

NO: R015

COUNCIL DATE: January 22, 2018

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## REGULAR COUNCIL

TO: **Mayor & Council** DATE: **January 18, 2018**  
FROM: **General Manager, Planning & Development** FILE: **6600-01**  
SUBJECT: **2016 Canada Census Update - Demographic Information**

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## RECOMMENDATION

The Planning & Development Department recommends that Council receive this report as information.

## INTENT

The intent of this report is to highlight information about Surrey that was contained in the documentation that was recently released by Statistics Canada, as gathered through the 2016 Census.

## BACKGROUND

Every five years Statistics Canada conducts a Census of Canada. The most recent Census was taken May 10, 2016. Since the Census, Statistics Canada has released all of the variables, which include the following:

- February 8, 2017 - Population Growth and Dwelling Counts
- May 3, 2017 - Age and Gender and Type of Dwelling
- August 2, 2017 - Families, Marital Status, Households and Language
- September 13, 2017 - Income
- October 25, 2017 - Immigration and Ethnocultural Diversity, Housing and Aboriginal Peoples
- November 29, 2017 - Education, Labour, Journey to Work, Language of Work, and Mobility and Migration

Several of these categories, which are most relevant to Surrey, will be highlighted in this Corporate Report.

## DISCUSSION

### Population Growth and Dwelling Unit Counts

Table 1 documents the total population and dwelling units for the City, along with related growth rates over the period from 2011 to 2016.

Table 1 – Statistics Canada 2011 – 2016 Census Population and Private Dwellings for Surrey

	Population Count	Private Dwelling Count
2016	517,887	181,159
2011	468,251	163,986
Growth between 2011 and 2016	49,636	17,173
Growth as percentage	10.6%	10.5%
Average Annual Growth	9,927	3,435
Average Annual Growth as %	2.12%	2.09%

The following provides some context in relation to Surrey’s growth during the period from 2011 and 2016 (see Appendix “I” for full details).

The 2016 census shows that the City is the 9th largest city in Canada by population. Between 2011 and 2016 Surrey’s population grew by 49,636, from 468,251 to 517,887, which ranked 7th in Canada in absolute (numeric) growth. Calgary had the highest absolute growth with 142,387 new residents, followed by Edmonton with 120,345, Toronto with 116,511, and Brampton with 69,732.

- In terms of percentage growth, Surrey ranked 7th in Canada, having grown by 10.6% between 2011 and 2016. Edmonton was 1st, with total growth of 14.8%, and was followed by Brampton, with total growth of 13.3%. Regina was 4th, with total growth of 11.4%, and Red Deer was 5th, with total growth of 10.9%.
- Within the Metro Vancouver Region, Surrey, with a population of 517,887, is second only to Vancouver which has a population of 631,486. The 3rd largest city in the region is the City of Burnaby, with a population of 232,755.
- Among Metro Vancouver municipalities, Surrey had by far the largest increase in its total population during the period from 2011 to 2016, having increased by 49,636 people. Surrey was followed by Vancouver, with a total population increase of 27,984 and then the Township of Langley, with 13,108.
- Between 2011 and 2016 Census, Surrey experienced an average annual growth rate of 2.09% in the number of private dwellings added. In absolute (numeric) growth, there were 17,173 private dwellings added in Surrey between Census periods.

***City Population Growth and Dwelling Estimates***

The City also produces its own population and dwelling unit estimates on an ongoing basis. This is done using BC Assessment Authority data, building and demolition permit activity and data about household composition (people per dwelling unit, by dwelling unit type, and by community) available from the Census information. It is estimated that the City’s population, as of May 2016, was approximately 519,918. Compared to the 2016 Census population figure, there is a difference of 2,031. This represents a difference of approximately 0.4%. As of December 31, 2016, it is estimated that Surrey’s population is 525,220.

***Statistics Canada Population Undercount/Overcount***

This initial Statistics Canada Census release does not take into account the people who did not respond to the Census (the undercount) or where double counting may have taken place. Statistics Canada will release corrected estimates for the 2016 Census sometime in 2018. It is

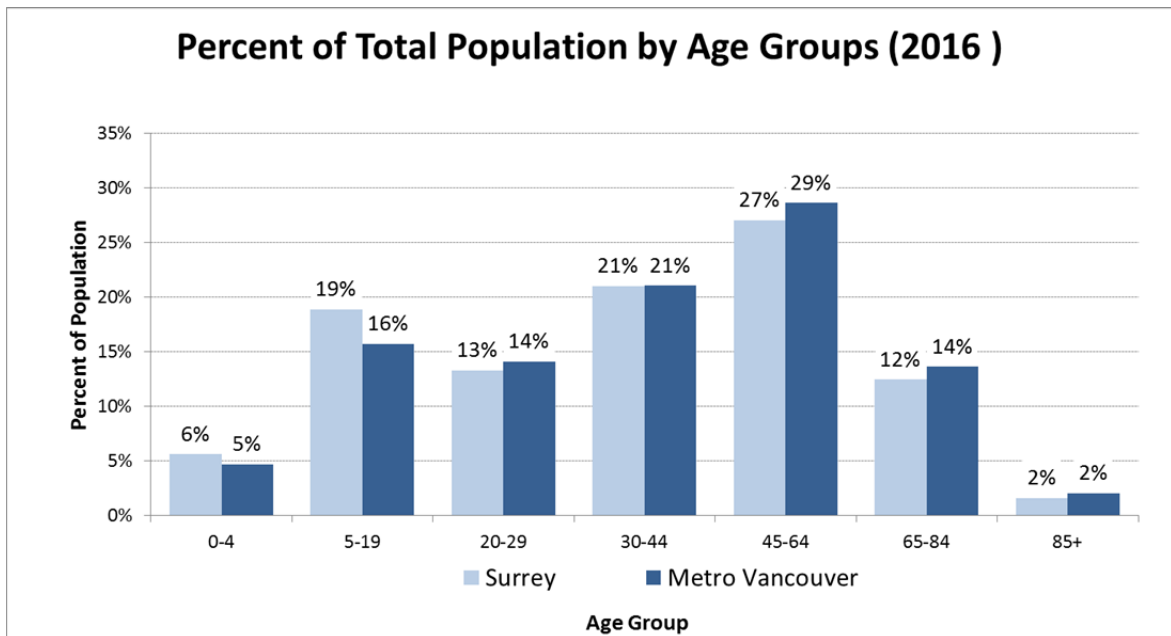
anticipated that the Census undercount correction will address the 2,031 (0.4%) difference between the City's population estimates and the current 2016 Census population for Surrey.

The convergence of the 2016 Census population figure for Surrey with the City's estimate for 2016 indicates a more accurate and complete population count of Surrey residents in the latest Census, as compared with the 2006 and 2011 Census.

### Age

Figure 1 compares age distribution of Surrey residents to Metro Vancouver. Compared to Metro Vancouver, Surrey has a larger portion of young people ages 5 to 19. The other age distributions for Surrey residents are fairly consistent with that of the region.

Figure 1

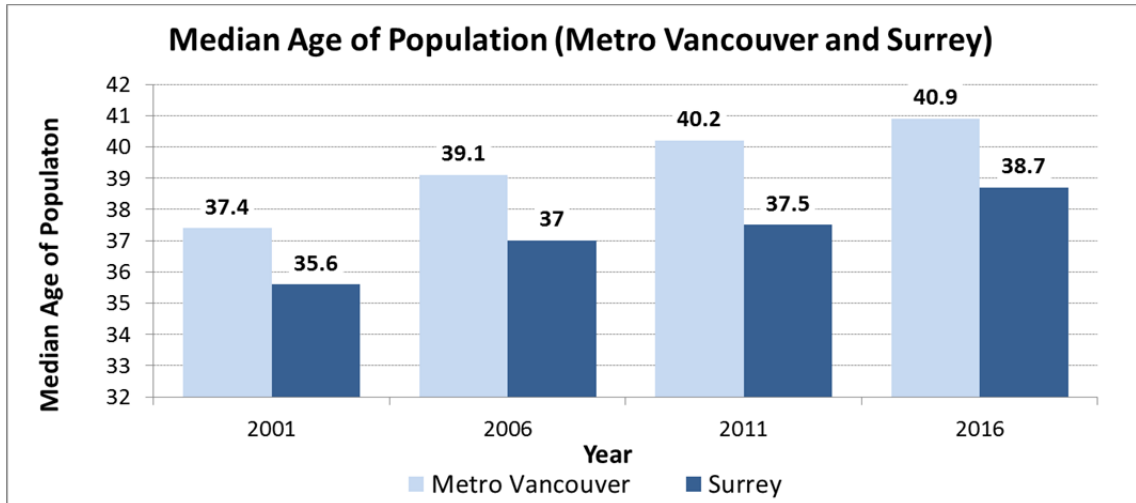


Between 1996 and 2016 there has been a gradual, but steady, increase in the proportion of Surrey's population over 40 years of age. The largest increase has been related to the group between 50 and 60 years of age.

The absolute number of children and young adults has grown as the population in general has grown. Residents 19 years of age and under account for 25% of the population, while seniors 65 years and over make up 14.1% of the population.

Figure 2 shows the median age of Surrey residents in comparison to the population of Metro Vancouver and to previous Census years. Since 2001, Surrey's population along with Metro Vancouver is aging although Surrey's median age is consistently less than the region.

Figure 2



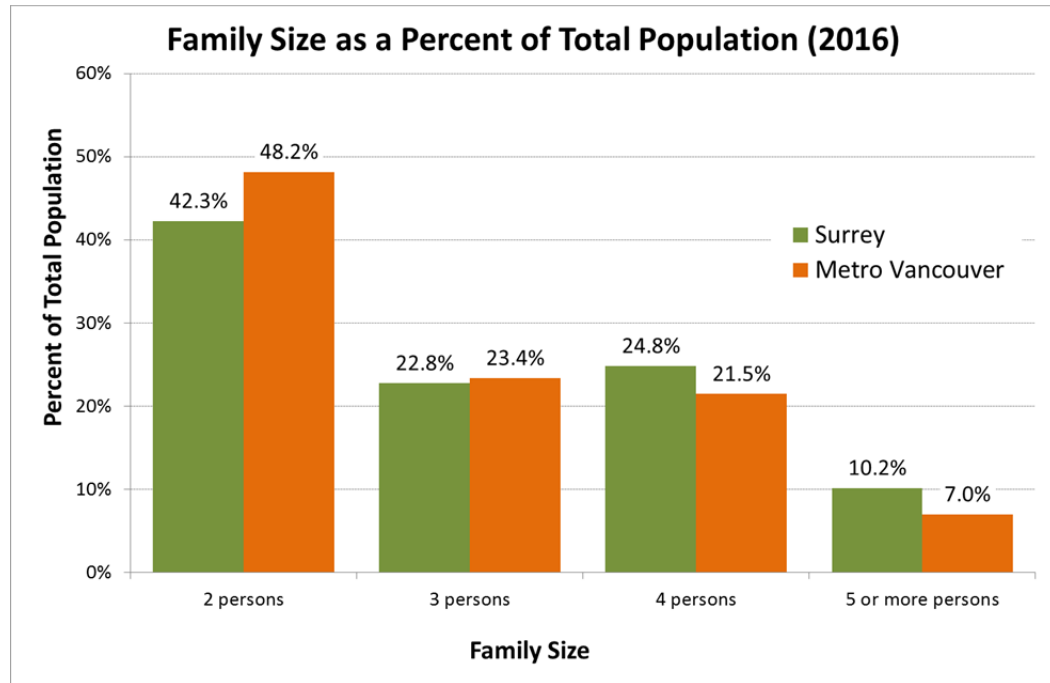
Although the median age shows that the population of Surrey is getting older, there are important geographic differences. Appendix “II” illustrates the median age in each of the various neighbourhoods of Surrey. Neighbourhoods in the South Surrey area generally have a higher median age, while neighbourhoods in the North Surrey communities tend to have a lower median age. In 2016, the median age in neighbourhoods in North Surrey communities (Guildford, Fleetwood, Cloverdale, and Whalley) have younger populations that include youth and young adults. The median age in this part of Surrey (39.4 years) is similar to the region (40.9 years). Neighbourhoods in South Surrey communities (Newton and South Surrey) have a significant number of seniors, resulting in a higher median age than the North Surrey communities. In 2016, the median age in South Surrey was 48.6 years, compared to 40.9 years for the region.

## Family Structure

### *Families*

Census families are defined as married or common-law couples (with or without children), or a lone parent living with at least one child. Figure 3 illustrates the comparison between Surrey and Metro Vancouver family size. In 2016 there were 144,500 Census families in Surrey. Of these 89.8% contained four or fewer individuals, compared with Metro Vancouver where 93.0% of families had four or fewer individuals. Compared to the region, Surrey has a larger proportion of families that have 5 or more persons.

Figure 3



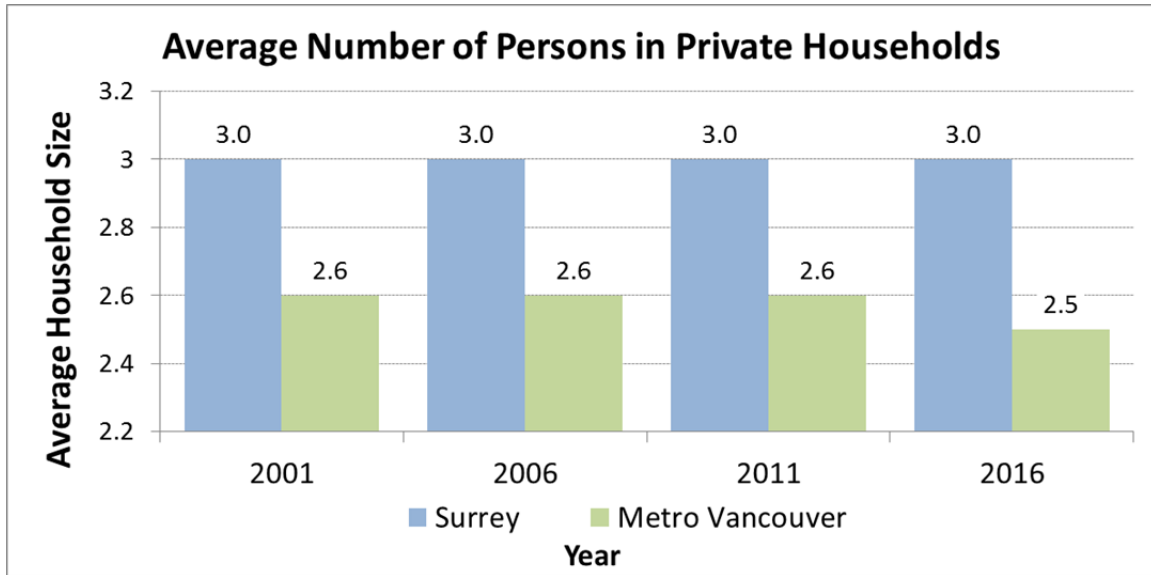
### ***Households***

Households are defined as an individual or group of individuals that occupy a single dwelling. In many cases households are made up of one family unit, while in other cases households are made up of un-related individuals or more than one family living together. In 2016, the breakdown of households by household type included the following:

- One family households (i.e. a couple with or without children or a lone parent with children) account for 68.0% of total households in Surrey.
- Multiple family households include two or more families or one family living with non-family persons collectively amount to 8.0%.
- Non-family households account for 24.0% of total households and include one-person households (20.3%) and households with two-or-more persons (3.7%).

Figure 4 illustrates that average household size has remained constant in Surrey, while it has declined slightly in Metro Vancouver since 2001. The average household size in Surrey is somewhat larger than the average in Metro Vancouver.

Figure 4



Appendix “III” illustrates the average household size in each of the various neighbourhoods in Surrey. The data shows that with the exception of Surrey’s City Centre, communities in the north of Surrey have a larger household size compared to communities in the south.

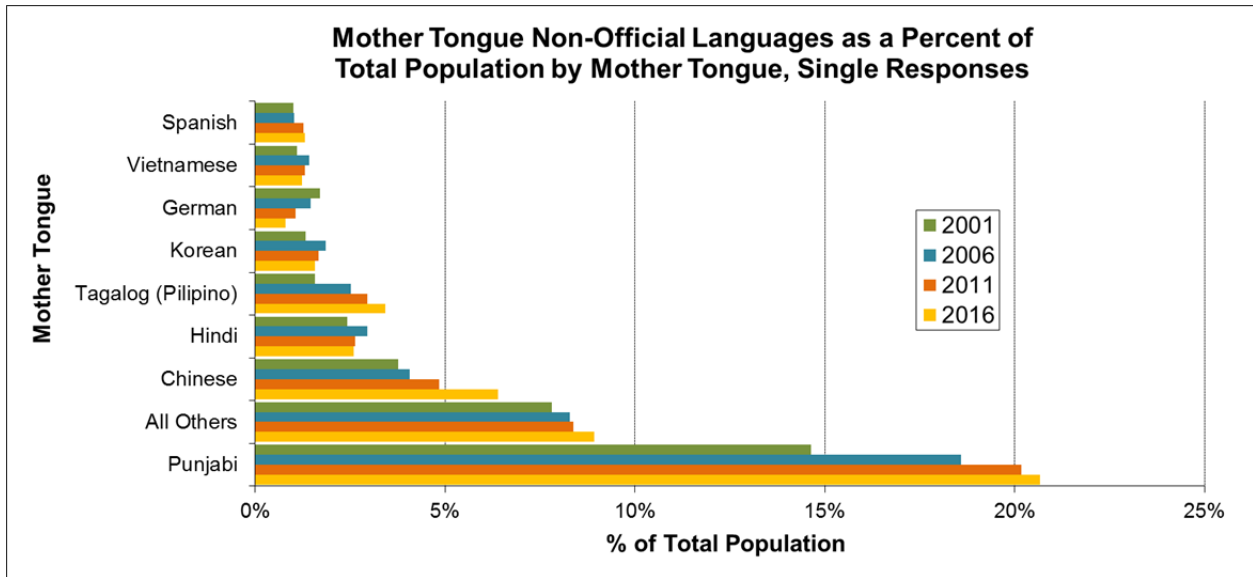
## Ethnicity

### *Mother Tongue*

Mother tongue is defined as the first language learned at home and still understood by an individual. In 2016, English was the most commonly identified mother tongue (48.2%), followed by Panjabi (Punjabi) at 20.7% and Chinese at 6.4%.

Figure 5 illustrates non-official languages as a percent of total population from 2001 to 2016. In total 46.9% of the population listed a language other than English as a mother tongue, demonstrating the multi-cultural character of Surrey. In 2011 44.3% of the population listed a language other than English as a mother tongue while in 2006 the figure was 42.1%.

Figure 5

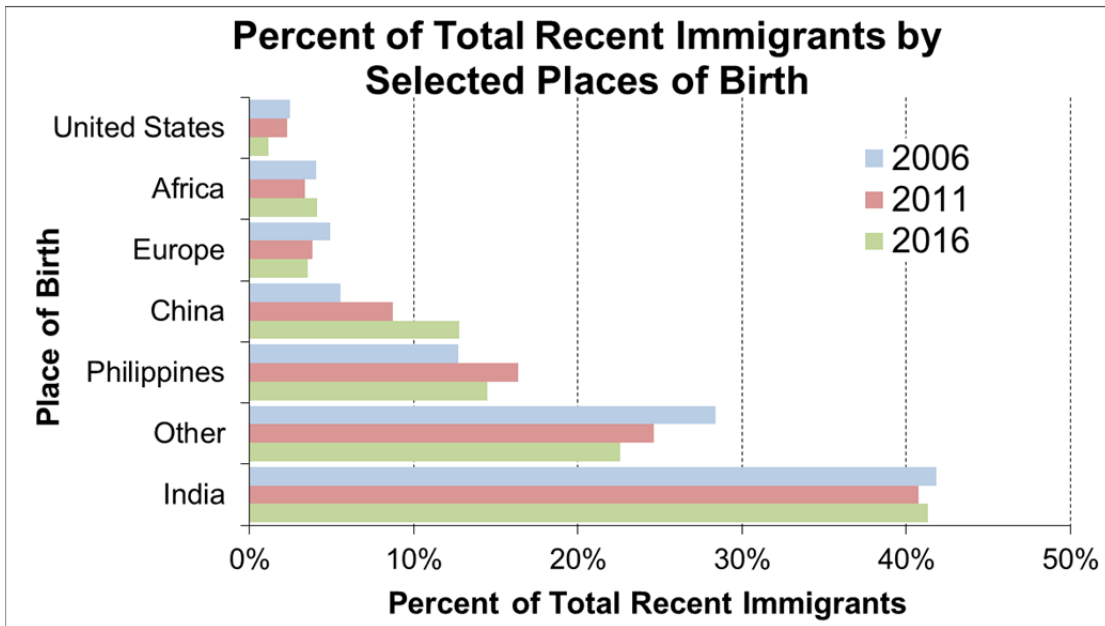


*Note: 'All others' includes all other non-official languages and French*

### Place of Birth

The Census provides information on the place of birth of immigrants. Recent immigrants represent those residents who became a landed immigrant between January 2011 and Census Day in 2016 (i.e., May 13, 2016). Figure 6 illustrates that by far the largest majority of recent immigrants to Surrey are from India (41.3%), followed by the Philippines (14.5%), China (12.8%), Europe (3.6%), Africa (4.1%) and United States (1.2%). Immigration from all other places of birth accounted for 22.6% of all landed immigrants in Surrey.

Figure 6



## Aboriginal Ancestry

Aboriginal ancestry, defined as including the First Nation, Inuit and Métis peoples of Canada, accounted for 13,460 persons in 2016, up from 13,305 in 2011. Surrey has the second largest aboriginal population in BC, exceeded only by the City of Vancouver. As a percent of total population, Surrey's aboriginal population has dropped slightly, from 2.8% in 2006 to 2.6% in 2016.

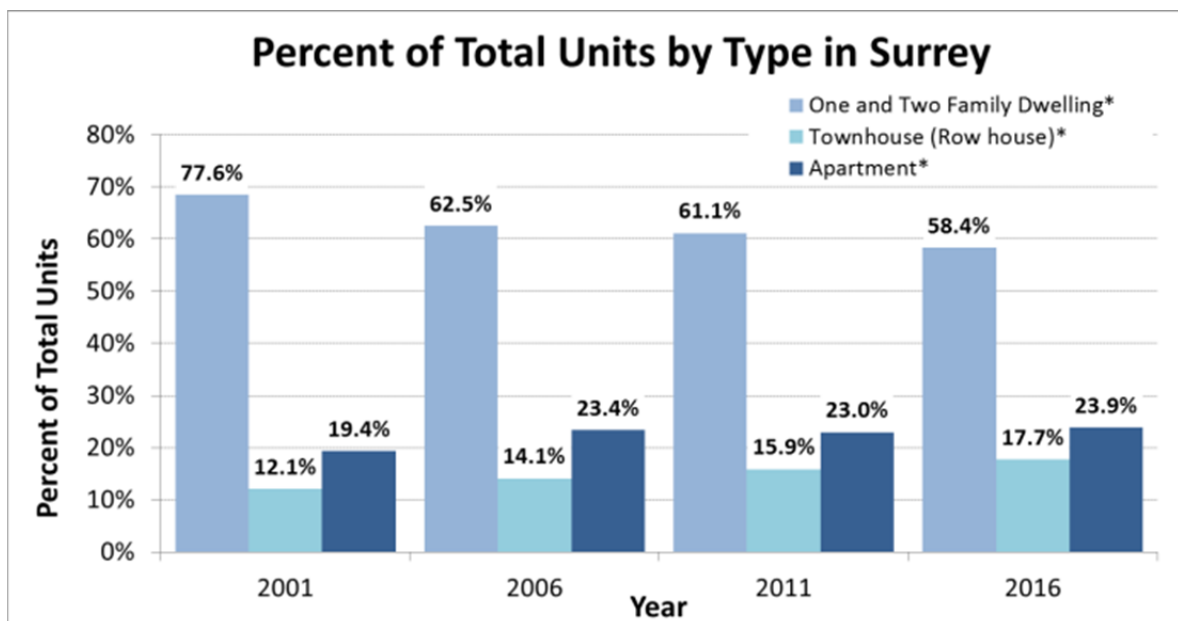
## Housing

### Housing Type

Statistics Canada defines occupied private dwellings by structural type, including single-detached houses, semi-detached houses, row houses, and apartments in low-rise buildings and apartments in high-rise buildings. Appendices "IV," "V" and "VI," respectively, illustrate the distribution of residential density (units/acre) for each major housing type in Surrey. Single Family Housing (including duplexes, secondary suites, coach houses and manufactured homes) are distributed fairly evenly throughout Surrey neighbourhoods, while townhouses and apartments are more densely located in Town Centres.

Figure 7 illustrates that since 2001, the number of one family and two family dwellings has declined as a percentage of total dwelling units, from 77.6% in 2001 to 58.4% in 2016. Row housing and apartment units are therefore trending upwards, from 31.5% of housing stock in 2001 to 41.6% in 2016.

Figure 7



Note:

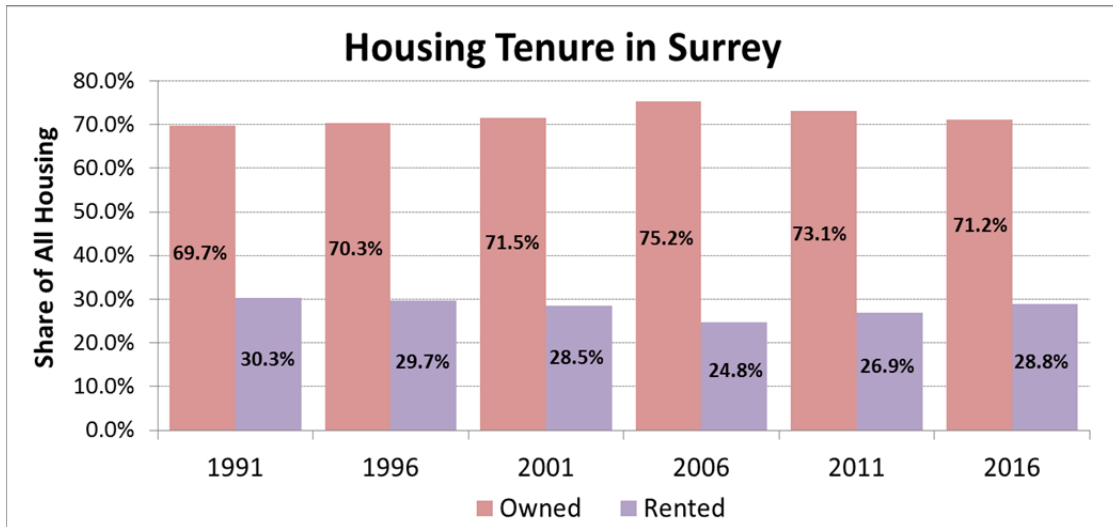
- One and Two Family dwelling includes detached duplex, movable dwelling and other single-attached house.
- Townhouse and Rowhouse includes semi-detached house
- Apartments include buildings that include five or more storeys and buildings that has fewer than five storeys.



### Housing Tenure

Between 1991 and 2006, the proportion of dwellings in Surrey that were rented declined while the proportion of dwellings owned increased (Figure 8); however, between 2006 and 2016 the trend changed, home ownership dropped, and rented units increased slightly. In 2006, the number of dwellings owned accounted for 75.2% and dropped to 71.2%, while rented dwellings increased from 24.8% to 28.8% in the last 10 years.

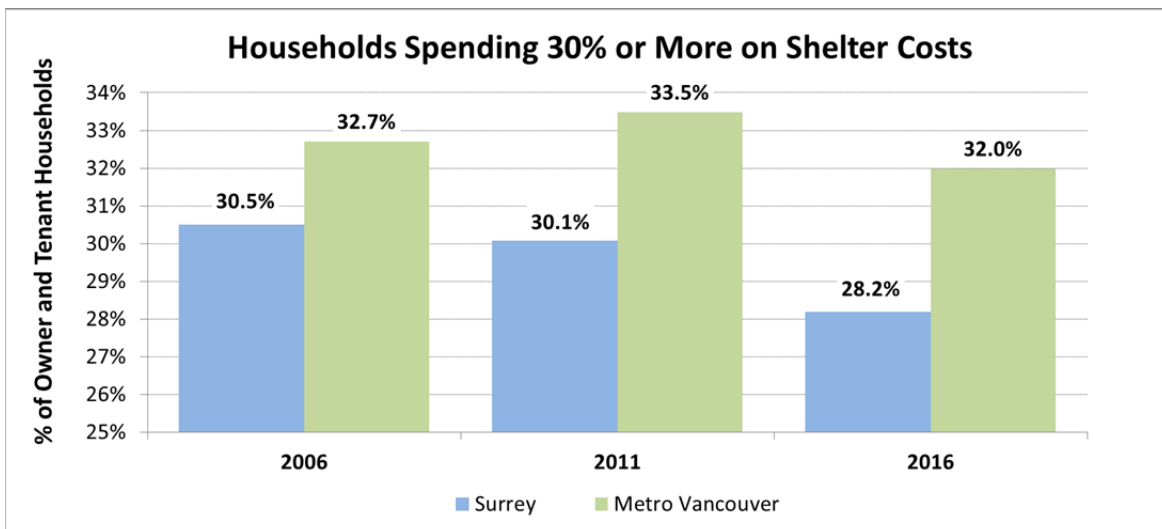
Figure 8



### Housing Costs

Figure 9 illustrates the percentage of Surrey residents that spend more than 30% of their household income on shelter. This percentage remained consistent between the 2006 and 2011 and decreased slightly in 2016. Households spending 30% or more on shelter costs in the region also decreased slightly from 33.5% in 2011 to 32.0% in 2016.

Figure 9



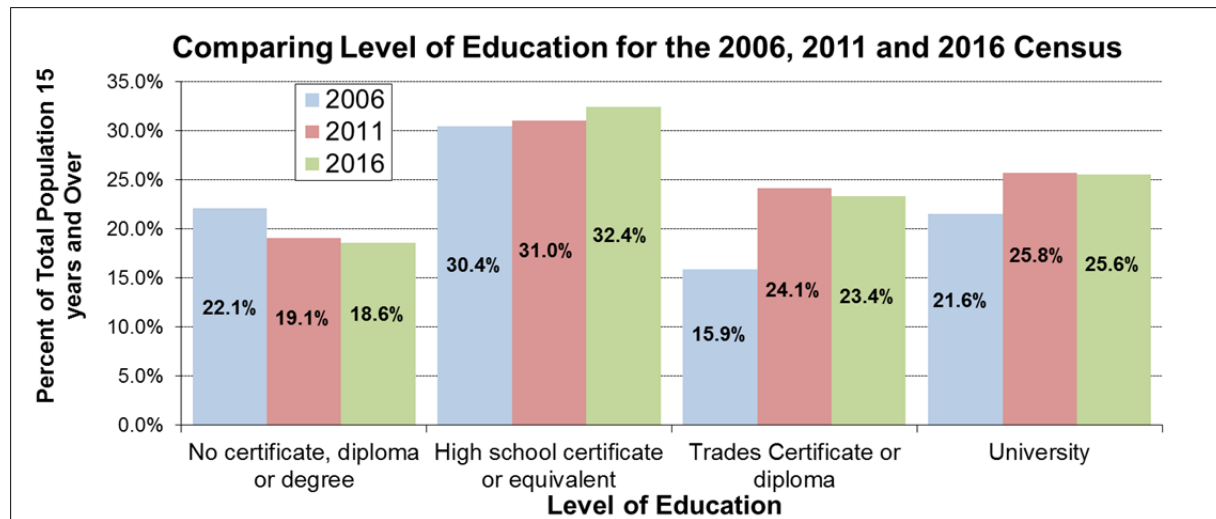
Average shelter costs have increased in Surrey between 2011 and 2016. Average monthly shelter costs for owned dwellings have increased from \$1,422 to \$1,608 per month. The average value of dwellings in Surrey has also increased from \$544,819 in 2011 to \$757,863 in 2016. Similarly, average monthly shelter costs for rented dwellings have increased from \$895 in 2011 to \$1,049 in 2016.

## Education

### Level of Education

As illustrated in Figure 10, 25.6% of the population 15 years and over had attained a university certificate, diploma or degree in 2016. A further 23.4% had obtained a trade certificate or equivalent. High school graduation was the highest level of education for 32.4% of the population 15 years and over.

Figure 10



## Mobility

The Census tracks whether residents have moved within the last five years. Since the 2001 Census, there are fewer Surrey residents who moved to another residence within or outside Surrey. The proportion of residents who remain in their current home in Surrey has increased from 51.3% to 55.5%. Residents moving within the city decreased from 27.0% to 25.4% during 2001 to 2016. During this same period, residents moving to another location within the Province have decreased from 12.2% to 9.3%. Residents moving from a different province decreased from 3.0% to 2.0%.

## Labour Force Activity

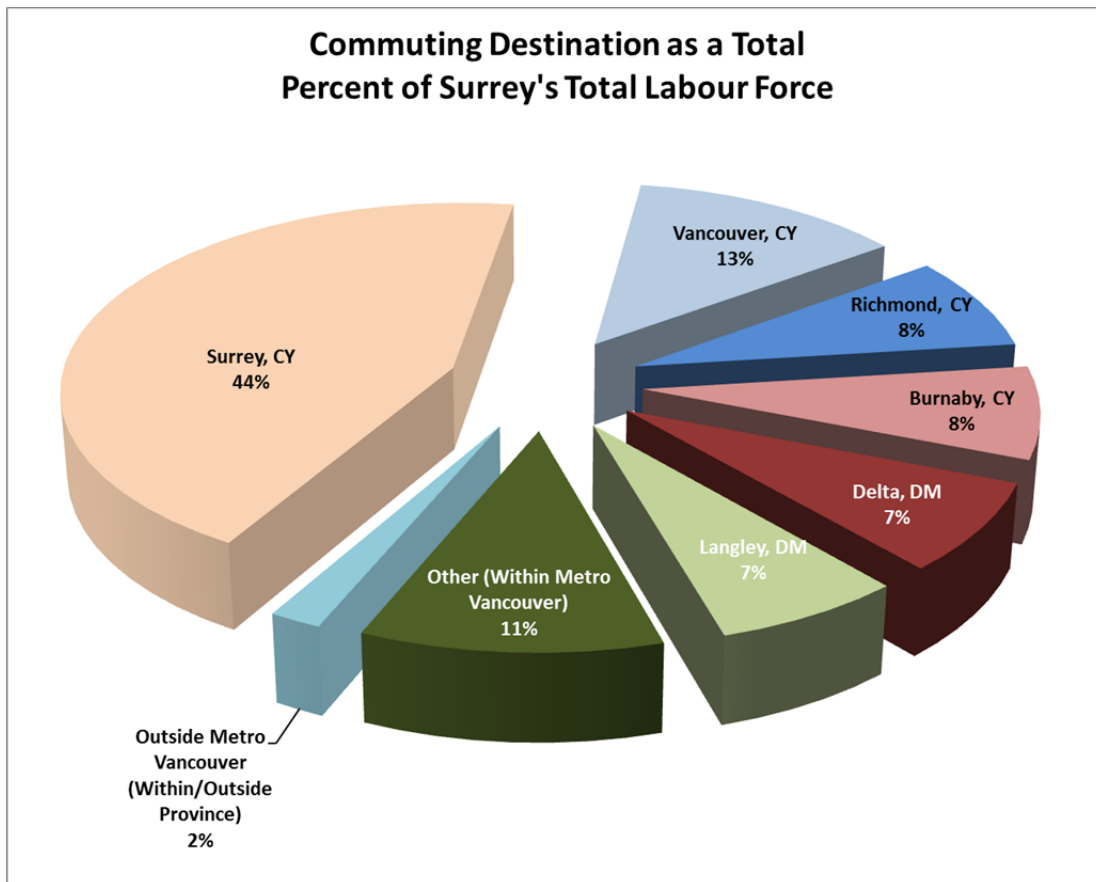
### Unemployment Rate

Statistics Canada defines the unemployment rate as the ratio of unemployed individuals to the entire labour force. The labour force includes all individuals 15 years and over who are employed, or unemployed and looking for work. Surrey's unemployment rate in May 2016 was 6.5%, down from 7.9% in 2011. Surrey's unemployment rate in May 2016 was marginally higher than the Metro Vancouver average of 5.8%.

### ***Surrey Workforce Destination***

Figure 11 illustrates the percent of Surrey’s labour force that commutes within Surrey and outside of Surrey. In 2016 44% of Surrey’s labour force worked within the City, compared to 39% in 2001. In 2016, the remaining 54% who worked outside of Surrey worked inside Metro Vancouver. The largest portion of Surrey’s labour force traveled to the City of Vancouver (13%), and the Cities of Richmond and Burnaby (8%), followed by the District Municipalities of Langley and Delta (7%).

Figure 11



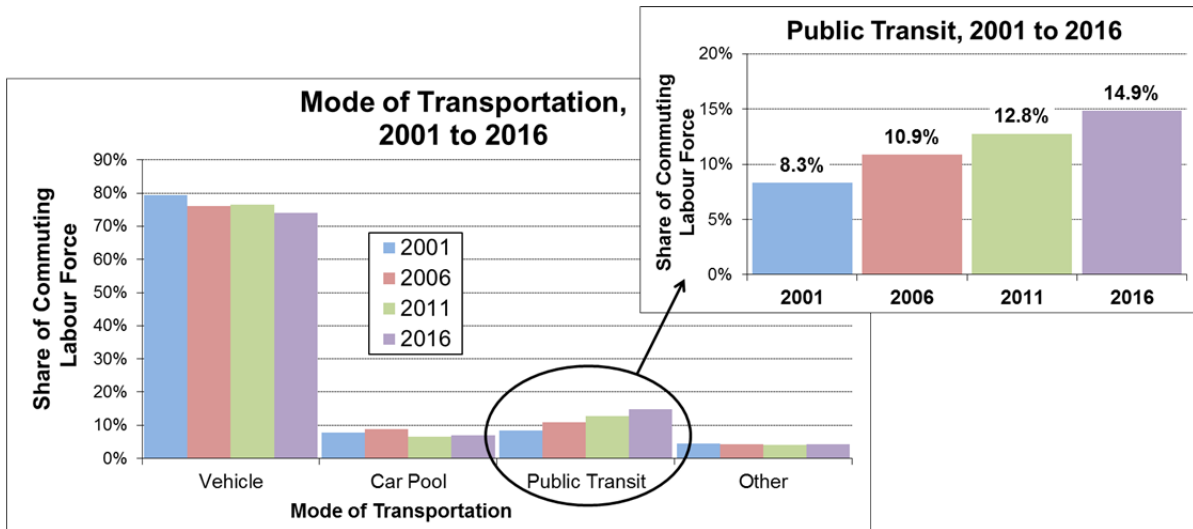
### **Journey to Work**

#### ***Mode of Transportation***

Figure 12 illustrates that private vehicles remain the primary mode of transportation in 2016 among Surrey’s employed labour force but that other modes are increasing in share. Between 2011 and 2016, the Surrey labour force increased by 30,720. Even with this increase the share of the labour force driving by vehicle decreased slightly during this period from 76.6% to 74.0%. This was accompanied by a slight increase in travel by vehicle as a passenger (from 6.6% to 6.9%), as well as an increase in the use of public transit (from 12.8% to 14.9%).

While the total number of work trips grew by 12.9% between 2011 and 2016, public transit trips grew by 17.5%. For comparison, during this period, trips by vehicle as a driver grew by only 12.9% compared to 14.8% in 2011, while those by vehicle, as a passenger, grew by 9.1% compared to 15.5% in 2011; and public transit grew by 17.5% compared to decrease of 14.3%.

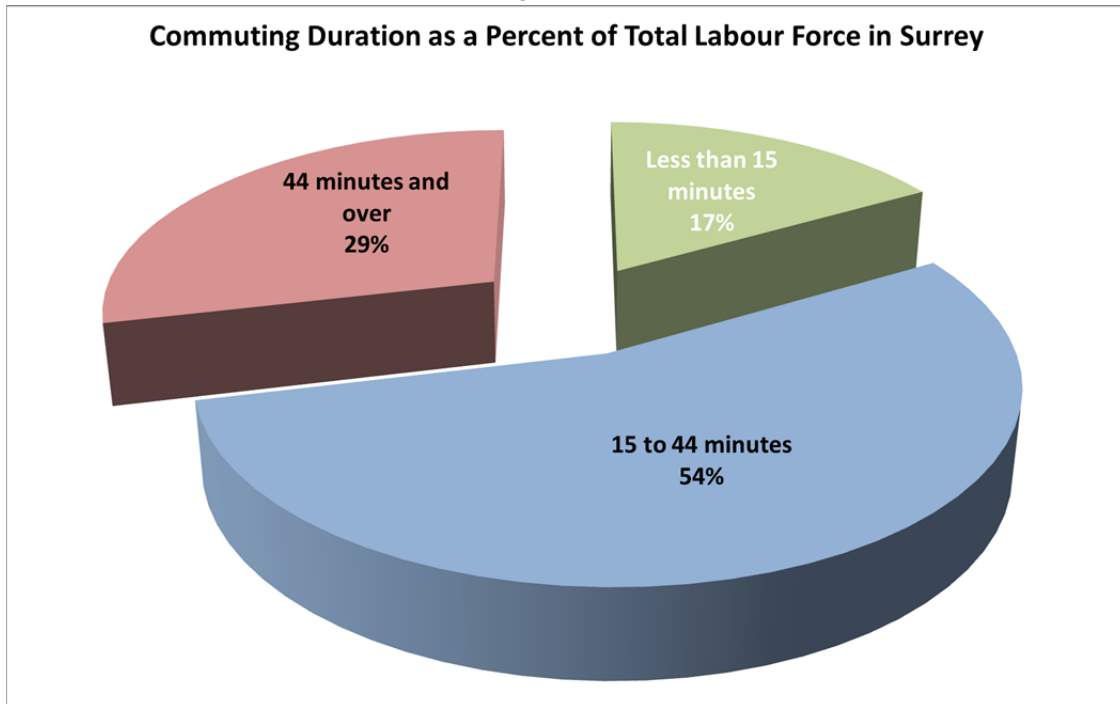
Figure 12



### Commuting Time

Statistics Canada defines commuting time as to how many minutes it took a person to travel from home to work. The commute times in Surrey's labour force vary considerably as illustrated in Figure 14. Roughly 17% of Surrey's labour force has a commute less than 15 minutes, compared to 29% that has a commute of 44 minutes and over.

Figure 14

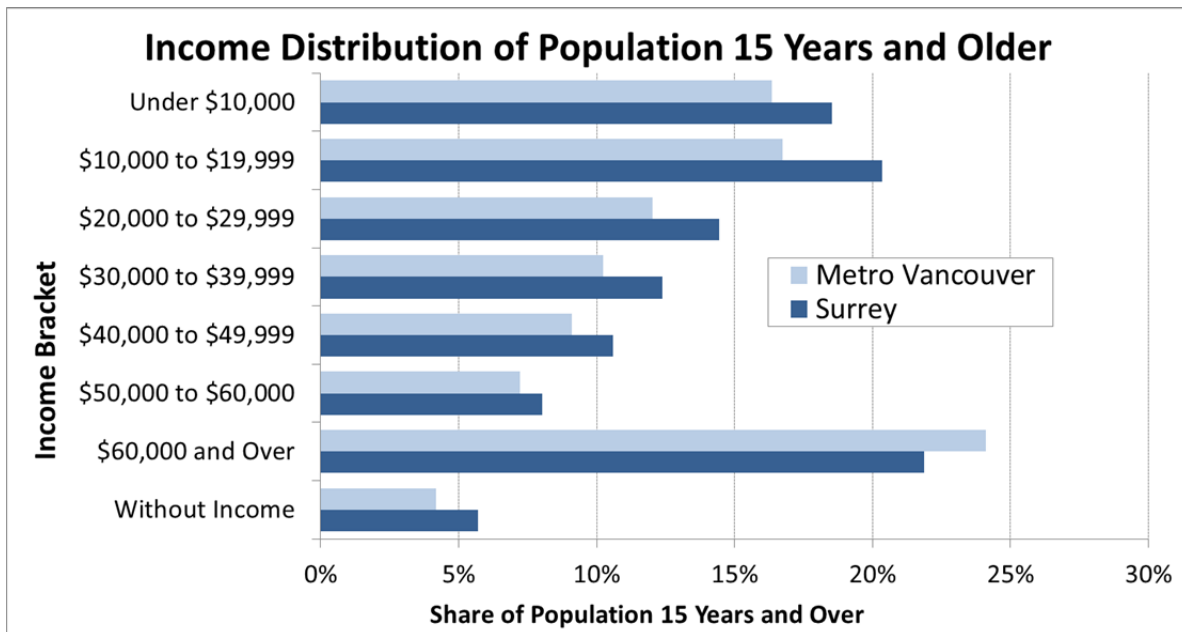


## Income

### *Income of Individuals*

In 2016 approximately 95% of Surrey’s population aged 15 years and over reported having an income, compared to the 2011 census (93%). Figure 15 illustrates the distribution of personal total income (the percent of population in each income bracket) of Surrey and Metro Vancouver. Both are similar with the exception of ‘Under \$10,000,’ ‘\$10,000 to \$19,999’ and ‘\$60,000 and over’ income brackets. Compared to Surrey , Metro Vancouver has a higher percentage of individuals in the ‘\$60,000 and over’ range.

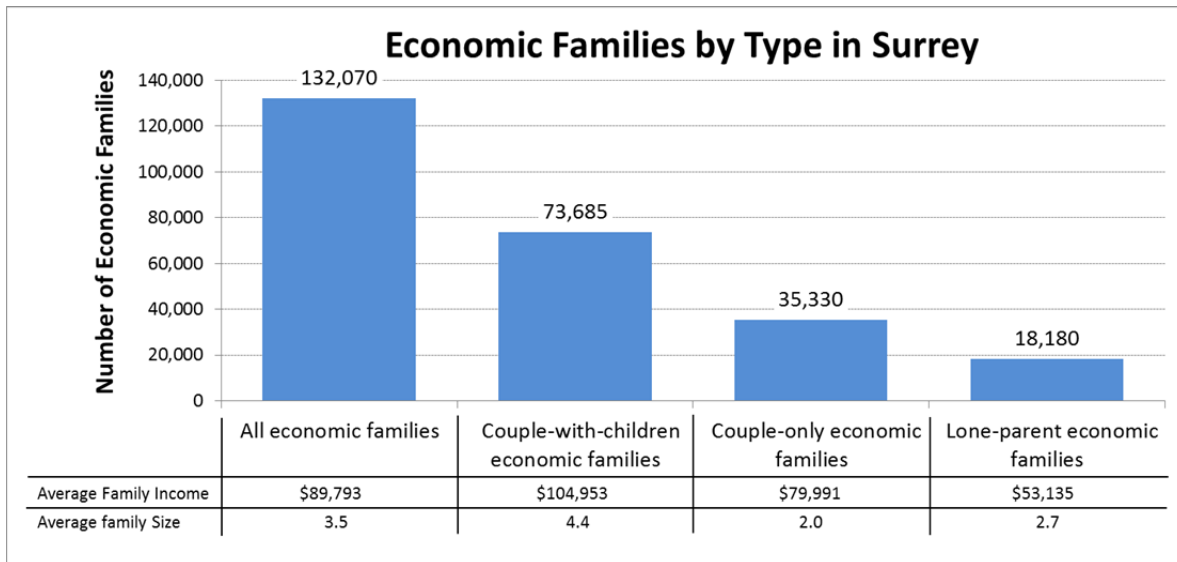
Figure 15



### *Income of Economic Families*

Statistics Canada defines an economic family as a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law, adoption or a foster relationship. A couple may be of opposite or same sex. Economic family total income is defined as the sum of the total incomes of all members of that family. Figure 16 illustrates that couple-with-children families recorded the highest average income and also the largest average household size. Average income of lone-parent families is considerably less with a much smaller average household size. In 2016 Census, the median total income of economic families in Surrey is \$89,793 compared to \$92,273 in Metro Vancouver.

Figure 16



### **Low Income**

According to the Statistics Canada Census low-income measure in 2016, 14.8% of Surrey’s population was in the low-income category, which is below the average rate of 16% for British Columbia. The low-income rate for persons under 6 years of age in Surrey was 19.3% compared to the provincial average rate of 18.0%. The low-income measure for the population aged 65 years and over in Surrey was 12.6% compared to the provincial average of 14.9%.

### **SUSTAINABILITY CONSIDERATIONS**

The information presented in this report responds to the following Desired Outcomes (DO) and Strategic Directions (SD) in the Sustainability Charter 2.0:

#### **Built Environment and Neighbourhoods**

**SD4:** Continue to plan and develop transportation and mobility network (including active transportation) that supports safety, placemaking and integration of neighbourhoods.

**SD15:** Provide greater multi-family housing choice, and options for affordability and accessibility.

#### **Economic Prosperity and Livelihoods**

**DO1:** Diverse and meaningful employment and business opportunities are available close to where people live, and provide incomes that can support a high quality of life.

**DO2:** Quality education, training and skills development programs are available in the city, which help to create a highly skilled workforce.

## **Education and Culture**

**DO1:** Surrey has a culture of learning, with a broad range of diverse learning opportunities available and accessible to meet the needs of all residents.

## **Infrastructure**

**DO11:** An integrated and multi-modal transportation network offers affordable convenient, accessible and safe transportation choice within the community and to regional destinations.

## **CONCLUSION**

This report summarizes information from the 2016 Census related to the City and provides comparisons between Surrey and the Metro Vancouver Region, as well as comparison with information from prior Census years.

Surrey's population has increased by 10.6% from the 2011 Census. While Surrey's population is aging similar to Metro Vancouver, the City contains a larger portion of young people and has a larger proportion of larger families compared to Metro Vancouver. The Census data also shows that the population is very diverse in character. Forty-six percent of the population listed a language other than English as a mother tongue and Punjabi makes up the largest proportion of that percentage. Surrey also contains the second largest aboriginal population in BC, exceeded only by the City of Vancouver.

Over the past 15 years, we are seeing a change in the type of housing stock in Surrey. Since 2001, the number of one family and two family dwellings declined as percentage of total dwelling units in 2016. Row housing and apartment units the trending upwards in city's housing stock. Since 2006, home ownership has dropped slightly while rental dwellings have increased. As well, households spending 30% more on shelter costs in 2016 has decreased slightly from 2011.

There are significant changes to Surrey's labour force in 2016. Surrey's unemployment rate has dropped, the workforce has grown and a greater portion of the labour force works within Surrey. There are also important changes in patterns of commuting to work. Although personal vehicle still remains the highest mode of transportation to work, there has been a steady increase in the use of public transit as a mode of commuting to work.

Surrey's family income is slightly lower than Metro Vancouver's. Couple-with-children families recorded the highest average income and also the largest average household size. Average income of lone-parent families is considerably less with a much smaller average household size.

The data from the 2016 Census release will be used to inform, support and guide City strategies and policy frameworks. The information will provide guidance for planning of future neighbourhood amenities, housing stock, school needs, transportation infrastructure, as well as policies pertaining to housing affordability, immigrant and refugee settlement, and social and recreational programs that include vulnerable populations, seniors and youth.

*Original signed by*  
Jean Lamontagne  
General Manager, Planning & Development

SJ/PH/ss

- Appendix "I" Population Growth in Large Canadian Cities (2011-2016)
- Appendix "II" Spatial Distribution of Median Age in Surrey (2016 Census)
- Appendix "III" Spatial Distribution of Average Household Size in Surrey (2016 Census)
- Appendix "IV" Spatial Distribution of One and Two Family Density in Surrey (2016 Census)
- Appendix "V" Spatial Distribution of Townhouse Density in Surrey (2016 Census)
- Appendix "VI" Spatial Distribution of Apartment Density in Surrey (2016 Census)



## Appendix "I"

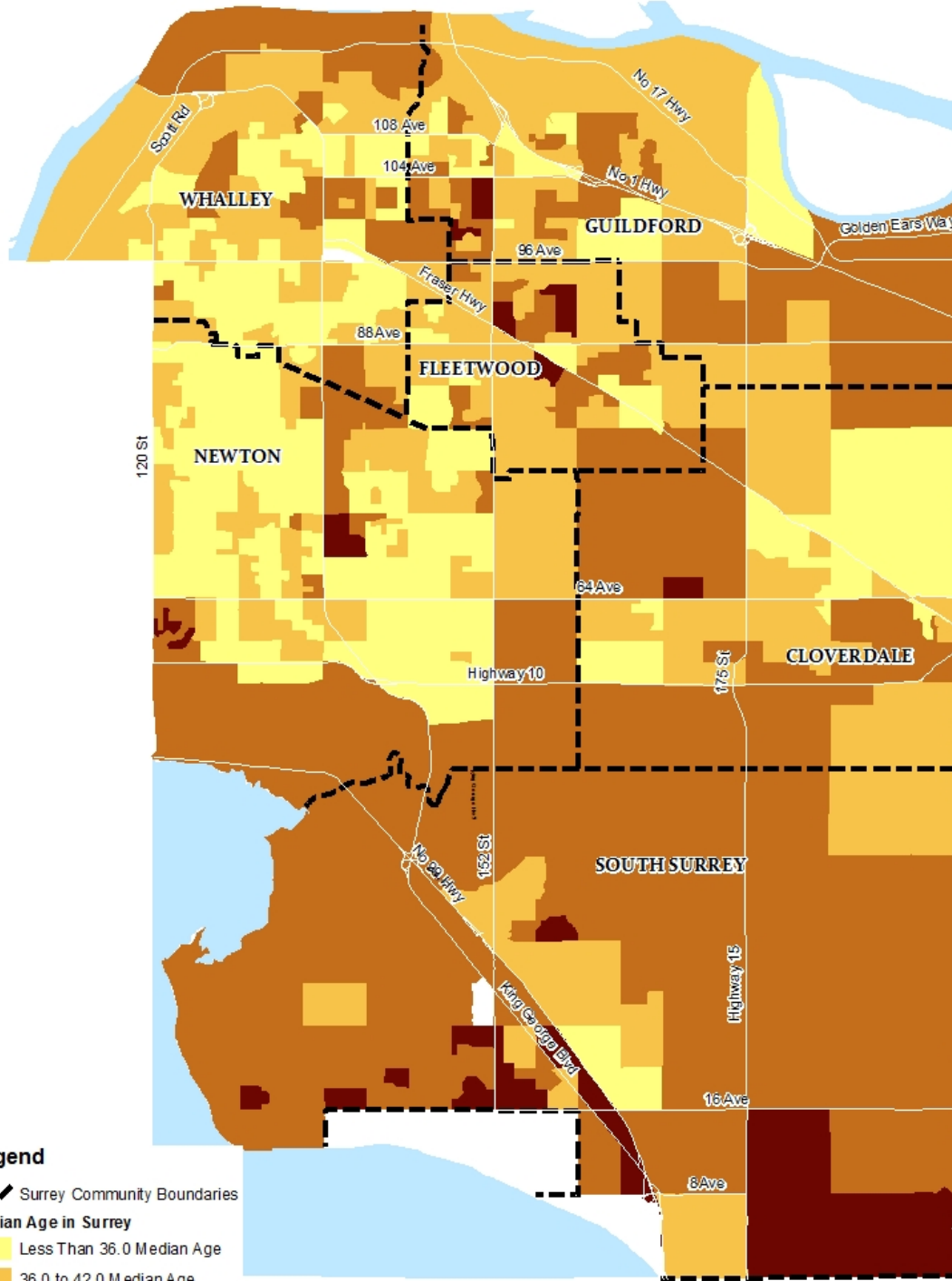
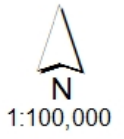
### Population Growth in Large Canadian Cities (2011-2016)

City	Province	2016 Population	2011 Population	Percent Change	Pop, % Change Rank in Canada	Total Private Dwellings 2016	Land Area sqkm	Population Density per square Kilometre, 2011
Edmonton	Alta.	932,546	812,201	14.8	1	387,950	685	1,361
Brampton*	Ont.	593,638	523,906	13.3	2	173,428	266	2,229
Calgary	Alta.	1,239,220	1,096,833	13	3	489,650	826	1,501
Regina*	Sask.	215,106	193,150	11.4	4	93,197	180	1,195
Red Deer	Alta.	100,418	90,564	10.9	5	42,285	105	959
Saskatoon*	Sask.	246,376	222,246	10.9	6	107,098	228	1,080
<b>Surrey</b>	<b>B.C.</b>	<b>517,887</b>	<b>468,251</b>	<b>10.6</b>	<b>7</b>	<b>181,159</b>	<b>316</b>	<b>1,637</b>
Coquitlam*	B.C.	139,284	126,804	9.8	8	54,393	122	1,139
Markham	Ont.	328,966	301,709	9.0	9	106,131	212	1,549
Kelowna	B.C.	127,380	117,312	8.6	10	57,433	212	601
Guelph	Ont.	131,794	121,688	8.3	11	55,927	87	1,511
Oshawa	Ont.	159,458	149,607	6.6	12	64,883	146	1,095
Kitchener	Ont.	233,222	219,153	6.4	13	95,495	137	1,705
Waterloo	Ont.	104,986	98,780	6.3	14	46,096	64	1,640
Winnipeg	Man.	705,244	663,617	6.3	15	294,245	464	1,519
Vaughan	Ont.	306,233	288,301	6.2	16	96,657	274	1,119
Abbotsford	B.C.	141,397	133,497	5.9	17	51,770	376	377
London	Ont.	383,822	366,151	4.8	18	175,558	420	913
Vancouver	B.C.	631,486	603,502	4.6	19	309,418	115	5,493
Toronto	Ont.	2,731,571	2,615,060	4.5	20	1,179,057	630	4,334
Burlington	Ont.	183,314	175,779	4.3	21	72,535	186	987
Burnaby	B.C.	232,755	223,218	4.3	22	98,030	91	2,569
Richmond	B.C.	198,309	190,473	4.1	23	77,478	129	1,534
Barrie*	Ont.	141,434	136,063	3.9	24	54,227	99	1,428
Hamilton	Ont.	536,917	519,949	3.3	25	222,918	1,117	481
Windsor	Ont.	217,188	210,891	3	26	97,777	146	1,484
Cambridge	Ont.	129,920	126,748	2.5	27	49,388	113	1,150
St. John's	N.L.	108,860	106,172	2.5	28	52,410	446	244
St. Catharines	Ont.	133,113	131,400	1.3	29	59,879	96	1,385
Mississauga	Ont.	721,599	713,443	1.1	30	248,469	292	2,468
Kingston	Ont.	123,798	123,363	0.4	31	59,977	451	274

\*2011 Census population has been revised in 2011 Census

Note: Only cities that have a population greater than 100,000 are included.

Spatial Distribution of Median Age in Surrey (2016 Census)



Legend

Surrey Community Boundaries

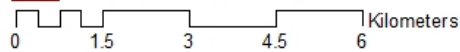
Median Age in Surrey

Less Than 36.0 Median Age

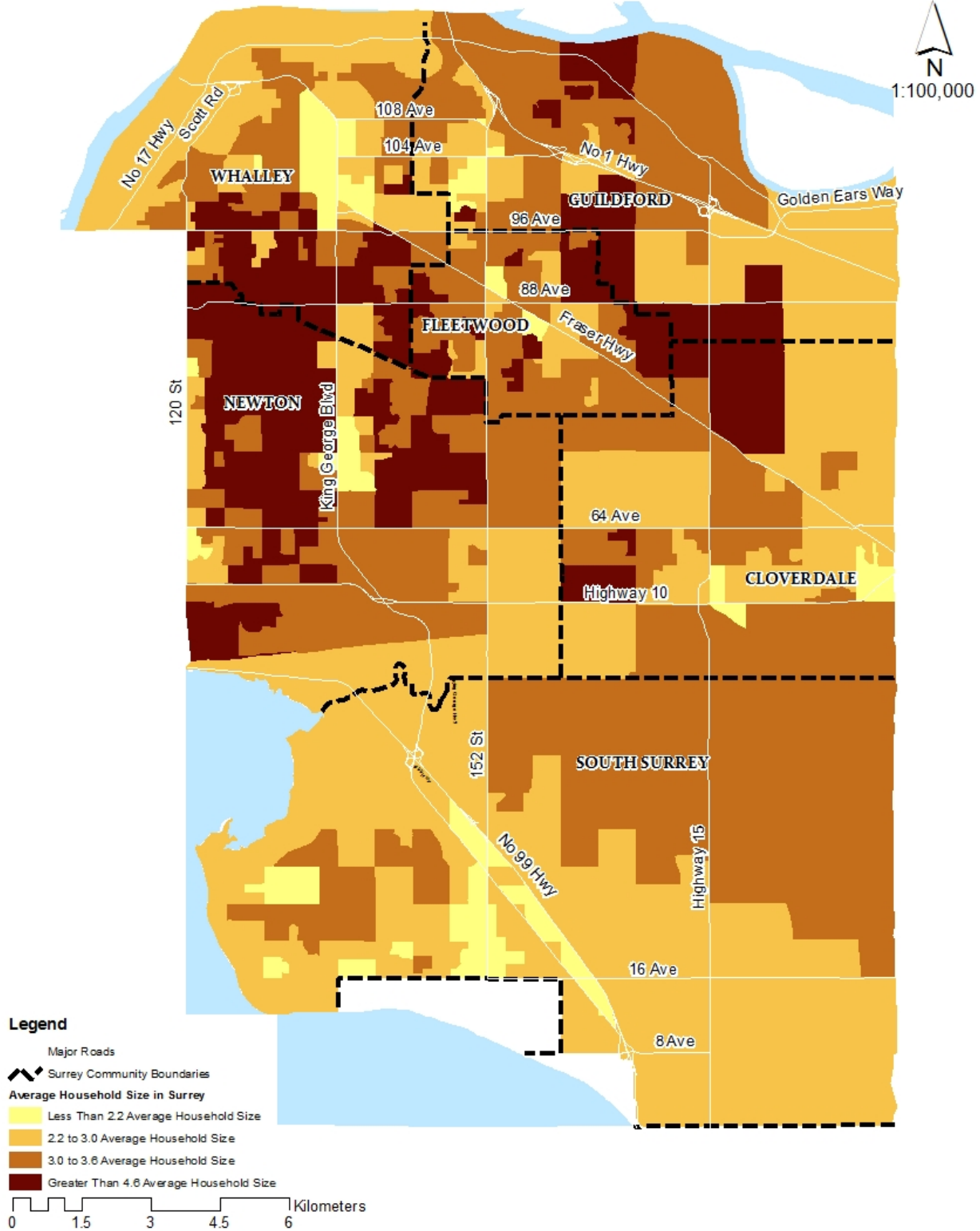
36.0 to 42.0 Median Age

42.0 to 55.0 Median Age

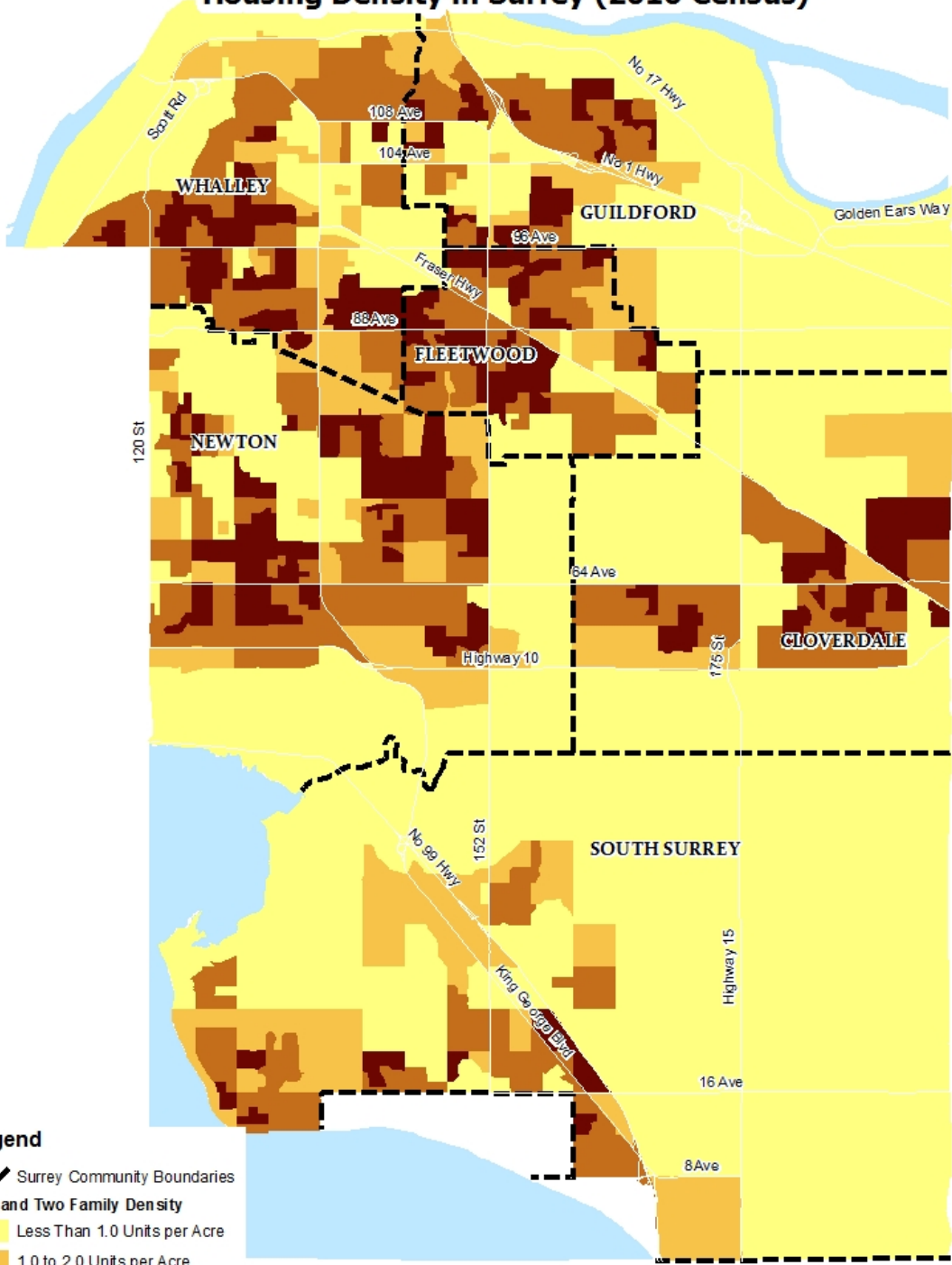
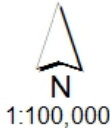
Greater Than 55.0 Median Age



# Spatial Distribution of Household Size in Surrey (2016 Census)



### Spatial Distribution of Single Family Housing Density in Surrey (2016 Census)

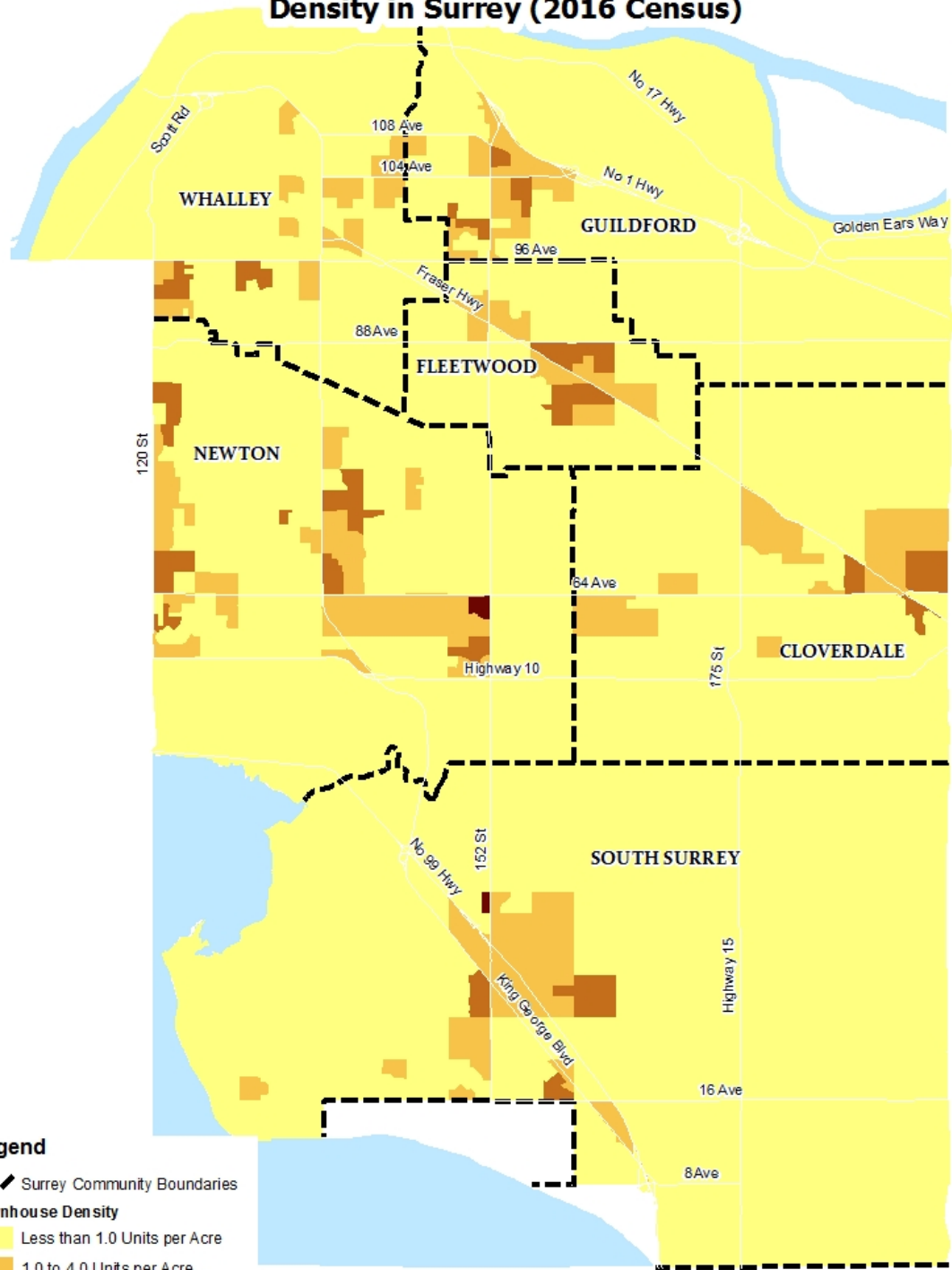
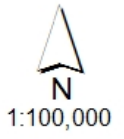


**Legend**

- Surrey Community Boundaries
- One and Two Family Density**
  - Less Than 1.0 Units per Acre
  - 1.0 to 2.0 Units per Acre
  - 2.0 to 4.0 Units per Acre
  - Greater Than 4.0 Units per Acre



### Spatial Distribution of Townhouse Density in Surrey (2016 Census)

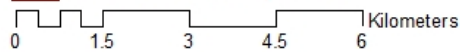


**Legend**

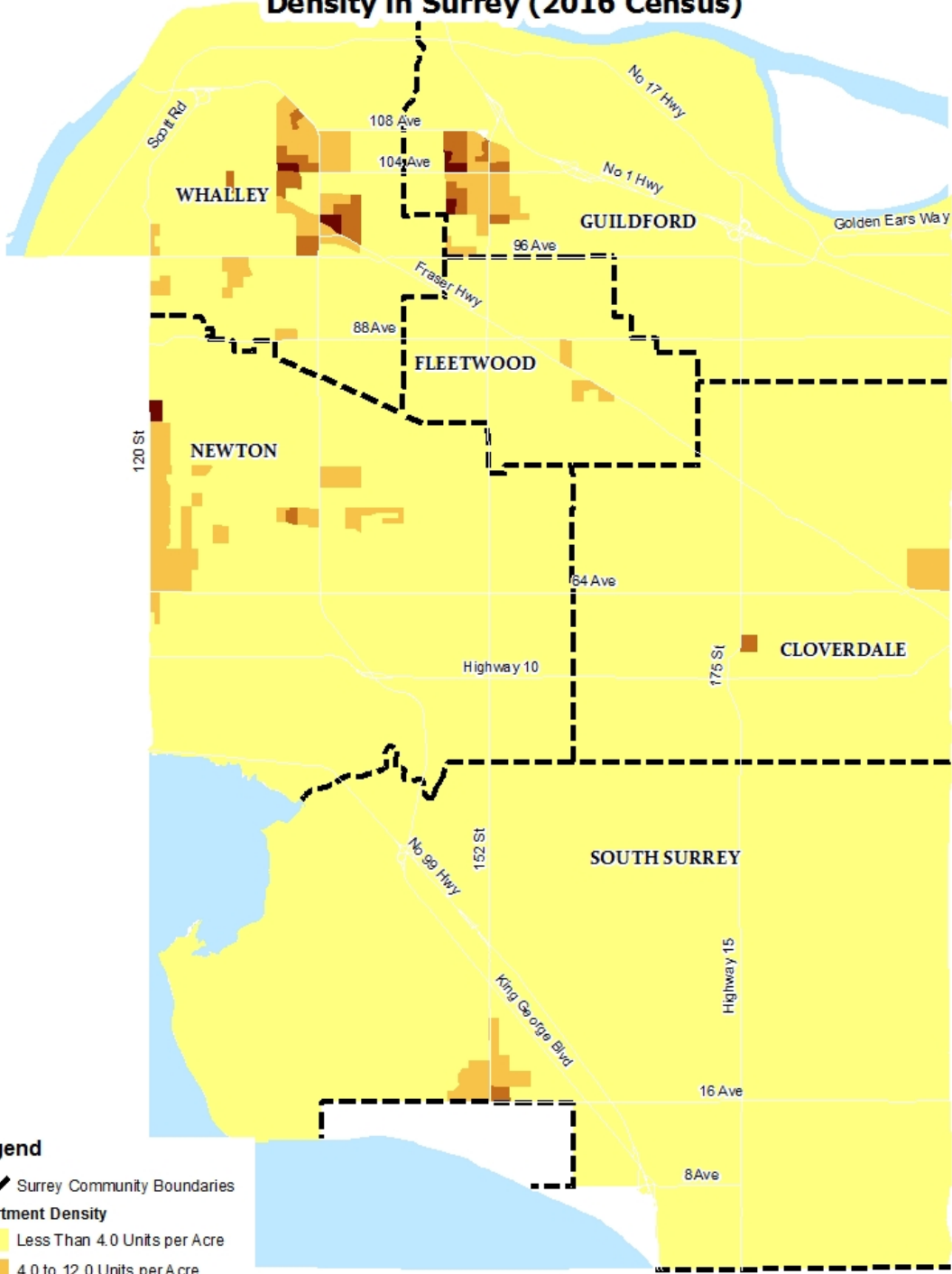
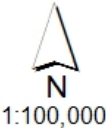
Surrey Community Boundaries

**Townhouse Density**

- Less than 1.0 Units per Acre
- 1.0 to 4.0 Units per Acre
- 4.0 to 12.0 Units per Acre
- Greater Than 12.0 Units per Acre



### Spatial Distribution of Apartment Density in Surrey (2016 Census)



**Legend**

Surrey Community Boundaries

**Apartment Density**

Less Than 4.0 Units per Acre

4.0 to 12.0 Units per Acre

12.0 to 22.0 Units per Acre

Greater Than 22.0 Units per Acre

