuf	2 Manuf
C29 Other Manufacturing	16	Other Manufacturing	2 Manuf	2 Manuf
D36 Electricity and Gas Supply	17	Electricity and Gas Supply	2 Manuf	2 Manuf
D37 Water Supply Sewerage and Drainage Services	18	Water Supply	2 Manuf	2 Manuf
E41 General Construction	19	Construction	2 Manuf	5 Agr/Min/Constr
E42 Construction Trade Services	19	Construction	2 Manuf	5 Agr/Min/Constr
F45 Basic Material Wholesaling	20	Wholesale and Retail Trade	1 Retail	1 Retail
F46 Machinery and Motor Vehicle Wholesaling	20	Wholesale and Retail Trade	1 Retail	1 Retail
F47 Personal and Household Good Wholesaling	20	Wholesale and Retail Trade	1 Retail	1 Retail
G51 Food Retailing	20	Wholesale and Retail Trade	1 Retail	1 Retail
G52 Personal and Household Good Retailing	20	Wholesale and Retail Trade	1 Retail	1 Retail

ANZSIC 2001 Lvl 2	Ind Code	Industry Description	WTSMS Industry	HCV Industry
G53 Motor Vehicle Retailing and Services	20	Wholesale and Retail Trade	1 Retail	1 Retail
H57 Accommodation Cafes and Restaurants	21	Accommodation, Cafes and Restaurants	1 Retail	1 Retail
I61 Road Transport	22	Road Transport	3 Trspt or Comms	3 Trspt or Comms
I62 Rail Transport	23	Water and Rail Transport	3 Trspt or Comms	3 Trspt or Comms
I63 Water Transport	23	Water and Rail Transport	3 Trspt or Comms	3 Trspt or Comms
I64 Air and Space Transport	24	Air Transport, Services to Transport, Storage	3 Trspt or Comms	3 Trspt or Comms
I65 Other Transport	24	Air Transport, Services to Transport, Storage	3 Trspt or Comms	3 Trspt or Comms
I66 Services to Transport	24	Air Transport, Services to Transport, Storage	3 Trspt or Comms	3 Trspt or Comms
I67 Storage	25	Storage and Communication Services	3 Trspt or Comms	3 Trspt or Comms
J71 Communication Services	25	Storage and Communication Services	3 Trspt or Comms	3 Trspt or Comms
K73 Finance	26	Finance and Insurance	4 Services	4 Services
K74 Insurance	26	Finance and Insurance	4 Services	4 Services
K75 Services to Finance and Insurance	26	Finance and Insurance	4 Services	4 Services
L77 Property Services	27	Property Services	4 Services	4 Services
L78 Business Services	28	Business Services	4 Services	4 Services
M81 Government Administration	29	Government Administration and Defence	4 Services	4 Services
M82 Defence	29	Government Administration and Defence	4 Services	4 Services
N84 Education	30	Education	4 Services	4 Services
O86 Health Services	31	Health Services	4 Services	4 Services
O87 Community Services	31	Health Services	4 Services	4 Services
P91 Motion Picture Radio and Television Services	32	Cultural and Recreational Services	4 Services	4 Services
P92 Libraries Museums and the Arts	32	Cultural and Recreational Services	4 Services	4 Services
P93 Sport and Recreation	32	Cultural and Recreational Services	4 Services	4 Services
Q95 Personal Services	33	Personal and Other Services, Pest Control and Cleaning Services, Waste Disposal and	4 Services	4 Services

ANZSIC 2001 Lvl 2	Ind Code	Industry Description	WTSU Industry	HCV Industry
		Sewerage Services		
Q96 Other Services	33	Personal and Other Services, Pest Control and Cleaning Services, Waste Disposal and Sewerage Services	4 Services	4 Services
Q97 Private Households Employing Staff	33	Personal and Other Services, Pest Control and Cleaning Services, Waste Disposal and Sewerage Services	4 Services	4 Services
R99 Not specified	34	Not Specified	6 Missing	
<b>TTT Total</b>	<b>35</b>	<b>All Industries</b>	<b>7 Total</b>	<b>6 Total</b>

## Appendix B

### 2013 WTSU Land Use

Zone	Population												Pop Total	
	Children			Young Adult			Adult			Older Adult				
	Infants	5-10 yrs	11-16 yrs	Full-Time Emp	Part-Time Emp	Other	Full-Time Emp	Part-Time Emp	Other	Full-Time Emp	Part-Time Emp	Other		
1	156	171	159	89	50	86	741	153	276	21	24	156	2082	
2	324	309	330	169	107	144	1544	304	503	44	53	473	4305	
3	252	294	285	115	78	119	1316	258	373	31	34	293	3447	
4	432	498	555	250	157	292	1963	414	752	50	78	489	5931	
5	147	192	192	35	38	50	654	157	188	27	30	153	1863	
6	39	78	102	21	18	18	337	65	72	6	9	60	825	
7	6	1	1	0	0	0	0	0	0	0	0	0	8	
8	288	306	291	165	86	145	1644	340	431	38	25	297	4056	
9	297	288	297	255	145	187	1619	307	614	40	40	624	4716	
10	249	300	231	338	133	171	1666	238	349	36	33	153	3897	
11	135	165	129	194	78	91	1082	161	240	24	27	129	2454	
12	48	66	84	109	28	40	681	95	175	33	21	102	1482	
13	15	6	24	243	191	331	354	35	109	6	6	107	1428	
14	360	258	222	563	327	475	2032	331	706	32	35	325	5667	
15	177	219	222	117	50	79	1085	208	261	25	15	164	2622	
16	276	372	240	180	93	135	1450	297	353	24	33	237	3690	
17	243	267	216	109	69	122	1194	270	288	33	30	210	3051	
18	117	171	123	57	39	66	682	144	179	12	6	117	1713	
19	117	108	72	321	191	295	857	129	262	16	19	253	2640	
20	303	228	180	225	113	199	1266	219	501	19	19	253	3525	
21	63	45	30	289	195	201	615	85	143	7	7	61	1740	
22	231	225	201	223	137	210	1522	251	306	27	27	177	3537	
23	162	150	120	98	66	79	944	155	234	19	25	167	2217	
24	195	267	270	255	139	191	1515	260	304	25	19	172	3612	
25	87	87	66	415	282	425	968	206	365	19	19	127	3066	
26	66	87	75	156	169	218	642	115	158	24	21	72	1803	
27	57	129	153	223	245	297	663	119	199	30	30	102	2247	
28	201	249	225	267	180	236	1423	254	297	36	33	132	3534	
29	120	162	192	94	53	84	913	170	216	41	25	178	2247	
30	333	525	624	206	181	267	2171	449	554	85	70	631	6096	
31	435	525	510	210	182	326	2301	427	557	77	71	479	6099	
32	210	210	198	99	62	130	1020	176	292	15	18	120	2550	
33	18	33	45	18	6	9	184	42	32	3	3	24	417	
34	117	147	126	67	26	48	636	108	126	18	12	108	1539	
35	174	291	273	154	106	122	1320	222	256	59	46	189	3210	
36	48	51	42	239	89	83	740	81	112	21	15	81	1602	
37	6	6	15	21	9	15	122	16	35	9	6	18	279	
38	39	45	72	152	63	111	655	67	137	31	22	118	1512	
39	4	4	4	9	1	1	0	0	0	0	0	0	23	
40	30	36	36	77	40	30	476	78	144	52	43	202	1245	
41	36	45	45	175	56	75	825	97	131	24	21	78	1608	
42	63	54	63	317	105	82	950	118	168	16	10	94	2040	
43	66	69	69	256	117	113	716	99	136	18	9	63	1731	
44	63	66	81	311	231	622	562	85	253	6	10	68	2358	
45	9	3	9	99	69	156	186	16	26	2	2	2	579	
46	9	9	9	131	54	106	259	31	65	1	1	9	683	
47	18	15	39	215	71	90	770	63	113	6	12	42	1452	
48	12	15	15	154	36	59	473	38	69	12	9	36	927	
49	0	0	6	6	3	6	0	0	0	6	6	18	51	
50	21	9	15	358	191	355	570	60	99	6	3	18	1704	
51	12	6	3	213	102	127	354	36	75	3	3	6	939	
52	9	9	0	109	68	109	201	17	44	3	3	9	579	
53	15	6	12	140	89	277	258	23	55	3	3	9	891	
54	12	0	18	198	114	345	263	49	117	6	9	33	1164	
55	3	3	12	61	73	379	88	16	25	3	3	15	681	
56	27	24	27	199	134	183	401	45	76	9	9	39	1173	
57	27	9	15	258	151	425	535	55	127	10	10	58	1680	

Zone	Population												Pop Total	
	Children			Young Adult			Adult			Older Adult				
	Infants	5-10 yrs	11-16 yrs	Full-Time Emp	Part-Time Emp	Other	Full-Time Emp	Part-Time Emp	Other	Full-Time Emp	Part-Time Emp	Other		
58	0	0	0	9	1	1	0	0	0	0	0	0	11	
59	0	0	0	3	3	3	0	0	0	0	0	0	9	
60	18	9	12	126	58	233	272	29	56	1	1	6	821	
61	12	21	15	55	100	430	185	31	60	12	9	30	960	
62	0	0	0	15	36	180	0	0	0	0	0	0	231	
63	0	0	0	0	0	0	0	0	0	0	0	0	0	
64	0	0	0	12	3	3	79	7	20	1	1	6	131	
65	2	2	2	18	1	1	70	7	17	4	4	4	131	
66	12	9	15	63	16	23	296	30	53	6	0	24	546	
67	6	6	6	12	3	3	0	0	0	2	2	2	42	
68	75	123	114	50	38	38	562	98	135	25	37	136	1431	
69	141	180	132	54	33	42	663	153	126	18	24	69	1635	
70	432	507	408	155	102	124	2042	373	468	69	51	264	4995	
71	231	324	300	90	90	96	1283	282	309	58	55	291	3411	
72	129	129	159	62	46	72	782	133	195	19	28	140	1893	
73	153	210	177	99	49	80	983	160	234	34	43	151	2373	
74	3	3	3	2	2	2	26	4	4	0	0	0	48	
75	228	252	267	132	82	122	1161	203	343	28	28	193	3039	
76	195	156	168	123	47	82	869	159	247	21	24	413	2505	
77	0	0	0	0	0	0	0	0	0	0	0	0	0	
78	228	222	195	139	63	85	1087	201	266	30	33	237	2787	
79	420	414	387	249	139	188	2014	322	547	38	35	261	5013	
80	363	321	345	219	127	200	1722	296	471	55	28	253	4401	
81	18	30	42	15	6	6	0	0	0	9	0	21	147	
82	399	540	555	249	209	206	2385	422	562	64	49	371	6009	
83	342	318	255	190	87	125	1469	256	393	44	40	324	3843	
84	9	12	15	3	6	3	82	13	22	4	4	4	177	
85	117	87	114	48	27	45	569	73	113	9	6	39	1248	
86	210	309	324	150	140	112	1203	271	323	34	50	459	3585	
87	42	63	66	15	12	24	187	35	60	9	6	21	540	
88	264	243	312	141	105	150	1163	225	346	19	22	244	3234	
89	54	90	126	48	30	42	406	86	95	9	18	141	1146	
90	300	333	366	156	127	209	1349	279	486	34	34	330	4005	
91	99	165	174	75	72	60	633	144	138	15	18	90	1683	
92	18	9	27	21	3	48	0	0	0	1	1	15	143	
93	39	42	60	20	13	33	130	28	73	1	1	33	473	
94	159	144	162	75	44	142	486	95	253	28	12	125	1725	
95	357	384	288	150	65	166	1067	229	449	28	28	352	3564	
96	399	411	321	216	81	210	1417	257	585	46	34	280	4257	
97	0	0	0	0	0	0	0	0	0	0	0	0	0	
98	156	174	210	106	35	167	542	148	350	17	17	116	2040	
99	120	96	99	51	34	71	509	74	175	14	17	102	1362	
100	483	516	573	194	85	492	972	230	841	29	19	233	4668	
101	360	390	432	167	64	341	719	157	649	29	19	264	3591	
102	486	567	552	209	101	422	1079	226	811	35	29	218	4734	
103	246	249	282	131	60	181	837	155	336	29	22	138	2667	
104	315	276	198	122	71	83	1356	200	283	49	28	379	3360	
105	159	231	228	105	71	74	1070	199	242	63	45	273	2760	
106	342	432	393	164	101	101	1670	331	387	73	46	356	4395	
107	243	366	372	145	117	89	1542	282	297	37	40	260	3789	
108	51	111	144	63	36	33	450	113	84	29	16	51	1182	
109	168	186	144	104	47	47	839	178	159	25	28	177	2103	
110	33	51	51	17	27	17	324	50	79	16	16	111	792	
111	120	138	141	69	50	43	723	145	167	41	31	144	1812	
112	168	183	156	69	33	42	703	169	196	25	28	121	1893	
113	9	18	18	2	2	0	0	0	0	1	6	1	59	
114	6	18	24	6	3	3	0	0	0	3	3	12	78	
115	117	159	126	32	35	38	604	180	183	21	27	138	1659	

Zone	Population												Pop Total	
	Children			Young Adult			Adult			Older Adult				
	Infants	5-10 yrs	11-16 yrs	Full-Time Emp	Part-Time Emp	Other	Full-Time Emp	Part-Time Emp	Other	Full-Time Emp	Part-Time Emp	Other		
116	279	303	303	119	81	91	1273	310	433	34	43	328	3597	
117	282	438	399	133	91	130	1432	330	518	55	95	894	4797	
118	159	177	189	83	40	93	573	144	300	15	33	389	2196	
119	18	15	39	12	9	9	0	0	0	12	18	219	351	
120	324	336	411	166	110	232	1303	316	588	62	87	1280	5214	
121	282	351	354	166	97	144	1375	375	560	70	91	1122	4989	
122	246	354	384	141	80	160	1243	328	469	55	52	585	4098	
123	105	150	165	57	35	61	740	155	208	30	27	195	1929	
124	177	231	231	116	60	79	888	235	374	55	71	540	3057	
125	216	303	297	87	71	109	1286	373	564	98	184	2189	5778	
126	102	132	141	39	26	36	540	168	202	37	46	539	2007	
127	30	39	63	18	15	18	182	53	68	15	12	42	555	
128	57	87	93	18	15	30	424	116	138	28	22	123	1152	
129	399	474	450	157	75	218	1374	419	863	88	129	1166	5811	
130	42	60	78	24	21	18	355	98	132	36	18	102	984	
131	15	36	33	6	9	9	0	0	0	12	15	75	210	
132	24	33	51	12	3	12	160	35	38	3	3	21	396	
133	39	45	48	21	9	24	228	44	60	6	6	30	561	
134	72	90	132	48	19	41	437	76	117	12	9	96	1149	
135	213	249	252	131	74	141	995	188	342	36	36	179	2835	
136	186	213	279	138	56	109	1053	173	249	31	31	241	2760	
137	240	267	249	144	64	93	1031	227	303	40	25	194	2874	
138	150	144	168	117	45	78	675	124	239	25	28	295	2088	
139	27	48	48	24	15	9	193	37	49	1	1	30	482	
140	27	21	15	12	6	15	83	20	53	3	6	45	306	
141	147	165	165	88	45	104	660	130	295	21	21	323	2166	
142	222	231	246	145	80	123	955	176	402	27	34	605	3246	
143	159	150	147	128	64	87	734	126	283	25	28	220	2151	
144	99	141	183	81	48	42	706	150	141	21	15	69	1695	
145	45	63	45	63	16	92	293	44	344	6	6	231	1248	
146	219	189	207	141	78	138	935	151	381	25	31	445	2940	
147	150	162	225	101	50	92	766	144	233	24	31	254	2232	
148	150	198	222	74	51	112	677	141	262	22	19	175	2103	
149	123	135	153	45	12	33	763	101	129	21	12	42	1569	
150	117	144	165	111	48	66	709	135	215	43	40	403	2196	
151	84	117	153	63	57	48	560	101	131	24	21	174	1533	
152	93	138	135	69	57	51	628	105	158	18	21	243	1716	
153	135	204	138	68	44	59	746	152	176	24	15	123	1884	
154	21	33	24	18	6	12	135	22	59	3	3	51	387	
155	255	306	285	181	69	147	1208	217	342	31	31	330	3402	
156	192	183	171	90	32	115	746	130	240	28	16	121	2064	
157	183	246	240	108	49	167	600	129	375	19	16	261	2394	
158	30	30	12	6	6	18	70	10	28	0	0	9	219	
159	240	255	231	158	68	71	1320	220	248	24	36	180	3051	
160	267	270	291	130	51	203	775	178	484	26	20	239	2934	
161	246	255	264	99	39	174	644	121	363	13	16	173	2406	
162	111	138	117	70	48	48	605	112	168	30	24	171	1641	
163	204	231	228	85	62	147	651	139	390	15	15	272	2439	
164	189	219	222	101	59	164	563	103	417	17	17	153	2223	
165	51	63	87	58	29	58	299	63	136	12	12	105	972	
166	237	255	249	105	57	186	714	156	411	16	19	139	2544	
167	180	174	189	108	42	108	715	134	363	19	25	283	2340	
168	192	192	222	140	81	133	1069	202	354	50	62	740	3438	
169	231	261	291	136	114	142	1424	283	274	52	43	184	3435	
170	165	213	231	111	76	92	999	197	286	40	37	400	2847	
171	129	135	150	85	54	92	707	129	300	31	22	271	2106	
172	231	243	204	112	70	121	927	207	417	28	31	280	2871	
173	345	408	405	181	86	240	1165	212	453	28	28	243	3795	

Zone	Population												Pop Total	
	Children			Young Adult			Adult			Older Adult				
	Infants	5-10 yrs	11-16 yrs	Full-Time Emp	Part-Time Emp	Other	Full-Time Emp	Part-Time Emp	Other	Full-Time Emp	Part-Time Emp	Other		
174	219	246	231	105	52	170	721	130	352	19	19	181	2445	
175	303	390	327	154	117	145	1471	314	448	52	59	450	4230	
176	69	132	186	75	45	66	596	138	169	24	18	180	1698	
177	63	111	117	48	33	57	499	112	143	34	21	218	1455	
178	9	15	18	12	6	9	0	0	0	0	0	21	90	
179	0	0	0	0	0	0	0	0	0	0	0	0	0	
180	0	0	0	0	0	0	0	0	0	0	0	0	0	
181	0	0	0	0	0	0	0	0	0	0	0	0	0	
182	6	3	3	9	1	1	0	0	0	0	0	0	23	
183	0	0	0	9	6	9	21	4	17	0	0	0	66	
184	75	78	78	49	16	39	401	79	117	4	4	60	1001	
185	117	132	93	89	48	70	649	97	187	18	12	99	1611	
186	21	45	57	30	21	24	257	63	67	15	6	282	888	
187	81	102	150	81	72	56	605	126	157	21	33	198	1683	
188	306	306	321	200	111	193	1395	260	457	34	34	364	3981	
189	120	132	132	60	31	101	418	105	275	9	12	131	1527	
190	165	165	129	111	64	95	784	143	243	26	19	189	2133	
191	138	126	123	161	80	113	821	107	224	13	19	154	2079	
192	138	186	165	111	60	51	895	155	180	33	27	108	2109	
193	315	324	258	151	114	101	1515	273	348	40	46	297	3783	
194	102	99	90	57	32	38	548	116	119	15	21	90	1326	
195	69	90	75	117	32	76	558	86	130	12	15	117	1377	
196	102	93	63	80	23	56	392	82	147	13	10	92	1152	
197	3	3	3	2	2	2	0	0	0	0	0	0	15	
198	207	237	255	144	56	144	914	153	283	23	26	207	2649	
199	36	39	36	18	6	15	151	19	49	6	6	99	480	
200	165	243	243	70	58	61	907	249	268	60	54	351	2730	
201	72	150	171	39	39	52	716	180	205	39	48	228	1938	
202	153	183	162	109	40	118	642	128	226	16	16	181	1974	
203	195	219	228	99	56	145	786	125	301	26	23	257	2460	
204	264	285	306	166	85	172	1064	186	391	35	44	267	3264	
205	15	9	12	3	9	3	96	29	19	3	3	15	216	
206	102	87	87	39	20	46	473	138	141	31	37	214	1416	
207	159	150	186	66	32	88	689	160	345	28	37	310	2250	
208	126	168	156	57	31	44	651	181	221	43	71	447	2196	
209	309	357	348	176	80	137	1358	340	569	80	86	843	4683	
210	252	288	279	136	59	139	1105	307	457	55	79	781	3936	
211	468	543	726	365	157	305	2089	538	808	91	140	1272	7503	
212	489	603	615	289	125	344	1724	552	904	59	87	919	6711	
213	51	84	57	15	6	15	269	80	65	21	24	48	735	
214	96	138	123	60	24	21	661	193	118	53	44	128	1659	
215	42	78	63	27	9	12	307	100	85	18	18	57	816	
216	129	237	252	74	47	65	1087	289	249	80	71	227	2808	
217	87	114	117	36	18	33	532	145	145	33	21	81	1362	
218	42	90	63	21	12	18	344	100	66	15	27	84	882	
219	27	36	30	29	7	15	122	29	26	3	6	18	348	
220	27	63	48	18	3	18	183	59	49	15	6	24	513	
221	42	51	63	26	17	23	258	69	54	18	14	53	687	
222	45	87	72	27	15	15	308	89	74	27	24	69	852	
223	54	57	51	54	17	17	206	63	73	24	18	42	675	
224	21	21	15	12	6	6	0	0	0	9	12	12	114	
225	51	63	72	21	18	75	238	85	62	21	18	42	765	

Zone	Households						Education		
	1 Adult Emp	1 Adult Non-Emp	2 Adults (Min 1 Emp)	2 Adults Neither Emp	3+ Adults	HH Total	Primary	Secondary	Tertiary
1	138	90	323	52	147	750	0	0	0
2	261	252	680	118	321	1632	369	83	0
3	183	126	583	83	243	1218	325	17	0
4	306	285	850	152	471	2064	222	743	0
5	99	69	353	49	90	660	651	145	0
6	42	27	156	9	48	282	0	0	0
7	6	0	12	0	0	18	0	0	0
8	347	175	717	87	270	1596	420	7	0
9	373	449	604	116	375	1917	77	2096	0
10	304	95	701	55	303	1458	273	66	0
11	229	98	418	38	195	978	223	2	0
12	151	59	258	39	114	621	106	31	0
13	51	9	143	10	207	420	0	0	598
14	406	233	745	98	579	2061	353	358	39
15	197	82	481	59	165	984	194	1	0
16	233	115	644	73	261	1326	462	8	0
17	199	101	542	58	216	1116	229	62	0
18	103	44	290	19	126	582	126	0	0
19	168	156	327	51	276	978	0	0	217
20	303	198	566	79	231	1377	200	13	0
21	134	55	242	22	219	672	0	0	0
22	333	114	662	49	252	1410	377	130	0
23	201	90	402	60	144	897	189	22	0
24	257	94	658	47	276	1332	0	0	0
25	236	184	379	41	330	1170	0	0	0
26	147	54	291	18	171	681	0	0	0
27	114	45	338	46	228	771	221	76	0
28	280	101	695	37	255	1368	338	97	0
29	231	90	416	55	129	921	165	53	0
30	308	244	1075	128	381	2136	659	598	823
31	365	250	1099	125	372	2211	152	43	0
32	174	66	440	43	189	912	329	100	0
33	30	9	81	9	24	153	22	5	0
34	105	48	311	31	84	579	164	2	0
35	210	102	626	37	207	1182	234	84	0
36	172	65	288	21	153	699	0	0	0
37	27	9	42	6	18	102	141	708	44
38	186	72	257	28	117	660	365	1922	165
39	12	0	15	0	6	33	0	0	267
40	122	94	241	62	72	591	0	0	0
41	209	46	264	24	144	687	0	0	0
42	196	83	350	22	195	846	178	59	378
43	139	50	257	16	183	645	0	0	0
44	221	112	226	53	198	810	0	990	3481
45	36	9	57	0	81	183	142	2667	0
46	57	27	96	12	81	273	159	59	7
47	210	48	300	15	117	690	0	0	317
48	136	32	186	15	75	444	0	0	92
49	21	9	45	0	0	75	0	0	47
50	168	45	303	33	183	732	0	0	990
51	114	36	155	13	93	411	0	0	2053
52	33	12	98	10	63	216	0	0	843
53	72	18	99	9	81	279	0	0	0
54	101	79	103	17	99	399	0	0	111
55	24	12	36	0	42	114	0	0	15859
56	75	42	158	16	150	441	169	52	0
57	191	70	205	23	114	603	0	0	1694

Zone	Households						Education		
	1 Adult Emp	1 Adult Non-Emp	2 Adults (Min 1 Emp)	2 Adults Neither Emp	3+ Adults	HH Total	Primary	Secondary	Tertiary
58	6	0	0	0	0	6	0	0	77
59	0	0	6	0	0	6	0	0	0
60	95	13	147	6	33	294	55	7	0
61	33	15	84	12	36	180	0	0	0
62	0	0	0	0	0	0	0	0	139
63	0	0	0	0	0	0	0	0	6191
64	21	0	24	0	9	54	0	0	0
65	18	0	24	0	9	51	0	0	0
66	135	27	104	13	27	306	0	0	0
67	6	0	33	0	12	51	0	0	0
68	79	53	288	39	81	540	0	0	0
69	126	39	327	18	87	597	0	0	0
70	375	144	1001	76	255	1851	503	18	0
71	189	132	657	75	195	1248	545	58	0
72	111	45	340	38	150	684	0	1255	0
73	132	75	482	52	147	888	357	4	0
74	6	0	12	0	0	18	0	0	0
75	138	69	493	62	258	1020	336	6	0
76	184	212	395	73	138	1002	2	630	0
77	0	0	0	0	0	0	0	0	0
78	183	90	491	55	186	1005	139	0	0
79	288	138	892	80	375	1773	76	1278	0
80	234	111	790	71	342	1548	564	13	0
81	12	9	72	0	24	117	0	0	0
82	293	118	1034	100	480	2025	483	22	0
83	250	158	680	64	261	1413	549	78	0
84	9	0	39	0	9	57	0	0	0
85	69	18	240	9	90	426	0	0	0
86	126	129	565	116	279	1215	601	4	0
87	27	12	72	9	42	162	0	0	0
88	173	130	490	77	255	1125	140	1	0
89	75	69	174	33	87	438	289	1979	0
90	227	202	579	84	321	1413	114	38	2849
91	60	30	260	22	162	534	201	0	0
92	0	0	18	0	6	24	41	466	0
93	18	27	48	12	42	147	143	1	4906
94	83	100	184	41	162	570	22	400	0
95	203	247	503	85	210	1248	656	183	0
96	256	233	649	119	285	1542	80	19	0
97	0	0	0	0	0	0	0	0	13
98	108	78	206	64	195	651	124	1	0
99	95	46	208	26	96	471	0	0	0
100	146	226	362	124	438	1296	653	96	0
101	65	163	232	92	378	930	253	695	0
102	146	146	392	100	456	1239	516	241	0
103	103	68	336	54	246	807	255	87	0
104	118	146	617	79	195	1155	0	957	0
105	129	72	527	79	192	999	562	173	0
106	209	118	817	107	273	1524	901	411	0
107	126	48	734	67	246	1221	0	0	0
108	46	17	218	16	87	384	157	17	0
109	132	63	400	50	126	771	173	1	0
110	69	63	149	22	42	345	0	0	0
111	138	63	340	50	111	702	378	134	0
112	99	42	392	40	93	666	139	35	0
113	6	0	33	0	6	45	0	0	0
114	9	6	36	9	9	69	0	0	0
115	165	105	302	40	72	684	121	51	0

Zone	Households						Education		
	1 Adult Emp	1 Adult Non-Emp	2 Adults (Min 1 Emp)	2 Adults Neither Emp	3+ Adults	HH Total	Primary	Secondary	Tertiary
116	256	179	653	115	183	1386	419	168	0
117	306	426	784	239	195	1950	479	1400	0
118	101	169	322	80	111	783	215	65	0
119	18	75	96	66	24	279	159	80	365
120	290	619	701	367	264	2241	0	0	30
121	292	464	785	307	225	2073	471	137	0
122	218	274	676	188	201	1557	386	1393	0
123	102	66	373	71	114	726	0	0	0
124	205	212	533	196	126	1272	0	0	0
125	269	781	844	596	198	2688	395	129	0
126	101	178	318	135	93	825	309	138	0
127	33	15	81	18	42	189	0	0	0
128	87	54	238	48	51	477	163	42	0
129	413	682	789	390	234	2508	539	569	2430
130	51	51	210	36	54	402	0	0	0
131	21	21	99	24	21	186	0	0	0
132	15	9	72	6	27	129	0	0	0
133	45	15	114	9	27	210	0	0	0
134	54	36	200	28	81	399	146	3	0
135	152	103	482	76	195	1008	80	1	0
136	160	110	474	81	186	1011	155	6	0
137	170	100	511	77	177	1035	253	6	0
138	151	176	319	80	126	852	0	0	0
139	15	9	93	9	36	162	0	0	11
140	15	42	39	9	21	126	287	114	71
141	144	234	303	96	123	900	300	5	0
142	159	276	412	137	222	1206	210	546	0
143	207	195	334	65	123	924	326	18	0
144	42	18	338	28	123	549	100	6	0
145	27	81	105	36	24	273	1	649	115
146	233	310	432	96	150	1221	0	782	0
147	140	130	350	79	147	846	327	4	0
148	133	101	302	67	147	750	2	1462	0
149	60	9	360	15	90	534	0	0	0
150	146	175	357	87	120	885	222	783	0
151	66	51	249	54	123	543	448	12	0
152	90	102	299	58	108	657	11	10	0
153	105	63	365	46	108	687	236	1	0
154	27	15	54	12	21	129	0	0	0
155	202	140	565	86	225	1218	296	11	0
156	106	86	341	40	147	720	82	32	0
157	124	185	231	72	180	792	160	37	0
158	6	6	21	0	18	51	0	497	195
159	205	65	605	49	201	1125	184	10	0
160	143	200	346	89	225	1002	176	1	0
161	108	156	281	73	174	792	0	0	0
162	90	81	281	49	111	612	308	4	0
163	129	171	298	77	156	831	444	71	0
164	105	171	232	71	177	756	90	40	0
165	48	60	126	30	90	354	142	4	0
166	153	135	333	54	180	855	0	0	0
167	132	180	320	94	168	894	159	1111	0
168	173	310	497	157	240	1377	1	177	0
169	154	53	659	55	267	1188	556	230	0
170	141	114	443	89	195	981	257	512	0
171	149	205	315	72	141	882	226	8	0
172	171	192	465	90	174	1092	99	2	0
173	165	123	526	86	297	1197	169	27	0

Zone	Households						Education		
	1 Adult Emp	1 Adult Non-Emp	2 Adults (Min 1 Emp)	2 Adults Neither Emp	3+ Adults	HH Total	Primary	Secondary	Tertiary
174	136	152	327	72	174	861	190	0	0
175	272	268	682	122	288	1632	522	12	443
176	69	96	249	48	147	609	0	639	0
177	54	78	219	63	114	528	97	932	0
178	12	9	24	0	18	63	666	13	235
179	0	0	0	0	0	0	0	0	0
180	0	0	0	0	0	0	0	0	0
181	0	0	0	0	0	0	0	0	0
182	9	0	12	0	0	21	0	0	42
183	12	12	15	0	0	39	0	0	0
184	72	30	161	16	63	342	283	11	0
185	133	86	290	25	114	648	0	0	109
186	29	67	105	27	54	282	352	2483	0
187	84	90	272	46	144	636	0	0	0
188	267	261	628	101	270	1527	381	49	0
189	108	150	192	54	102	606	127	37	0
190	126	141	356	46	153	822	374	96	0
191	179	115	328	38	153	813	216	74	4266
192	132	51	401	34	144	762	133	1	0
193	208	104	738	81	240	1371	210	52	0
194	102	33	269	31	81	516	116	30	0
195	129	81	213	30	102	555	0	0	0
196	79	89	185	22	81	456	0	0	9
197	21	0	9	0	0	30	0	0	35
198	153	102	408	69	195	927	256	1143	10
199	21	42	51	30	39	183	190	72	18
200	179	166	493	86	141	1065	379	90	0
201	111	78	391	74	102	756	205	150	0
202	97	56	263	61	183	660	230	9	0
203	118	146	369	90	168	891	0	0	0
204	172	143	474	93	243	1125	330	8	0
205	15	6	45	0	12	78	0	0	0
206	119	112	272	52	48	603	204	47	0
207	188	235	377	94	93	987	133	38	0
208	157	179	388	113	75	912	273	559	0
209	340	419	771	234	198	1962	484	149	0
210	271	368	639	204	168	1650	316	120	0
211	576	741	1115	310	357	3099	934	1928	436
212	464	607	946	305	366	2688	275	659	23
213	54	18	159	27	24	282	13	3	0
214	99	42	406	50	60	657	155	38	0
215	63	24	194	31	21	333	65	31	0
216	156	90	617	73	132	1068	325	347	0
217	81	42	311	34	57	525	0	0	0
218	48	27	212	31	33	351	0	0	0
219	24	9	78	6	12	129	0	0	0
220	24	9	119	13	24	189	0	0	0
221	42	15	143	13	42	255	130	33	0
222	45	21	186	27	39	318	44	10	0
223	45	21	149	19	27	261	21	7	0
224	21	0	72	9	12	114	0	0	0
225	42	9	140	16	33	240	0	0	0

Zone	Employment					HCV		
	Emp:Other	Manufac	Retail	TransCom	Services	Manufac	Commun	Agr, Min, and Construc
						Only	Services	
1	2	58	77	6	159	22	159	32
2	0	148	413	26	863	68	863	53
3	2	181	178	71	1032	84	1032	77
4	0	75	187	256	417	16	417	49
5	7	63	58	4	206	6	206	53
6	2	43	2	6	95	6	95	35
7	2	50	202	542	196	37	196	4
8	0	119	451	88	395	31	395	74
9	0	307	777	444	1280	143	1280	109
10	2	43	67	38	496	9	496	32
11	1	59	58	3	203	9	203	39
12	1	31	30	3	113	3	113	21
13	2	128	203	264	4181	75	4181	35
14	2	153	436	45	1077	59	1077	67
15	0	88	27	0	144	19	144	56
16	2	85	217	8	342	16	342	63
17	7	64	72	0	208	9	208	53
18	3	96	18	6	211	28	211	49
19	2	31	253	15	651	6	651	25
20	11	65	80	6	389	19	389	42
21	1	37	28	3	124	3	124	18
22	0	67	74	11	356	6	356	53
23	1	23	20	3	113	3	113	18
24	1	77	20	3	195	6	195	63
25	1	48	100	3	190	12	190	32
26	2	28	10	6	142	9	142	18
27	2	35	98	8	374	6	374	28
28	2	39	87	5	280	9	280	25
29	2	39	14	6	193	3	193	32
30	2	86	326	11	1226	25	1226	53
31	7	77	119	45	450	22	450	53
32	1	19	23	3	186	3	186	14
33	22	52	18	12	77	12	77	21
34	2	23	67	5	236	3	236	14
35	0	93	76	15	449	12	449	56
36	1	11	98	6	308	3	308	4
37	0	23	59	0	1567	6	1567	11
38	0	67	460	52	2023	28	2023	25
39	2	174	321	921	1689	93	1689	42
40	0	33	91	16	132	6	132	14
41	0	31	221	0	392	6	392	18
42	2	43	256	34	370	25	370	14
43	2	50	183	11	181	16	181	32
44	2	159	281	5	899	93	899	35
45	1	59	93	2	557	22	557	32
46	0	255	355	28	812	112	812	98
47	2	276	950	17	2032	190	2032	32
48	2	63	1134	70	1838	19	1838	32
49	72	132	664	182	6038	47	6038	133
50	2	116	903	46	1537	78	1537	18
51	2	218	589	20	1253	93	1253	91
52	0	210	1013	388	3103	137	3103	35
53	0	112	554	24	1324	56	1324	35
54	1	53	101	9	944	12	944	28
55	1	85	133	6	1845	19	1845	56
56	1	19	35	6	169	3	169	11
57	2	381	933	888	5020	264	5020	46

Zone	Employment					HCV		
	Emp:Other	Manufac	Retail	TransCom	Services	Manufac	Commun	Agr, Min, and Construc
						Only	Services	
58	0	154	562	369	2267	25	2267	109
59	2	577	650	71	6279	442	6279	28
60	0	659	939	98	5514	504	5514	21
61	2	38	56	8	350	19	350	14
62	0	73	238	164	3945	31	3945	32
63	0	39	256	209	3695	12	3695	14
64	2	40	479	322	2605	25	2605	4
65	0	15	159	37	5914	3	5914	11
66	0	72	371	803	7644	31	7644	28
67	0	230	263	273	177	78	177	123
68	1	39	17	2	136	3	136	28
69	1	39	17	3	113	6	113	25
70	0	87	68	15	396	16	396	56
71	0	90	235	30	492	9	492	67
72	1	32	13	11	91	6	91	21
73	0	141	84	11	331	12	331	109
74	0	1114	393	145	663	600	663	319
75	2	35	21	11	178	6	178	21
76	0	69	140	15	689	6	689	53
77	1	48	778	37	363	16	363	21
78	2	51	23	23	204	9	204	35
79	2	81	193	26	400	12	400	60
80	2	207	57	95	323	6	323	179
81	24	34	36	6	199	3	199	28
82	11	187	130	23	380	19	380	158
83	2	82	108	11	586	6	586	63
84	2	7	2	4	6	3	6	7
85	2	20	7	5	31	3	31	18
86	22	217	330	11	454	40	454	172
87	17	478	322	129	193	202	193	206
88	1	53	128	3	276	3	276	39
89	0	41	210	15	586	9	586	25
90	2	121	84	15	253	28	253	74
91	1	91	24	3	75	53	75	21
92	2	430	375	38	1507	217	1507	122
93	0	937	1029	113	950	474	950	293
94	2	12	8	8	207	3	207	9
95	2	61	55	8	270	18	270	34
96	0	80	72	19	195	9	195	59
97	0	57	1091	75	1466	27	1466	19
98	2	11	41	12	133	3	133	6
99	1	11	10	3	98	3	98	3
100	1	11	45	3	297	3	297	9
101	0	11	21	0	222	3	222	9
102	0	35	35	63	279	3	279	28
103	1	34	10	2	97	3	97	25
104	0	49	40	11	724	6	724	31
105	2	75	78	6	284	9	284	53
106	2	117	119	19	429	15	429	84
107	2	94	41	6	229	12	229	65
108	70	114	48	4	239	15	239	140
109	1	182	129	3	212	36	212	112
110	0	26	255	8	272	3	272	16
111	10	57	61	11	234	12	234	44
112	7	42	27	11	152	9	152	34
113	10	22	0	0	17	3	17	25
114	15	15	7	5	17	3	17	22
115	0	51	122	0	141	21	141	19

Zone	Employment					HCV		
	Emp:Other	Manufac	Retail	TransCom	Services	Manufact	Commun	Agr, Min, and Construc
						Only	Services	
116	7	86	68	12	334	21	334	53
117	2	118	251	12	773	39	773	53
118	2	108	78	80	322	36	322	50
119	2	184	1056	52	926	57	926	97
120	2	449	483	73	656	223	656	134
121	2	144	268	64	681	39	681	78
122	0	100	84	16	430	15	430	65
123	15	150	37	13	235	48	235	75
124	2	86	95	7	204	18	204	50
125	29	273	500	28	777	51	777	187
126	2	89	72	8	220	9	220	69
127	23	51	12	0	40	12	40	47
128	86	46	51	4	96	15	96	100
129	91	283	578	49	927	121	927	153
130	124	82	99	7	96	21	96	150
131	39	45	23	8	36	24	36	47
132	12	12	17	4	24	3	24	16
133	1	0	7	4	35	3	35	3
134	8	56	25	0	46	18	46	31
135	2	55	14	12	79	9	79	41
136	2	46	71	12	99	12	99	28
137	0	49	27	23	107	12	107	28
138	11	403	91	12	149	278	149	47
139	0	169	247	16	532	57	532	72
140	0	68	1118	71	927	36	927	19
141	1	27	10	4	135	3	135	19
142	0	112	116	36	400	33	400	56
143	2	47	85	8	130	12	130	25
144	65	86	45	8	126	12	126	112
145	15	140	20	0	1826	109	1826	12
146	2	111	91	12	480	63	480	25
147	1	125	147	4	188	57	188	44
148	0	38	37	0	247	6	247	22
149	12	20	11	8	57	3	57	22
150	2	57	184	5	383	3	383	44
151	1	27	10	2	123	3	123	19
152	2	23	369	75	205	6	205	16
153	1	38	20	4	115	6	115	25
154	1	149	7	3	90	21	90	100
155	2	82	91	8	205	12	205	59
156	2	111	124	11	141	21	141	72
157	0	19	21	0	193	3	193	9
158	1	30	10	11	154	21	154	3
159	2	145	47	19	144	51	144	65
160	2	537	187	88	422	392	422	47
161	7	35	7	4	100	3	100	31
162	2	73	27	8	65	9	65	53
163	2	64	24	6	246	18	246	37
164	2	7	70	12	197	3	197	6
165	1	523	291	11	139	347	139	84
166	3	0	11	7	42	3	42	3
167	0	30	54	0	379	3	379	22
168	0	85	84	11	664	39	664	31
169	7	102	44	35	302	15	302	75
170	0	70	187	11	2397	12	2397	47
171	1	40	66	2	354	12	354	19
172	0	68	68	8	171	9	171	47
173	1	56	17	11	104	3	104	44

Zone	Employment					HCV		
	Emp:Other	Manufac	Retail	TransCom	Services	Manufac	Commun	Agr, Min, and Construc
						Only	Services	
174	1	31	11	3	63	3	63	19
175	2	71	90	27	678	18	678	41
176	1	108	44	91	241	39	241	53
177	2	16	78	12	339	3	339	12
178	2	122	816	26	940	69	940	31
179	2	48	260	8	240	24	240	19
180	0	18	40	0	364	3	364	12
181	0	26	1104	45	664	9	664	12
182	2	48	401	42	1051	36	1051	3
183	0	11	111	23	279	3	279	6
184	0	292	638	15	335	115	335	125
185	1	195	232	148	182	81	182	81
186	1	73	88	3	1214	48	1214	12
187	1	52	23	2	172	3	172	37
188	0	246	203	56	569	139	569	62
189	0	229	118	23	70	172	70	16
190	2	74	50	6	192	24	192	44
191	0	1448	1057	126	1163	863	1163	309
192	11	57	10	0	155	12	155	41
193	0	57	61	39	194	12	194	34
194	1	126	83	8	87	33	87	69
195	0	757	1119	384	1247	410	1247	200
196	2	477	172	6	176	205	176	190
197	0	1738	891	625	1164	969	1164	443
198	2	52	50	8	195	9	195	41
199	1	7	319	3	262	3	262	3
200	2	87	108	6	344	15	344	59
201	2	53	69	6	223	18	223	31
202	1	33	40	2	87	15	87	9
203	0	65	28	0	66	24	66	25
204	11	77	31	4	146	24	146	47
205	18	8	2	5	18	3	18	16
206	86	143	282	32	266	69	266	97
207	20	52	132	15	192	30	192	28
208	17	149	357	18	377	42	377	87
209	37	240	402	36	607	85	607	143
210	36	179	71	20	885	100	885	69
211	148	930	1309	116	2224	465	2224	396
212	55	324	982	129	1104	85	1104	215
213	224	30	36	0	53	6	53	215
214	419	73	52	12	131	27	131	374
215	300	27	53	8	98	3	98	256
216	404	122	210	20	267	24	267	409
217	178	368	39	61	143	238	143	221
218	94	61	27	6	53	30	53	94
219	126	17	13	0	16	3	16	109
220	131	12	11	16	46	6	46	115
221	170	21	16	0	100	3	100	162
222	144	66	16	7	33	36	33	143
223	197	31	22	0	26	9	26	184
224	102	34	10	2	23	27	23	97
225	240	242	16	2	86	178	86	237