



Still Suburban? Growth in Canadian Suburbs, 2006-2016

Council for Canadian Urbanism
Working Paper #2



Mount Pleasant, Brampton ON (Google Maps)

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Executive Summary

Canada is a suburban nation. More than two-thirds of our country's total population lives in suburbs. In all our largest metropolitan areas, the portion of suburban residents is over 80%, including the Vancouver, Toronto, and Montreal regions (Gordon & Janzen 2013). Their downtowns may be full of new condo towers, but there is five times as much population growth on the suburban edges of the regions.

The purpose of this monograph is to update the article "Suburban Nation? Estimating the size of Canada's suburban population", published in the *Journal of Architecture and Planning Research* (Gordon & Janzen 2013), and the 2014 CanU Working Paper. The *JAPR* article was based upon 1996 and 2006 census data, while this working paper updates the research using the 2016 census data that was released in late 2017.

Our research for the 1996-2006 period estimated that 66% of all Canadians lived in some form of suburb. This proportion rose to 67.5% by 2016. In 2016, we found that within our metropolitan areas, 86% of the population lived in transit suburbs, auto suburbs, or exurban areas, while only 14% lived in active core neighbourhoods.

Canada's population growth from 2006-2016 was mapped using classification methods modified from the *JAPR* article. The active cores and transit suburbs grew by 9% and 8%, which was below the national average population growth of 15%. The auto suburbs and the exurban areas grew by 17% and 20%, exceeding the national average. The net effect of this trend is that 85% of the CMA population growth from 2006–2016 was in auto suburbs and exurbs. Only 15% of the population growth was in more sustainable active cores and transit suburbs.

Canadian Metropolitan Neighbourhood Population Distribution for 2006 and 2016

	Population in 2006 ^{1,2}		Population in 2016		Population Growth 2006-2016		Share of Population Growth 2006-2016
Active Core	3,107,305	14%	3,372,730	14%	265,425	9%	8%
Transit Suburb	2,707,917	13%	2,923,161	12%	215,244	8%	7%
Auto Suburb	14,100,386	66%	16,523,569	67%	2,423,183	17%	75%
Exurban	1,572,913	7%	1,887,269	8%	314,356	20%	10%
TOTAL CMA^{3,4}	21,506,282	100%	24,724,257	100%	3,217,975	15%	100%

Data source : Statistics Canada, 2016 and 2006 Census Tract data

¹ This chart utilizes classifications from the 2016 Census and moves the population data backward

² Data for 2006 is sourced from the 2016 Census 'T9' classification exercise and are estimations due to census tract splits

³ Lethbridge and Belleville are new CMAs for the 2016 Census but have been omitted from this chart for comparison to previous work

⁴ While all total population figures represent true totals, they are not always a true sum of the Active Core, Transit Suburb, Auto Suburb, and Exurban figures due to 'unclassified' census tracts in several CMAs

The 2006–2016 findings show that the population of Canadian auto-dependent communities are growing much faster than the national growth rate, which is significant to note when implementing policies guiding public health, transportation, education planning, political decisions, and community design.

The national pattern is similar regarding construction of new dwelling units, though not as extreme. This is because new units in the active cores have about 40% fewer occupants than those in auto suburbs in 2016. Even if dwelling units are our growth measure, 78% of new dwelling unit growth from 2006-2016 occurred in the less sustainable auto suburbs and exurbs.

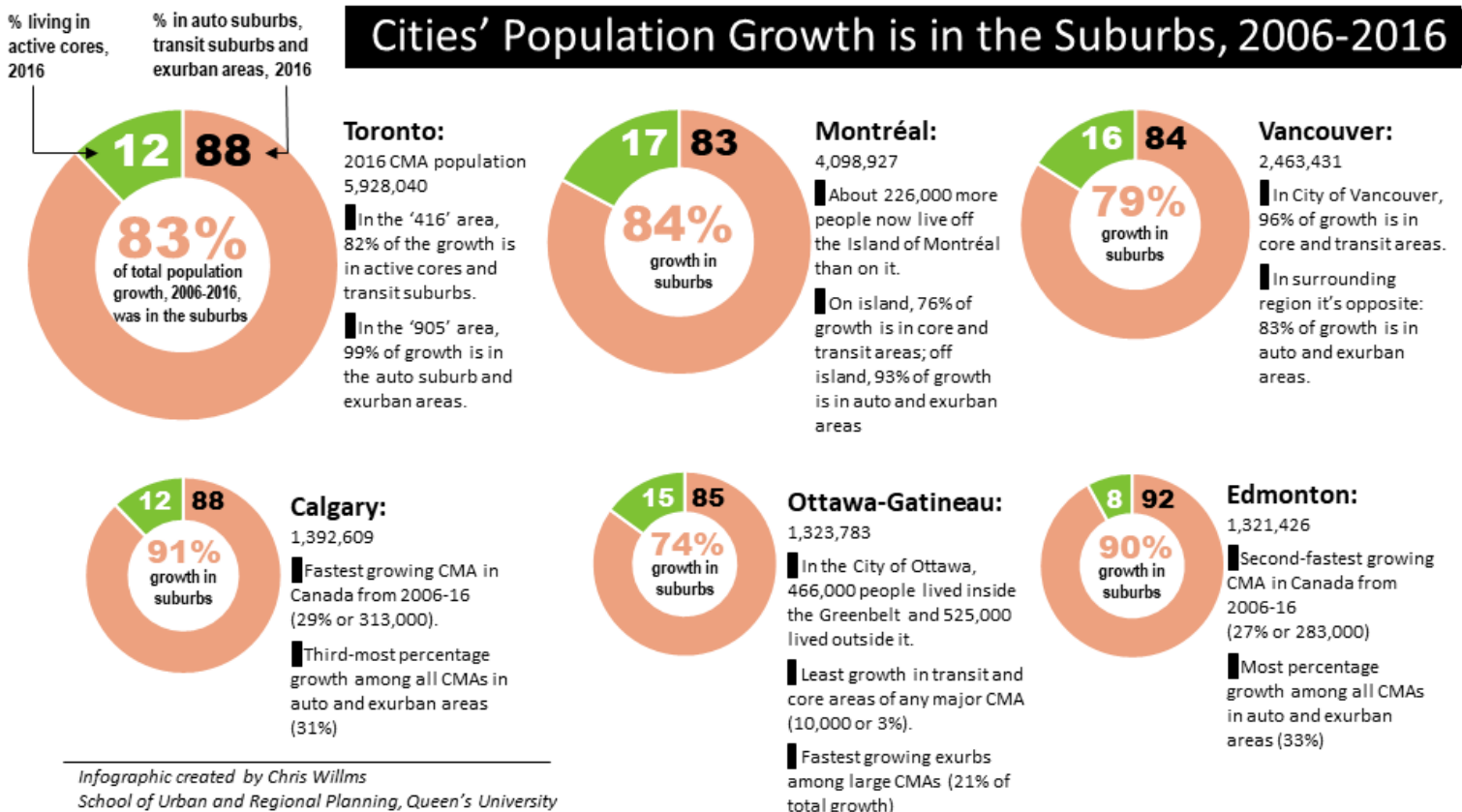
Canadian Metropolitan Neighbourhood Dwelling Unit Distribution for 2006 and 2016

	Total Dwelling Units in 2006 ^{1,2}		Total Dwelling Units in 2016		Total Dwelling Unit Growth 2006-2016		Share of Total Dwelling Unit Growth 2006-2016
Active Core	1,698,259	19%	1,912,110	19%	213,851	13%	15%
Transit Suburb	1,209,926	14%	1,315,979	13%	106,053	9%	7%
Auto Suburb	5,336,178	60%	6,326,671	61%	990,493	19%	68%
Exurban	612,434	7%	764,301	7%	151,867	25%	10%
TOTAL CMA^{3,4}	8,862,602	100%	10,325,115	100%	1,462,513	17%	100%

* Refer to Population chart for complete footnotes

Many people over-estimate the importance of the highly visible downtown cores and underestimate the vast growth happening in the suburban edges of our metropolitan regions. The population in low-density auto suburbs and exurbs is still growing five times faster than inner-cities and inner-suburbs across Canada. Despite their inner-city condo booms, even the Toronto and Vancouver metropolitan areas saw 3.4 and 2.4 times as much population growth in auto suburbs and exurbs compared to active cores and transit suburbs.

Canada is a suburban nation and its population became more suburban from 2006–2016, despite the planning policies of most metropolitan areas.



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Statistics Canada, 2016 and 2006 Census Tract Data

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1996, 2006, and 2016 data and maps are available at: CanadianSuburbs.ca

Peer-reviewed academic journal reference for methods and 1996-2006 data:

Gordon, David L.A. & Janzen, Mark. Suburban Nation? Estimating the size of Canada's suburban population. *Journal of Architectural and Planning Research* 30:3 (December 2013), pp. 197-220.

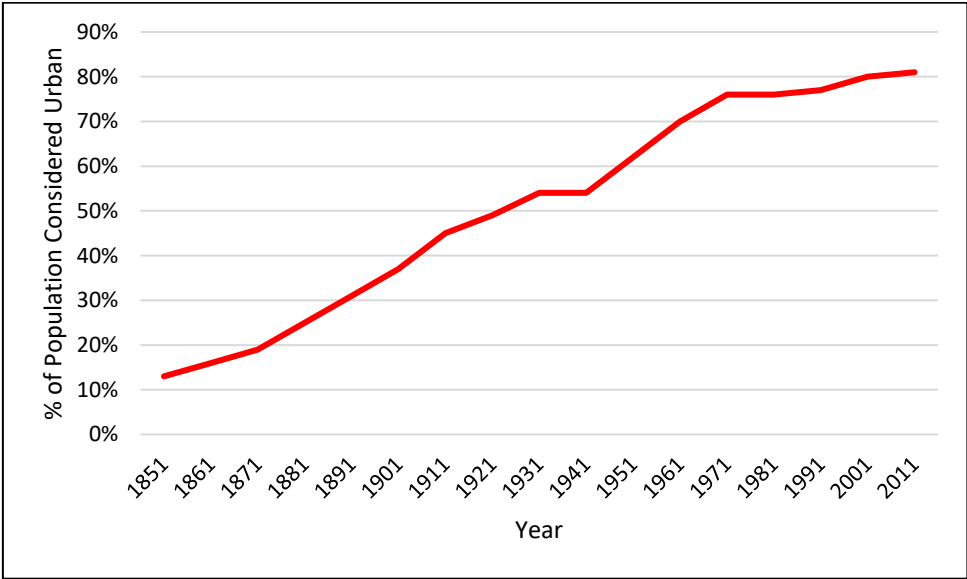
Available for no charge at: http://japr.homestead.com/Gordon_FinalVersion131216.pdf

Introduction

Canada is a nation where over two-thirds of the population lives in some form of suburb (Gordon & Janzen 2013). It is important to monitor the locations of population growth within our nation as it has profound effects on our economic effectiveness, environmental sustainability, and our overall public health. The purpose of this monograph is to update the article “Suburban Nation? Estimating the size of Canada’s suburban population”, published in the *Journal of Architecture and Planning Research* (Gordon & Janzen 2013). The *JAPR* article was based upon 1996 and 2006 census data, while this paper updates the research using the 2016 census data that was released late 2017.

This monograph replaces and updates the CanU Working Paper #1, “Suburban Nation? Population Growth in Canadian Suburbs, 2006-2011”, which was based on estimates from the flawed 2011 Census (Hulchanski, et al. 2013).

We routinely hear that Canada is one of the world’s most urbanized nations, but that does not mean that most Canadians live in apartments and travel by public transit. Although Statistics Canada now estimates that our 2011 “urban” population was 81%¹, this category includes downtown, inner-city, suburban, and exurban development.



Our initial estimates for 2006 indicated that perhaps 66% of the Canadian population lived in neighbourhoods that most observers would consider suburban (i.e. cars and many post-war single homes) (Gordon & Janzen 2013). Our most recent research for 2016 indicates that perhaps 67.5% of Canadians live in suburbs.

¹ Statistics Canada, Proportion of the population living in rural areas, Canada, 1851 to 2011 http://www12.statcan.gc.ca/census-recensement/2011/as-sa/98-310-x/2011003/fig/fig3_2-1-eng.cfm

Why should we care?

Social Equity

If the growth trends we observe continue, Canada will become even more suburban in the future, with increased problems caused by low-density auto-dependent neighbourhoods. For example, there is a growing body of evidence that suburban lifestyles are correlated with higher obesity rates in children and adults. The lack of a built environment that promotes physical activity has shown to be a contributing factor to obese and overweight children and parents (Ewing, et al. 2014; Canadian Public Health Association 2012; Kerr et al. 2012; Saelens, et al. 2012; van Loon & Frank 2011; Papas, et al. 2007; Frumkin, et al. 2004). Poor suburban design can affect the walkability of a neighbourhood (Giles-Corti et al. 2013; Frank et al. 2010)

Furthermore, there is evidence that shows a positive association between the frequency of commuting by transit and physical activity (MacDonald et al. 2010). It was found that frequent and infrequent transit users partake in more physical activity through active transportation to and from transit stops (Lachapelle et al. 2011). A study published in the *International Journal of Epidemiology* investigated the overall reduction in all-cause mortality through an increase in physical activity. The study concluded that an increase in non-vigorous physical activity resulted in a reduction of all-cause mortality, particularly found when shifting from sedentary behaviour to low levels of activity (Woodcock, et al. 2010; Arrieta, et al. 2008).

Although the suburbs are becoming less socially homogeneous (Moos & Walter-Joseph 2017; Moos & Mendez 2014; Hulchanski 2010), the evidence of a political divide between the residents within the inner-city and the auto-dependent suburbs creates another social issue (Walks 2013 & 2007). Politicians who can drive a wedge between suburban and inner-city voters will have a substantial majority at the polls (Kiel 2018, ch. 8; Delacourt 2013).

Environmental Sustainability

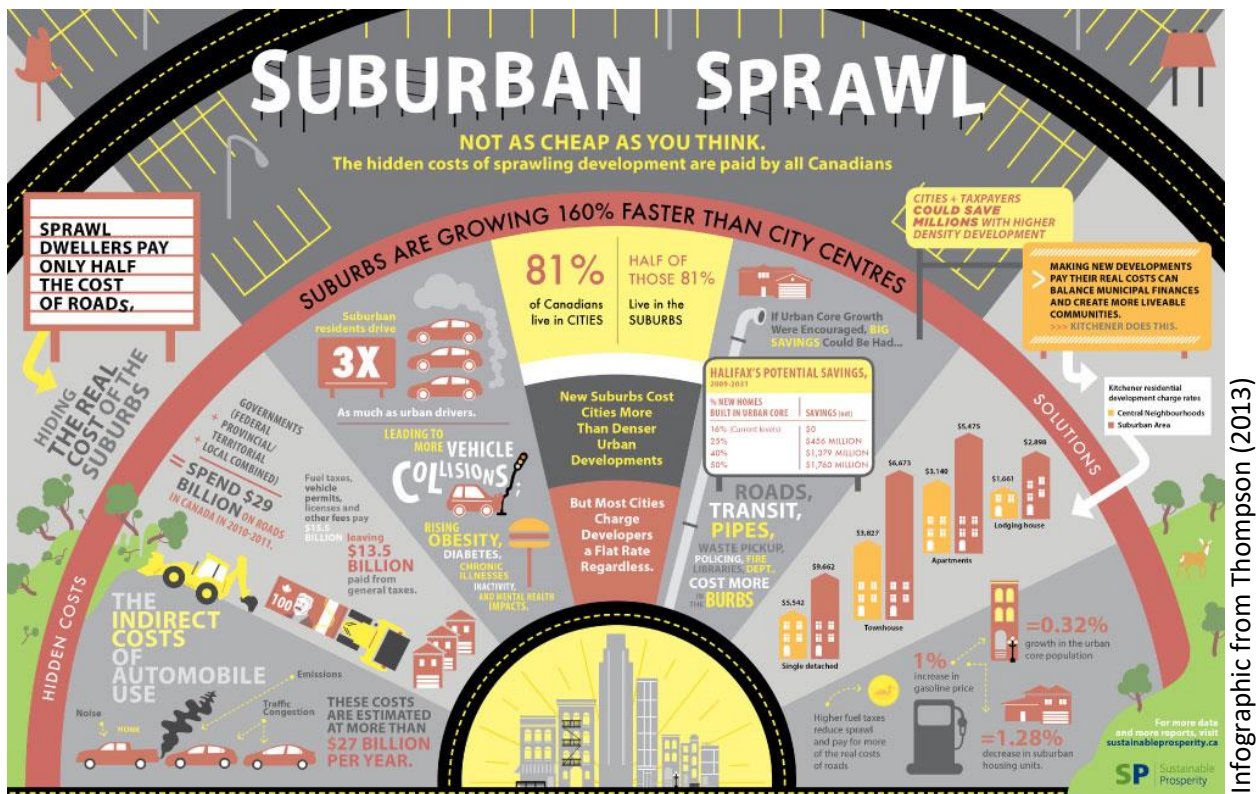
Suburban areas require different planning techniques to deal with environmental problems such as resource conservation or auto dependence (Newman & Kenworthy 2015), which are significantly different from inner-city issues such as brownfield redevelopment. Sprawling suburban areas are witness to higher rates of automobile use and vehicle ownership (Ewing et al. 2002). In such areas, people own more cars, drive longer hours, and commute less by public transit. Extensive automobile use leads to more air pollution and greenhouse gas emissions compared to commuting by transit, walking, or cycling. The suburban dependence on automobiles contributes more to climate change emissions, which makes transportation Canada's highest sector for contributions to GHG emissions (Environment Canada 2013). As of 2011, cars, trucks, and motorcycles account for 92% of the GHG emissions produced by passenger transportation in Canada. Bus, rail, and domestic aviation accounted for the remaining 8% (Environment Canada 2013).

These greenhouse gas emissions stimulate climate change. A study by the National Roundtable on the Environment and the Economy (NRTEE) in 2011 attempted to assess an economic price tag on climate change in Canada across three sectors: the BC timber industry, Canada's coastal regions, and overall public health with respect to air quality. The report estimated an economic cost on average of \$5 billion

per year for each scenario observed as of 2020. The anticipated annual cost increased to \$21 billion per year on the low end and \$43 billion on the high end by 2050 (NRTEE 2011).

Economic Efficiency

There are substantial economic costs involved with suburban sprawl, which are borne by the local and provincial governments and, ultimately, the taxpayer. Greenfield development on a city's periphery requires significant new infrastructure investments, which are difficult to accurately forecast and recover through development charges, because of the physical degradation of the infrastructure over many decades (CSCE 2016). The municipality is then burdened with the maintenance and capital repairs for the infrastructure providing service to the low-density development for its lifetime (Kiel 2018, ch. 7; Thompson 2013; Blais 2010).



The suburbs are a product of less expensive land on the city's edge combined with affordable fuel costs for automotive transportation (Lang, et al. 2008). As more people live on the city's periphery and commute to work within the city, the social and economic costs of roadway congestion significantly increases. Enforcing tolling or tax mechanisms to reduce congestion is often politically difficult to implement (Brueckner 2000).

Arthur Nelson suggests a "fifth settlement movement" is emerging as the suburbs shift housing products, following demographic and economic changes in North America. The supply of cheap land supporting greenfield development has declined, the price of fuel for automobiles has risen, and the aging demographic of the Baby Boomers will require less floor space and closer amenities (Grant, et al. 2013; Nelson 2009). Nelson and Leinberger both conclude that there will be a growing desire for smaller units and denser communities, however the current supply of housing stock, largely single-detached houses, is inconsistent with that demand (Nelson 2011; Leinberger 2008).

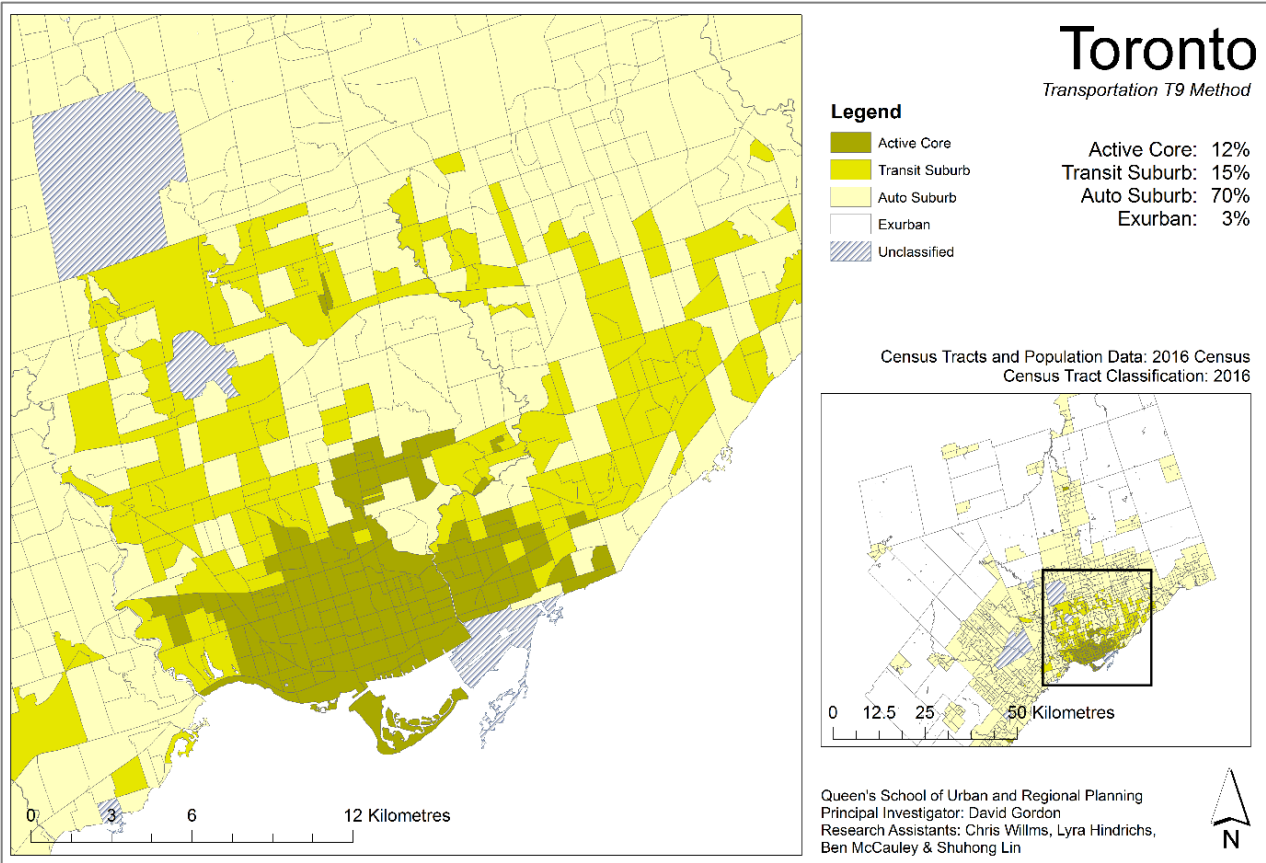
What is unique about this study?

Arthur Nelson describes American suburbs as “low densities spread across vast landscapes, they are dominated by one land use: the single-detached home on a large lot, dependent on the automobile, and so inefficiently developed as to rob America of economic vitality.” (Nelson cited in Grant 2013 p. 392)

The terms “suburb” and “sprawl” are used with many different definitions (Duckworth-Smith 2016). It is important to create a level of consistency with the description of the suburbs so that comparisons can be made across disciplines and data sources. Ann Forsyth defined suburbs using descriptions from a number of academic papers. She grouped the classifications into several types of descriptions: location, built environment characteristics, transportation, activities, political places, sociocultural, and year of construction (Forsyth 2012). Forsyth concluded that many definitions of suburbs are really catalogs of their ills. She suggests defining suburbs by their type or an environmental indicator. For our purposes, we settled upon transportation behaviour and density as our main suburb indicators, after experimenting with dozens of definitions (Gordon 2018).

There are many research studies of Canadian suburbs, but most only compare a few of the larger cities. To our knowledge, this is the first study to develop a classification of suburban areas that gives credible results across Canada, in cities large and small (See comparison tables in Appendices A through F). This allows us to make nation-wide estimates of the extent of suburbs and compare any or all of the 35 metropolitan areas (CMAs) on a standard basis. We produced an atlas of maps of the metropolitan structure for all 35 metropolitan areas (Appendix G).

Sample Transportation Method T9 Map of the Toronto CMA, 2016

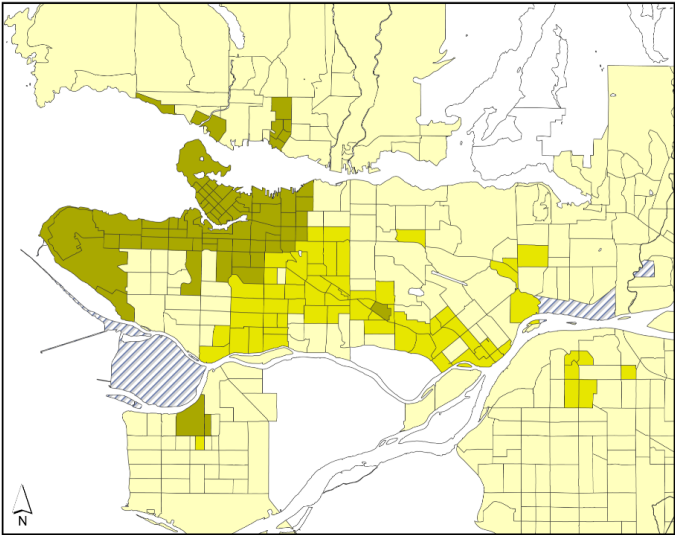


How did we classify the suburbs?

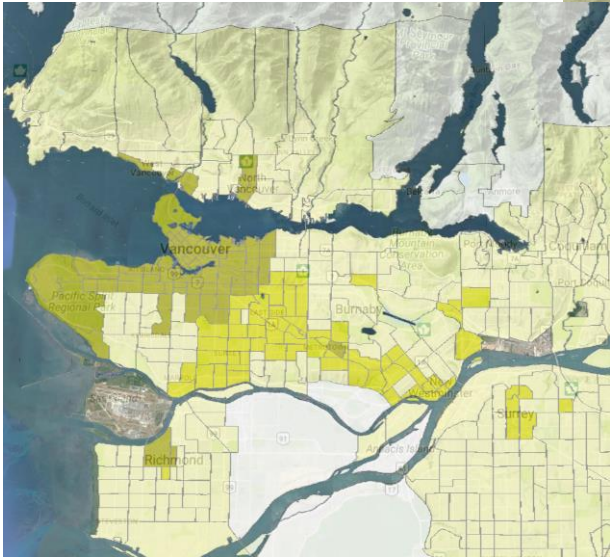
This research program spent five years testing a series of models to estimate the proportion of Canadians who live in suburban neighbourhoods. Statistics Canada census data was extracted at the neighbourhood-level and classified using Esri’s ArcMap geospatial processing program.

For the initial model, we tested scores of different definitions of ‘suburbs’ for all 33 big metropolitan areas for 2006 (CMAs over 100,000 population) – Lethbridge and Belleville are new CMAs for 2016 – and a structured sample of Census Agglomerations (10,000-99,000 people). We worked at the neighbourhood level, reviewing over 5,000 census tracts for each national model.

We check the accuracy of our classifications by making innovative use of the Google Earth and Google Street View systems. When something looked wrong on the map, we would connect it to Google Earth, look at the air photo and then zoom in on the Street View to check out the neighbourhood. If the evidence was still confusing, we would check with graduate students who lived in the region or contact local planners.



Vancouver CMA 2016 map drawn with ArcMap (top left); overlaid on Google Earth (bottom left) and with data attached (bottom right)



0190.05	
0190.05	
FID	5679
CTUID	9330190.05
Municipality	Surrey
Neighbourhood	E of Gateway Stn
Area (sqKm)	0.61
Area (Ha)	61
2016 Population	1,791
2011 Population	1,753
2006 Population	1,618
Population change 06-16	173
Population change % 06-16	10.7%
Population Density per sqKm	2,949.1
Total Dwelling Units 2016	693
Total DU 2006	610
Total DU change	83
Total DU change %	13.6%
Occupied DU 2016	644
Occupied DU 2006	559
Occupied DU change	85
Occupied DU change %	15.2%
Occupied DU per Ha 2016	10.6
Commuters Total	730
Driver	405
Passenger	45
Driver & Passenger Total	450
Driver & Passenger %	61.6%
Driver & Passenger Normalized	0.89
Public Transit	245
Public Transit %	33.6%
Public Transit Normalized	1.65
Walk	20
Bike	10
Active Transport Total	30
Active Transport %	4.1%
Active Transport Normalized	0.45
Other	0
2016 Classification	Transit Suburb
2006 Classification	Auto Suburb
notes	

Developing definitions that would give reasonable results across Canada took over five years, because Canadian cities are quite diverse. Some definitions that seemed reasonable for Vancouver might not work in Montreal. For example, a definition of the inner-city that was based on many high-rise apartments might work in Vancouver, but Montreal has several dense, vibrant and walkable urban neighbourhoods like the Plateau, filled with traditional local triplex (“plex”) townhouses. Conversely, there are a great deal of townhouses and apartments in many suburban areas across Canada, so we cannot define a suburb as a neighbourhood of single-detached houses.

Our initial classification methods were examined by an expert panel of leading geographers and urban planners as well as anonymous peer reviewers for a refereed journal. Density classifications proved most useful for classifying exurban and rural areas. The most reliable definitions of inner-city and suburban development emerged from journey-to-work transportation data, available for every metropolitan area from Statistics Canada’s long-form census.

Twelve models for classifying suburbs were tested for the entire nation, with the most credible results emerging for a classification of active cores, transit suburbs, auto suburbs and exurban areas. These classification models estimate that the suburban areas make up approximately 79% of the metropolitan population and 67.5% of the national population (Gordon & Janzen 2013 Table 2; Table “Population growth” table below).

We do not need an exact count of suburban households for practical policy making. However, an improved estimate of the proportion and the rate of growth of the Canadian suburban population has proven useful for research shaping an urban infrastructure program or public health analysis (Walker 2016).

How we updated the 2006 classification for 2016

The most recent Canadian census was taken in the spring of 2016 and the final data was released in late 2017. Unfortunately, the federal government made the “long-form” questionnaire optional for 2011, rendering its results impossible to compare accurately with previous years on a metropolitan basis (Hulchanski et al. 2013). We therefore used the 2006 classification as a base and considered the location of population growth and decline on a neighbourhood-by-neighbourhood basis. This used all 5,400 census tracts in all 35 CMAs. Many census tracts were created for 2016 in fast-growing suburbs – many of these were created by splitting previous tracts – following Statistics Canada standard procedures (Allen & Taylor 2018). We examined every new census tract in detail using Google Earth, Street View, and local experts, to classify them according to our 2006 method.


We also tested our classification techniques on Australia, another country with a large proportion of low density auto-dependent suburbs. The transportation model worked well for Australian metropolitan areas with the 2011 Census indicating that about 77% of the metropolitan population lived in low-density, auto-dependent suburbs (Gordon, Maginn & Biermann 2015).


How can we interpret the maps?


There are many types of suburbs across Canada. We found that it is not possible to create a single definition that worked everywhere. We found that the most reliable models had urban cores and three or four types of suburbs.

The maps from the project show the classification of neighbourhoods (census tracts) using our most recent model (T9), which was based upon a combination of population density and journey to work data.

We identified three types of suburbs in this T9 model:

*Exurbs*² (white on the maps)  – very low-density rural areas where more than half the workers commute to the central core. The commuters come from low-density rural estate subdivisions or houses scattered along rural roads. In 2016, about 8% of the Canadian metropolitan population lived in exurbs. The smaller metro areas had much higher proportions of exurban residents, presumably because the commuting is easier from their rural areas.

*Auto Suburbs*³ (pale yellow on the maps)  – neighbourhoods where almost all people commute by automobile; there is negligible transit, walking or cycling to work. These are the classic suburban neighbourhoods. In 2016, about 67% of the metropolitan population lived in auto suburbs, varying from 38% (Peterborough) to 83% (Abbotsford-Mission) and 82% (Oshawa). The larger metro areas had much higher proportions of residents in auto suburbs.

*Transit Suburbs*⁴ (gold on the maps)  – neighbourhoods where a higher proportion of people commute by transit. In 2016, about 12% of the metro populations lived in transit suburbs, with the higher numbers in the big cities with sophisticated transit systems such as Toronto and Montréal. The smaller metro areas had lower proportions of residents in transit suburbs, since far fewer people commute by transit in cities in the 100,000 population range. They also had much more variation in transit use. In the historic dense inner-suburbs that are well-served by transit, Halifax, Kingston and London have relatively high proportions of transit suburbs, while some newer communities such as Abbotsford, Kelowna, and Saguenay have none.

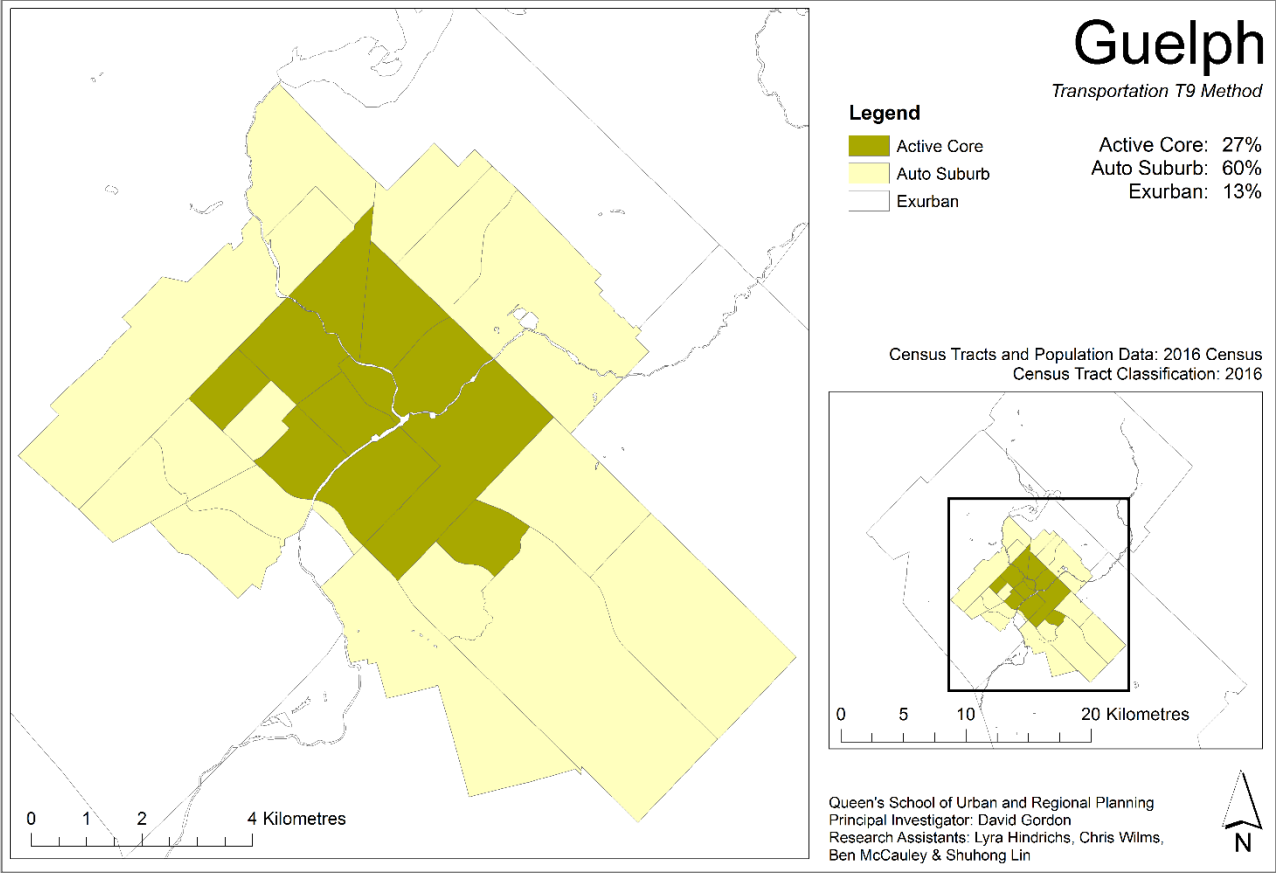
² [Technical definition: Exurban is defined as gross population density less than 150 people per square kilometre and more than 50% of workers commuting into the metropolitan area, as per OECD and Statistics Canada definitions (du Plessis et al. 2001)]

³ [Technical definition: Auto Suburbs have a gross population density that is greater than 150 people per square kilometre; transit use less than 150% of the metro average and active transit less than 150% of the metro average]

⁴ [Technical definition: Transit Suburbs have transit use greater than 150% of the metro average for journey to work; active transit less than 150% of the metro average and transit use must be greater than 50% of the national average]

In addition to the suburbs, *Active Cores*⁵ (khaki on the maps) were found in most metropolitan areas. These neighbourhoods are where a higher proportion of people use active transportation (walk or cycle) to get to work. Most of these active core areas are in the inner-city, but some are found in suburban transit nodes such as Burnaby’s Metrotown or the North York City Centre. Other active cores may be found in towns such as Langley, Oakville and St. Jerome, which have been inundated by the tidal wave of metropolitan expansion. In 2016, about only 14% of the metropolitan populations lived in active core neighbourhoods.

The largest cities varied from 8-17%, with Montréal at the top end. Once again, the smaller cities generally had fewer people living in active core neighbourhoods, but a much greater range. Guelph had the country’s highest proportion at 27%; and Peterborough had 26%, thanks to walkable neighbourhoods near historic downtown employers such as General Electric. At the other extreme, Abbotsford-Mission did not appear to have any active core neighbourhoods, where a significant proportion of people walked or cycled to work in 2016.



⁵ [Technical definition: Active Cores are defined when active transportation (walk/cycle) is greater than 150% of the metro average for the journey to work and greater than 50% of the national average]

National Population Growth Trends for 2006-2016

Low-density automobile suburbs and exurbs absorbed the vast majority of the population growth in Canada's metropolitan areas from 2006 to 2016. These areas account for over 5.5 times as many new residents as in the active cores and transit suburbs (2.74 million to 481,000).

Population growth from 2006-2016 within Canada's CMAs

	Population in 2006 ^{1,2}		Population in 2016		Population Growth 2006-2016		Share of Population Growth 2006-2016
Active Core	3,107,305	14%	3,372,730	14%	265,425	9%	8%
Transit Suburb	2,707,917	13%	2,923,161	12%	215,244	8%	7%
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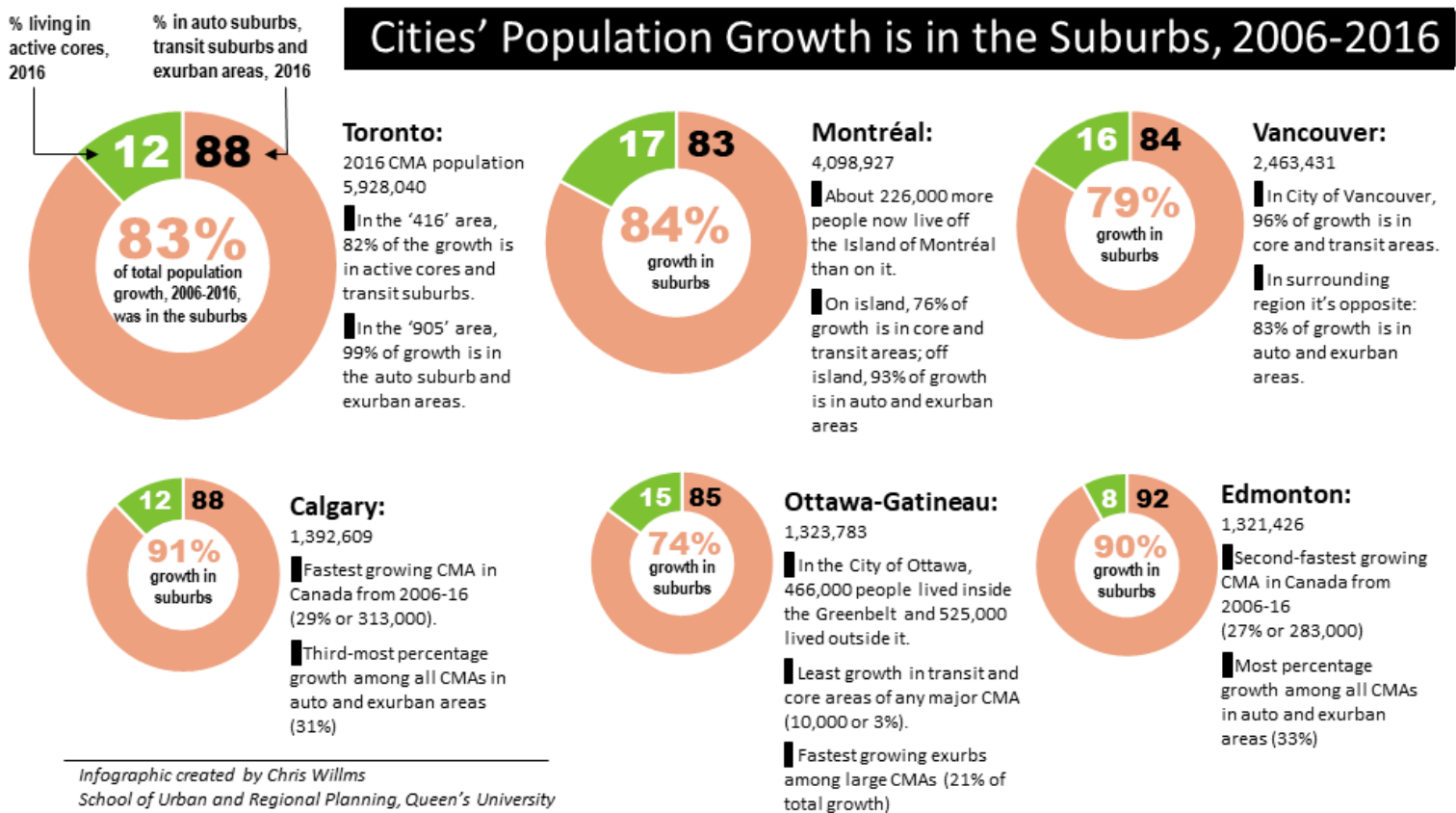
⁴ While all total population figures represent true totals, they are not always a true sum of the Active Core, Transit Suburb, Auto Suburb, and Exurban figures due to 'unclassified' census tracts in several CMAs

The good news is that almost 265,000 more Canadians live in active core neighbourhoods, mostly in the inner-cities. Toronto (112,000), Vancouver (61,000), and Montréal (48,000) make up most of that growth with their widely-reported condominium apartment booms. Calgary (17,000) and Ottawa-Gatineau (10,000) also had significant population growth in active cores. No other city had population growth of over 8,000 in the active core neighbourhoods. About one-third of the metro areas saw slight declines in their inner-city populations as the pace of new apartment construction did not keep up with declining household sizes in central city areas. All these declines were in the smaller CMAs.

The transit suburbs also grew slowly from 2006-2016, with another 215,000 people living in these inner-suburban neighbourhoods. Once again, Toronto (75,000) and Vancouver (42,000) led with over half this growth. Montréal (29,000), Calgary (25,000), and Edmonton (22,000) also saw significant population growth in their transit suburbs. These are the larger cities with high quality subways and LRT.

The vast majority of Canada's population growth from 2006-2016 was in low density auto suburbs. These neighbourhoods grew by over 2,420,000 new people. The large metro areas all saw large increases in the population of automobile-dependent suburbs: Toronto (610,000); Montréal (359,000); Vancouver (237,000); Calgary (253,000); Ottawa-Gatineau (143,000); and Edmonton (232,000). Most of the growth in the smaller metro areas was also in auto suburbs.

Exurban areas grew by 20%, which was also faster than the national average from 2006-2016. Another 314,000 Canadians live within these low-density rural districts adjacent to the 33 metropolitan areas. The largest total growth was near the largest cities: Toronto (24,000); Montréal (28,000); Vancouver (11,000); Calgary (10,000); Ottawa-Gatineau (39,000); and, Edmonton (23,000). However, the exurban areas next to many smaller urban centres were even more attractive, with growth rates of over 25% in metro areas such as Québec, Saskatoon, and Sherbrooke. We believe that exurban development may be more popular in smaller cities because the journey to work is more manageable. We found residents who drive 45 minutes to the edge of a smaller metropolitan area may have another 15 minutes to travel to work in the core, but in the largest cities, another hour of travel may be required at peak periods.



National Dwelling Unit Growth Trends for 2006-2016

When we look at total dwelling unit growth (see table below) rather than population, the national pattern is similar, but not as extreme. Dwelling unit growth in the more sustainable active core and transit suburbs was 22% over the past decade, compared to their share of only 15% of the population growth in this period. This is because new units in the active cores had about 1.76 people while new units in auto suburbs had 2.47 people, in 2016. However, even if dwelling units are our growth measure, 78% of new growth from 2006-2016 occurred in the less sustainable auto suburbs and exurbs.

Once again, the largest metropolitan areas showed some progress in managing a higher proportion of unit growth in more sustainable active cores and transit suburbs, with the Toronto CMA (33%), Montréal (25%), and Vancouver CMAs (38%) leading the way.

When we drill down even further within the metropolitan areas, the urban-suburban differences are even more extreme. 82% of new units within the City of Toronto (416 area code) were in active core and transit suburbs, while 99% of new units in the rest of the CMA (905 area code) were in auto suburbs and exurbs. On the Island of Montréal, 76% were more sustainable active core and transit suburbs, while the new growth off the Island was 93% in auto suburbs and exurbs.

Total dwelling unit growth from 2006-2011 within Canada's CMAs

	Total Dwelling Units in 2006 ^{1,2}		Total Dwelling Units in 2016		Total Dwelling Unit Growth 2006-2016		Share of Total Dwelling Unit Growth 2006-2016
Active Core	1,698,259	19%	1,912,110	19%	213,851	13%	15%
Transit Suburb	1,209,926	14%	1,315,979	13%	106,053	9%	7%
Auto Suburb	5,336,178	60%	6,326,671	61%	990,493	19%	68%
Exurban	612,434	7%	764,301	7%	151,867	25%	10%
TOTAL CMA^{3,4}	8,862,602	100%	10,325,115	100%	1,462,513	17%	100%

Data source : Statistics Canada, 2016 and 2006 Census Tract data

¹ This chart utilizes classifications from the 2016 Census and moves the population data backward

² Data for 2006 is sourced from the 2016 Census 'T9' classification exercise and are estimations due to census tract splits

³ Lethbridge and Belleville are new CMAs for the 2016 Census but have been omitted from this chart for comparison to previous

⁴ While all total population figures represent true totals, they are not always a true sum of the Active Core, Transit Suburb, Auto Suburb, and Exurban figures due to 'unclassified' census tracts in several CMAs

The Vancouver region set the best example for the nation from 2006-2016 with the lowest overall proportion of growth in auto suburbs and exurbs at 62%. The City of Vancouver should be proud that it managed to direct 90% of its unit growth to active core and transit suburbs, adding 258,000 new units in their more sustainable neighbourhoods.

However, Vancouver's most unusual achievements are in its suburban municipalities, where 18% of new units were in active cores and transit suburbs, a much greater proportion of sustainable suburban development than in other metropolitan regions. The Lower Mainland's transit-oriented developments in Burnaby Metrotown, New Westminster, Richmond's downtown and Surrey City Centre are good examples for suburban municipalities across Canada.

Conclusion

After a decade of developing a method to classify and map the suburban areas of Canada's 35 metropolitan areas, the results indicate that Canada is a more suburban nation with 67.5% of its population living in the suburbs in 2016.

When mapping the population growth from 2006-2016 within the active cores and transit suburbs, we found that both classifications grew by 9% and 8% respectively, which was below national CMA average population growth of 15%. The auto-dependent suburbs and the exurban areas grew by 17% and 20%, exceeding the national CMA average growth rate. The net effect of this trend is that 85% of the CMA population growth from 2006 – 2016 was in auto suburbs and exurbs. Only 15% of the population growth was in more sustainable active cores and transit suburbs.

The findings show that the population of Canadian auto-dependent communities are growing much faster than the national growth rate, which is significant to note when implementing policies guiding public health, transportation, education planning, political decisions, and community design.

Across Canada, the more sustainable active core and transit suburbs grew by 480,000 people, while auto suburb and exurban areas grew by 2,737,000 people, absorbing over 85% of the nation's population growth. Few observers would describe this as a sustainable outcome, or an optimal mix of locations for Canada's future population.

When we measure growth using dwelling units, the split is 22% active core and transit suburbs versus 78% auto suburbs and exurbs, due to larger family sizes in outer suburbs. So municipal agencies should monitor growth carefully and choose different indicators, depending if they are planning for people or for buildings. Population-based services such as schools and health care will still show the strongest new demands at the metropolitan edges of Canada's suburban nation.

So while there is much media attention to the intensification of our active cores and transit suburbs (see the media articles citing the research), we must constantly remember that there is over five times as much population growth in the automobile suburbs and exurbs.

What to do?

There is no single magic bullet to deal with the imbalance of urban and suburban growth in Canadian communities. A multi-pronged planning approach will be needed (Hodge & Gordon 2014, ch. 11) including:

- Rebalancing economic incentives that encourage suburban sprawl and discourage compact development (Kiel 2018; Thompson 2013; Blais 2010; Leinberger 2008).
- Better intensification in existing urban areas including “invisible density” in secondary suites and “gentle density” in rear lane housing. (Hess 2008; CMHC 2006a).
- Redevelopment of former industrial areas and brownfields on the edges of the inner-city, such as Brandt’s Creek in Kelowna (former rail yard), Edmonton’s Oliver Village; Wellington Square in Cambridge (foundry), Spencer Creek Village in Dundas; Toronto’s West Don Lands and Montréal’s Quai des Éclusiers (DeSousa 2008; CMHC 2006b).
- Waterfront redevelopment such as the work of Halifax’s Waterfront Development Corporation; Canada Lands Corporation on Montréal’s Lachine Canal; Waterfront Toronto; Vancouver’s Village at False Creek; and Victoria’s Docks Green (Grant, Holme & Pettman 2008; Gordon 2004).
- Military base and inner-city airport redevelopment such as Garrison Crossing in Chilliwack, BC; City Centre airport and Griesbach Village in Edmonton; Garrison Commons in Calgary; Montréal’s Bois Franc and Pleasantville in St. John’s (Tomalty & Haider 2010).
- Transit-Oriented Development including Vancouver’s SeaBus terminal and Richmond City Centre; The Bridges in Calgary, Brampton’s Mount Pleasant Village; Oakville’s Port Credit Village; and Village de la Gare, Mont-Saint-Hilaire QC (CMHC 2010; Dittmar & Ohland 2004).
- Street corridor redevelopment plans such as Vancouver’s Cambie Corridor and Toronto’s Avenues and Mid-Rise Plan (Vancouver 2011; Brook McIlroy 2011).
- Better design of new suburban development, such as Cornell in Markham, Calgary’s Garrison Woods and Surrey BC’s City Centre (Barnett & Beasley 2015; Williamson 2013; Tomalty & Haider 2010; Duany, Plater-Zyberk & Speck 2010; Grant 2009; Grant & Perrott 2009, 2011; Duany, Speck and Lydon 2009; Grant 2006; Gordon & Vipond 2005).
- Greyfield redevelopment of suburban shopping centres such as Vancouver’s Oakridge Centre; Markham’s Olde Thornhill Village; and Toronto’s Don Mills Centre (CMHC 2011; PriceWaterhouseCoopers 2002).
- Retrofitting existing suburbs using “sprawl repair” techniques, such as Burnaby’s Metrotown and Toronto’s Parkway Forest (Williamson 2013; Dunham-Jones & Williamson 2011; Tachieva 2010).

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**Still Suburban?
Growth in Canadian Suburbs, 2006-2016**

Council for Canadian Urbanism
Working Paper #2

**APPENDIX A:
Population Summary by Classification
for Census Metropolitan Areas, 2016**

**POPULATION IN CANADIAN CENSUS METROPOLITAN AREAS,
CORE / SUBURBS / EXURBAN PROPORTIONS, 2016 CENSUS, MODEL T9**

Census Metropolitan Area	Population in 2016*	Active Core		Transit Suburb		Auto Suburb		Exurban	
		Population	(%)	Population	%	Population	%	Population	%
Toronto	5,928,040	716,141	12%	889,532	15%	4,142,820	70%	168,252	3%
Montréal	4,098,927	706,910	17%	562,012	14%	2,708,563	66%	121,032	3%
Vancouver	2,463,431	397,076	16%	363,305	15%	1,643,519	67%	58,658	2%
Calgary	1,392,609	169,209	12%	119,437	9%	1,053,139	76%	47,484	3%
Ottawa-Gatineau	1,323,783	198,731	15%	123,897	9%	820,355	62%	180,800	14%
Edmonton	1,321,426	105,366	8%	187,512	14%	893,241	68%	134,948	10%
Québec	800,296	149,613	19%	78,987	10%	450,133	56%	121,563	15%
Winnipeg	778,489	115,092	15%	70,018	9%	526,836	68%	66,315	9%
Hamilton	747,545	89,599	12%	76,264	10%	534,074	71%	47,488	6%
Kitchener-Waterloo-Cambridge	523,894	57,780	11%	60,499	12%	377,139	72%	28,323	5%
London	494,069	71,238	14%	79,209	16%	273,792	55%	69,830	14%
St. Catharines-Niagara	406,074	43,688	11%	-	0%	314,270	77%	48,116	12%
Halifax	403,390	59,593	15%	53,832	13%	193,085	48%	96,824	24%
Oshawa	379,848	9,596	3%	32,580	9%	312,651	82%	25,021	7%
Victoria	367,770	77,369	21%	35,451	10%	240,278	65%	14,672	4%
Windsor	329,144	38,601	12%	23,858	7%	232,623	71%	33,492	10%
Saskatoon	295,095	36,746	12%	18,644	6%	184,824	63%	54,881	19%
Regina	236,481	21,039	9%	40,460	17%	151,844	64%	23,138	10%
Sherbrooke	212,105	49,327	23%	25,366	12%	83,449	39%	53,963	25%
St. John's	205,955	30,028	15%	-	0%	153,110	74%	22,817	11%
Barrie	197,059	7,437	4%	10,072	5%	150,424	76%	29,126	15%
Kelowna	194,882	19,217	10%	15,237	8%	132,367	68%	28,061	14%
Abbotsford-Mission	180,518	-	0%	-	0%	150,249	83%	30,269	17%
Greater Sudbury	164,689	12,333	7%	16,721	10%	96,604	59%	39,026	24%
Kingston	161,175	22,942	14%	24,153	15%	77,323	48%	36,757	23%
Saguenay	160,980	9,310	6%	-	0%	89,907	56%	61,763	38%
Trois-Rivières	156,042	19,860	13%	-	0%	90,805	58%	45,377	29%
Guelph	151,984	41,218	27%	-	0%	90,576	60%	20,190	13%
Moncton	144,810	27,990	19%	-	0%	82,335	57%	34,485	24%
Brantford	134,203	4,454	3%	-	0%	103,976	77%	25,773	19%
Saint John	126,202	14,539	12%	12,178	10%	56,110	44%	43,256	34%
Peterborough	121,721	31,627	26%	2,695	2%	46,484	38%	40,915	34%
Thunder Bay	121,621	19,061	16%	1,242	1%	66,664	55%	34,654	28%
Lethbridge	117,394	11,123	9%	3,493	3%	92,370	79%	10,408	9%
Belleville	103,472	9,252	9%	5,604	5%	53,455	52%	35,092	34%
TOTAL CMA	24,945,123	3,393,105	14%	2,932,258	12%	16,669,394	67%	1,932,769	8%

**Note: While all total population figures represent true totals, they are not always a true sum of the Active Core, Transit Suburb, Auto Suburb, and Exurban figures due to 'unclassified' census tracts in several CMAs*

Data source : Statistics Canada, 2016 Census Tract Data

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**Still Suburban?
Growth in Canadian Suburbs, 2006-2016**

Council for Canadian Urbanism
Working Paper #2

**APPENDIX B:
Population Growth Summary
for Census Metropolitan Areas, 2006-2016**

POPULATION GROWTH IN CANADIAN CENSUS METROPOLITAN AREAS, CORE / SUBURBS / EXURBAN PROPORTIONS, 2016 CENSUS, MODEL T9

Census Metropolitan Area ¹	2006 Pop ⁿ ^{2,3}	2016 Pop ⁿ ³	2006-16 Population Growth		Active Core ⁴					Transit Suburb ⁴					Auto Suburb ⁴					Exurban ⁴												
					2006 Population ^{2,3} (share of total)		2016 Population (share of total)		2006-16 Growth in Classification		CMA Growth Share	2006 Population ^{2,3} (share of total)		2016 Population (share of total)		2006-16 Growth in Classification		CMA Growth Share	2006 Population ^{2,3} (share of total)		2016 Population (share of total)		2006-16 Growth in Classification		CMA Growth Share							
Toronto	5,105,717	5,928,040	822,323	16%	603,798	12%	716,141	12%	112,343	19%	14%	814,190	16%	889,532	15%	75,342	9%	9%	3,533,122	69%	4,142,820	70%	609,698	17%	74%	144,573	3%	168,252	3%	23,679	16%	3%
Montréal	3,634,709	4,098,927	464,218	13%	658,962	18%	706,910	17%	47,948	7%	10%	532,640	15%	562,012	14%	29,372	6%	6%	2,350,123	65%	2,708,563	66%	358,440	15%	77%	92,671	3%	121,032	3%	28,361	31%	6%
Vancouver	2,112,800	2,463,431	350,631	17%	335,929	16%	397,076	16%	61,147	18%	17%	321,652	15%	363,305	15%	41,653	13%	12%	1,406,535	67%	1,643,519	67%	236,984	17%	68%	47,757	2%	58,658	2%	10,901	23%	3%
Calgary	1,088,090	1,392,609	304,519	28%	151,753	14%	169,209	12%	17,456	12%	6%	94,921	9%	119,437	9%	24,516	26%	8%	800,464	74%	1,053,139	76%	252,675	32%	83%	37,534	3%	47,484	3%	9,950	27%	3%
Ottawa-Gatineau	1,130,549	1,323,783	193,234	17%	188,445	17%	198,731	15%	10,286	5%	5%	123,777	11%	123,897	9%	120	0%	0%	677,144	60%	820,355	62%	143,211	21%	74%	141,183	12%	180,800	14%	39,617	28%	21%
Edmonton	1,038,803	1,321,426	282,623	27%	99,577	10%	105,366	8%	5,789	6%	2%	165,850	16%	187,512	14%	21,662	13%	8%	661,286	64%	893,241	68%	231,955	35%	82%	111,526	11%	134,948	10%	23,422	21%	8%
Québec	715,499	800,296	84,797	12%	148,345	21%	149,613	19%	1,268	1%	1%	77,677	11%	78,987	10%	1,310	2%	2%	397,382	56%	450,133	56%	52,751	13%	62%	92,096	13%	121,563	15%	29,467	32%	35%
Winnipeg	694,668	778,489	83,821	12%	110,557	16%	115,092	15%	4,535	4%	5%	66,919	10%	70,018	9%	3,099	5%	4%	462,288	67%	526,836	68%	64,548	14%	77%	54,673	8%	66,315	9%	11,642	21%	14%
Hamilton	690,869	747,545	56,676	8%	92,268	13%	89,599	12%	-2,669	-3%	-5%	77,981	11%	76,264	10%	-1,717	-2%	-3%	477,367	69%	534,074	71%	56,707	12%	100%	43,252	6%	47,488	6%	4,236	10%	7%
Kitchener-Wat.-Cam.	451,227	523,894	72,667	16%	54,619	12%	57,780	11%	3,161	6%	4%	58,921	13%	60,499	12%	1,578	3%	2%	318,460	71%	377,139	72%	58,679	18%	81%	18,102	4%	28,323	5%	10,221	56%	14%
London	457,720	494,069	36,349	8%	72,657	16%	71,238	14%	-1,419	-2%	-4%	72,086	16%	79,209	16%	7,123	10%	20%	249,328	54%	273,792	55%	24,464	10%	67%	63,649	14%	69,830	14%	6,181	10%	17%
St. Catharines-Niagara	390,317	406,074	15,757	4%	43,682	11%	43,688	11%	6	0%	0%	0	-	0	-	0	-	0%	302,864	78%	314,270	77%	11,406	4%	72%	43,771	11%	48,116	12%	4,345	10%	28%
Halifax	372,857	403,390	30,533	8%	56,970	15%	59,593	15%	2,623	5%	9%	52,274	14%	53,832	13%	1,558	3%	5%	174,216	47%	193,085	48%	18,869	11%	62%	89,328	24%	96,824	24%	7,496	8%	25%
Oshawa	330,594	379,848	49,254	15%	9,236	3%	9,596	3%	360	4%	1%	30,038	9%	32,580	9%	2,542	8%	5%	271,887	82%	312,651	82%	40,764	15%	83%	19,433	6%	25,021	7%	5,588	29%	11%
Victoria	330,134	367,770	37,636	11%	70,147	21%	77,369	21%	7,222	10%	19%	33,215	10%	35,451	10%	2,236	7%	6%	213,004	65%	240,278	65%	27,274	13%	72%	13,769	4%	14,672	4%	903	7%	2%
Windsor	323,338	329,144	5,806	2%	40,691	13%	38,601	12%	-2,090	-5%	-36%	24,490	8%	23,858	7%	-632	-3%	-11%	224,522	69%	232,623	71%	8,101	4%	140%	33,153	10%	33,492	10%	339	1%	6%
Saskatoon	233,792	295,095	61,303	26%	35,959	15%	36,746	12%	787	2%	1%	17,448	7%	18,644	6%	1,196	7%	2%	145,005	62%	184,824	63%	39,819	27%	65%	35,380	15%	54,881	19%	19,501	55%	32%
Regina	194,971	236,481	41,510	21%	19,718	10%	21,039	9%	1,321	7%	3%	37,268	19%	40,460	17%	3,192	9%	8%	120,353	62%	151,844	64%	31,491	26%	76%	17,632	9%	23,138	10%	5,506	31%	13%
Sherbrooke	186,920	212,105	25,185	13%	50,733	27%	49,327	23%	-1,406	-3%	-6%	25,395	14%	25,366	12%	-29	-%	-%	69,886	37%	83,449	39%	13,563	19%	54%	40,907	22%	53,963	25%	13,056	32%	52%
St. John's	181,111	205,955	24,844	14%	31,160	17%	30,028	15%	-1,132	-4%	-5%	0	-	0	-	0	-	-	132,479	73%	153,110	74%	20,631	16%	83%	17,472	10%	22,817	11%	5,345	31%	22%
Barrie	177,060	197,059	19,999	11%	7,170	4%	7,437	4%	267	4%	1%	10,070	6%	10,072	5%	2	0%	0%	132,138	75%	150,424	76%	18,286	14%	91%	27,682	16%	29,126	15%	1,444	5%	7%
Kelowna	162,132	194,882	32,750	20%	17,640	11%	19,217	10%	1,577	0%	5%	13,142	8%	15,237	8%	2,095	16%	6%	109,051	67%	132,367	68%	23,316	21%	71%	22,299	14%	28,061	14%	5,762	26%	18%
Abbotsford-Mission	159,020	180,518	21,498	14%	0	-	0	-	0	-	-	0	-	0	-	0	-	-	133,563	84%	150,249	83%	16,686	12%	78%	25,457	16%	30,269	17%	4,812	19%	22%
Greater Sudbury	158,244	164,689	6,445	4%	12,506	8%	12,333	7%	-173	-1%	-3%	17,328	11%	16,721	10%	-607	-4%	-9%	93,920	59%	96,604	59%	2,684	3%	42%	34,490	22%	39,026	24%	4,536	13%	70%
Kingston	152,358	161,175	8,817	6%	24,110	16%	22,942	14%	-1,168	-5%	-13%	24,142	16%	24,153	15%	11	0%	0%	67,178	44%	77,323	48%	10,145	15%	115%	36,461	24%	36,757	23%	296	1%	3%
Saguenay	151,643	160,980	9,337	6%	10,274	7%	9,310	6%	-964	0%	-10%	0	-	0	-	0	-	-	89,818	59%	89,907	56%	89	0%	1%	51,551	34%	61,763	38%	10,212	20%	109%
Trois-Rivières	141,529	156,042	14,513	10%	20,782	15%	19,860	13%	-922	0%	-6%	0	-	0	-	0	-	-	86,793	61%	90,805	58%	4,012	5%	28%	33,954	24%	45,377	29%	11,423	34%	79%
Guelph	127,009	151,984	24,975	20%	40,677	32%	41,218	27%	541	1%	2%	0	-	0	-	0	-	-	74,266	58%	90,576	60%	16,310	22%	65%	12,066	10%	20,190	13%	8,124	67%	33%
Moncton	126,416	144,810	18,394	15%	27,689	22%	27,990	19%	301	0%	2%	0	-	0	-	0	-	-	66,983	53%	82,335	57%	15,352	23%	83%	31,744	25%	34,485	24%	2,741	9%	15%
Brantford	124,607	134,203	9,596	8%	4,310	3%	4,454	3%	144	0%	2%	0	-	0	-	0	-	-	96,111	77%	103,976	77%	7,865	8%	82%	24,186	19%	25,773	19%	1,587	7%	17%
Saint John	122,333	126,202	3,869	3%	15,264	12%	14,539	12%	-725	-5%	-19%	12,703	10%	12,178	10%	-525	-4%	-14%	52,358	43%	56,110	44%	3,752	7%	97%	41,876	34%	43,256	34%	1,380	3%	36%
Peterborough	116,341	121,721	5,380	5%	31,753	27%	31,627	26%	-126	0%	-2%	2,515	2%	2,695	2%	180	7%	3%	41,690	36%	46,484	38%	4,794	11%	89%	40,383	35%	40,915	34%	532	1%	10%
Thunder Bay	122,905	121,621	-1,284	-1%	19,925	16%	19,061	16%	-864	0%	67%	1,274	1%	1,242	1%	-32	-3%	2%	68,803	56%	66,664	55%	-2,139	-3%	167%	32,903	27%	34,654	28%	1,751	5%	-136%
TOTAL CMA	21,506,282	24,724,257	3,217,975	15%	3,107,305	14%	3,372,730	14%	265,425	9%	8%	2,707,917	13%	2,923,161	12%	215,244	8%	7%	14,100,386	66%	16,523,569	67%	2,423,183	17%	75%	1,572,913	7%	1,887,269	8%	314,356	20%	10%

¹ Lethbridge and Belleville are new CMAs for the 2016 census but have been omitted from this chart for the purposes of comparison to previous work

Data sources : Statistics Canada, 2006 and 2016 Census Tract Data

² Data for 2006 is sourced from the 2016 Census 'T9' classification exercise and are estimations due to census tract splits

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³ While all total population figures represent true totals, they are not always a true sum of the Active Core, Transit Suburb, Auto Suburb, and Exurban figures due to 'unclassified' census tracts in several CMAs

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⁴ This chart utilizes classifications from the 2016 Census and moves the population data backward



**Still Suburban?
Growth in Canadian Suburbs, 2006-2016**

Council for Canadian Urbanism
Working Paper #2

**APPENDIX C:
Population Classification and Growth Charts
for all 35 CMAs**

Abbotsford-Mission CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	-	-	-	-	-	-	-
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	133,563	84.0%	150,249	83.2%	16,686	12.5%	77.6%
Exurban	25,457	16.0%	30,269	16.8%	4,812	18.9%	22.4%
Total	159,020		180,518		21,498	13.5%	

Barrie CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	7,170	4.0%	7,437	3.8%	267	3.7%	1.3%
Transit Suburb	10,070	5.7%	10,072	5.1%	2	0.0%	0.0%
Auto Suburb	132,138	74.6%	150,424	76.3%	18,286	13.8%	91.4%
Exurban	27,682	15.6%	29,126	14.8%	1,444	5.2%	7.2%
Total	177,060		197,059		19,999	11.3%	

Belleville CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	9,660	10.6%	9,252	8.9%	-408	-4.2%	-3.4%
Transit Suburb	5,962	6.5%	5,604	5.4%	-358	-6.0%	-3.0%
Auto Suburb	51,395	56.2%	53,455	51.7%	2,060	4.0%	17.2%
Exurban	24,415	26.7%	35,092	33.9%	10,677	43.7%	89.3%
Total	91,518		103,472		11,954	13.1%	

Brantford CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	4,310	3.5%	4,454	3.3%	144	3.3%	1.5%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	96,111	77.1%	103,976	77.5%	7,865	8.2%	82.0%
Exurban	24,186	19.4%	25,773	19.2%	1,587	6.6%	16.5%
Total	124,607		134,203		9,596	7.7%	

Calgary CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	151,753	13.9%	169,209	12.2%	17,456	11.5%	5.7%
Transit Suburb	94,921	8.7%	119,437	8.6%	24,516	25.8%	8.1%
Auto Suburb	800,464	73.6%	1,053,139	75.6%	252,675	31.6%	83.0%
Exurban	37,534	3.4%	47,484	3.4%	9,950	26.5%	3.3%
Total	1,088,090		1,392,609		304,519	28.0%	

Edmonton CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	99,577	9.6%	105,366	8.0%	5,789	5.8%	2.0%
Transit Suburb	165,850	16.0%	187,512	14.2%	21,662	13.1%	7.7%
Auto Suburb	661,286	63.7%	893,241	67.6%	231,955	35.1%	82.1%
Exurban	111,526	10.7%	134,948	10.2%	23,422	21.0%	8.3%
Total	1,038,803		1,321,426		282,623	27.2%	

Greater Sudbury CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	12,506	7.9%	12,333	7.5%	-173	-1.4%	-2.7%
Transit Suburb	17,328	11.0%	16,721	10.2%	-607	-3.5%	-9.4%
Auto Suburb	93,920	59.4%	96,604	58.7%	2,684	2.9%	41.6%
Exurban	34,490	21.8%	39,026	23.7%	4,536	13.2%	70.4%
Total	158,244		164,689		6,445	4.1%	

Guelph CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	40,677	32.0%	41,218	27.1%	541	1.3%	2.2%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	74,266	58.5%	90,576	59.6%	16,310	22.0%	65.3%
Exurban	12,066	9.5%	20,190	13.3%	8,124	67.3%	32.5%
Total	127,009		151,984		24,975	19.7%	

Halifax CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	56,970	15.3%	59,593	14.8%	2,623	4.6%	8.6%
Transit Suburb	52,274	14.0%	53,832	13.3%	1,558	3.0%	5.1%
Auto Suburb	174,216	46.7%	193,085	47.9%	18,869	10.8%	61.8%
Exurban	89,328	24.0%	96,824	24.0%	7,496	8.4%	24.5%
Total	372,857		403,390		30,533	8.2%	

Hamilton CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	92,268	13.4%	89,599	12.0%	-2,669	-2.9%	-4.7%
Transit Suburb	77,981	11.3%	76,264	10.2%	-1,717	-2.2%	-3.0%
Auto Suburb	477,367	69.1%	534,074	71.4%	56,707	11.9%	100.1%
Exurban	43,252	6.3%	47,488	6.4%	4,236	9.8%	7.5%
Total	690,869		747,545		56,676	8.2%	

Kelowna CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	17,640	10.9%	19,217	9.9%	1,577	8.9%	4.8%
Transit Suburb	13,142	8.1%	15,237	7.8%	2,095	15.9%	6.4%
Auto Suburb	109,051	67.3%	132,367	67.9%	23,316	21.4%	71.2%
Exurban	22,299	13.8%	28,061	14.4%	5,762	25.8%	17.6%
Total	162,132		194,882		32,750	20.2%	

Kingston CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	24,110	15.8%	22,942	14.2%	-1,168	-4.8%	-13.2%
Transit Suburb	24,142	15.8%	24,153	15.0%	11	0.0%	0.1%
Auto Suburb	67,178	44.1%	77,323	48.0%	10,145	15.1%	115.1%
Exurban	36,461	23.9%	36,757	22.8%	296	0.8%	3.4%
Total	152,358		161,175		8,817	5.8%	

Kitchener-Waterloo-Cambridge CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	54,619	12.1%	57,780	11.0%	3,161	5.8%	4.3%
Transit Suburb	58,921	13.1%	60,499	11.5%	1,578	2.7%	2.2%
Auto Suburb	318,460	70.6%	377,139	72.0%	58,679	18.4%	80.8%
Exurban	18,102	4.0%	28,323	5.4%	10,221	56.5%	14.1%
Total	451,227		523,894		72,667	16.1%	

Lethbridge CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	11,289	11.9%	11,123	9.5%	-166	-1.5%	-0.7%
Transit Suburb	3,703	3.9%	3,493	3.0%	-210	-5.7%	-0.9%
Auto Suburb	69,797	73.3%	92,370	78.7%	22,573	32.3%	101.6%
Exurban	10,380	10.9%	10,408	8.9%	28	0.3%	0.1%
Total	95,169		117,394		22,225	23.4%	

London CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	72,657	15.9%	71,238	14.4%	-1,419	-2.0%	-3.9%
Transit Suburb	72,086	15.7%	79,209	16.0%	7,123	9.9%	19.6%
Auto Suburb	249,328	54.5%	273,792	55.4%	24,464	9.8%	67.3%
Exurban	63,649	13.9%	69,830	14.1%	6,181	9.7%	17.0%
Total	457,720		494,069		36,349	7.9%	

Moncton CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	27,689	21.9%	27,990	19.3%	301	1.1%	1.6%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	66,983	53.0%	82,335	56.9%	15,352	22.9%	83.5%
Exurban	31,744	25.1%	34,485	23.8%	2,741	8.6%	14.9%
Total	126,416		144,810		18,394	14.6%	

Montréal CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	658,962	18.1%	706,910	17.2%	47,948	7.3%	10.3%
Transit Suburb	532,640	14.7%	562,012	13.7%	29,372	5.5%	6.3%
Auto Suburb	2,350,123	64.7%	2,708,563	66.1%	358,440	15.3%	77.2%
Exurban	92,671	2.5%	121,032	3.0%	28,361	30.6%	6.1%
Total	3,634,709		4,098,927		464,218	12.8%	

Montréal On Island	2006 Population		2016 Population		2006-2016 Population Growth		Share of Population Growth
Active Core	622,062	33.7%	652,372	33.7%	30,310	4.9%	34.6%
Transit Suburb	507,971	27.5%	531,989	27.5%	24,018	4.7%	27.4%
Auto Suburb	717,304	38.8%	750,696	38.8%	33,392	4.7%	38.1%
Exurban	962	0.1%	926	0.0%	-36	-3.7%	-0.0%
Total	1,848,587		1,936,238		87,651	4.7%	

Montréal Off Island	2006 Population		2016 Population		2006-2016 Population Growth		Share of Population Growth
Active Core	36,900	2.1%	54,538	2.5%	17,638	47.8%	4.7%
Transit Suburb	24,669	1.4%	30,023	1.4%	5,354	21.7%	1.4%
Auto Suburb	1,632,819	91.4%	1,957,867	90.5%	325,048	19.9%	86.3%
Exurban	91,709	5.1%	120,106	5.6%	28,397	31.0%	7.5%
Total	1,786,122		2,162,689		376,567	21.1%	

Oshawa CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	9,236	2.8%	9,596	2.5%	360	3.9%	0.7%
Transit Suburb	30,038	9.1%	32,580	8.6%	2,542	8.5%	5.2%
Auto Suburb	271,887	82.2%	312,651	82.3%	40,764	15.0%	82.8%
Exurban	19,433	5.9%	25,021	6.6%	5,588	28.8%	11.3%
Total	330,594		379,848		49,254	14.9%	

Ottawa-Gatineau CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	188,445	16.7%	198,731	15.0%	10,286	5.5%	5.3%
Transit Suburb	123,777	10.9%	123,897	9.4%	120	0.1%	0.1%
Auto Suburb	677,144	59.9%	820,355	62.0%	143,211	21.1%	74.1%
Exurban	141,183	12.5%	180,800	13.7%	39,617	28.1%	20.5%
Total	1,130,549		1,323,783		193,234	17.1%	

City of Ottawa - Inside Greenbelt	2006 Population		2016 Population		2006-2016 Population Growth		Share of Population Growth
Active Core	154,939	34.3%	167,973	36.0%	13,034	8.4%	87.0%
Transit Suburb	123,777	27.4%	123,897	26.6%	120	0.1%	0.8%
Auto Suburb	172,554	38.2%	174,385	37.4%	1,831	1.1%	12.2%
Exurban	-	-	-	-	-	-	-
Total	451,270		466,255		14,985	3.3%	

City of Ottawa - Outside Greenbelt	2006 Population		2016 Population		2006-2016 Population Growth		Share of Population Growth
Active Core	2,219	0.6%	1,959	0.4%	-260	-11.7%	-0.2%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	305,035	77.2%	409,340	77.9%	104,305	34.2%	80.2%
Exurban	88,088	22.3%	114,172	21.7%	26,084	29.6%	20.0%
Total	395,342		525,471		130,129	32.9%	

Peterborough CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	31,753	27.3%	31,627	26.0%	-126	-0.4%	-2.3%
Transit Suburb	2,515	2.2%	2,695	2.2%	180	7.2%	3.3%
Auto Suburb	41,690	35.8%	46,484	38.2%	4,794	11.5%	89.1%
Exurban	40,383	34.7%	40,915	33.6%	532	1.3%	9.9%
Total	116,341		121,721		5,380	4.6%	

Québec CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	148,345	20.7%	149,613	18.7%	1,268	0.9%	1.5%
Transit Suburb	77,677	10.9%	78,987	9.9%	1,310	1.7%	1.5%
Auto Suburb	397,382	55.5%	450,133	56.2%	52,751	13.3%	62.2%
Exurban	92,096	12.9%	121,563	15.2%	29,467	32.0%	34.8%
Total	715,499		800,296		84,797	11.9%	

Regina CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	19,718	10.1%	21,039	8.9%	1,321	6.7%	3.2%
Transit Suburb	37,268	19.1%	40,460	17.1%	3,192	8.6%	7.7%
Auto Suburb	120,353	61.7%	151,844	64.2%	31,491	26.2%	75.9%
Exurban	17,632	9.0%	23,138	9.8%	5,506	31.2%	13.3%
Total	194,971		236,481		41,510	21.3%	

Saguenay CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	10,274	6.8%	9,310	5.8%	-964	-9.4%	-10.3%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	89,818	59.2%	89,907	55.8%	89	0.1%	1.0%
Exurban	51,551	34.0%	61,763	38.4%	10,212	19.8%	109.4%
Total	151,643		160,980		9,337	6.2%	

Saint John CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	15,264	12.5%	14,539	11.5%	-725	-4.7%	-18.7%
Transit Suburb	12,703	10.4%	12,178	9.6%	-525	-4.1%	-13.6%
Auto Suburb	52,358	42.8%	56,110	44.5%	3,752	7.2%	97.0%
Exurban	41,876	34.2%	43,256	34.3%	1,380	3.3%	35.7%
Total	122,333		126,202		3,869	3.2%	

Saskatoon CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	35,959	15.4%	36,746	12.5%	787	2.2%	1.3%
Transit Suburb	17,448	7.5%	18,644	6.3%	1,196	6.9%	2.0%
Auto Suburb	145,005	62.0%	184,824	62.6%	39,819	27.5%	65.0%
Exurban	35,380	15.1%	54,881	18.6%	19,501	55.1%	31.8%
Total	233,792		295,095		61,303	26.2%	

Sherbrooke CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	50,733	27.1%	49,327	23.3%	-1,406	-2.8%	-5.6%
Transit Suburb	25,395	13.6%	25,366	12.0%	-29	-0.1%	-0.1%
Auto Suburb	69,886	37.4%	83,449	39.3%	13,563	19.4%	53.9%
Exurban	40,907	21.9%	53,963	25.4%	13,056	31.9%	51.8%
Total	186,920		212,105		25,185	13.5%	

St. Catharines-Niagara CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	43,682	11.2%	43,688	10.8%	6	0.0%	0.0%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	302,864	77.6%	314,270	77.4%	11,406	3.8%	72.4%
Exurban	43,771	11.2%	48,116	11.8%	4,345	9.9%	27.6%
Total	390,317		406,074		15,757	4.0%	

St. John's CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	31,160	17.2%	30,028	14.6%	-1,132	-3.6%	-4.6%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	132,479	73.1%	153,110	74.3%	20,631	15.6%	83.0%
Exurban	17,472	9.6%	22,817	11.1%	5,345	30.6%	21.5%
Total	181,111		205,955		24,844	13.7%	

Thunder Bay CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	19,925	16.2%	19,061	15.7%	-864	-4.3%	-67.3%
Transit Suburb	1,274	1.0%	1,242	1.0%	-32	-2.5%	-2.5%
Auto Suburb	68,803	56.0%	66,664	54.8%	-2,139	-3.1%	-166.6%
Exurban	32,903	26.8%	34,654	28.5%	1,751	5.3%	136.4%
Total	122,905		121,621		-1,284	-1.0%	

Toronto CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	603,798	11.8%	716,141	12.1%	112,343	18.6%	13.7%
Transit Suburb	814,190	15.9%	889,532	15.0%	75,342	9.3%	9.2%
Auto Suburb	3,533,122	69.2%	4,142,820	69.9%	609,698	17.3%	74.1%
Exurban	144,573	2.8%	168,252	2.8%	23,679	16.4%	2.9%
Total	5,105,717		5,928,040		822,323	16.1%	

City of Toronto (416 area code)	2006 Population		2016 Population		2006-2016 Population Growth		Share of Population Growth
Active Core	591,693	23.7%	703,821	25.9%	112,128	19.0%	49.2%
Transit Suburb	809,553	32.5%	884,334	32.5%	74,781	9.2%	32.8%
Auto Suburb	1,091,503	43.8%	1,133,104	41.6%	41,601	3.8%	18.2%
Exurban	-	-	-	-	-	-	-
Total	2,493,981		2,722,067		228,086	9.1%	

Toronto Outer Suburbs (905 area code)	2006 Population		2016 Population		2006-2016 Population Growth		Share of Population Growth
Active Core	12,105	0.5%	12,320	0.4%	215	1.8%	0.0%
Transit Suburb	4,637	0.2%	5,198	0.2%	561	12.1%	0.1%
Auto Suburb	2,441,619	93.5%	3,009,716	93.9%	568,097	23.3%	95.6%
Exurban	144,573	5.5%	168,252	5.2%	23,679	16.4%	4.0%
Total	2,611,736		3,205,973		594,237 22.8%		

Trois-Rivières CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	20,782	14.7%	19,860	12.7%	-922	-4.4%	-6.4%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	86,793	61.3%	90,805	58.2%	4,012	4.6%	27.6%
Exurban	33,954	24.0%	45,377	29.1%	11,423	33.6%	78.7%
Total	141,529		156,042		14,513 10.3%		

Vancouver CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	335,929	15.9%	397,076	16.1%	61,147	18.2%	17.4%
Transit Suburb	321,652	15.2%	363,305	14.7%	41,653	12.9%	11.9%
Auto Suburb	1,406,535	66.6%	1,643,519	66.7%	236,984	16.8%	67.6%
Exurban	47,757	2.3%	58,658	2.4%	10,901	22.8%	3.1%
Total	2,112,800		2,463,431		350,631 16.6%		

City of Vancouver	2006 Population		2016 Population		2006-2016 Population Growth		Share of Population Growth
Active Core	269,015	46.6%	310,311	49.0%	41,296	15.4%	73.9%
Transit Suburb	181,113	31.4%	193,382	30.5%	12,269	6.8%	22.0%
Auto Suburb	127,119	22.0%	129,445	20.4%	2,326	1.8%	4.2%
Exurban	-	-	-	-	-	-	-
Total	577,247		633,138		55,891 9.7%		

Vancouver Suburbs	2006 Population		2016 Population		2006-2016 Population Growth		Share of Population Growth
Active Core	66,913	4.4%	86,765	4.7%	19,852	29.7%	6.7%
Transit Suburb	140,539	9.2%	169,923	9.3%	29,384	20.9%	10.0%
Auto Suburb	1,279,416	83.3%	1,514,074	82.7%	234,658	18.3%	79.6%
Exurban	47,757	3.1%	58,658	3.2%	10,901	22.8%	3.7%
Total	1,535,553		1,830,293		294,740 19.2%		

Victoria CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	70,147	21.2%	77,369	21.0%	7,222	10.3%	19.2%
Transit Suburb	33,215	10.1%	35,451	9.6%	2,236	6.7%	5.9%
Auto Suburb	213,004	64.5%	240,278	65.3%	27,274	12.8%	72.5%
Exurban	13,769	4.2%	14,672	4.0%	903	6.6%	2.4%
Total	330,134		367,770		37,636	11.4%	

Windsor CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	40,691	12.6%	38,601	11.7%	-2,090	-5.1%	-36.0%
Transit Suburb	24,490	7.6%	23,858	7.2%	-632	-2.6%	-10.9%
Auto Suburb	224,522	69.4%	232,623	70.7%	8,101	3.6%	139.5%
Exurban	33,153	10.3%	33,492	10.2%	339	1.0%	5.8%
Total	323,338		329,144		5,806	1.8%	

Winnipeg CMA	2006 Population		2016 Population		2006-2016 Population Growth		Share of CMA Population Growth
Active Core	110,557	15.9%	115,092	14.8%	4,535	4.1%	5.4%
Transit Suburb	66,919	9.6%	70,018	9.0%	3,099	4.6%	3.7%
Auto Suburb	462,288	66.5%	526,836	67.7%	64,548	14.0%	77.0%
Exurban	54,673	7.9%	66,315	8.5%	11,642	21.3%	13.9%
Total	694,668		778,489		83,821	12.1%	



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**APPENDIX D:
Dwelling Unit Summary by Classification
for Census Metropolitan Areas, 2016**

TOTAL DWELLING UNITS IN CANADIAN CENSUS METROPOLITAN AREAS, CORE / SUBURBS / EXURBAN PROPORTIONS, 2016 CENSUS, MODEL T9

Census Metropolitan Area	Total Dwelling Units in 2016*	Active Core		Transit Suburb		Auto Suburb		Exurban	
		Total DUs	%	Total DUs	%	Total DUs	%	Total DUs	%
Toronto	2,235,145	387,836	17%	371,542	17%	1,411,814	63%	60,221	3%
Montréal	1,823,281	400,373	22%	264,189	14%	1,108,190	61%	50,500	3%
Vancouver	1,027,613	230,340	22%	156,748	15%	617,956	60%	22,245	2%
Calgary	544,870	95,549	18%	46,769	9%	384,318	71%	16,876	3%
Ottawa-Gatineau	571,146	115,042	20%	59,102	10%	322,452	56%	74,550	13%
Edmonton	537,634	62,507	12%	82,738	15%	339,877	63%	52,419	10%
Québec	382,308	89,879	24%	43,966	12%	196,577	51%	51,886	14%
Winnipeg	321,484	59,507	19%	31,341	10%	205,744	64%	24,782	8%
Hamilton	306,034	49,680	16%	35,392	12%	203,964	67%	16,998	6%
Kitchener-Waterloo-Cambridge	210,896	33,613	16%	27,729	13%	139,535	66%	9,960	5%
London	220,452	44,116	20%	39,522	18%	110,306	50%	26,508	12%
St. Catharines-Niagara	180,606	23,497	13%	-	0%	135,726	75%	21,383	12%
Halifax	187,478	34,471	18%	29,976	16%	81,917	44%	41,097	22%
Oshawa	142,462	5,422	4%	13,269	9%	114,682	81%	9,089	6%
Victoria	172,559	45,212	26%	16,945	10%	103,828	60%	6,574	4%
Windsor	140,408	22,496	16%	11,888	8%	92,391	66%	13,370	10%
Saskatoon	124,766	20,384	16%	8,343	7%	75,559	61%	20,480	16%
Regina	101,719	12,196	12%	18,258	18%	61,946	61%	9,319	9%
Sherbrooke	106,082	28,234	27%	14,144	13%	37,828	36%	25,876	24%
St. John's	92,353	16,495	18%	-	0%	66,864	72%	8,994	10%
Barrie	76,336	4,432	6%	4,714	6%	55,924	73%	11,266	15%
Kelowna	88,374	10,269	12%	8,793	10%	56,620	64%	12,692	14%
Abbotsford-Mission	65,967	-	0%	-	0%	56,025	85%	9,942	15%
Greater Sudbury	76,619	8,098	11%	9,777	13%	41,851	55%	16,890	22%
Kingston	77,173	16,849	22%	12,458	16%	31,134	40%	16,732	22%
Saguenay	77,968	6,228	8%	-	0%	42,487	54%	29,253	38%
Trois-Rivières	77,734	13,104	17%	-	0%	44,814	58%	19,816	25%
Guelph	63,324	20,765	33%	-	0%	35,162	56%	7,397	12%
Moncton	66,699	16,225	24%	-	0%	35,556	53%	14,918	22%
Brantford	54,419	2,583	5%	-	0%	42,476	78%	9,360	17%
Saint John	58,398	9,322	16%	6,307	11%	23,300	40%	19,403	33%
Peterborough	55,662	16,373	29%	1,370	2%	19,169	34%	18,750	34%
Thunder Bay	57,146	11,013	19%	699	1%	30,679	54%	14,755	26%
Lethbridge	48,317	5,829	12%	1,437	3%	37,901	78%	3,150	7%
Belleville	45,050	4,868	11%	2,919	6%	23,218	52%	14,012	31%
TOTAL CMA	10,418,482	1,922,807	18%	1,320,335	13%	6,387,790	61%	781,463	8%

**Note: While all total dwelling unit figures represent true totals, they are not always a true sum of the Active Core, Transit Suburb, Auto Suburb, and Exurban figures due to 'unclassified' census tracts in several CMAs*

Data source : Statistics Canada, 2016 Census Tract Data

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**APPENDIX E:
Dwelling Unit Growth Summary
for Census Metropolitan Areas, 2006-2016**



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**APPENDIX F:
Dwelling Unit Classification and Growth Charts
for all 35 CMAs**

Abbotsford-Mission CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	-	-	-	-	-	-	-
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	49,568	85.3%	56,025	84.9%	6,457	13.0%	82.1%
Exurban	8,531	14.7%	9,942	15.1%	1,411	16.5%	17.9%
Total	58,099		65,967		7,868	13.5%	

Barrie CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	3,885	5.8%	4,432	5.8%	547	14.1%	6.1%
Transit Suburb	4,467	6.6%	4,714	6.2%	247	5.5%	2.8%
Auto Suburb	48,790	72.4%	55,924	73.3%	7,134	14.6%	79.6%
Exurban	10,236	15.2%	11,266	14.8%	1,030	10.1%	11.5%
Total	67,378		76,336		8,958	13.3%	

Belleville CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	4,949	12.7%	4,868	10.8%	-81	-1.6%	-1.3%
Transit Suburb	2,913	7.5%	2,919	6.5%	6	0.2%	0.1%
Auto Suburb	21,711	55.9%	23,218	51.5%	1,507	6.9%	24.3%
Exurban	9,243	23.8%	14,012	31.1%	4,769	51.6%	76.9%
Total	38,851		45,050		6,199	16.0%	

Brantford CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	2,385	4.8%	2,583	4.7%	198	8.3%	4.0%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	38,575	78.0%	42,476	78.1%	3,901	10.1%	79.0%
Exurban	8,520	17.2%	9,360	17.2%	840	9.9%	17.0%
Total	49,480		54,419		4,939	10.0%	

Calgary CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	83,848	19.2%	95,549	17.5%	11,701	14.0%	10.9%
Transit Suburb	39,161	9.0%	46,769	8.6%	7,608	19.4%	7.1%
Auto Suburb	299,907	68.6%	384,318	70.5%	84,411	28.1%	78.4%
Exurban	12,918	3.0%	16,876	3.1%	3,958	30.6%	3.7%
Total	437,165		544,870		107,705	24.6%	

Edmonton CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	59,255	13.8%	62,507	11.6%	3,252	5.5%	3.0%
Transit Suburb	75,769	17.7%	82,738	15.4%	6,969	9.2%	6.4%
Auto Suburb	251,708	58.8%	339,877	63.2%	88,169	35.0%	80.5%
Exurban	40,915	9.6%	52,419	9.7%	11,504	28.1%	10.5%
Total	428,049		537,634		109,585	25.6%	

Greater Sudbury CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	7,741	11.1%	8,098	10.6%	357	4.6%	5.1%
Transit Suburb	9,417	13.5%	9,777	12.8%	360	3.8%	5.2%
Auto Suburb	38,474	55.2%	41,851	54.6%	3,377	8.8%	48.5%
Exurban	14,031	20.1%	16,890	22.0%	2,859	20.4%	41.1%
Total	69,663		76,619		6,956	10.0%	

Guelph CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	19,953	38.3%	20,765	32.8%	812	4.1%	7.3%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	28,016	53.7%	35,162	55.5%	7,146	25.5%	63.8%
Exurban	4,161	8.0%	7,397	11.7%	3,236	77.8%	28.9%
Total	52,130		63,324		11,194	21.5%	

Halifax CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	32,076	19.2%	34,471	18.4%	2,395	7.5%	11.6%
Transit Suburb	28,379	17.0%	29,976	16.0%	1,597	5.6%	7.7%
Auto Suburb	70,555	42.3%	81,917	43.7%	11,362	16.1%	54.8%
Exurban	35,708	21.4%	41,097	21.9%	5,389	15.1%	26.0%
Total	166,757		187,478		20,721	12.4%	

Hamilton CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	48,373	17.3%	49,680	16.2%	1,307	2.7%	4.8%
Transit Suburb	34,719	12.4%	35,392	11.6%	673	1.9%	2.5%
Auto Suburb	180,676	64.8%	203,964	66.6%	23,288	12.9%	86.1%
Exurban	15,231	5.5%	16,998	5.6%	1,767	11.6%	6.5%
Total	278,999		306,034		27,035	9.7%	

Kelowna CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	9,625	13.4%	10,269	11.6%	644	6.7%	3.9%
Transit Suburb	7,513	10.5%	8,793	9.9%	1,280	17.0%	7.7%
Auto Suburb	45,139	62.8%	56,620	64.1%	11,481	25.4%	69.4%
Exurban	9,553	13.3%	12,692	14.4%	3,139	32.9%	19.0%
Total	71,830		88,374		16,544	23.0%	

Kingston CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	15,621	22.3%	16,849	21.8%	1,228	7.9%	17.1%
Transit Suburb	11,988	17.1%	12,458	16.1%	470	3.9%	6.6%
Auto Suburb	26,093	37.3%	31,134	40.3%	5,041	19.3%	70.3%
Exurban	16,301	23.3%	16,732	21.7%	431	2.6%	6.0%
Total	70,003		77,173		7,170	10.2%	

Kitchener-Waterloo-Cambridge CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	29,154	16.4%	33,613	15.9%	4,459	15.3%	13.5%
Transit Suburb	26,166	14.7%	27,729	13.1%	1,563	6.0%	4.7%
Auto Suburb	115,980	65.2%	139,535	66.2%	23,555	20.3%	71.3%
Exurban	6,207	3.5%	9,960	4.7%	3,753	60.5%	11.4%
Total	177,876		210,896		33,020	18.6%	

Lethbridge CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	5,805	14.6%	5,829	12.1%	24	0.4%	0.3%
Transit Suburb	1,419	3.6%	1,437	3.0%	18	1.3%	0.2%
Auto Suburb	29,453	74.2%	37,901	78.4%	8,448	28.7%	97.8%
Exurban	3,002	7.6%	3,150	6.5%	148	4.9%	1.7%
Total	39,679		48,317		8,638	21.8%	

London CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	41,971	21.2%	44,116	20.0%	2,145	5.1%	9.6%
Transit Suburb	36,061	18.2%	39,522	17.9%	3,461	9.6%	15.5%
Auto Suburb	96,881	48.9%	110,306	50.0%	13,425	13.9%	60.2%
Exurban	23,231	11.7%	26,508	12.0%	3,277	14.1%	14.7%
Total	198,144		220,452		22,308	11.3%	

Moncton CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	14,691	26.6%	16,225	24.3%	1,534	10.4%	13.4%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	27,589	49.9%	35,556	53.3%	7,967	28.9%	69.6%
Exurban	12,969	23.5%	14,918	22.4%	1,949	15.0%	17.0%
Total	55,249		66,699		11,450	20.7%	

Montréal CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	357,855	22.5%	400,373	22.0%	42,518	11.9%	18.5%
Transit Suburb	249,134	15.6%	264,189	14.5%	15,055	6.0%	6.5%
Auto Suburb	950,158	59.6%	1,108,190	60.8%	158,032	16.6%	68.7%
Exurban	36,015	2.3%	50,500	2.8%	14,485	40.2%	6.3%
Total	1,593,201		1,823,281		230,080	14.4%	

Montréal On Island	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of Total DU Growth
Active Core	339,294	38.7%	371,903	39.7%	32,609	9.6%	54.7%
Transit Suburb	236,765	27.0%	249,386	26.6%	12,621	5.3%	21.2%
Auto Suburb	299,692	34.2%	314,081	33.6%	14,389	4.8%	24.1%
Exurban	444	0.1%	435	0.0%	-9	-2.0%	-0.0%
Total	876,222		935,825		59,603	6.8%	

Montréal Off Island	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of Total DU Growth
Active Core	18,561	2.6%	28,470	3.2%	9,909	53.4%	5.8%
Transit Suburb	12,369	1.7%	14,803	1.7%	2,434	19.7%	1.4%
Auto Suburb	650,466	90.7%	794,109	89.5%	143,643	22.1%	84.3%
Exurban	35,571	5.0%	50,065	5.6%	14,494	40.7%	8.5%
Total	716,979		887,456		170,477	23.8%	

Oshawa CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	5,146	4.2%	5,422	3.8%	276	5.4%	1.4%
Transit Suburb	12,096	9.8%	13,269	9.3%	1,173	9.7%	6.1%
Auto Suburb	99,168	80.4%	114,682	80.5%	15,514	15.6%	81.2%
Exurban	6,941	5.6%	9,089	6.4%	2,148	30.9%	11.2%
Total	123,351		142,462		19,111	15.5%	

Ottawa-Gatineau CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	104,934	21.9%	115,042	20.1%	10,108	9.6%	10.9%
Transit Suburb	58,064	12.1%	59,102	10.3%	1,038	1.8%	1.1%
Auto Suburb	259,182	54.2%	322,452	56.5%	63,270	24.4%	68.1%
Exurban	55,993	11.7%	74,550	13.1%	18,557	33.1%	20.0%
Total	478,173		571,146		92,973	19.4%	

City of Ottawa - Inside Greenbelt	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of Total DU Growth
Active Core	86,866	40.5%	96,201	42.2%	9,335	10.7%	70.2%
Transit Suburb	58,064	27.1%	59,102	25.9%	1,038	1.8%	7.8%
Auto Suburb	69,710	32.5%	72,628	31.9%	2,918	4.2%	22.0%
Exurban	-	-	-	-	-	-	-
Total	214,640		227,931		13,291	6.2%	

City of Ottawa - Outside Greenbelt	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of Total DU Growth
Active Core	1,214	0.9%	1,223	0.6%	9	0.7%	0.0%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	105,999	76.5%	145,856	76.7%	39,857	37.6%	77.1%
Exurban	31,324	22.6%	43,178	22.7%	11,854	37.8%	22.9%
Total	138,536		190,257		51,721	37.3%	

Peterborough CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	15,757	30.3%	16,373	29.4%	616	3.9%	17.2%
Transit Suburb	1,249	2.4%	1,370	2.5%	121	9.7%	3.4%
Auto Suburb	16,709	32.1%	19,169	34.4%	2,460	14.7%	68.6%
Exurban	18,361	35.3%	18,750	33.7%	389	2.1%	10.8%
Total	52,076		55,662		3,586	6.9%	

Québec CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	85,888	25.8%	89,879	23.5%	3,991	4.6%	8.0%
Transit Suburb	42,402	12.8%	43,966	11.5%	1,564	3.7%	3.1%
Auto Suburb	164,949	49.6%	196,577	51.4%	31,628	19.2%	63.2%
Exurban	39,059	11.8%	51,886	13.6%	12,827	32.8%	25.6%
Total	332,298		382,308		50,010	15.0%	

Regina CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	12,126	14.3%	12,196	12.0%	70	0.6%	0.4%
Transit Suburb	17,350	20.4%	18,258	17.9%	908	5.2%	5.4%
Auto Suburb	48,377	56.9%	61,946	60.9%	13,569	28.0%	81.1%
Exurban	7,145	8.4%	9,319	9.2%	2,174	30.4%	13.0%
Total	84,998		101,719		16,721	19.7%	

Saguenay CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	5,642	8.4%	6,228	8.0%	586	10.4%	5.4%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	39,484	58.8%	42,487	54.5%	3,003	7.6%	27.8%
Exurban	22,024	32.8%	29,253	37.5%	7,229	32.8%	66.8%
Total	67,150		77,968		10,818	16.1%	

Saint John CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	8,857	16.5%	9,322	16.0%	465	5.3%	9.6%
Transit Suburb	6,283	11.7%	6,307	10.8%	24	0.4%	0.5%
Auto Suburb	20,935	39.1%	23,300	39.9%	2,365	11.3%	48.9%
Exurban	17,422	32.5%	19,403	33.2%	1,981	11.4%	40.9%
Total	53,560		58,398		4,838	9.0%	

Saskatoon CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	20,511	20.3%	20,384	16.3%	-127	-0.6%	-0.5%
Transit Suburb	8,143	8.1%	8,343	6.7%	200	2.5%	0.8%
Auto Suburb	59,128	58.5%	75,559	60.6%	16,431	27.8%	69.2%
Exurban	13,255	13.1%	20,480	16.4%	7,225	54.5%	30.4%
Total	101,037		124,766		23,729	23.5%	

Sherbrooke CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	27,793	31.0%	28,234	26.6%	441	1.6%	2.7%
Transit Suburb	13,093	14.6%	14,144	13.3%	1,051	8.0%	6.4%
Auto Suburb	30,607	34.1%	37,828	35.7%	7,221	23.6%	44.1%
Exurban	18,207	20.3%	25,876	24.4%	7,669	42.1%	46.8%
Total	89,700		106,082		16,382	18.3%	

St. Catharines-Niagara CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	22,120	13.3%	23,497	13.0%	1,377	6.2%	9.8%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	126,991	76.3%	135,726	75.2%	8,735	6.9%	62.0%
Exurban	17,415	10.5%	21,383	11.8%	3,968	22.8%	28.2%
Total	166,526		180,606		14,080	8.5%	

St. John's CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	15,624	20.6%	16,495	17.9%	871	5.6%	5.3%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	53,735	70.8%	66,864	72.4%	13,129	24.4%	79.6%
Exurban	6,500	8.6%	8,994	9.7%	2,494	38.4%	15.1%
Total	75,859		92,353		16,494	21.7%	

Thunder Bay CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	11,229	20.2%	11,013	19.3%	-216	-1.9%	-13.8%
Transit Suburb	661	1.2%	699	1.2%	38	5.7%	2.4%
Auto Suburb	30,122	54.2%	30,679	53.7%	557	1.8%	35.6%
Exurban	13,569	24.4%	14,755	25.8%	1,186	8.7%	75.8%
Total	55,581		57,146		1,565	2.8%	

Toronto CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	307,482	16.2%	387,836	17.4%	80,354	26.1%	23.4%
Transit Suburb	337,718	17.8%	371,542	16.6%	33,824	10.0%	9.9%
Auto Suburb	1,193,999	63.1%	1,411,814	63.2%	217,815	18.2%	63.5%
Exurban	50,227	2.7%	60,221	2.7%	9,994	19.9%	2.9%
Total	1,892,297		2,235,145		342,848	18.1%	

City of Toronto (416 area code)	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of Total DU Growth
Active Core	301,682	29.1%	381,778	32.5%	80,096	26.5%	57.9%
Transit Suburb	335,707	32.4%	369,529	31.4%	33,822	10.1%	24.5%
Auto Suburb	399,808	38.5%	424,323	36.1%	24,515	6.1%	17.7%
Exurban	-	-	-	-	-	-	-
Total	1,037,617		1,175,923		138,306	13.3%	

Toronto Outer Suburbs (905 area code)	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of Total DU Growth
Active Core	5,800	0.7%	6,058	0.6%	258	4.4%	0.1%
Transit Suburb	2,011	0.2%	2,013	0.2%	2	0.1%	0.0%
Auto Suburb	794,190	92.9%	987,491	93.2%	193,301	24.3%	94.5%
Exurban	50,227	5.9%	60,221	5.7%	9,994	19.9%	4.9%
Total	854,680		1,059,222		204,542	23.9%	

Trois-Rivières CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	12,750	18.9%	13,104	16.9%	354	2.8%	3.4%
Transit Suburb	-	-	-	-	-	-	-
Auto Suburb	40,546	60.1%	44,814	57.7%	4,268	10.5%	41.4%
Exurban	14,125	21.0%	19,816	25.5%	5,691	40.3%	55.2%
Total	67,421		77,734		10,313	15.3%	

Vancouver CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	196,258	22.6%	230,340	22.4%	34,082	17.4%	21.4%
Transit Suburb	131,099	15.1%	156,748	15.3%	25,649	19.6%	16.1%
Auto Suburb	521,865	60.1%	617,956	60.1%	96,091	18.4%	60.4%
Exurban	19,046	2.2%	22,245	2.2%	3,199	16.8%	2.0%
Total	868,631		1,027,613		158,982	18.3%	

City of Vancouver	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of Total DU Growth
Active Core	159,170	58.4%	180,984	58.4%	21,814	13.7%	58.3%
Transit Suburb	65,221	23.9%	76,973	24.8%	11,752	18.0%	31.4%
Auto Suburb	48,236	17.7%	52,076	16.8%	3,840	8.0%	10.3%
Exurban	-	-	-	-	-	-	-
Total	272,627		310,033		37,406	13.7%	

Vancouver Suburbs	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of Total DU Growth
Active Core	37,088	6.2%	49,356	6.9%	12,268	33.1%	10.1%
Transit Suburb	65,878	11.1%	79,775	11.1%	13,897	21.1%	11.4%
Auto Suburb	473,629	79.5%	565,880	78.9%	92,251	19.5%	75.9%
Exurban	19,046	3.2%	22,245	3.1%	3,199	16.8%	2.6%
Total	596,004		717,580		121,576	20.4%	

Victoria CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	40,982	26.6%	45,212	26.2%	4,230	10.3%	22.8%
Transit Suburb	16,097	10.5%	16,945	9.8%	848	5.3%	4.6%
Auto Suburb	90,978	59.1%	103,828	60.2%	12,850	14.1%	69.3%
Exurban	5,953	3.9%	6,574	3.8%	621	10.4%	3.3%
Total	154,010		172,559		18,549	12.0%	

Windsor CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	22,237	16.6%	22,496	16.0%	259	1.2%	4.0%
Transit Suburb	11,854	8.8%	11,888	8.5%	34	0.3%	0.5%
Auto Suburb	87,147	65.0%	92,391	65.8%	5,244	6.0%	81.9%
Exurban	12,556	9.4%	13,370	9.5%	814	6.5%	12.7%
Total	134,008		140,408		6,400	4.8%	

Winnipeg CMA	2006 Total Dwelling Units		2016 Total Dwelling Units		2006-2016 Total DU Growth		Share of CMA Total DU Growth
Active Core	56,490	19.4%	59,507	18.5%	3,017	5.3%	10.2%
Transit Suburb	31,043	10.6%	31,341	9.7%	298	1.0%	1.0%
Auto Suburb	184,149	63.1%	205,744	64.0%	21,595	11.7%	73.0%
Exurban	20,109	6.9%	24,782	7.7%	4,673	23.2%	15.8%
Total	291,903		321,484		29,581	10.1%	



**Still Suburban?
Growth in Canadian Suburbs, 2006-2016**

Council for Canadian Urbanism
Working Paper #2

**APPENDIX G:
Atlas**

**Showing 2016 Neighbourhood Classification
for all 35 Census Metropolitan Areas**

List of Census Metropolitan Areas

Note: The maps are ordered geographically from west to east

Victoria	1
Vancouver	2
Abbotsford-Mission	3
Kelowna	4
Calgary	5
Edmonton	6
Lethbridge	7
Saskatoon	8
Regina	9
Winnipeg	10
Thunder Bay	11
Windsor	12
London	13
Greater Sudbury	14
Kitchener-Waterloo-Cambridge	15
Brantford	16
Guelph	17
Hamilton	18
Barrie	19
Toronto	20
St. Catharines-Niagara	21
Oshawa	22
Peterborough	23
Belleville	24
Kingston	25
Ottawa-Gatineau	26
Montréal	27
Trois-Rivières	28
Sherbrooke	29
Québec	30
Saguenay	31
Saint John	32
Moncton	33
Halifax	34
St. John's	35

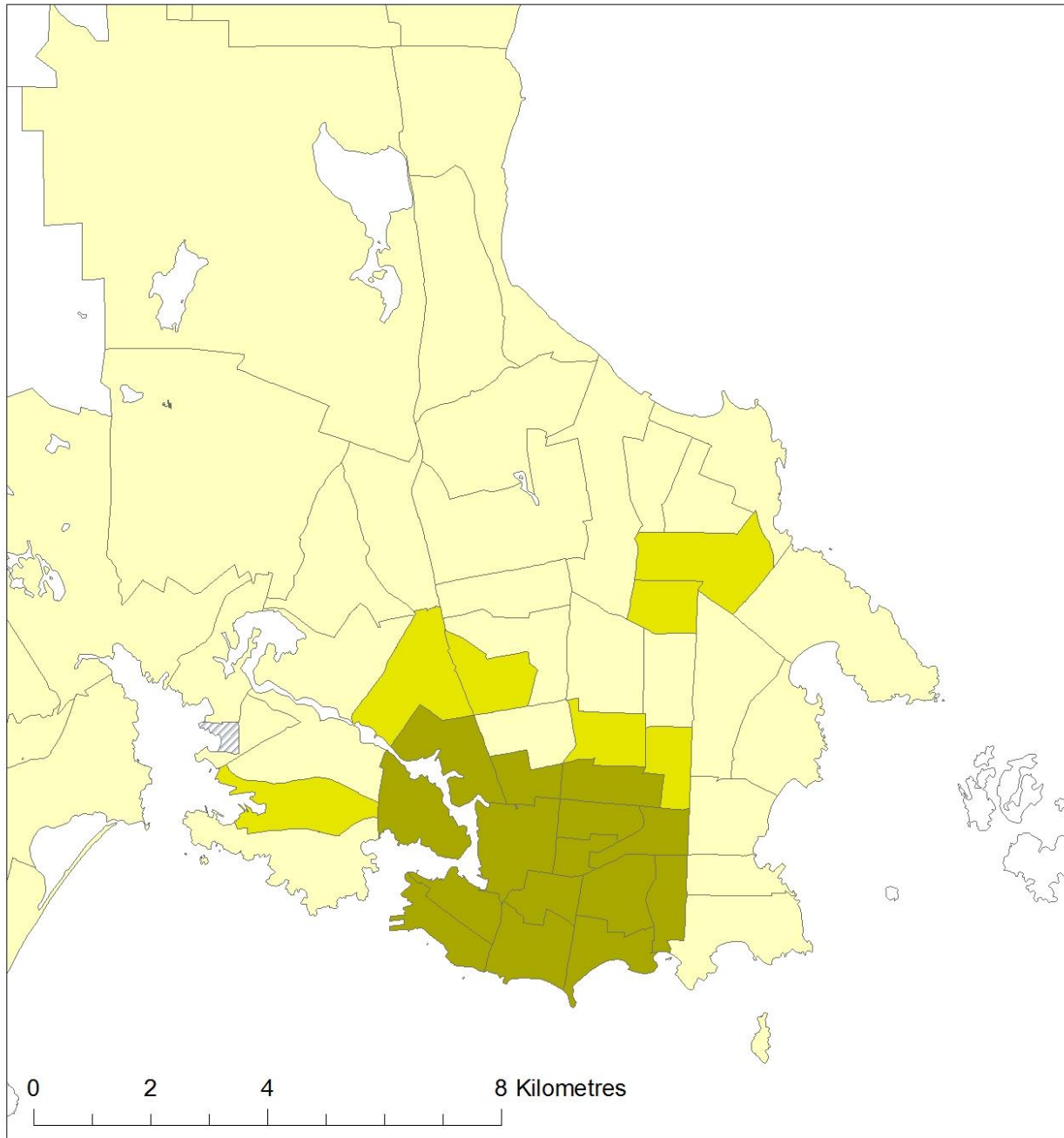
Victoria

Transportation T9 Method

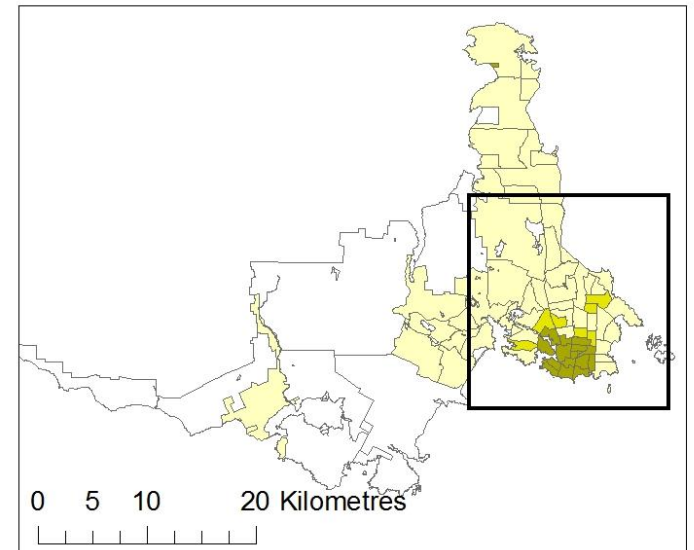
Legend

- Active Core
- Transit Suburb
- Auto Suburb
- Exurban
- Unclassified

Active Core: 21%
Transit Suburb: 10%
Auto Suburb: 65%
Exurban: 4%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016










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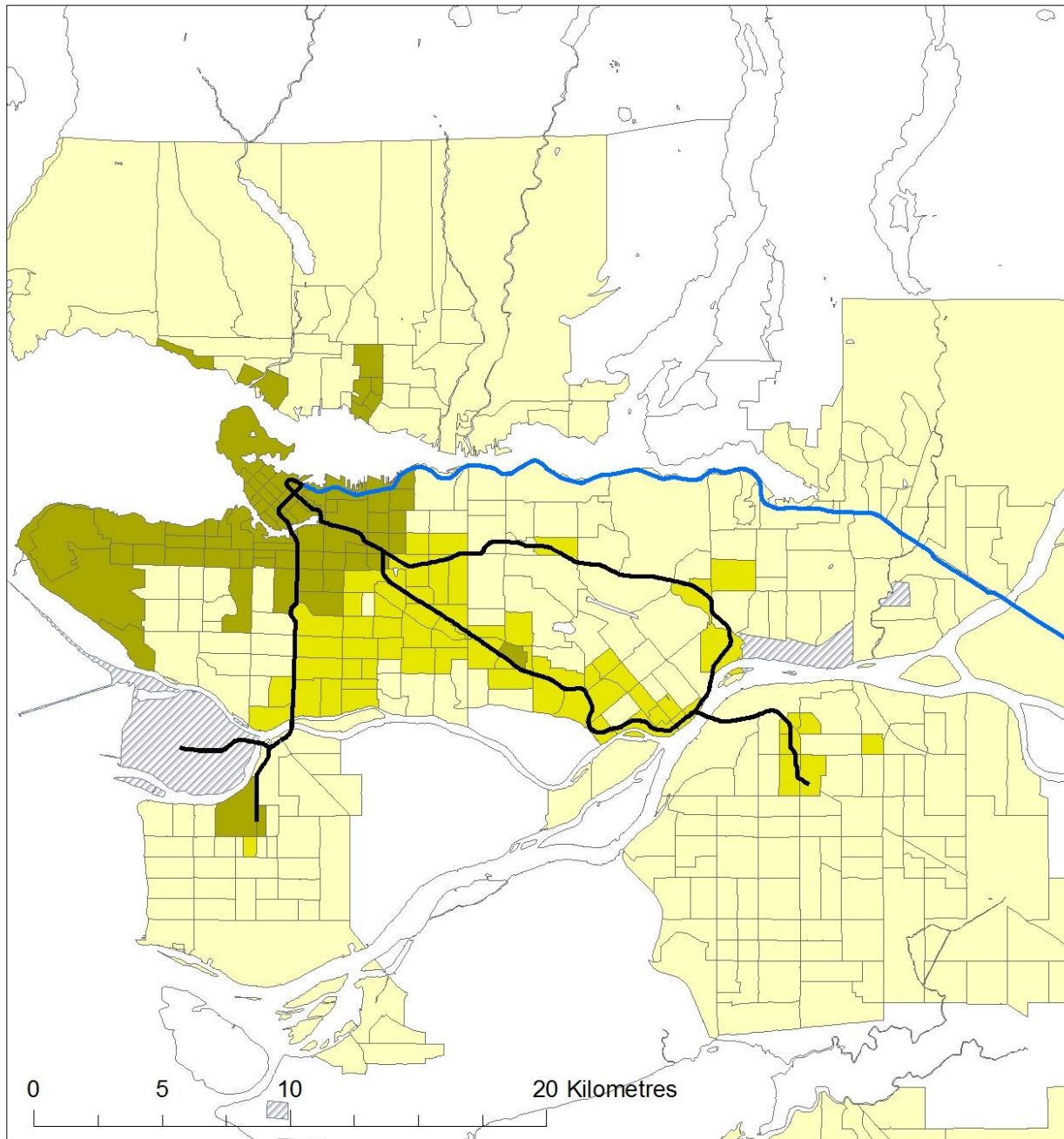
Vancouver

Transportation T8 Method

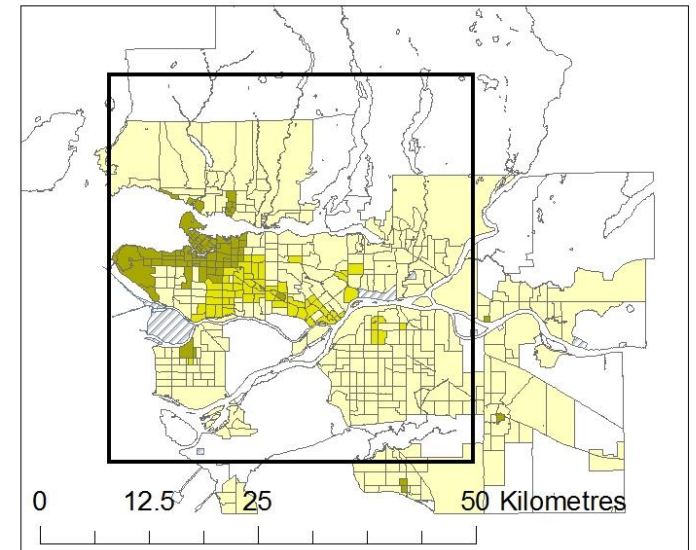
Legend

-  Active Core
-  Transit Suburb
-  Auto Suburb
-  Exurban
-  Unclassified
-  Sky Train
-  West Coast Express

Active Core: 16%
Transit Suburb: 15%
Auto Suburb: 67%
Exurban: 2%

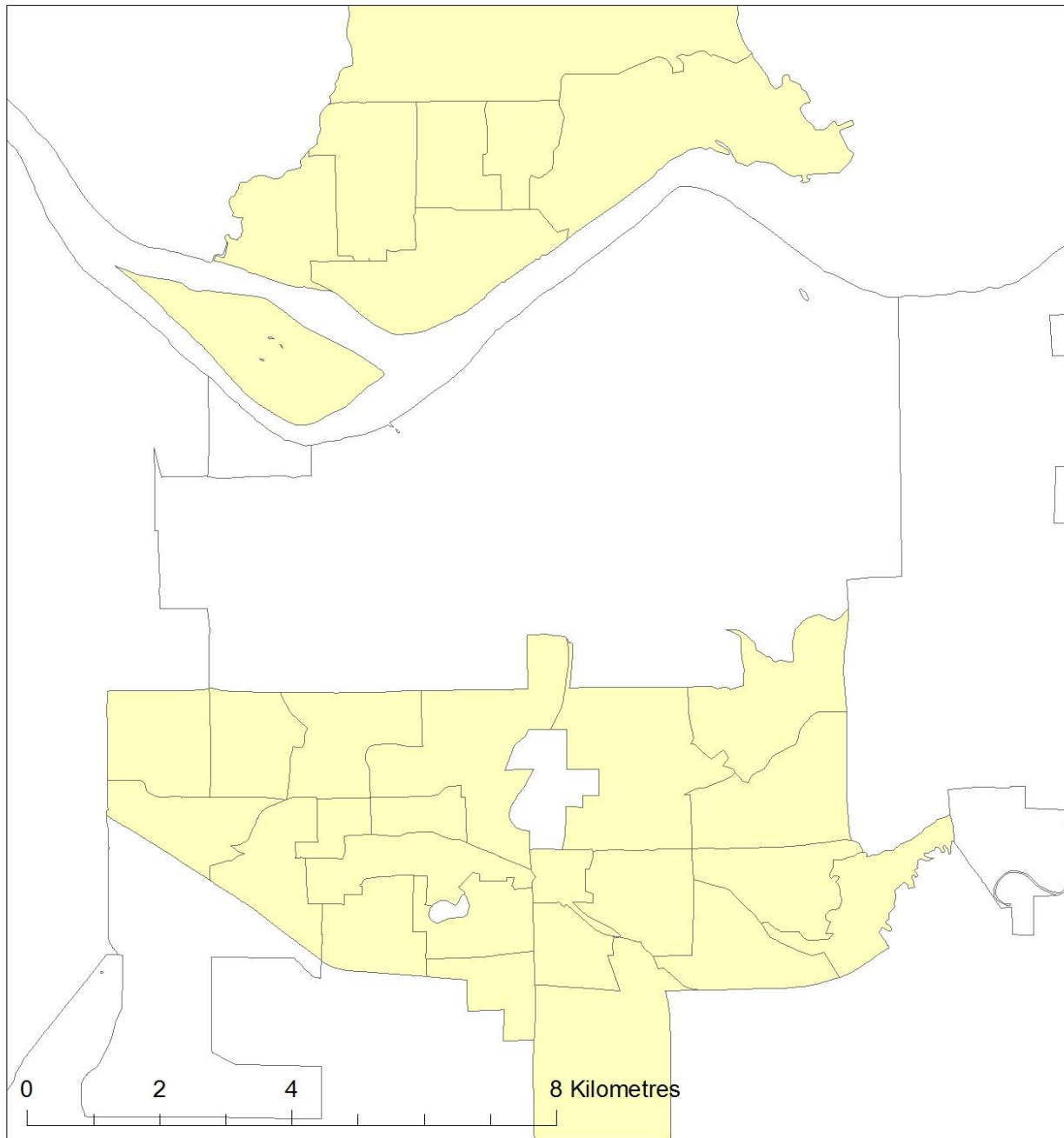


Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs & Ben McCauley & Shuhong Lin





Abbotsford-Mission

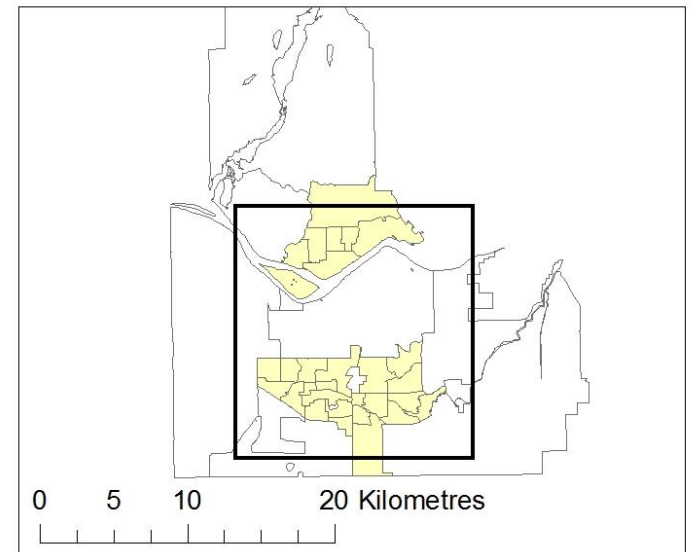
Transportation T9 Method

Legend

- Auto Suburb
- Exurban

Auto Suburb: 83%
Exurban: 17%

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016







Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs & Chris Willms



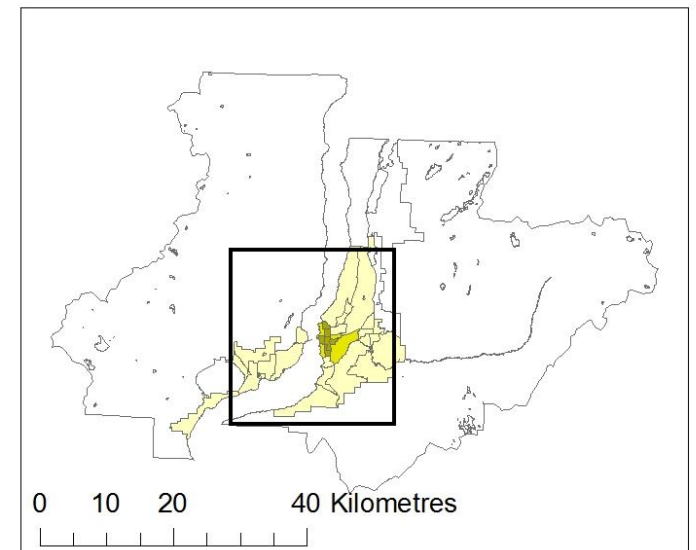
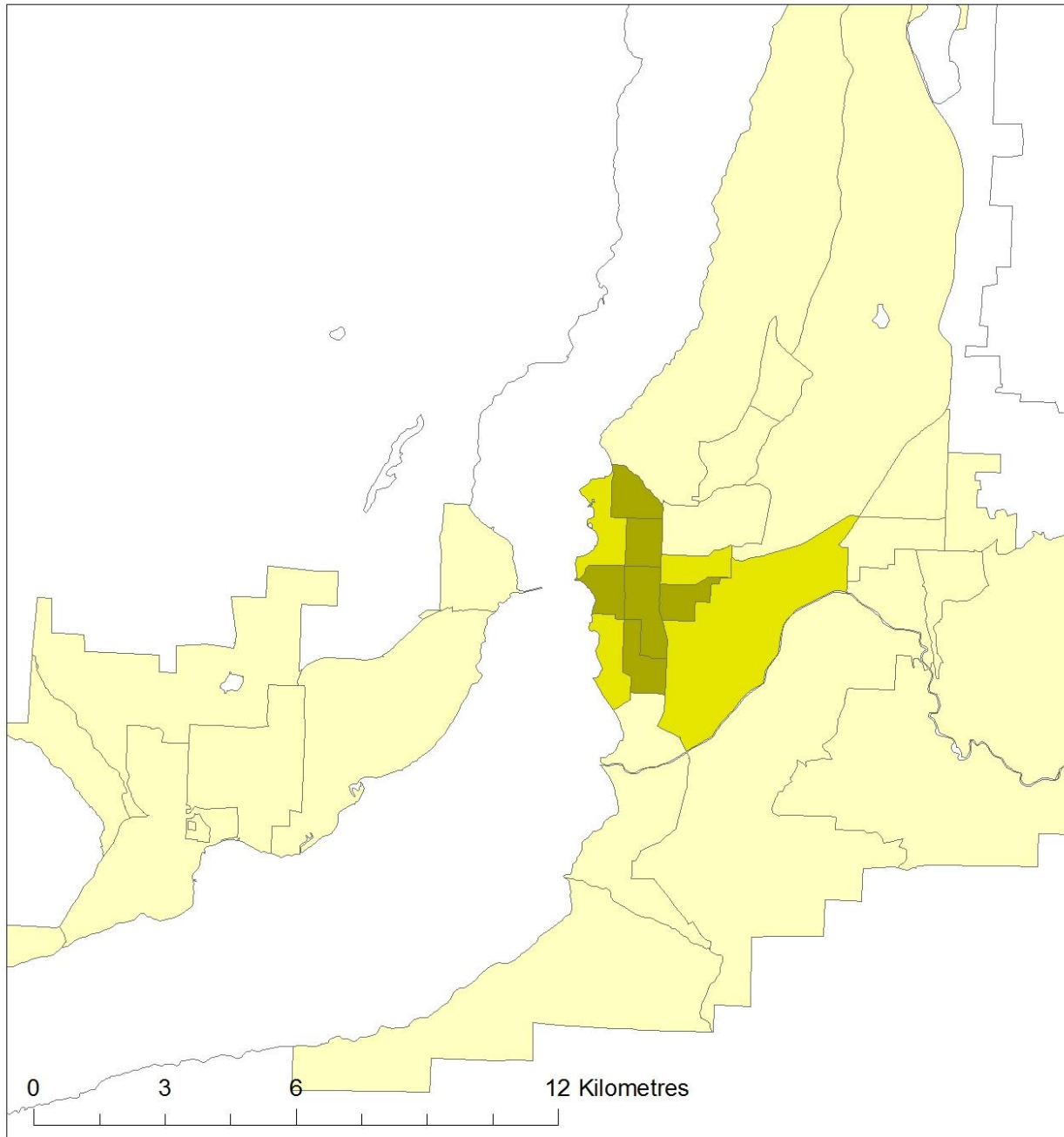
Kelowna

Transportation T9 Method

Legend

	Active Core	Active Core: 10%
	Transit Suburb	Transit Suburb: 8%
	Auto Suburb	Auto Suburb: 68%
	Exurban	Exurban: 14%

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016

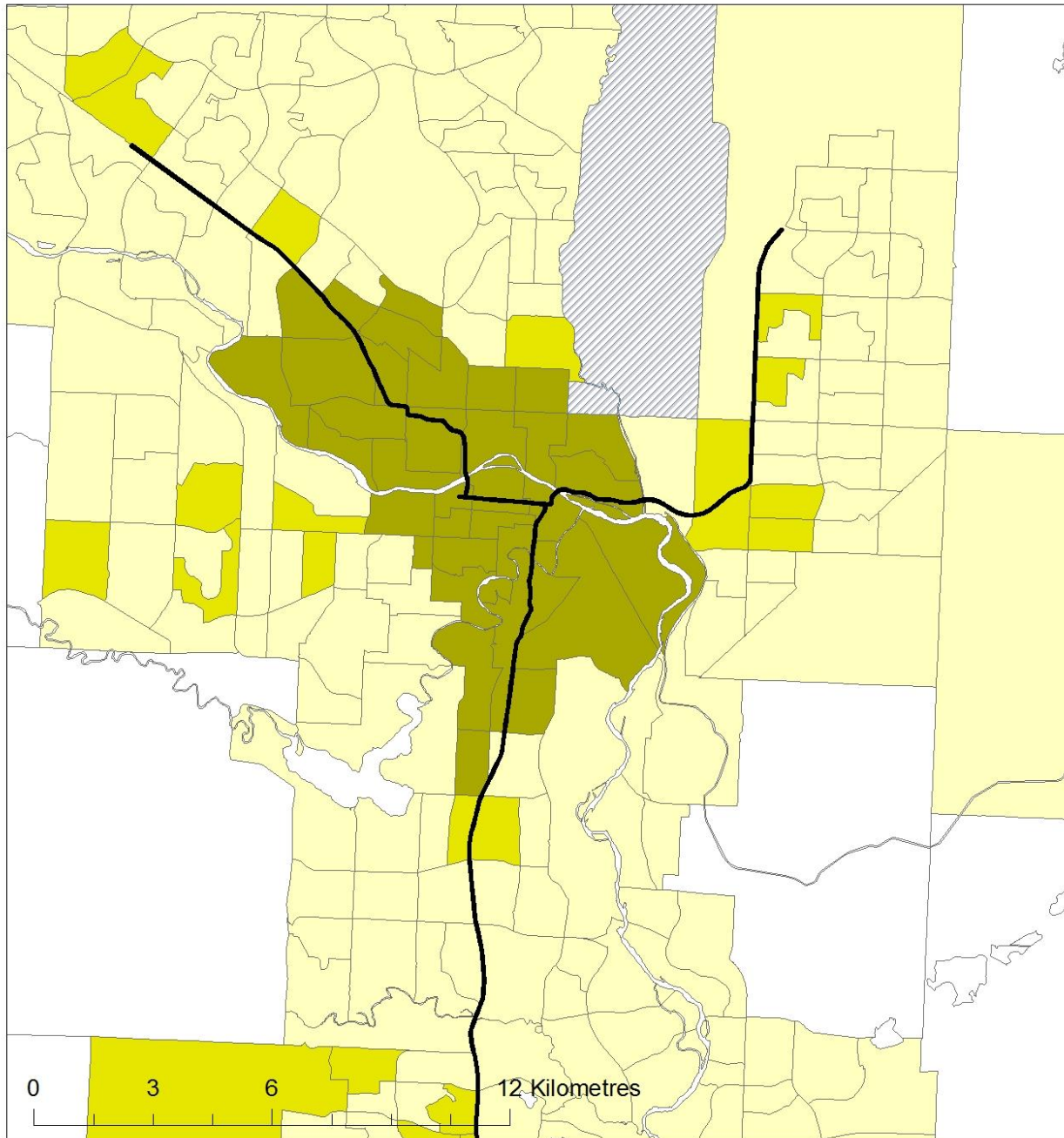


Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistant: Chris Willms & Lyra Hindrichs









Calgary

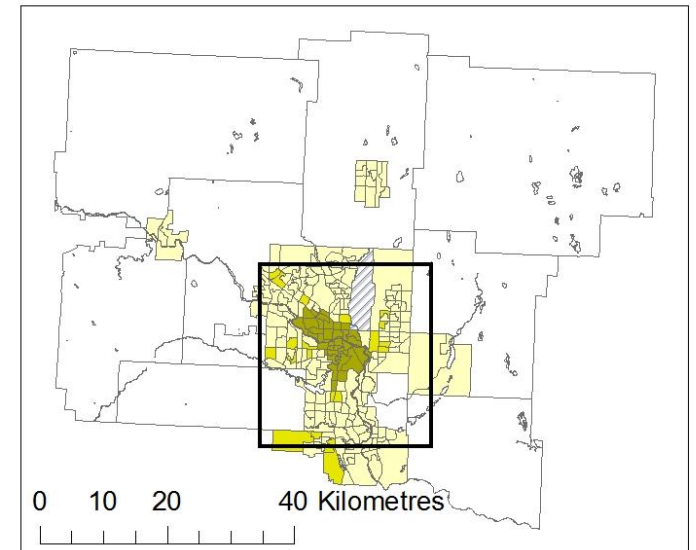
Transportation T9 Method



Legend

	Active Core	Active Core: 12%
	Transit Suburb	Transit Suburb: 9%
	Auto Suburb	Auto Suburb: 76%
	Exurban	Exurban: 3%
	Unclassified	
	Calgary LRT 2016	

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



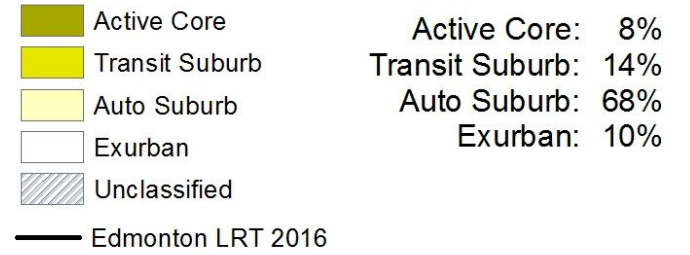
Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs & Chris Willms



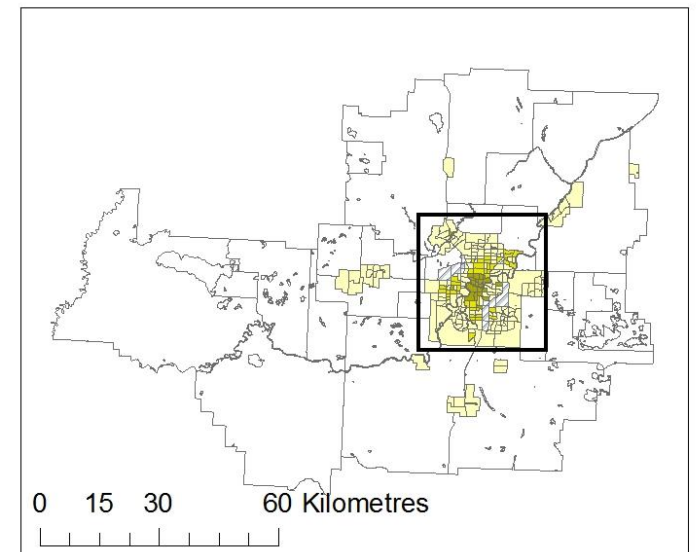
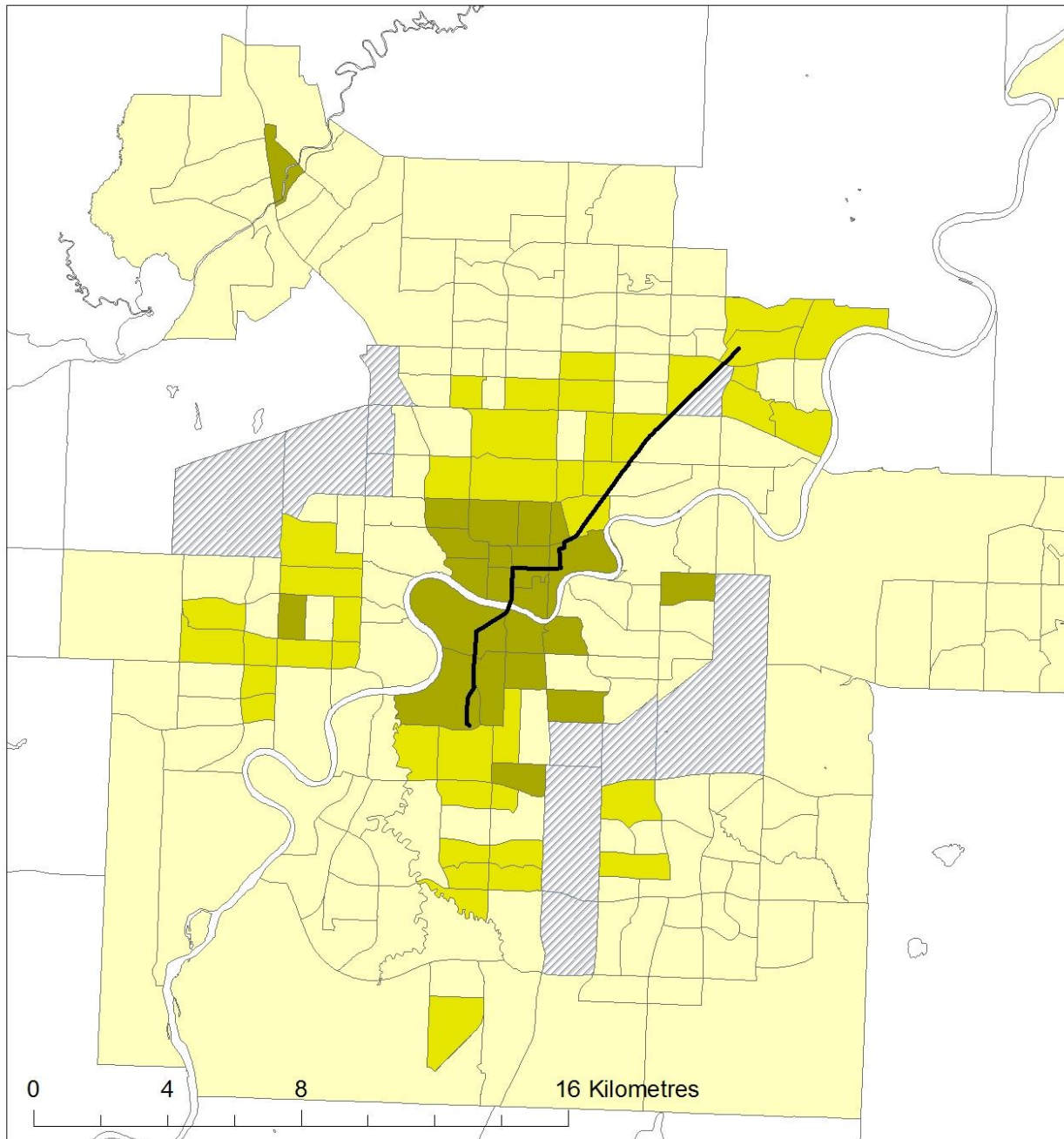
Edmonton

Transportation T9 Method

Legend



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016





Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs & Chris Willms

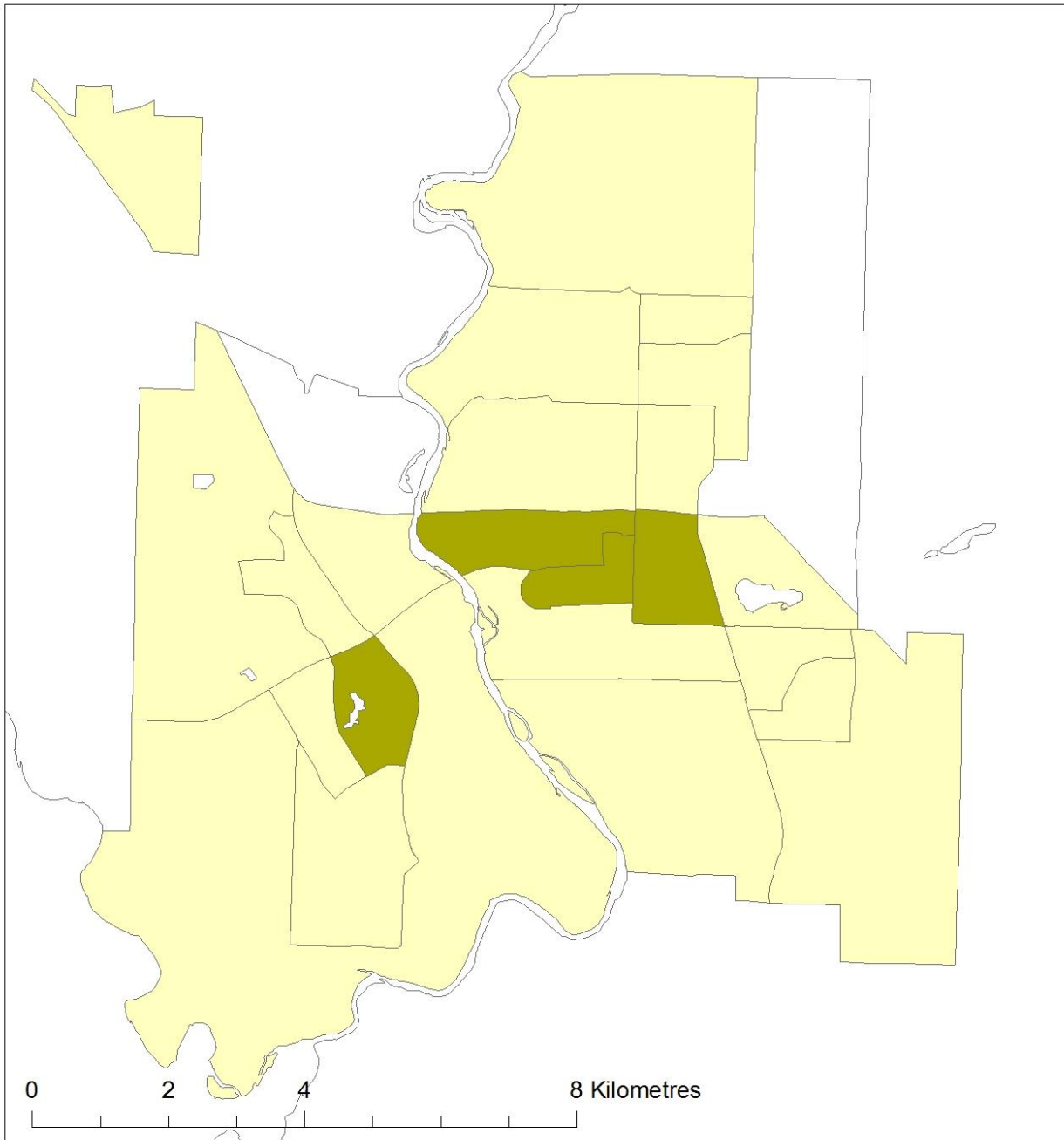


Lethbridge

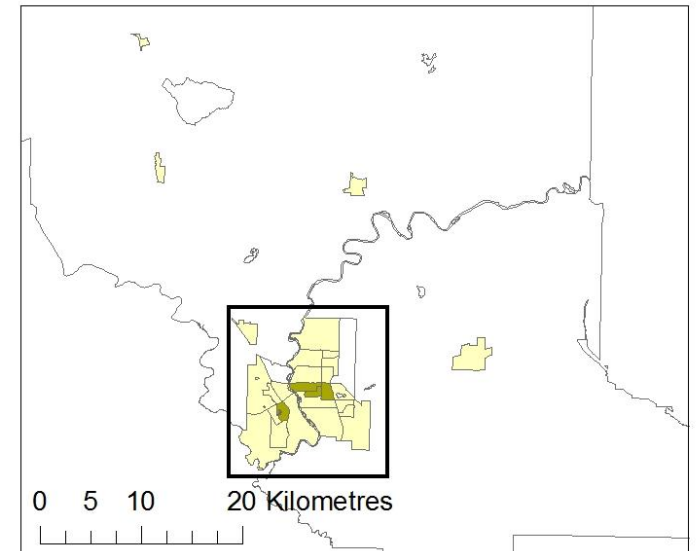
Transportation T9 Method

Legend

	Active Core	Active Core: 9%
	Auto Suburb	Auto Suburb: 82%
	Exurban	Exurban: 9%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016




Queen's School of Urban and Regional Planning
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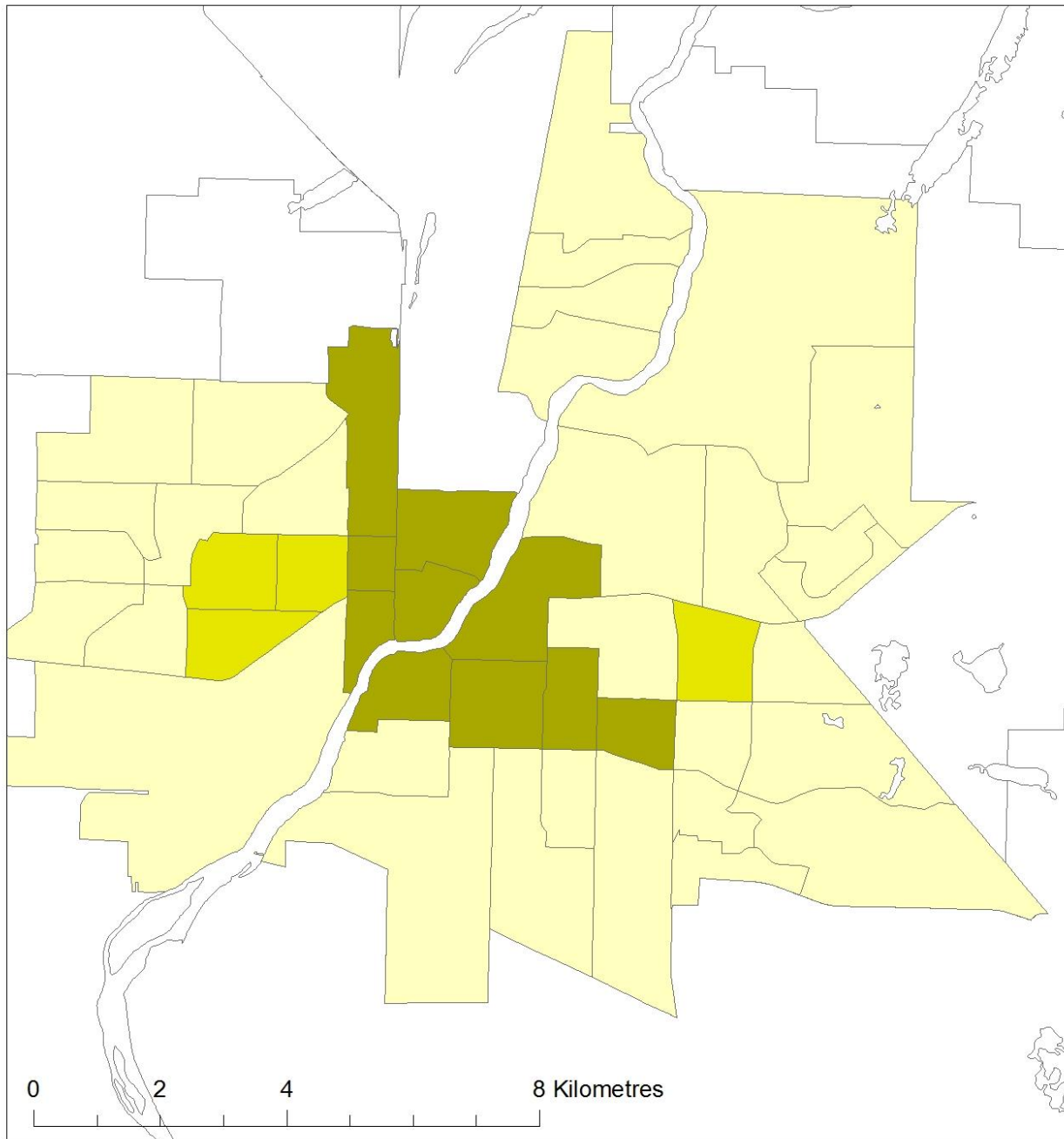


Saskatoon

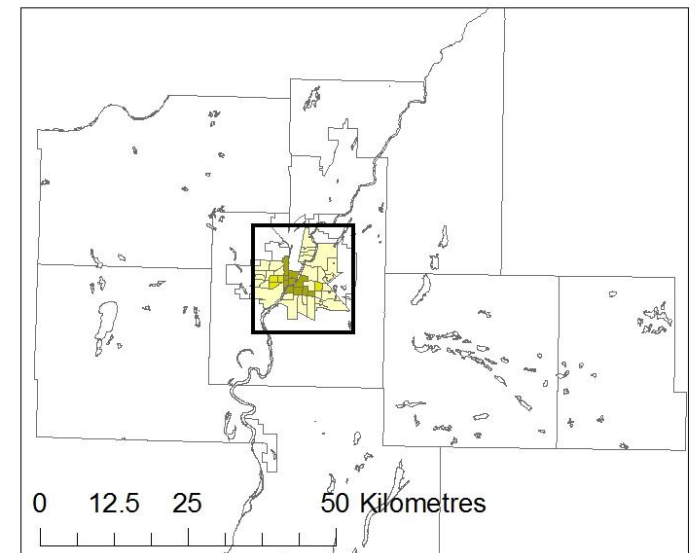
Transportation T9 Method

Legend

	Active Core	Active Core: 12%
	Transit Suburb	Transit Suburb: 6%
	Auto Suburb	Auto Suburb: 63%
	Exurban	Exurban: 19%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016





Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Chris Willms & Lyra Hindrichs



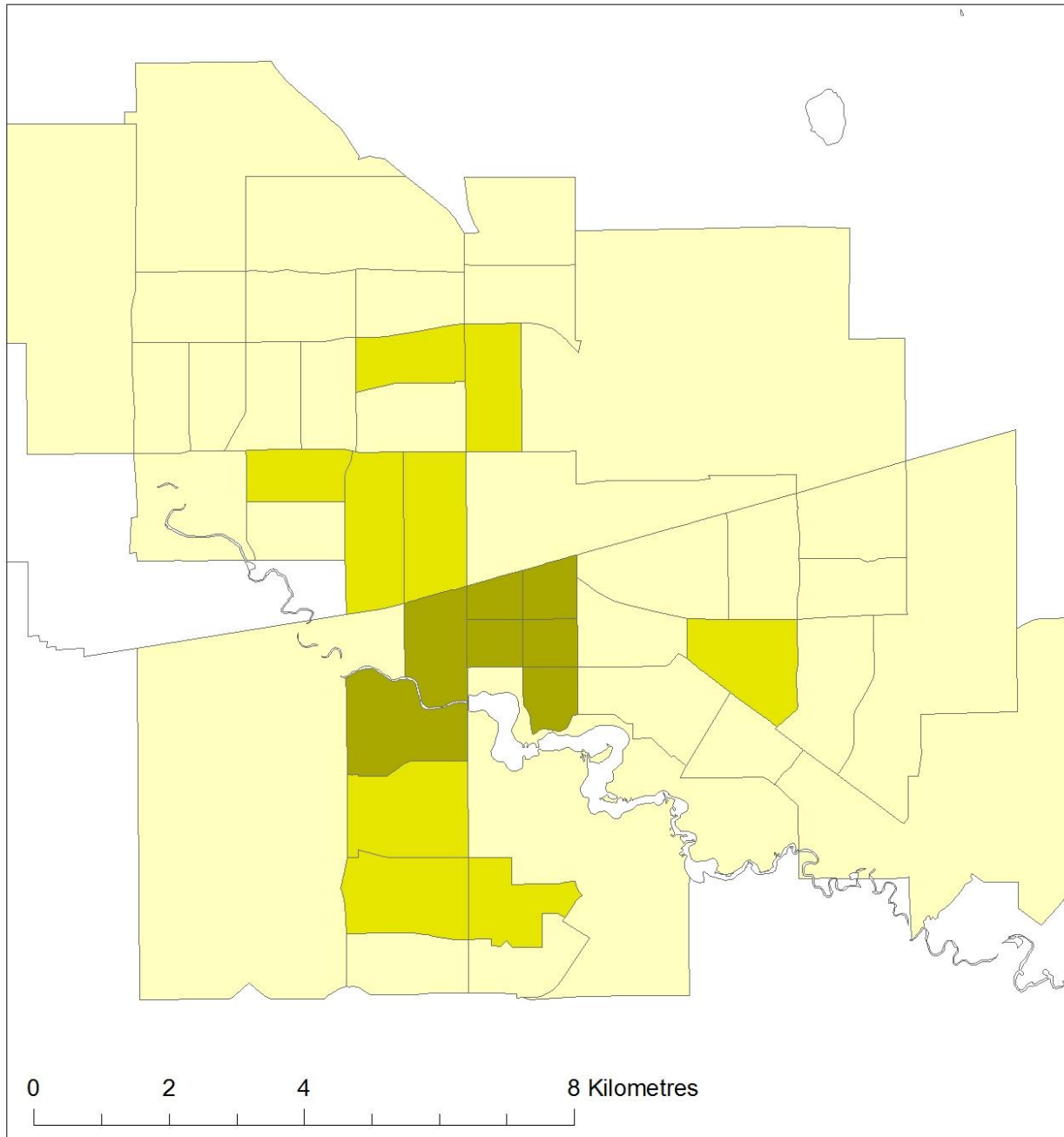
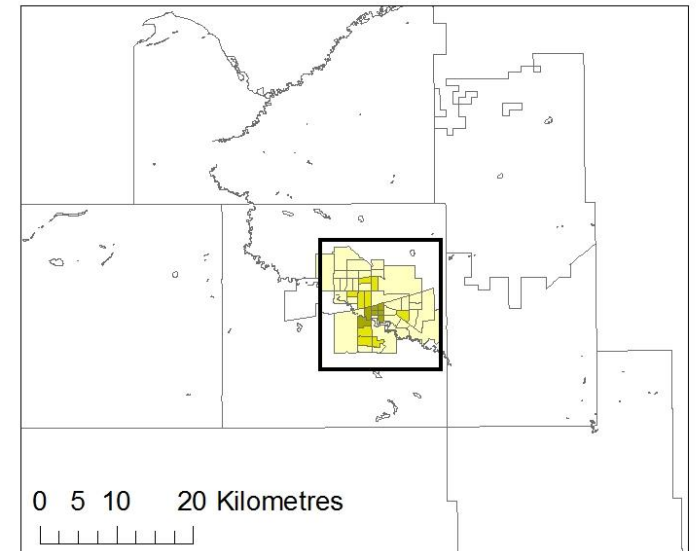
Regina

Transportation T9 Method

Legend

	Active Core	Active Core: 9%
	Transit Suburb	Transit Suburb: 17%
	Auto Suburb	Auto Suburb: 64%
	Exurban	Exurban: 10%

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016








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Principal Investigator: David Gordon
Research Assistants: Chris Willms & Lyra Hindrichs

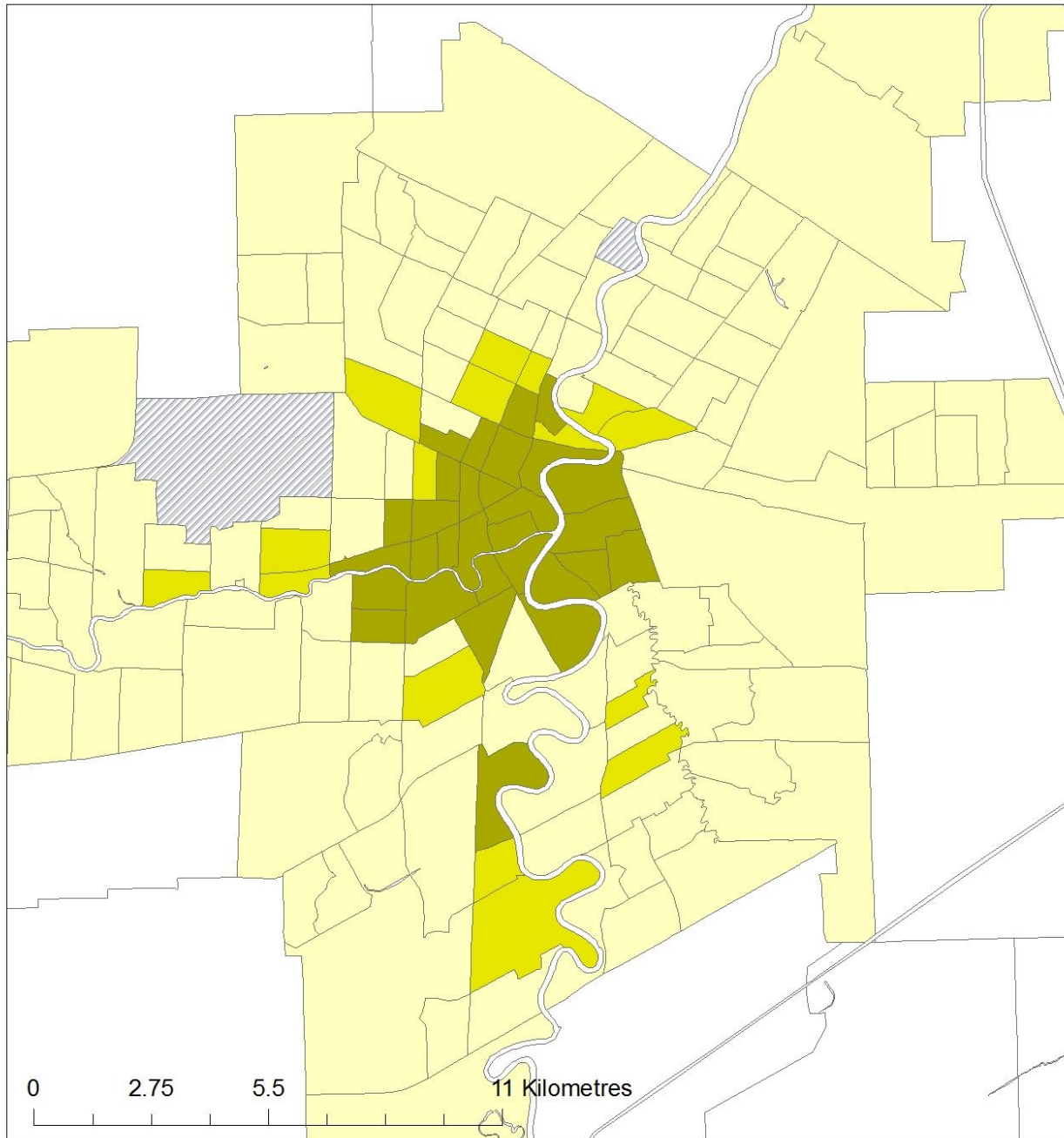


Winnipeg

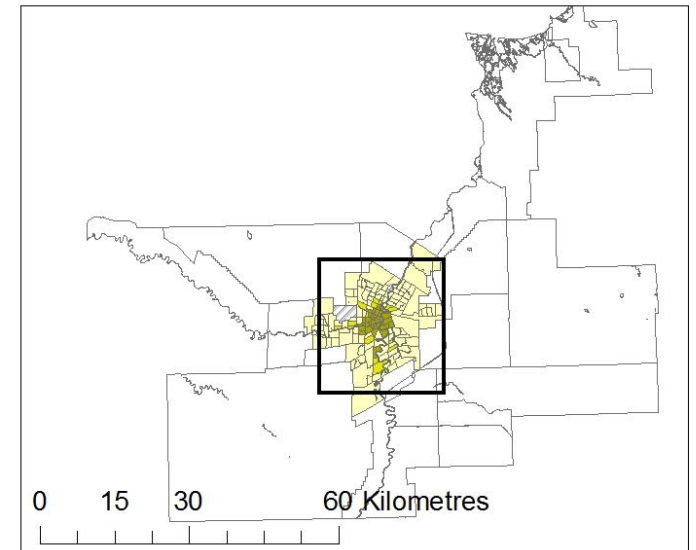
Transportation T9 Method

Legend

	Active Core	Active Core: 15%
	Transit Suburb	Transit Suburb: 9%
	Auto Suburb	Auto Suburb: 68%
	Exurban	Exurban: 8%
	Unclassified	



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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Principal Investigator: David Gordon
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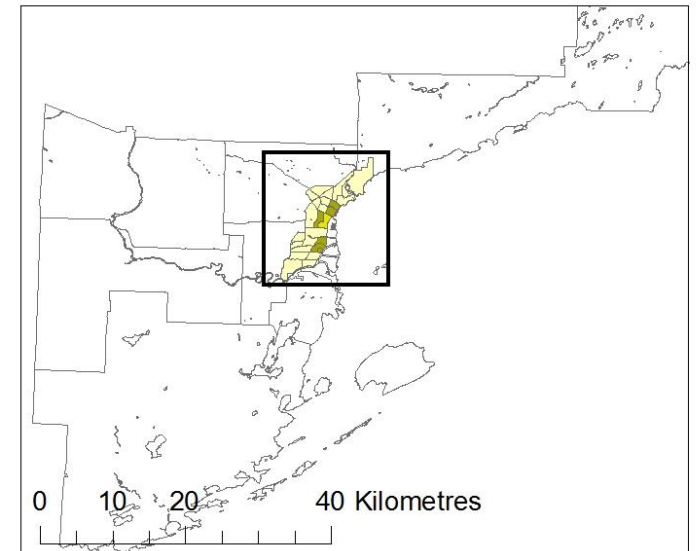
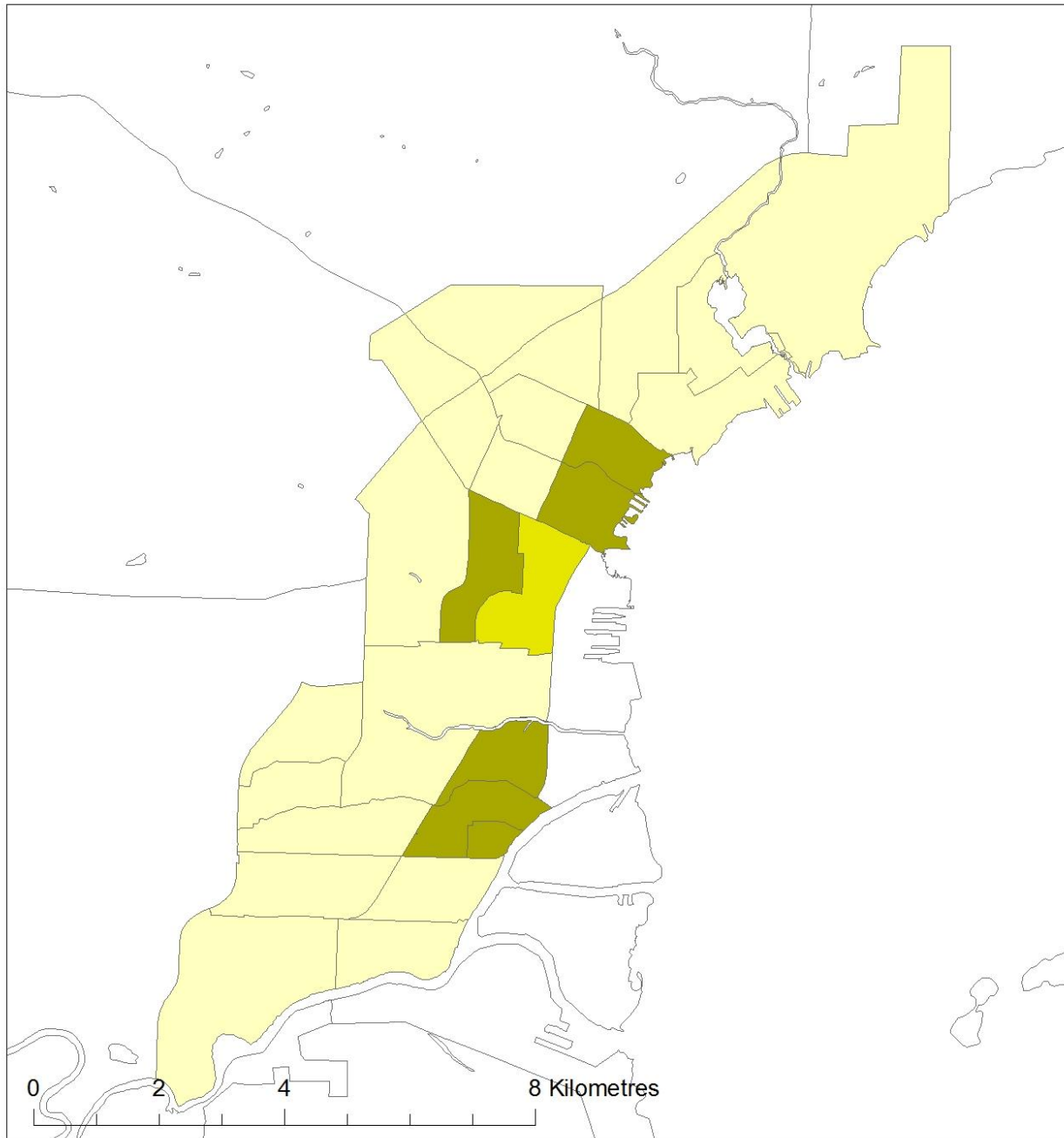
Thunder Bay

Transportation T9 Method

Legend

	Active Core	Active Core: 16%
	Transit Suburb	Transit Suburb: 1%
	Auto Suburb	Auto Suburb: 55%
	Exurban	Exurban: 28%

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016








Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms &
Ben McCauley



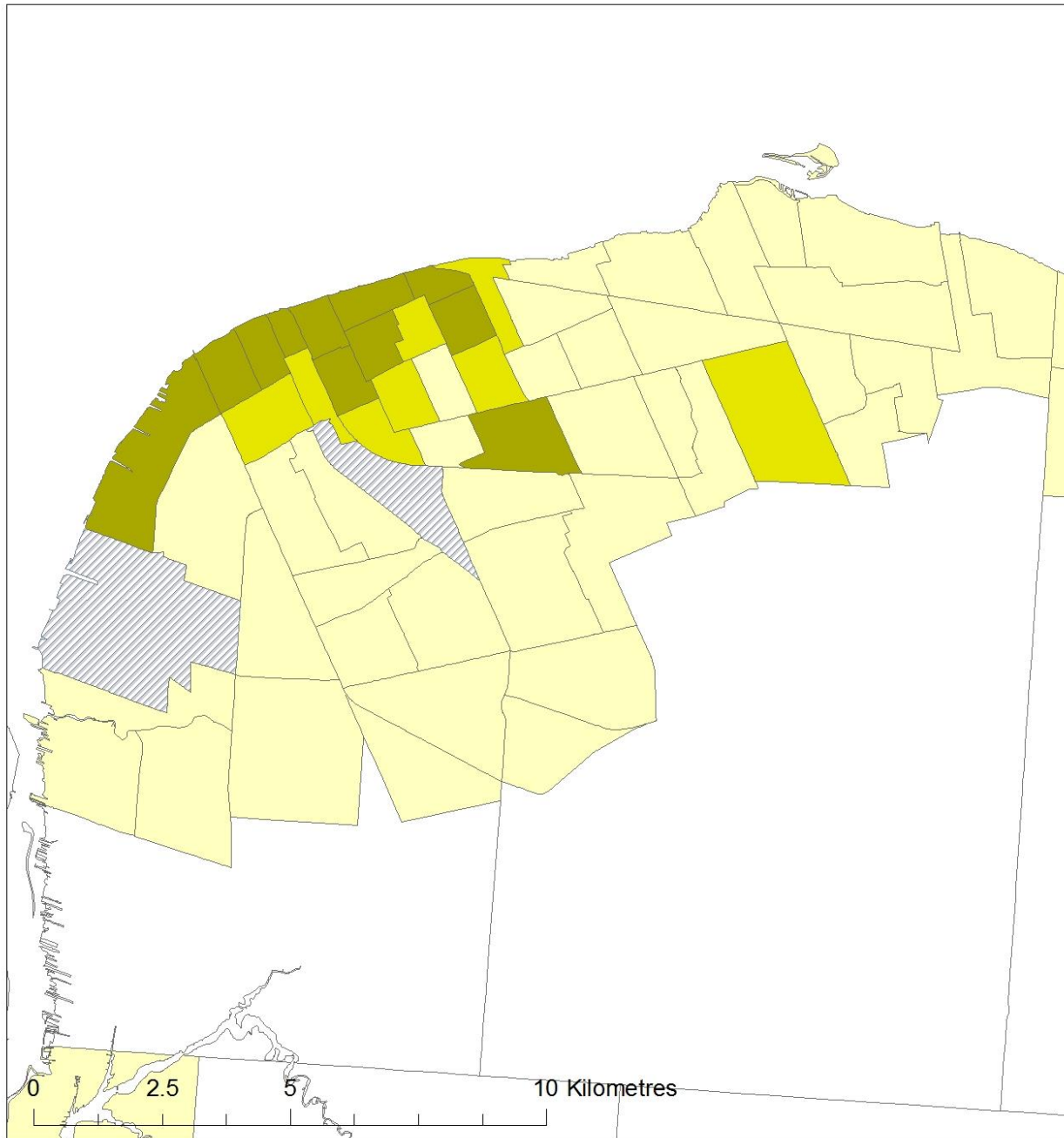
Windsor

Transportation T9 Method

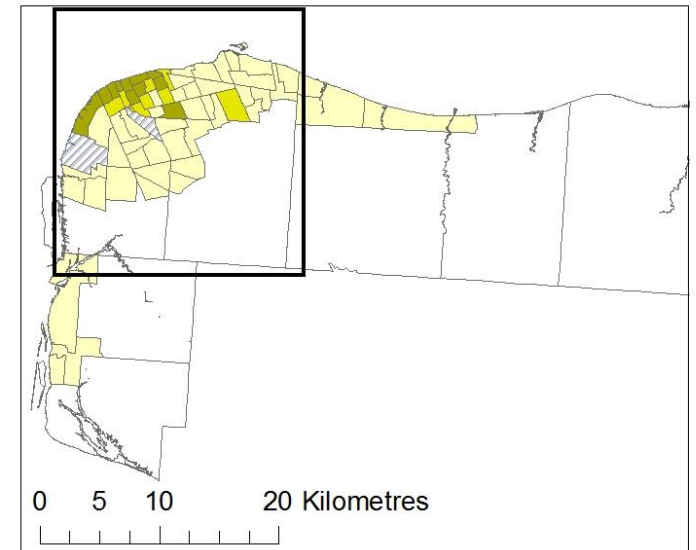
Legend

-  Active Core
-  Transit Suburb
-  Auto Suburb
-  Exurban
-  Unclassified

Active Core: 12%
Transit Suburb: 7%
Auto Suburb: 71%
Exurban: 10%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, CHris Willms &
Ben McCauley



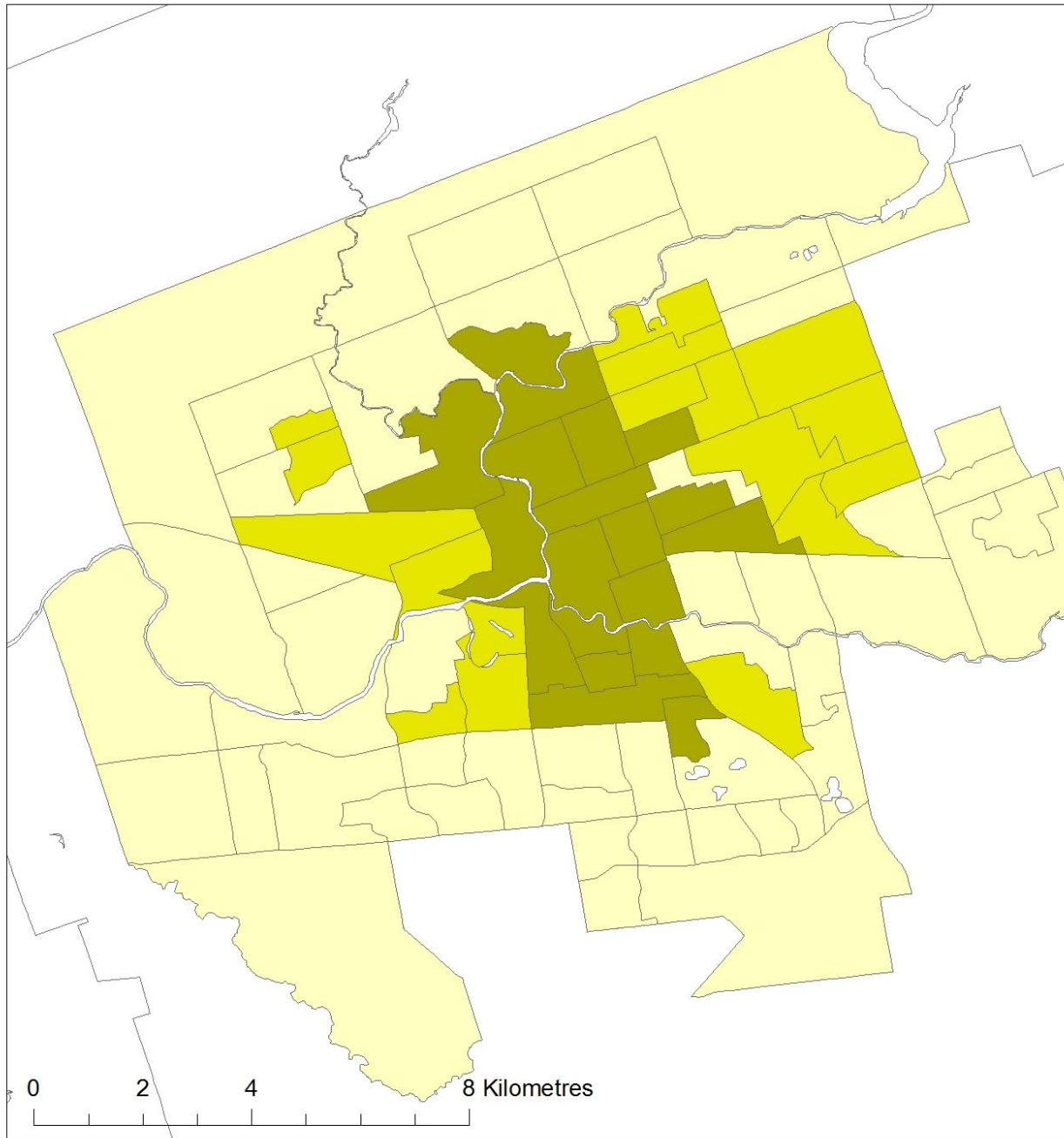
London

Transportation T9 Method

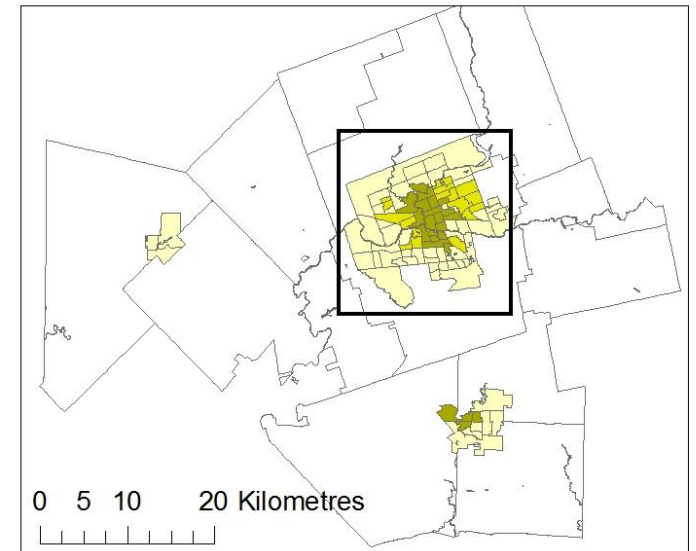
Legend

- Active Core
- Transit Suburb
- Auto Suburb
- Exurban

Active Core: 14%
Transit Suburb: 16%
Auto Suburb: 55%
Exurban: 14%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms & Ben McCauley



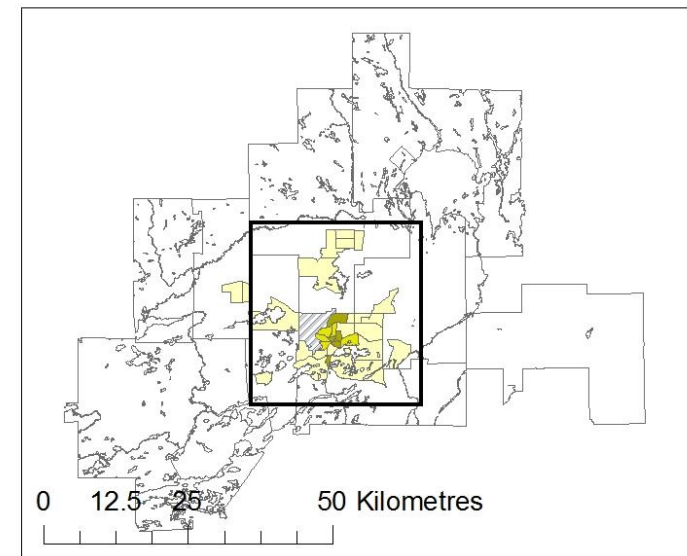
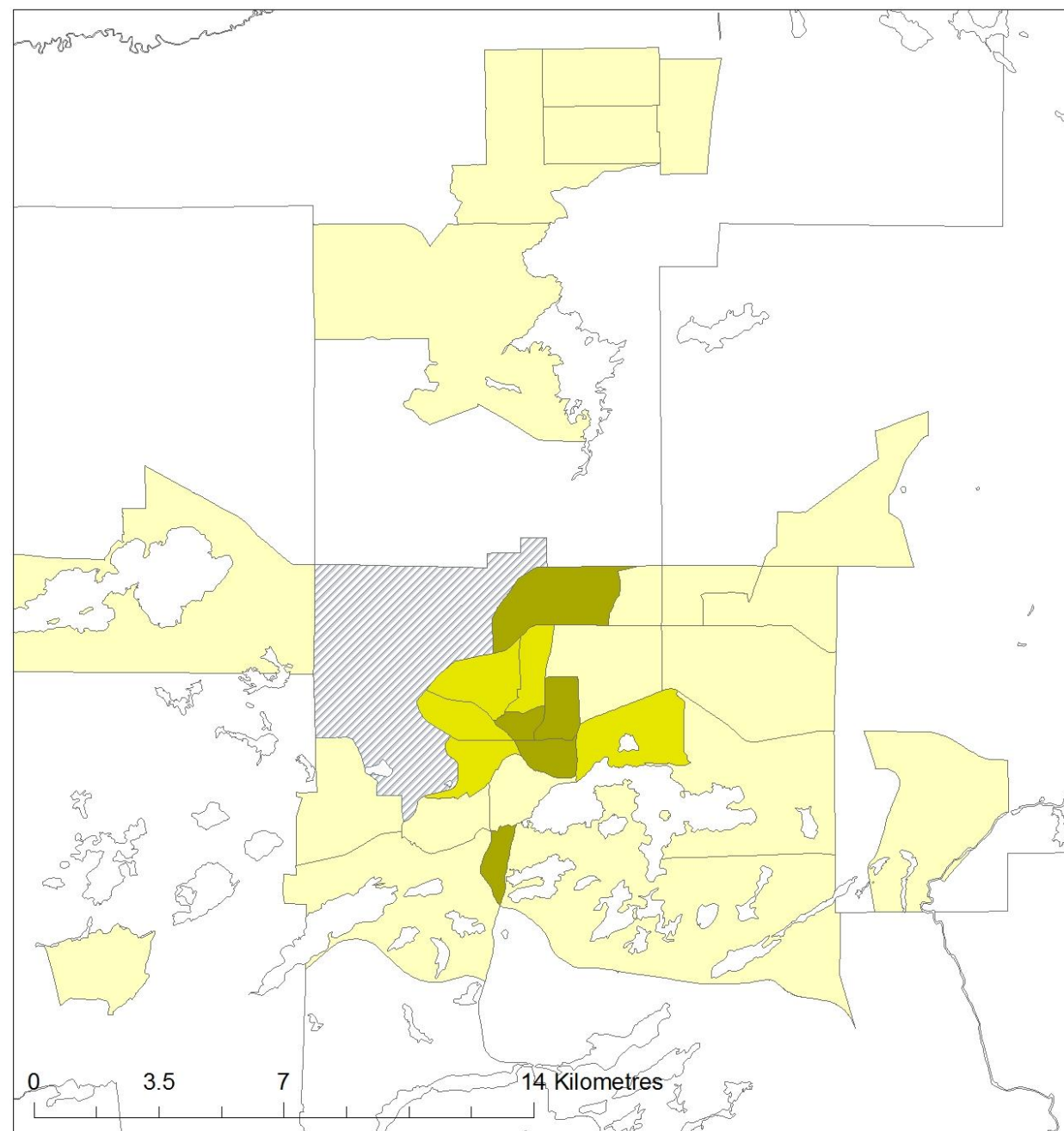
Greater Sudbury

Transportation T9 Method

Legend

	Active Core	Active Core: 7%
	Transit Suburb	Transit Suburb: 10%
	Auto Suburb	Auto Suburb: 59%
	Exurban	Exurban: 24%
	Unclassified	

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016








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Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms,
Ben McCauley & Shuhong Lin

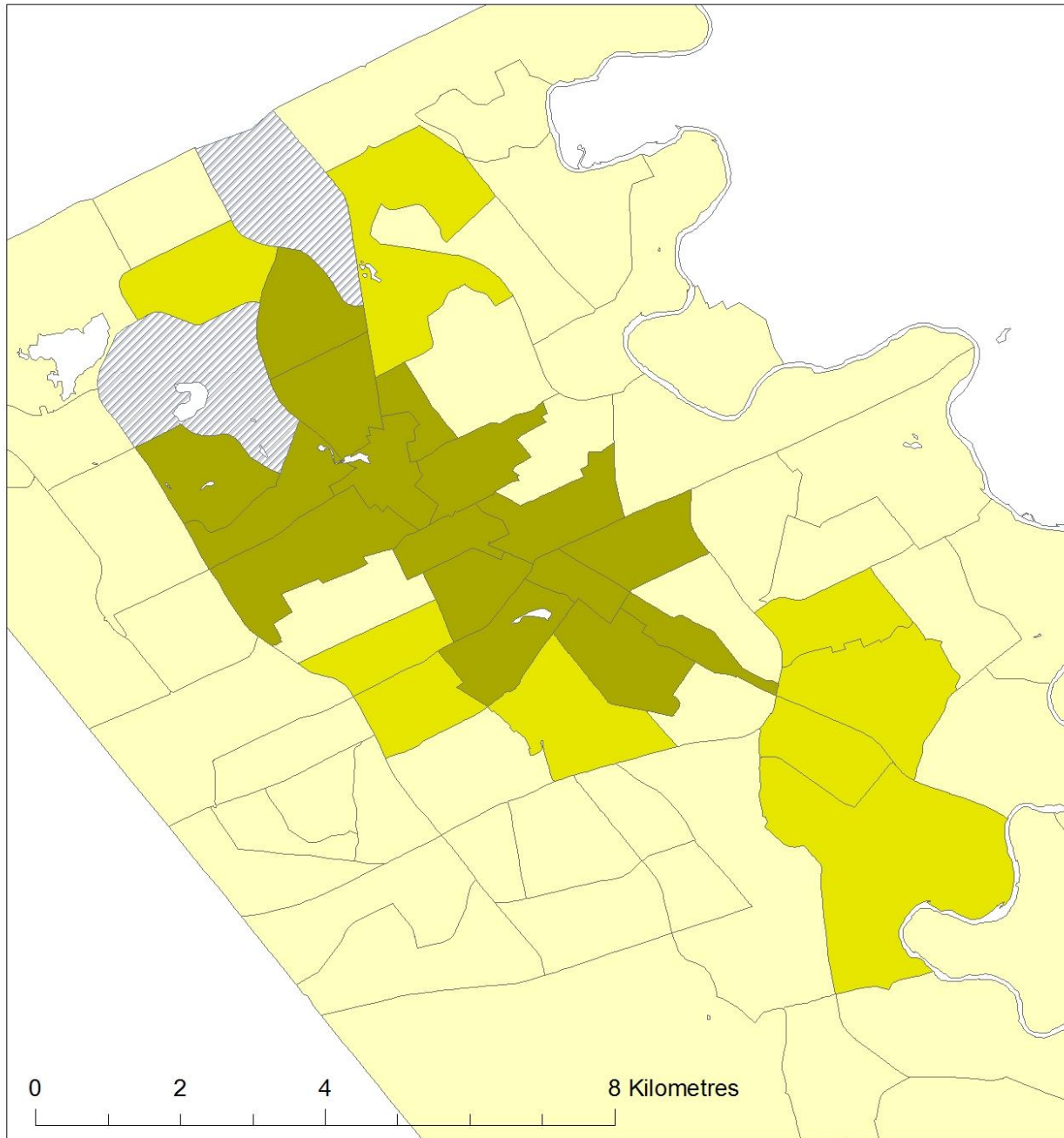


Kitchener-Waterloo-Cambridge

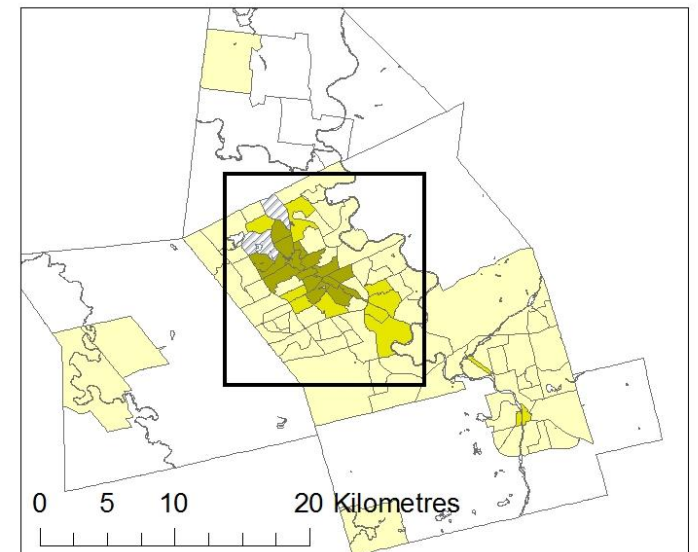
Transportation T9 Method

Legend

	Active Core	Active Core: 11%
	Transit Suburb	Transit Suburb: 12%
	Auto Suburb	Auto Suburb: 72%
	Exurban	Exurban: 5%
	Unclassified	



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



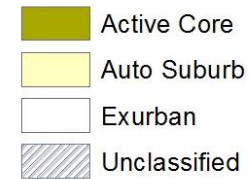
Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Chris Willms & Lyra Hindrichs



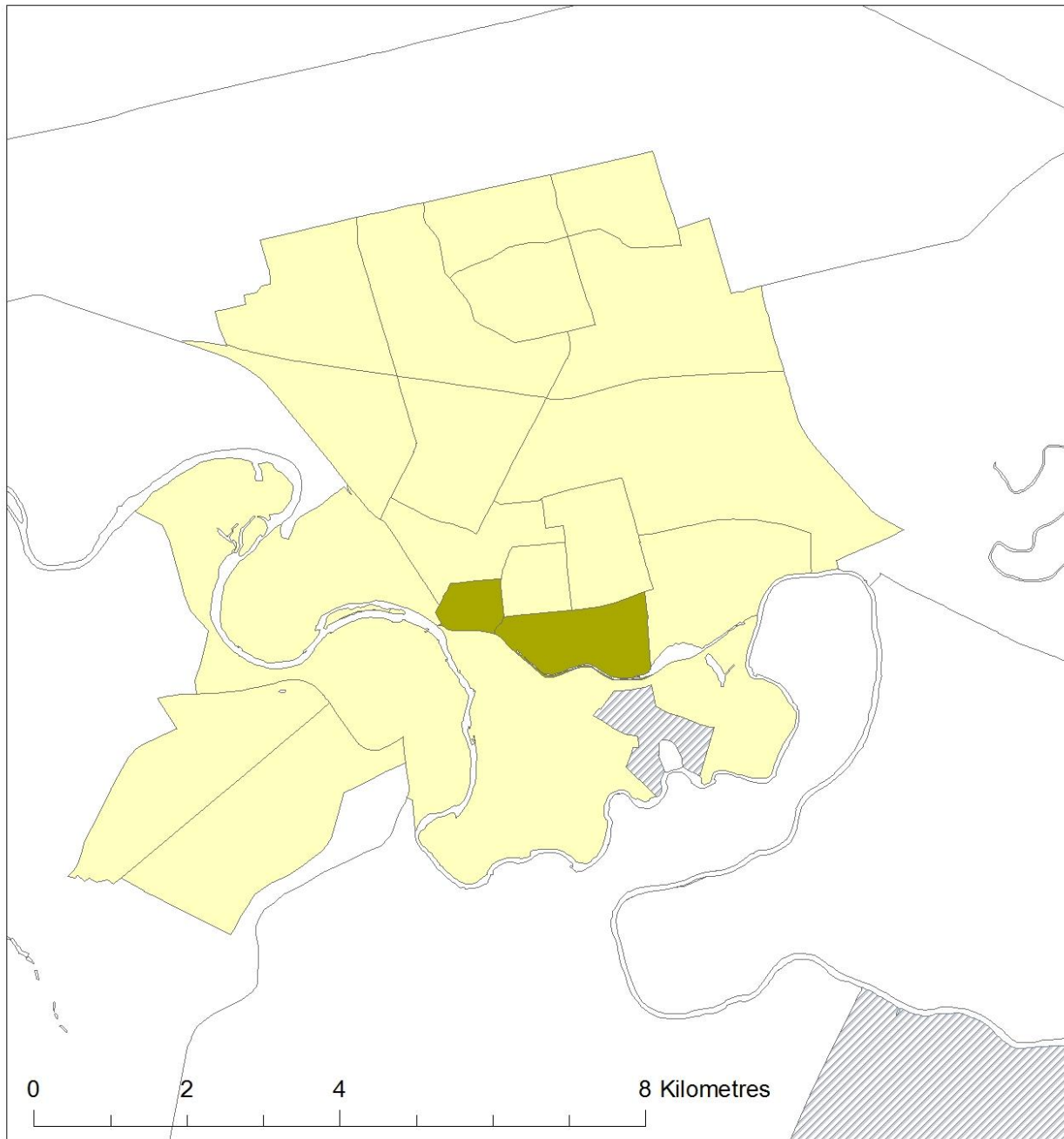
Brantford

Transportation T9 Method

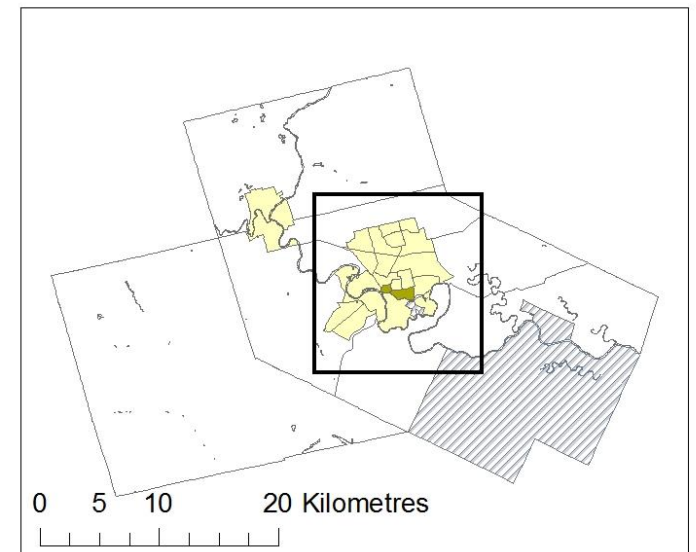
Legend



Active Core: 3%
Auto Suburb: 78%
Exurban: 19%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms,
Ben McCauley & Shuhong Lin



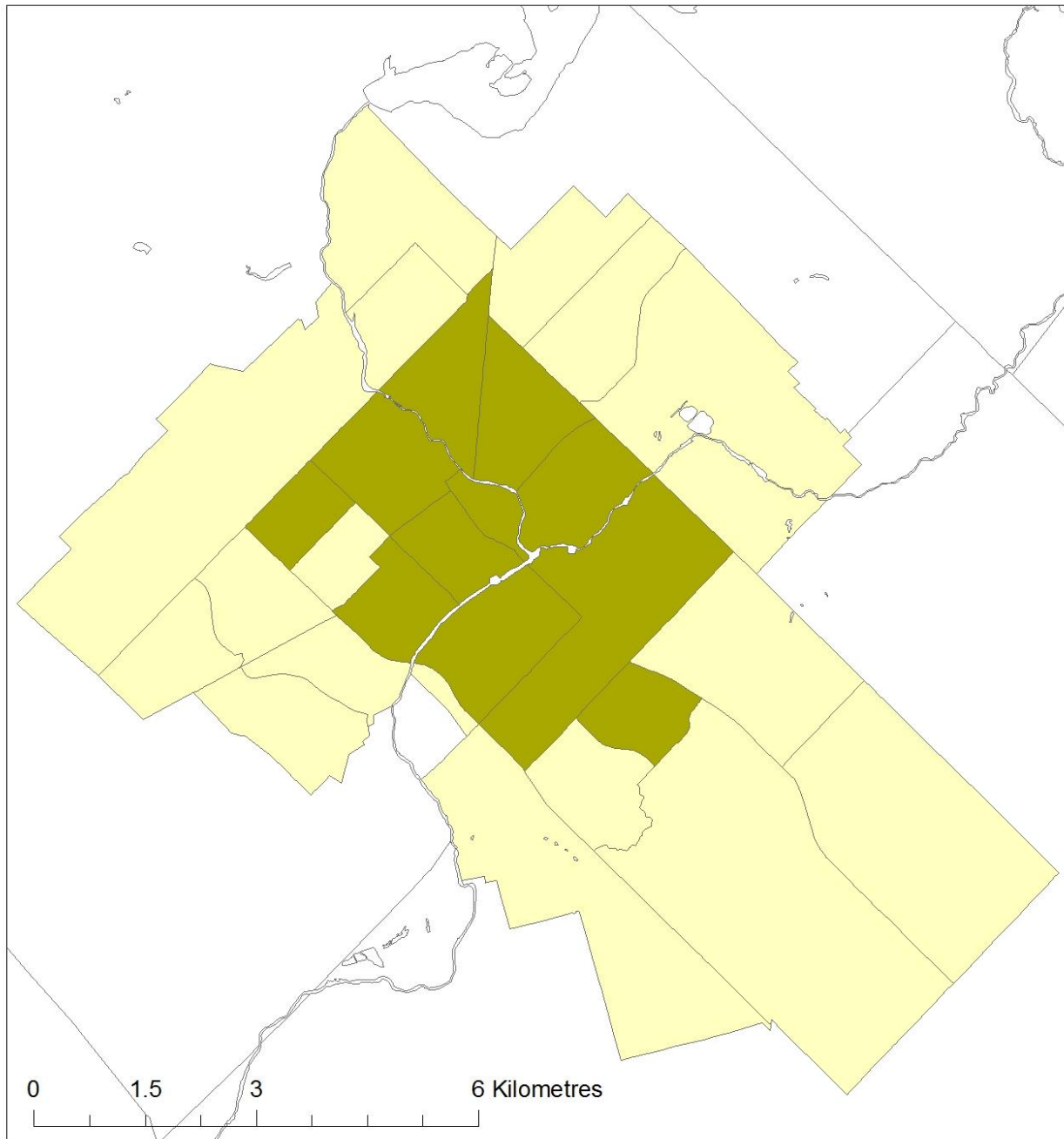
Guelph

Transportation T9 Method

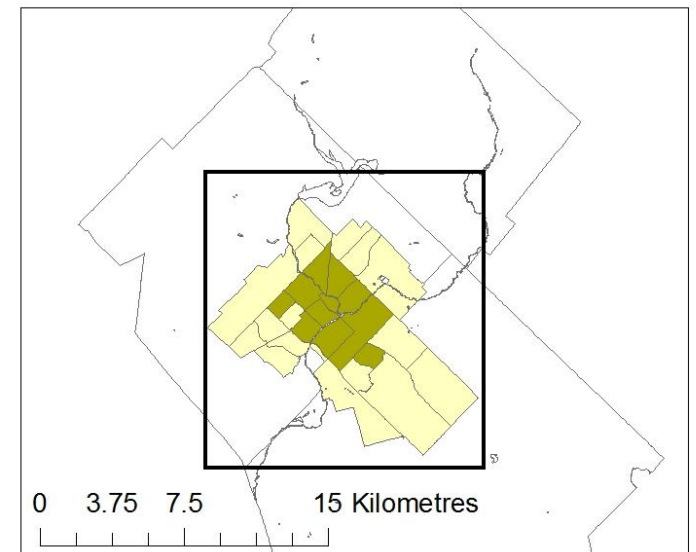
Legend

- Active Core
- Auto Suburb
- Exurban

Active Core: 27%
Auto Suburb: 60%
Exurban: 13%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



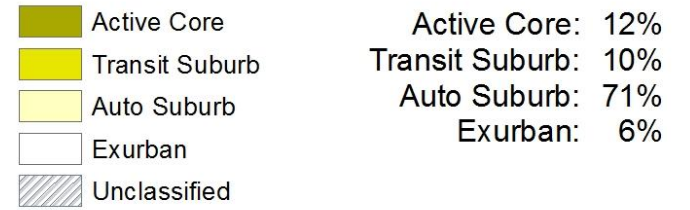
Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Wilms,
Ben McCauley & Shuhong Lin



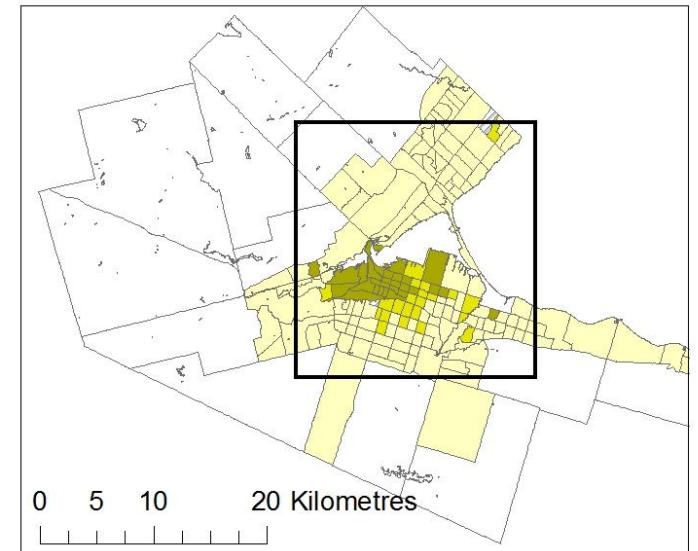
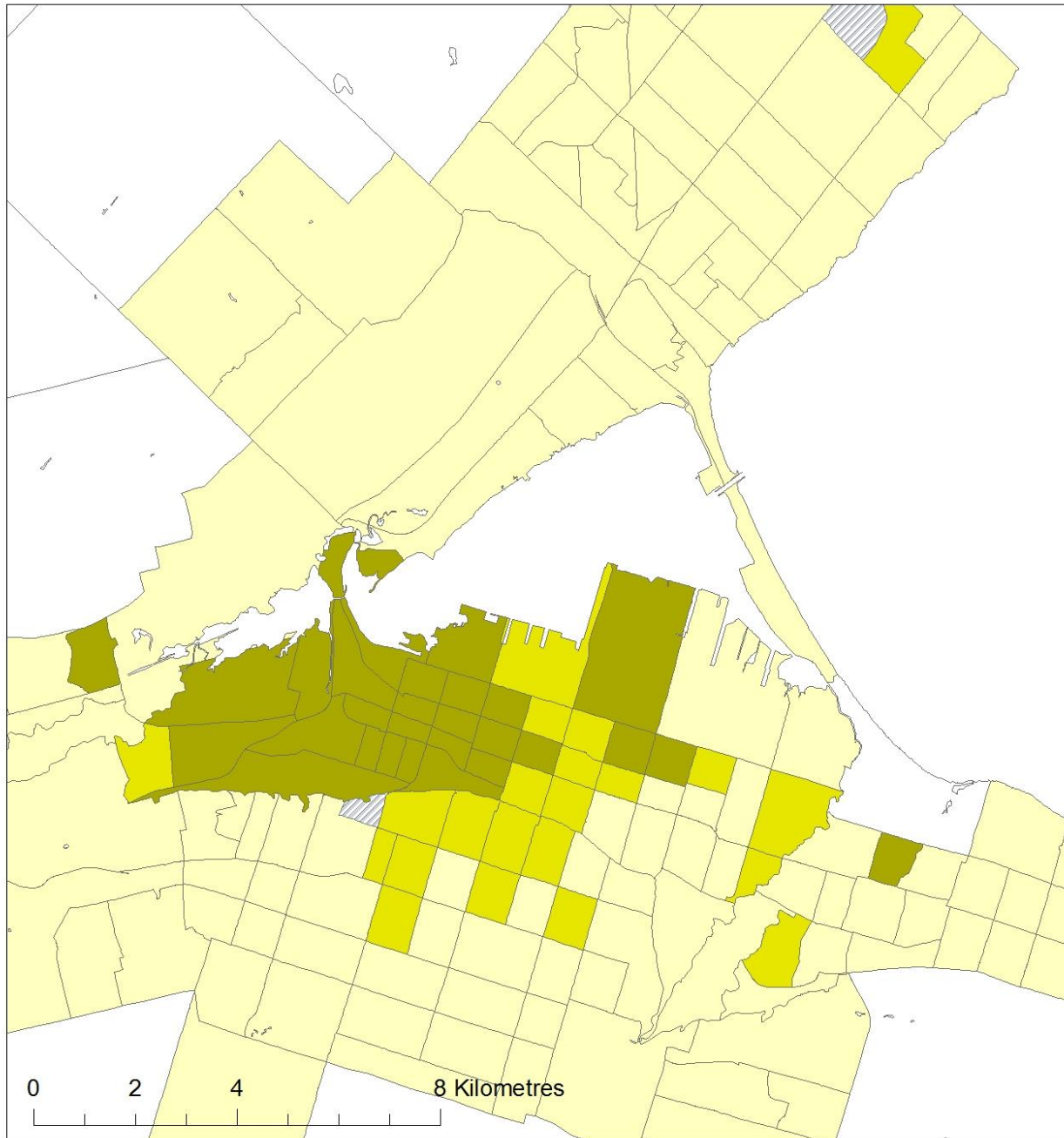
Hamilton

Transportation T9 Method

Legend



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016







Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Chris Willms, Lyra Hindrichs & Ben McCauley



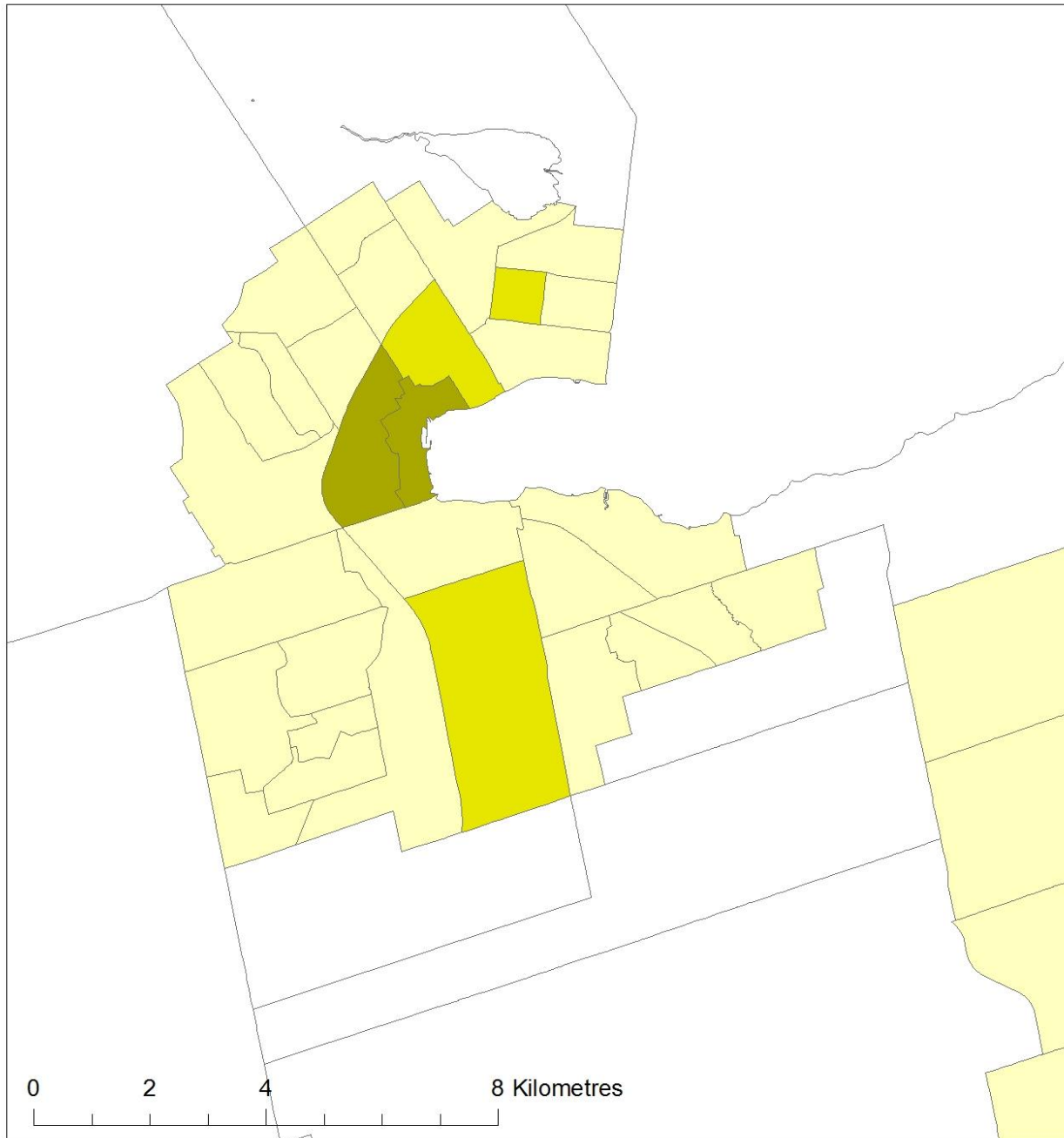
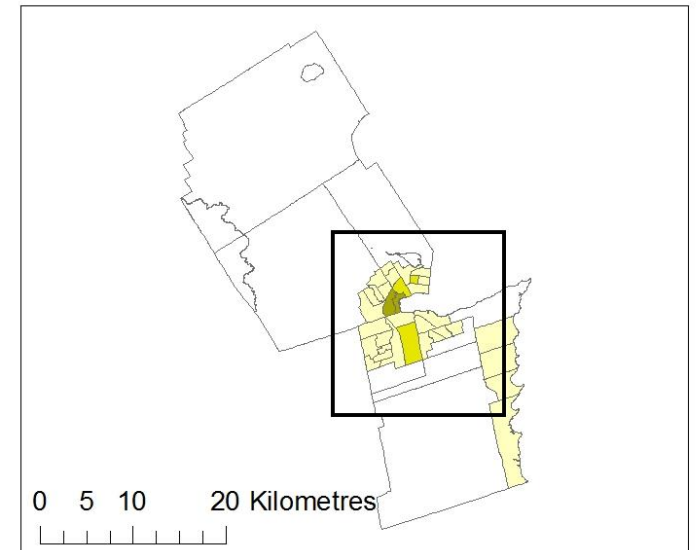
Barrie

Transportation T9 Method

Legend

	Active Core	Active Core: 4%
	Transit Suburb	Transit Suburb: 5%
	Auto Suburb	Auto Suburb: 76%
	Exurban	Exurban: 15%

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



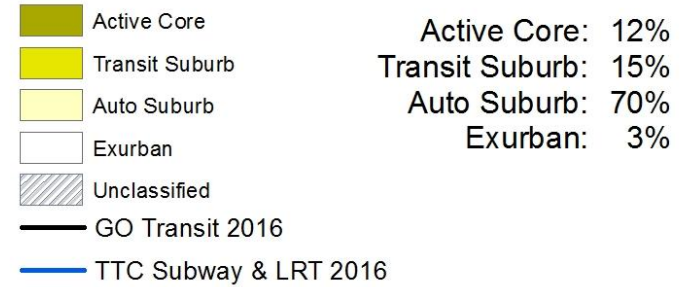
Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms,
Ben McCauley & Shuhong Lin



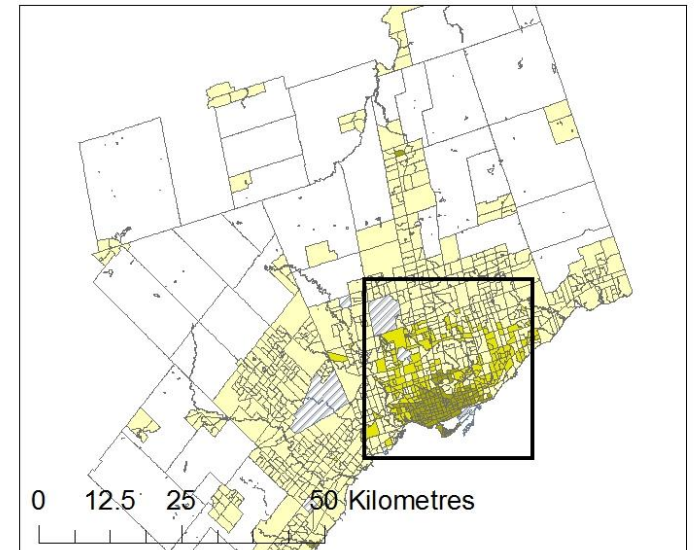
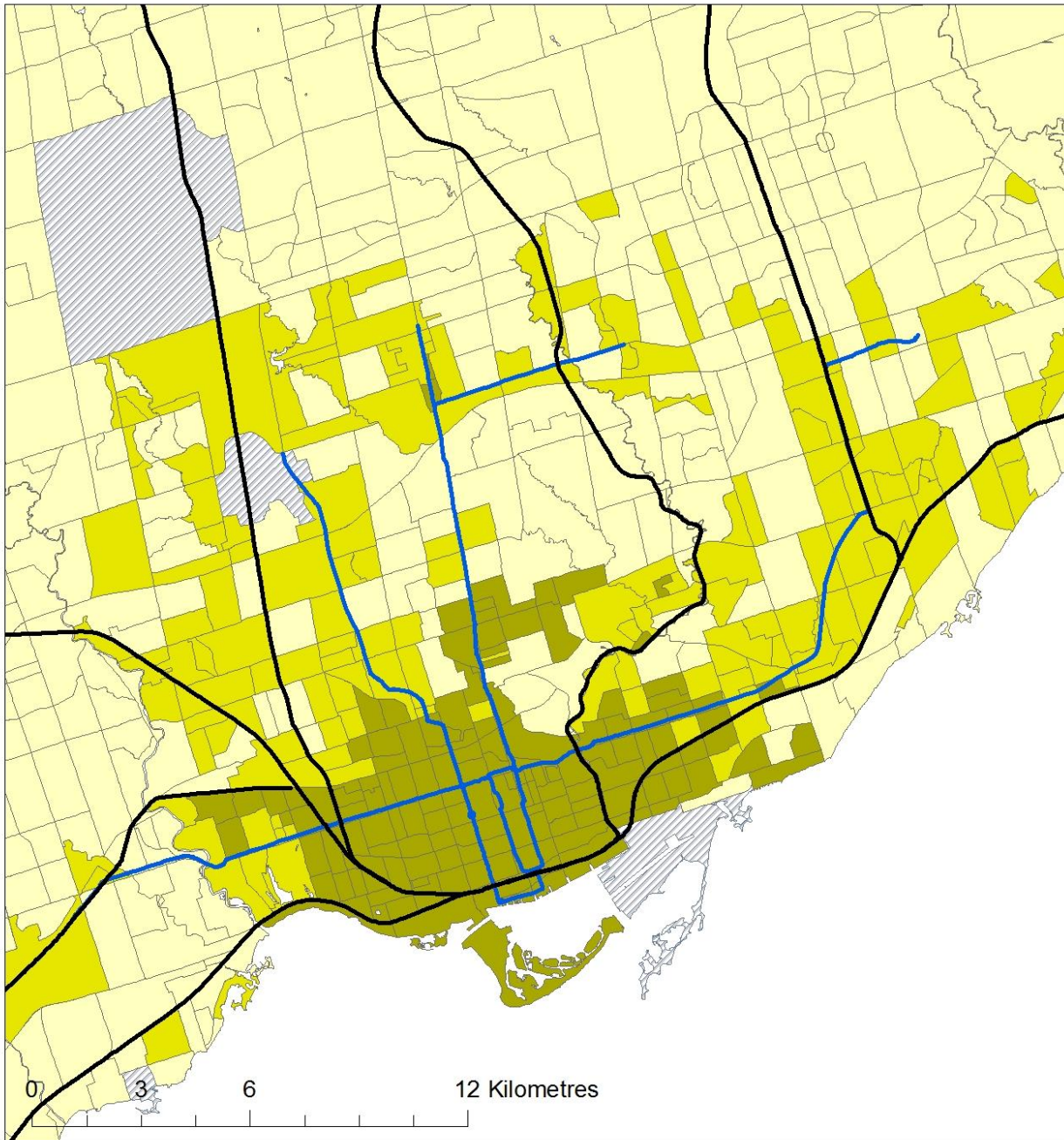
Toronto

Transportation T9 Method

Legend



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Chris Willms, Lyra Hindrichs,
Ben McCauley & Shuhong Lin



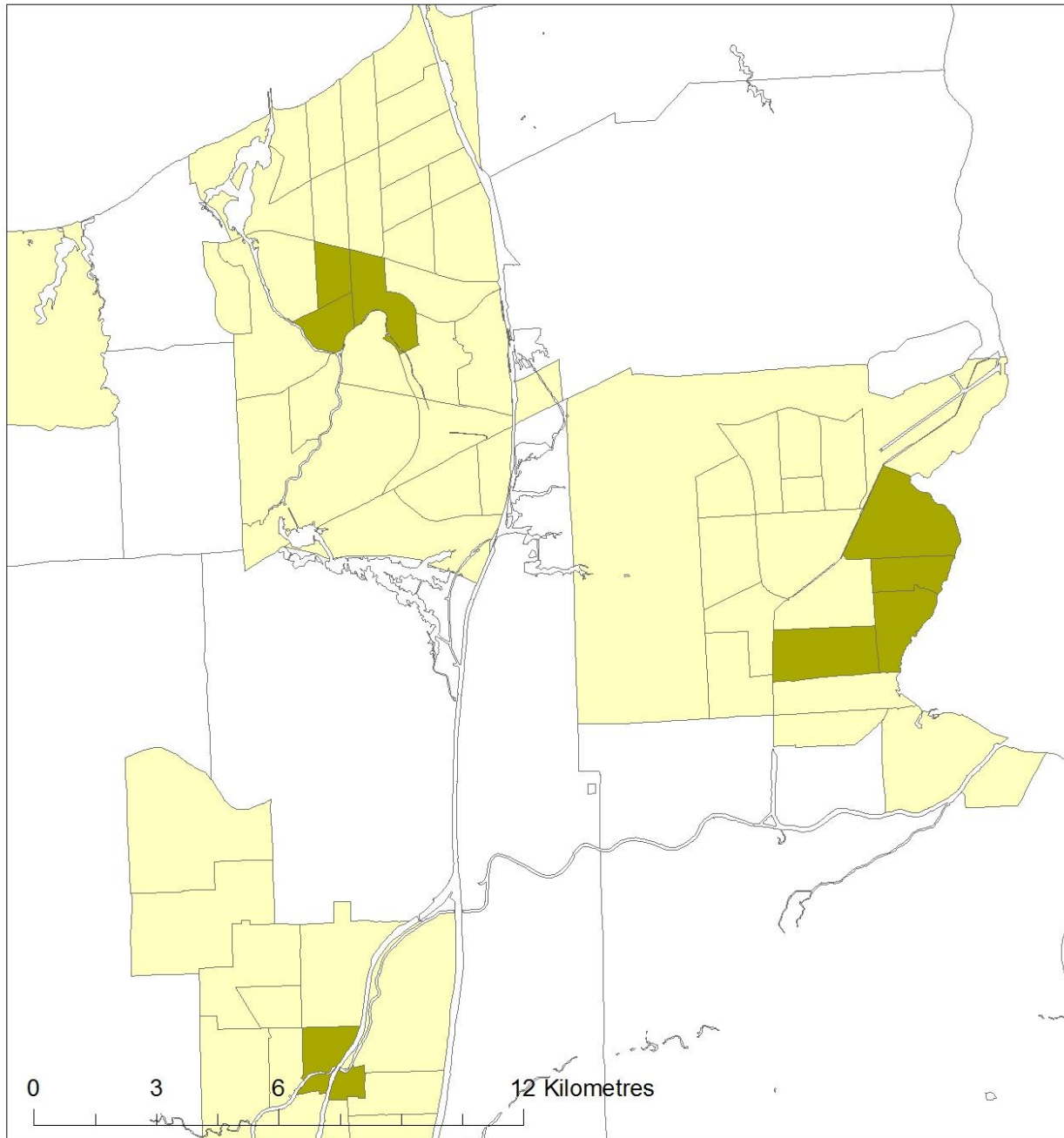
St. Catharines - Niagara

Transportation T9 Method

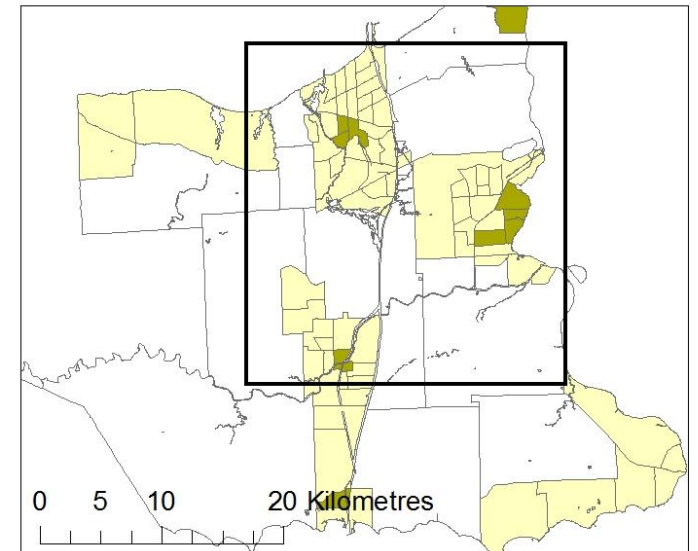
Legend

- Active Core
- Auto Suburb
- Exurban

Active Core: 11%
Auto Suburb: 77%
Exurban: 12%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016







Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms & Ben McCauley



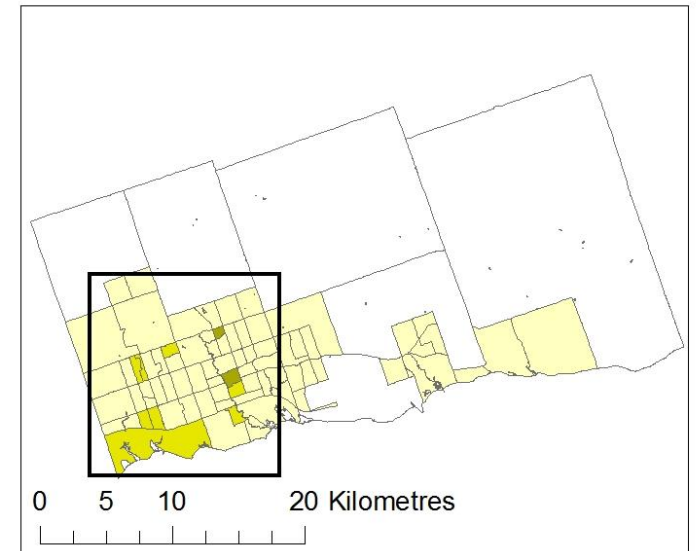
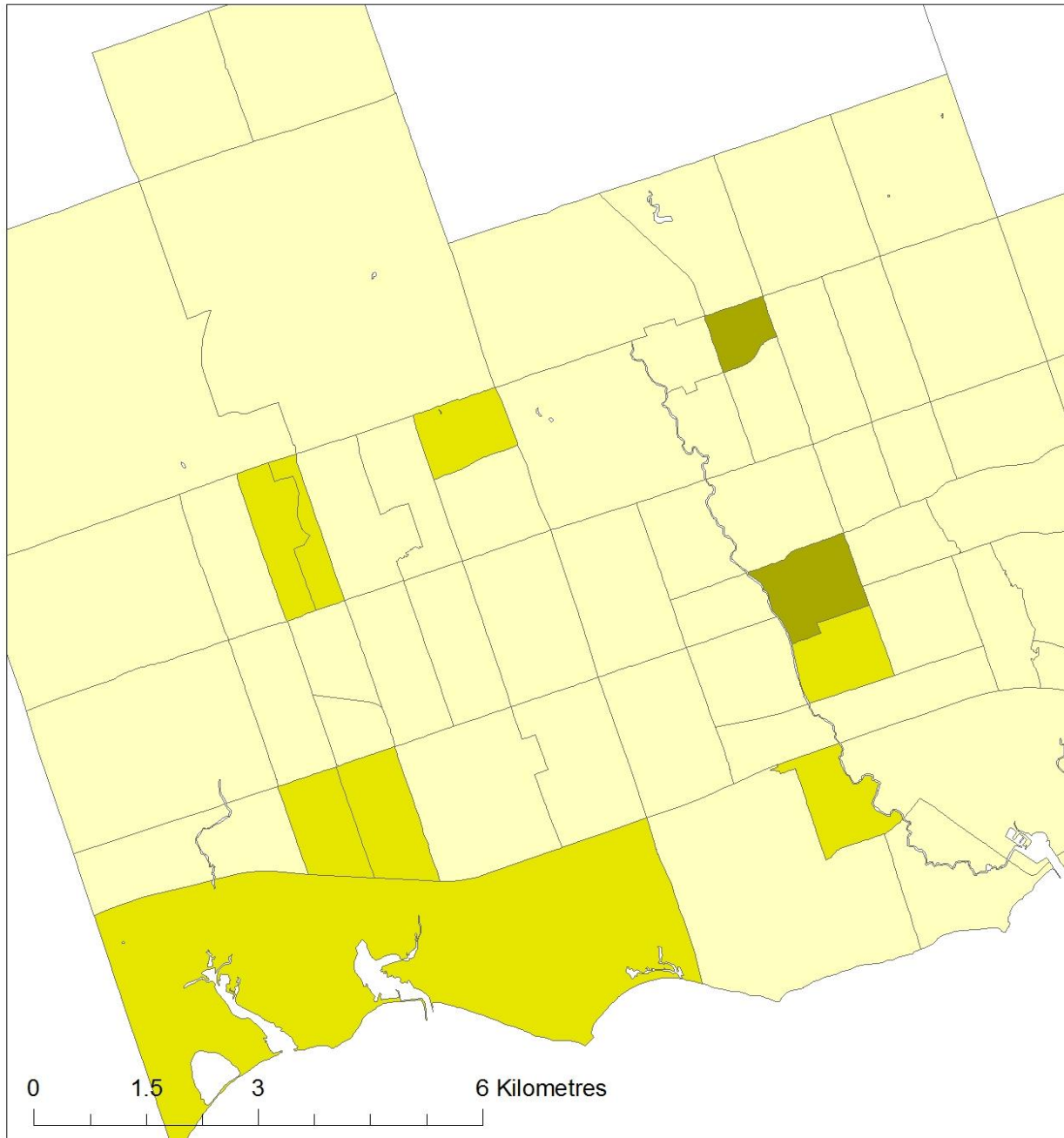
Oshawa

Transportation T9 Method

Legend

	Active Core	Active Core:	3%
	Transit Suburb	Transit Suburb:	9%
	Auto Suburb	Auto Suburb:	82%
	Exurban	Exurban:	7%

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016






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Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms,
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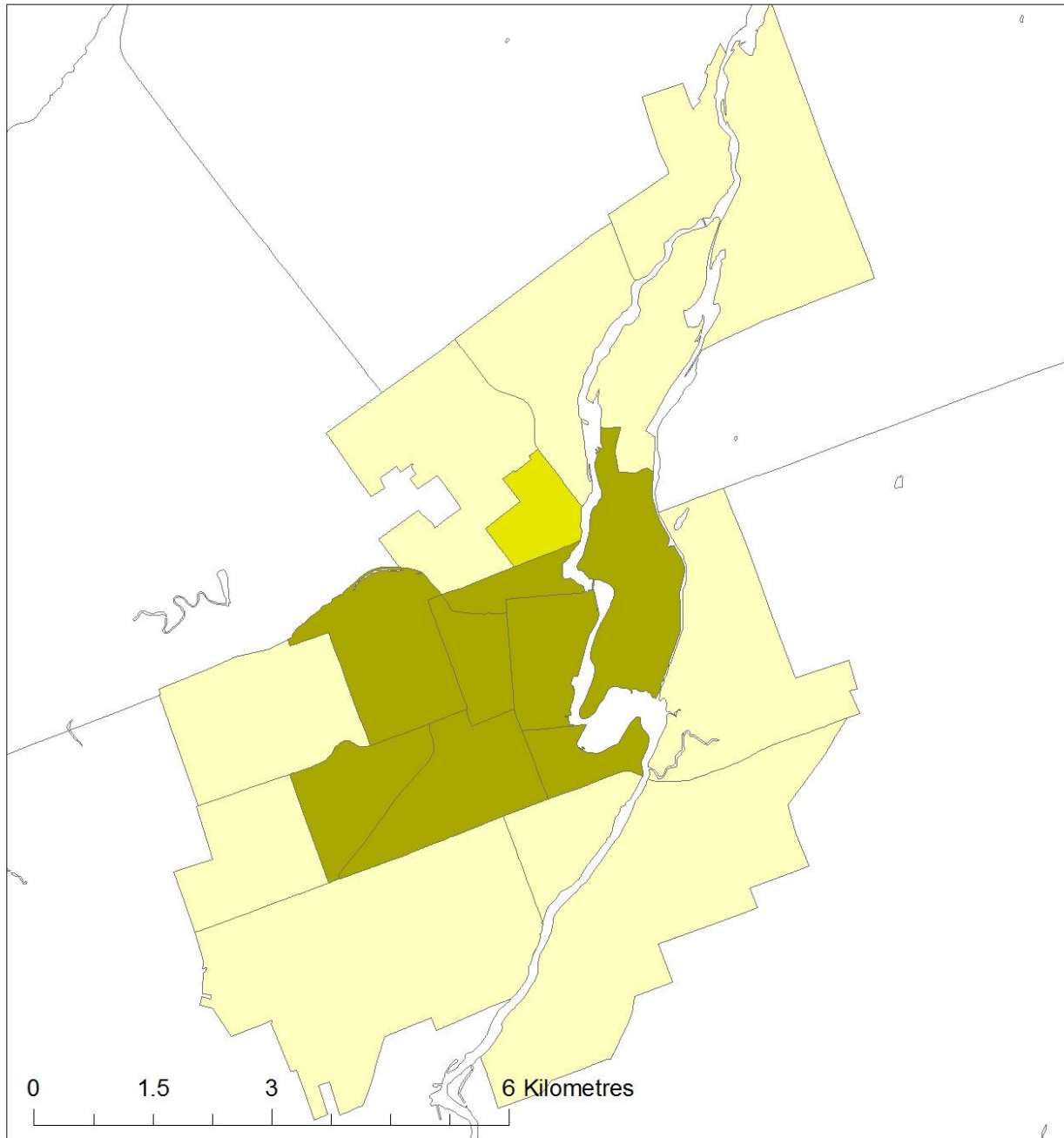


Peterborough

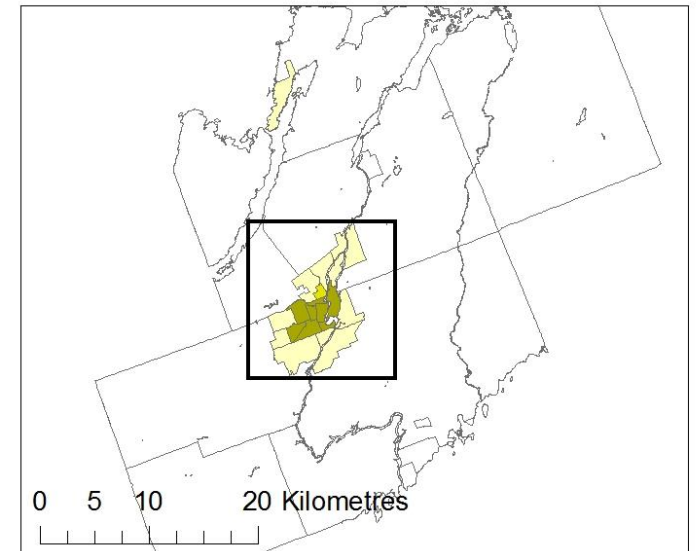
Transportation T9 Method

Legend

	Active Core	Active Core: 26%
	Transit Suburb	Transit Suburb: 2%
	Auto Suburb	Auto Suburb: 38%
	Exurban	Exurban: 34%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms,
Ben McCauley & Shuhong Lin



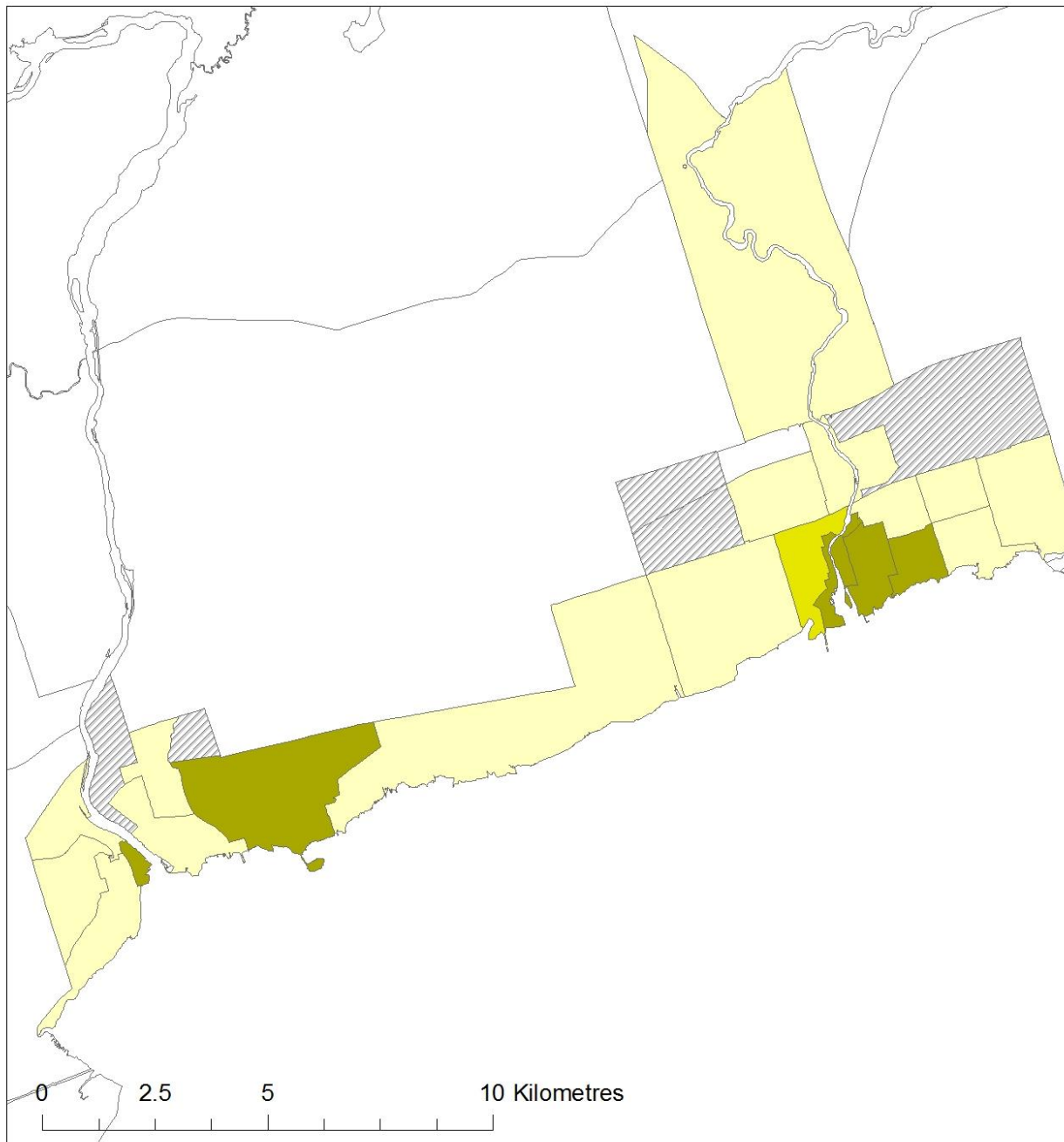
Belleville

Transportation T9 Method

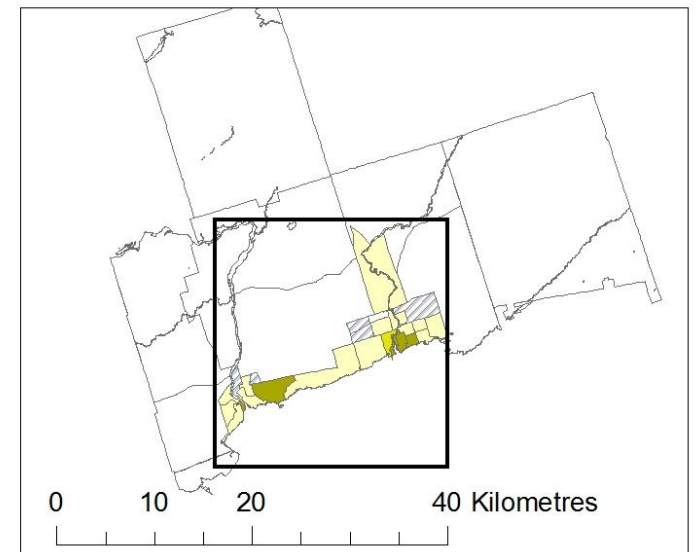
Legend

- Active Core
- Transit Suburb
- Auto Suburb
- Exurban
- Unclassified

Active Core: 9%
Transit Suburb: 5%
Auto Suburb: 52%
Exurban: 34%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016








Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs & Chris Willms



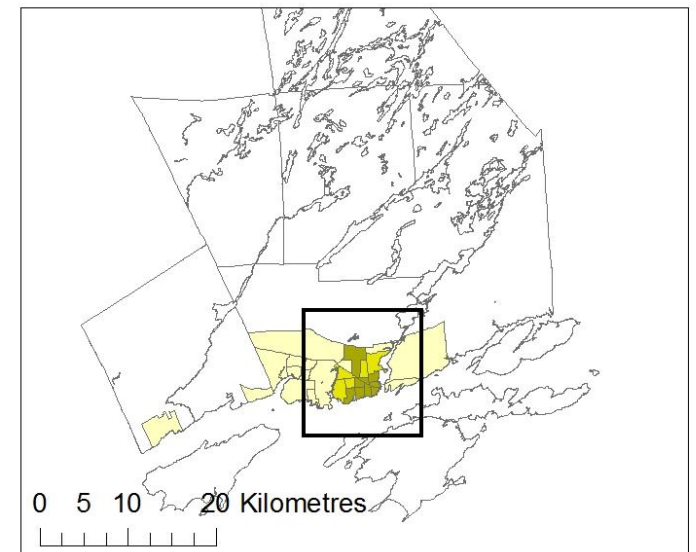
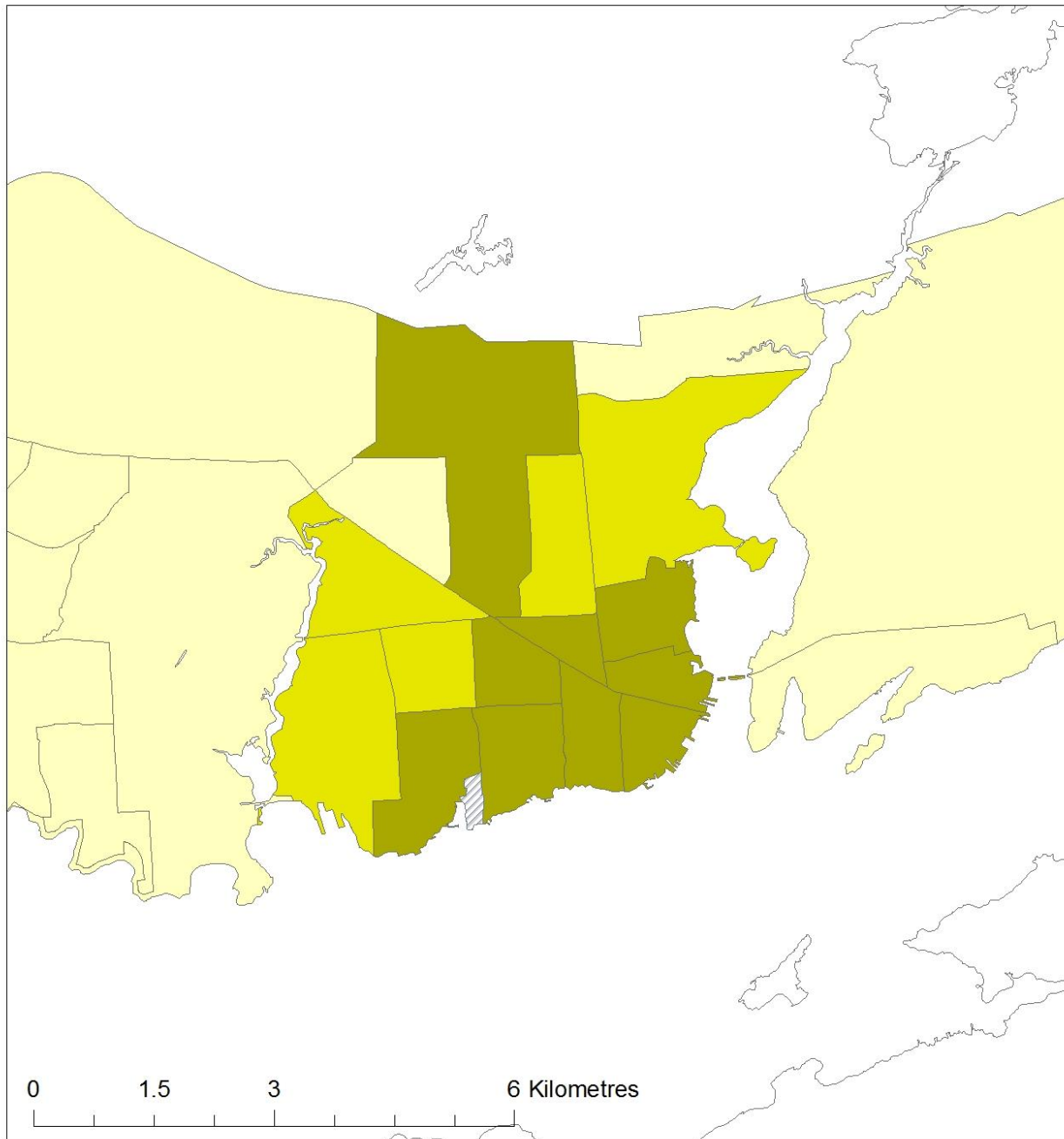
Kingston

Transportation T9 Method

Legend

	Active Core	Active Core: 14%
	Transit Suburb	Transit Suburb: 15%
	Auto Suburb	Auto Suburb: 48%
	Exurban	Exurban: 23%
	Unclassified	

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016







Queen's School of Urban and Regional Planning
Principal Investigator: David Gordon
Research Assistants: Chris Willms, Lyra Hindrichs,
Ben McCauley & Shuhong Lin

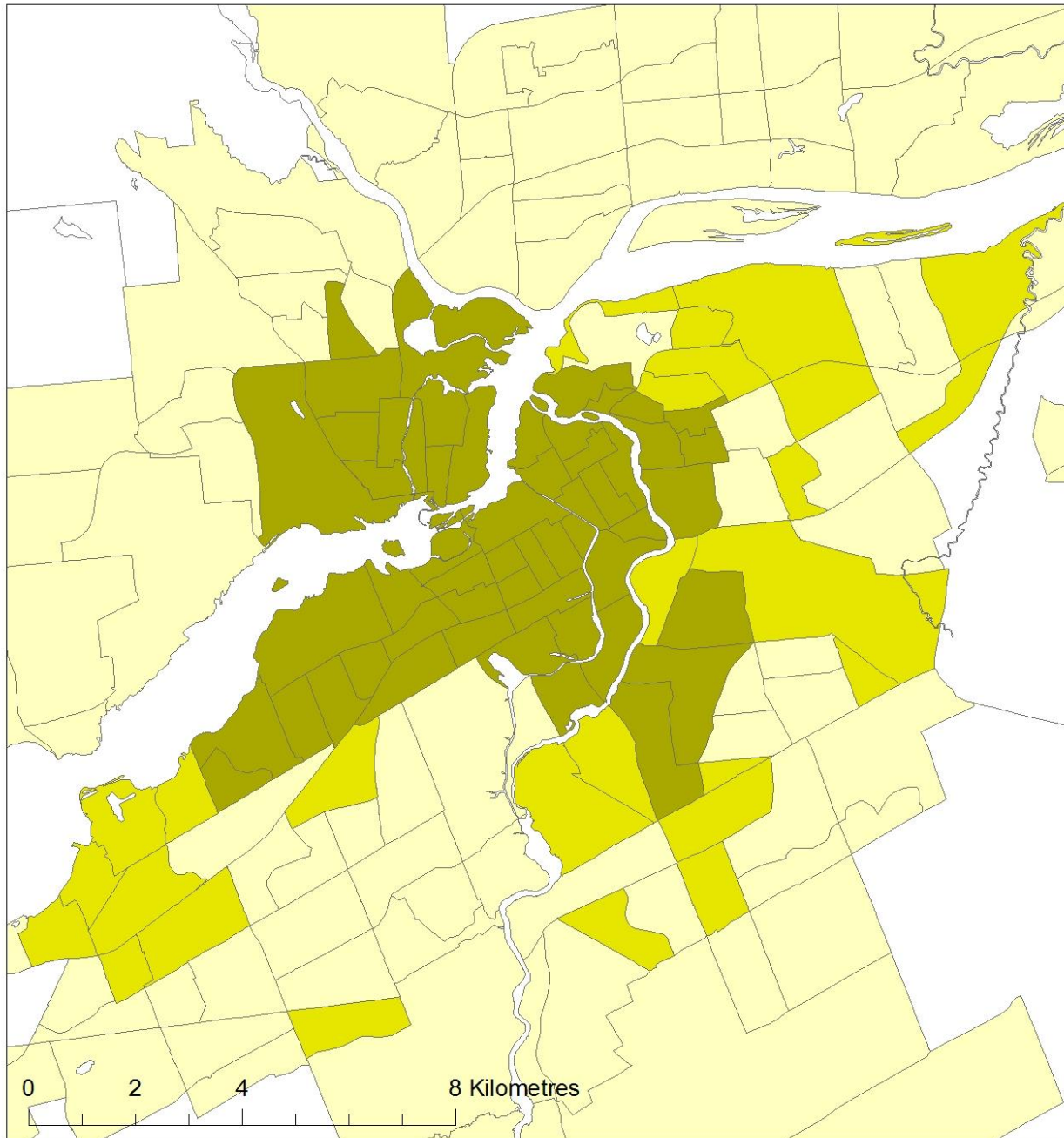


Ottawa-Gatineau

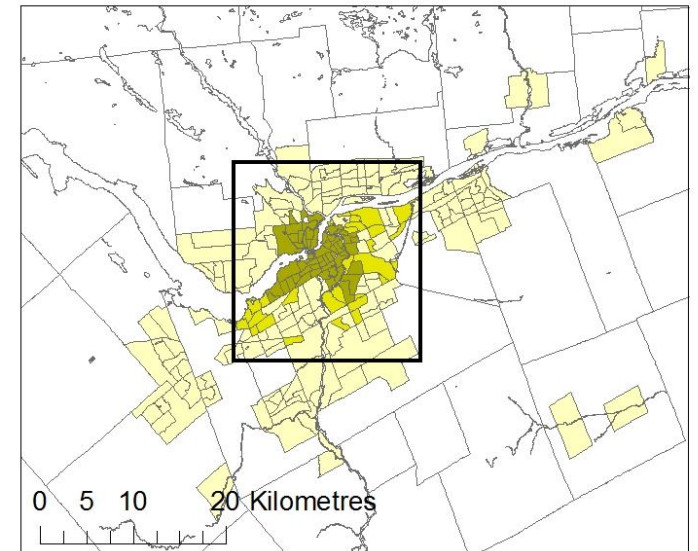
Transportation T9 Method

Legend

	Active Core	Active Core: 15%
	Transit Suburb	Transit Suburb: 9%
	Auto Suburb	Auto Suburb: 62%
	Exurban	Exurban: 14%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016

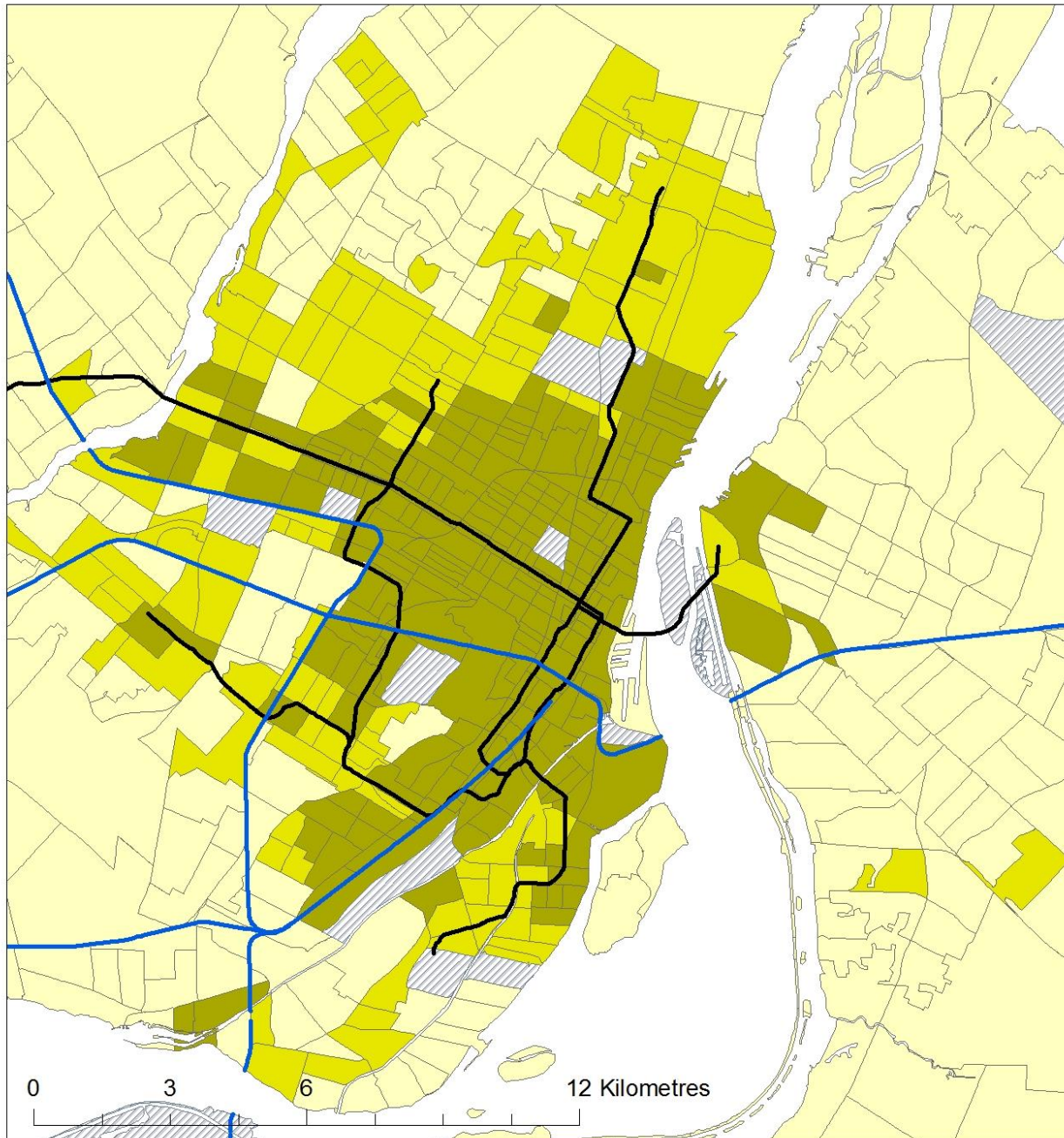


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Principal Investigator: David Gordon
Research Assistants: Lyra Hindrichs, Chris Willms &
Emily Goldney










Montréal

Transportation T9 Method

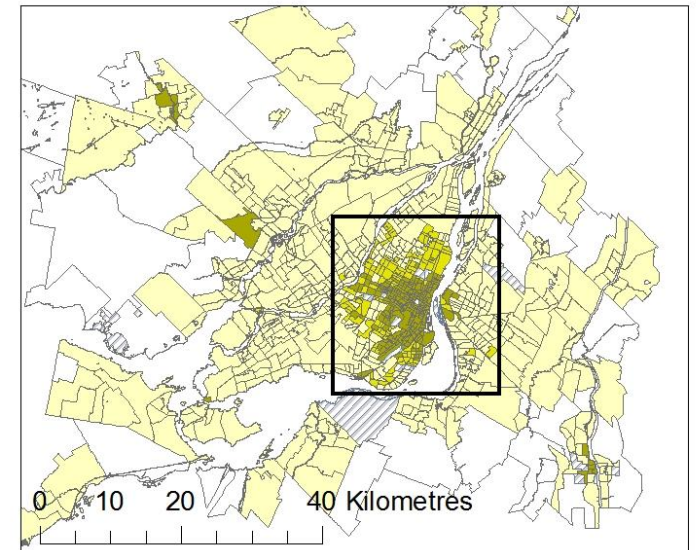


Legend

-  Active Core
-  Transit Suburb
-  Auto Suburb
-  Exurban
-  Unclassified
-  Commuter Rail 2016
-  Metro 2016

Active Core: 17%
Transit Suburb: 14%
Auto Suburb: 66%
Exurban: 3%

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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Research Assistant: Lyra Hindrichs & Chris Willms



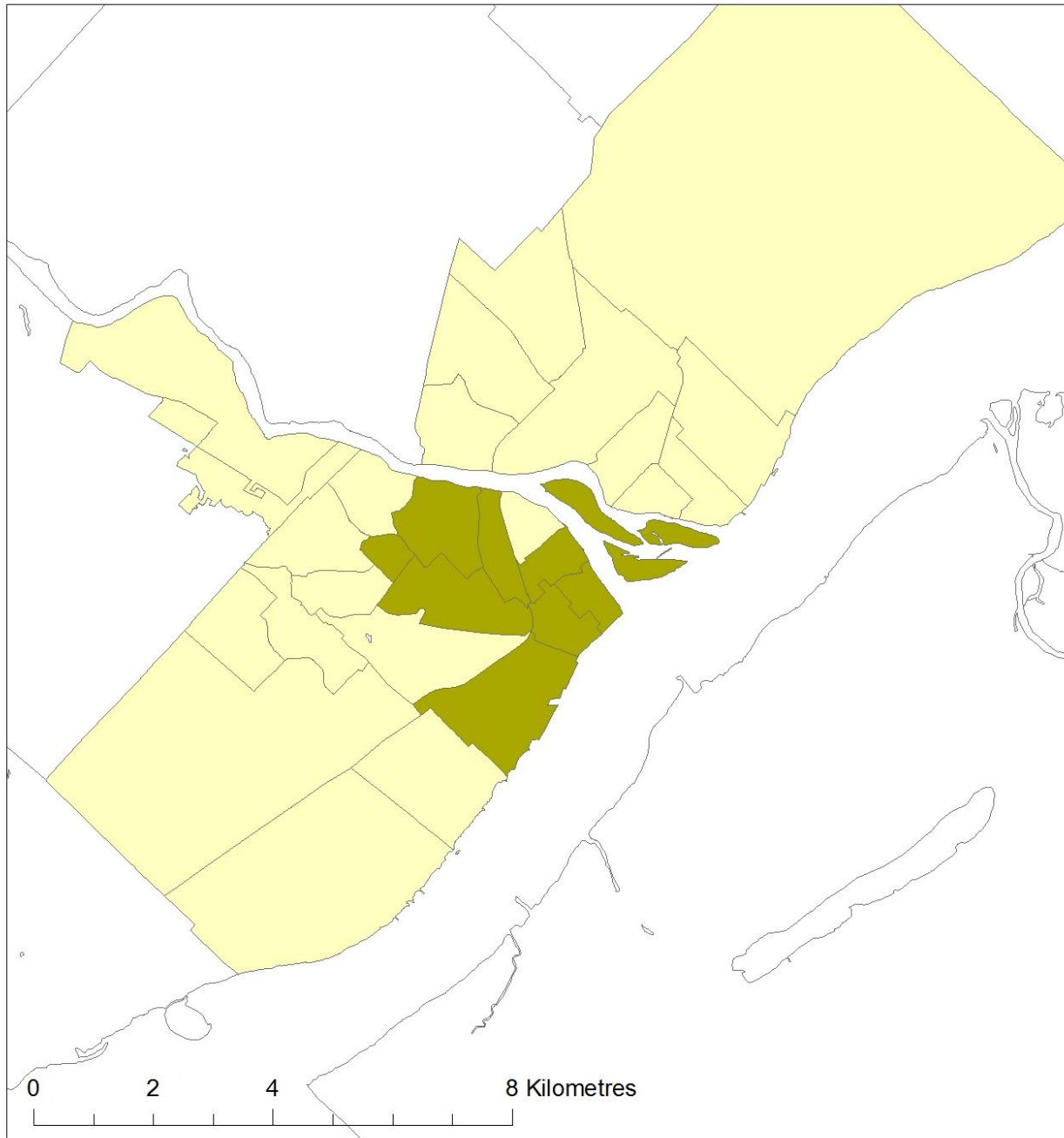
Trois-Rivières

Transportation T9 Method

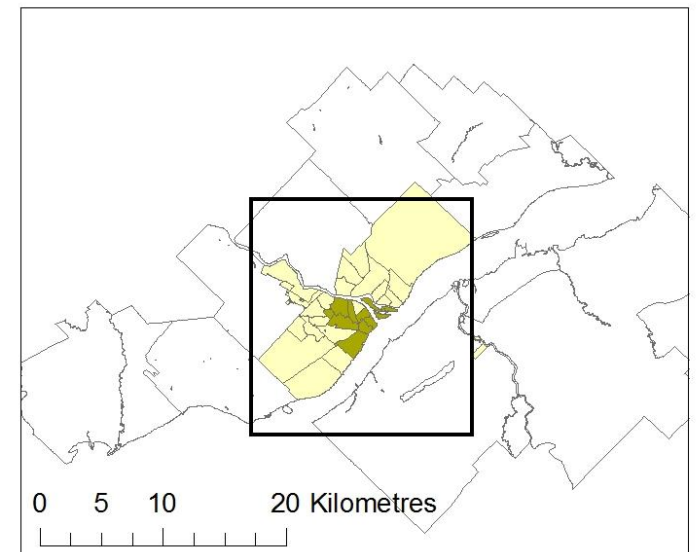
Legend

- Active Core
- Auto Suburb
- Exurban

Active Core: 13%
Auto Suburb: 58%
Exurban: 29%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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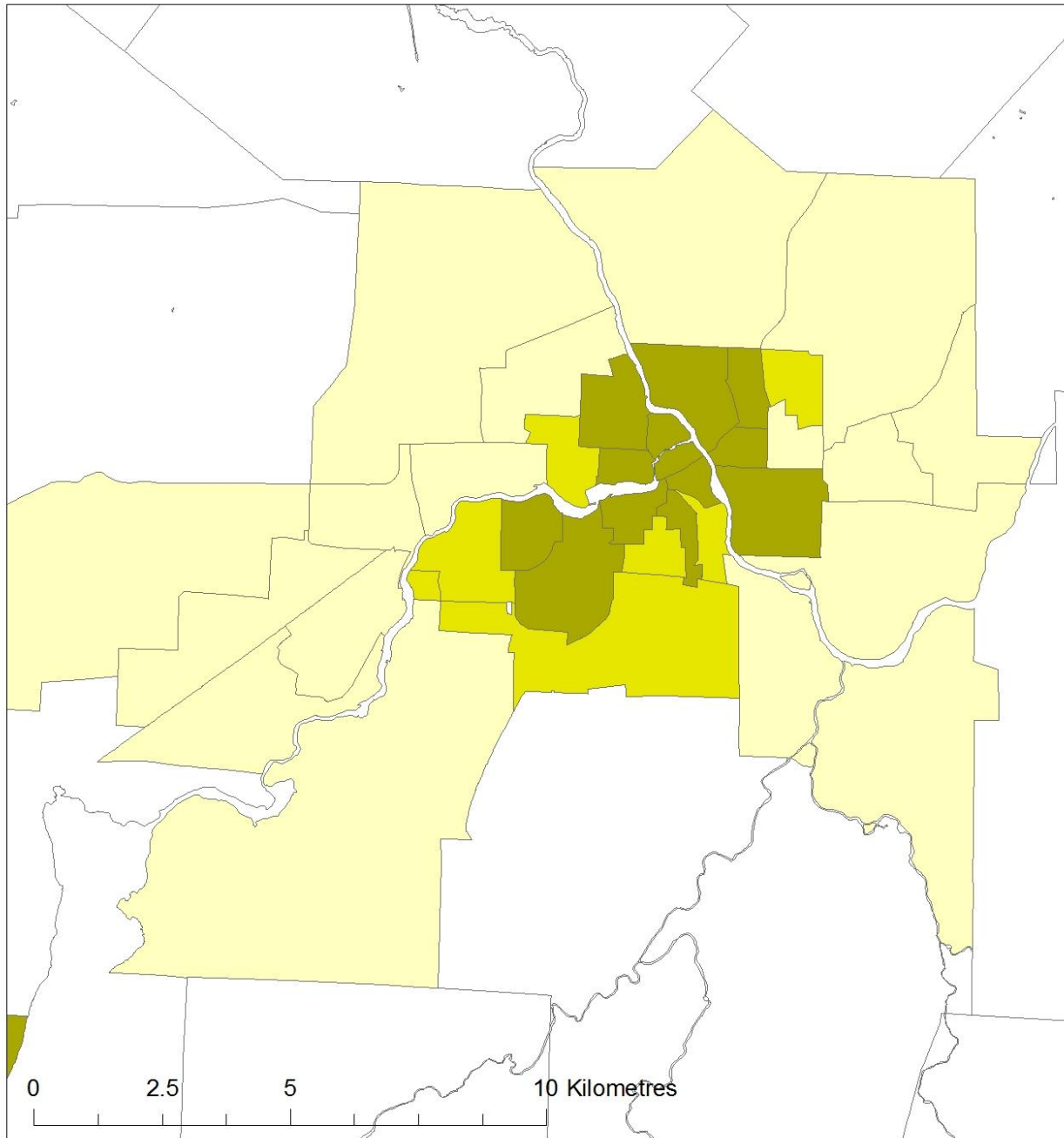


Sherbrooke

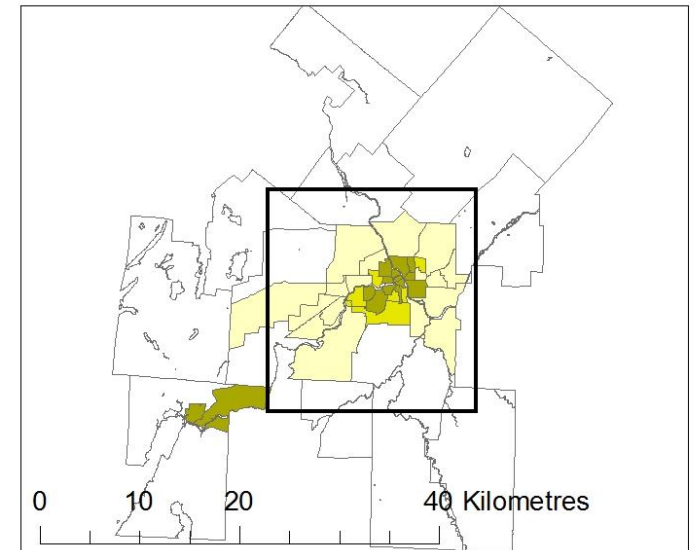
Transportation T9 Method

Legend

	Active Core	Active Core: 23%
	Transit Suburb	Transit Suburb: 12%
	Auto Suburb	Auto Suburb: 39%
	Exurban	Exurban: 25%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016







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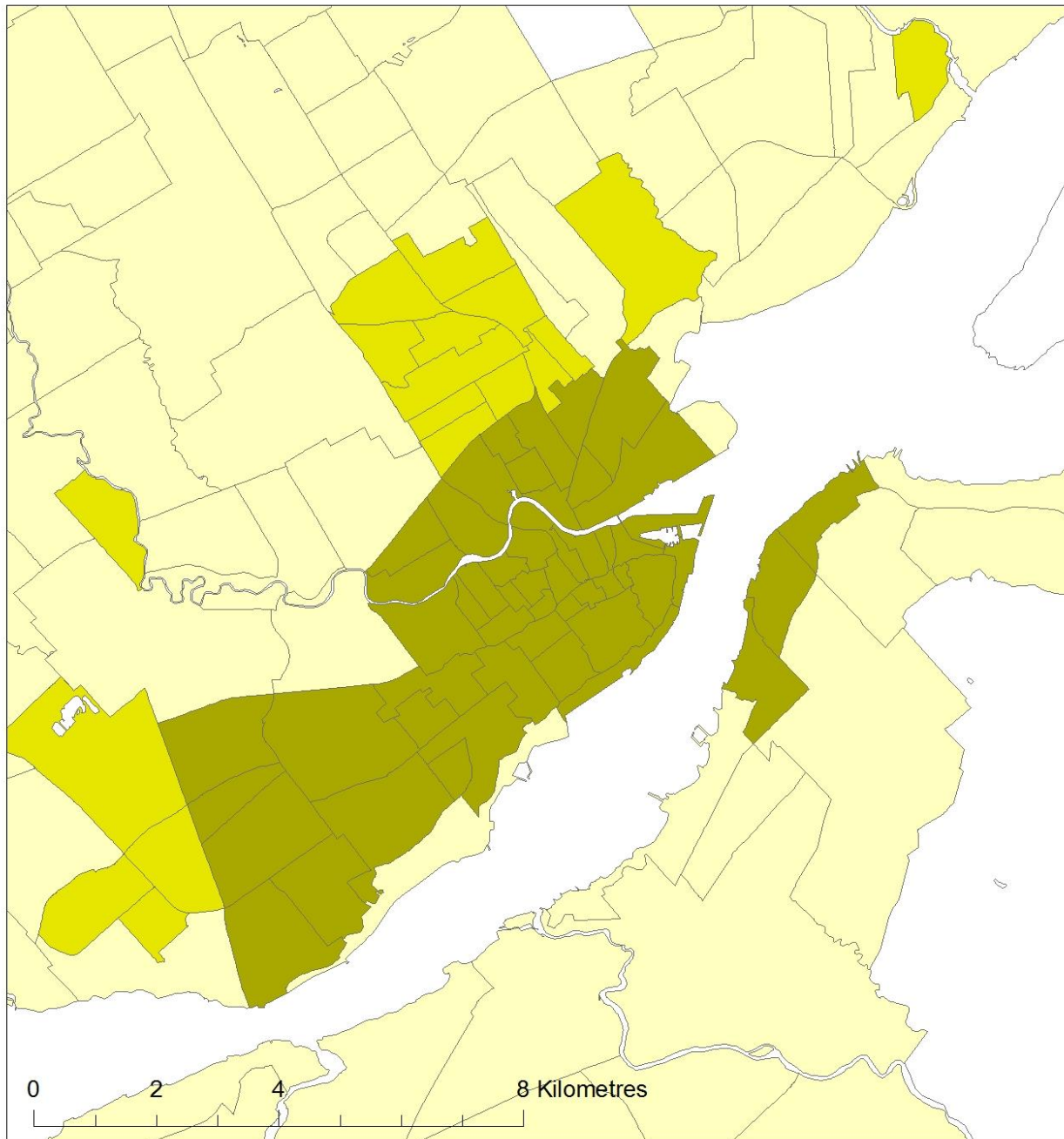
Québec

Transportation T9 Method

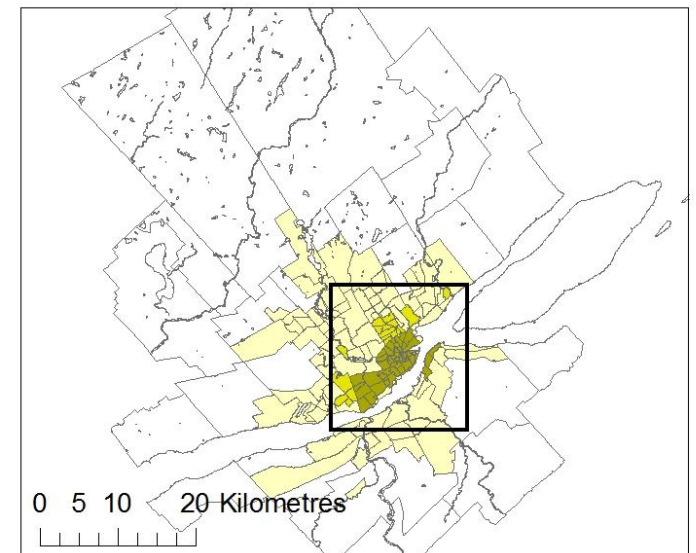
Legend

-  Active Core
-  Transit Suburb
-  Auto Suburb
-  Exurban

- Active Core: 19%
- Transit Suburb: 10%
- Auto Suburb: 56%
- Exurban: 15%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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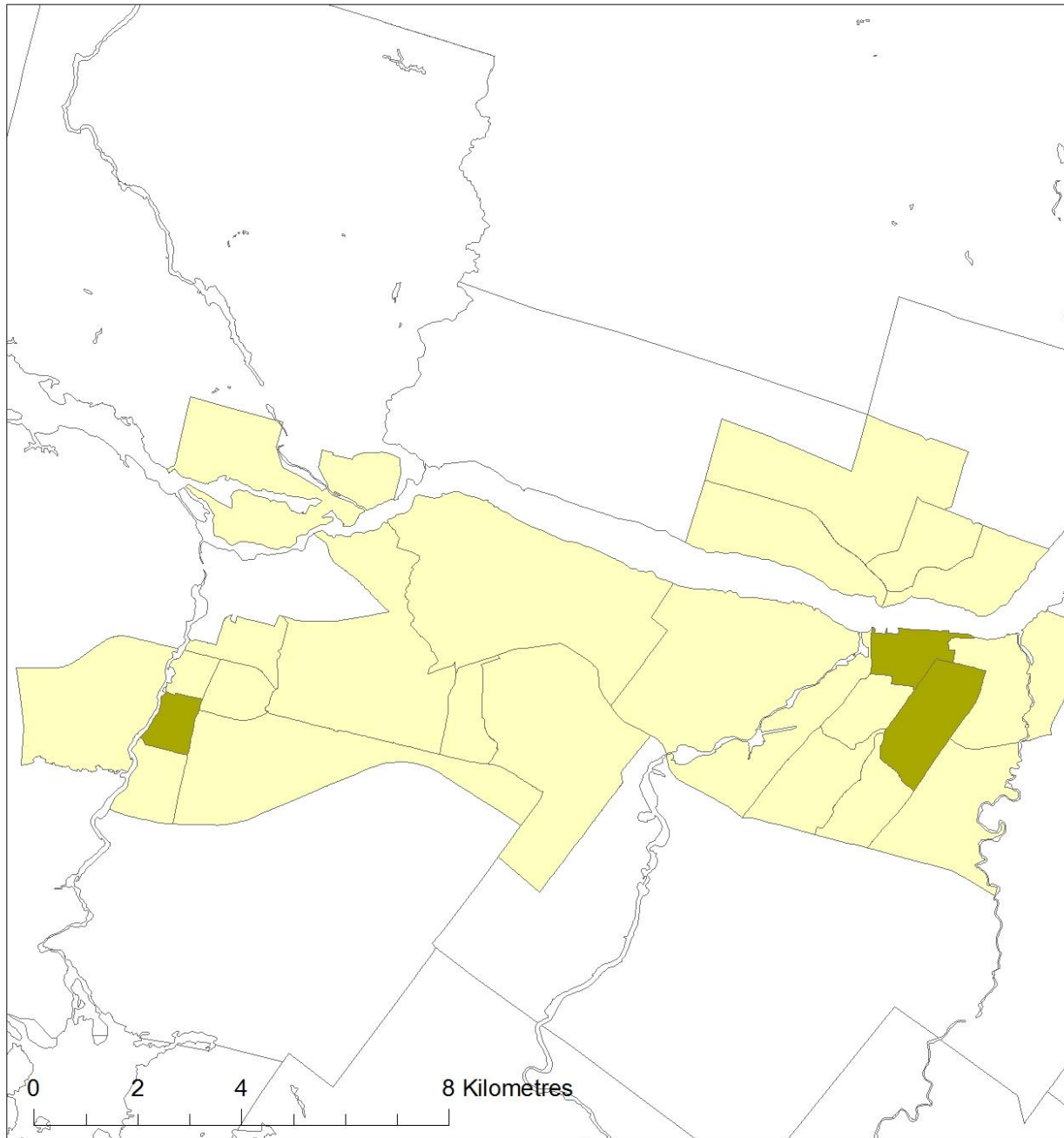
Saguenay

Transportation T9 Method

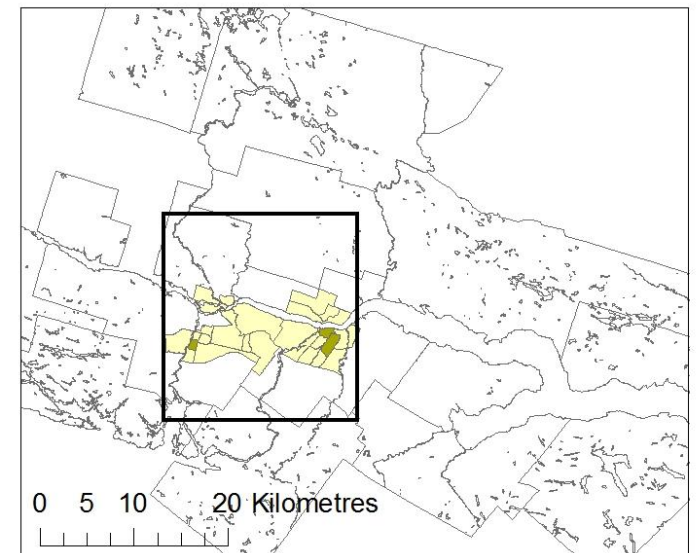
Legend

- Active Core
- Auto Suburb
- Exurban

Active Core: 6%
Auto Suburb: 56%
Exurban: 38%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



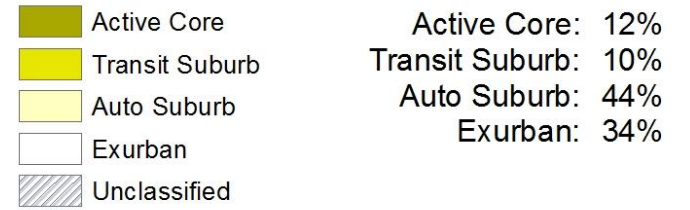
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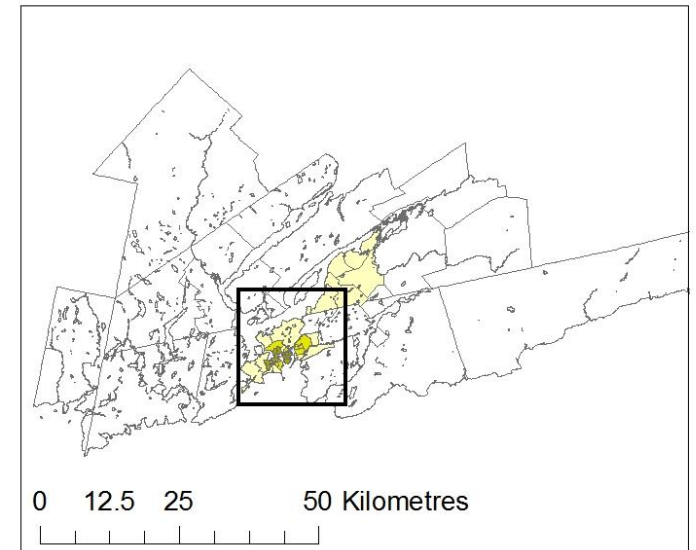
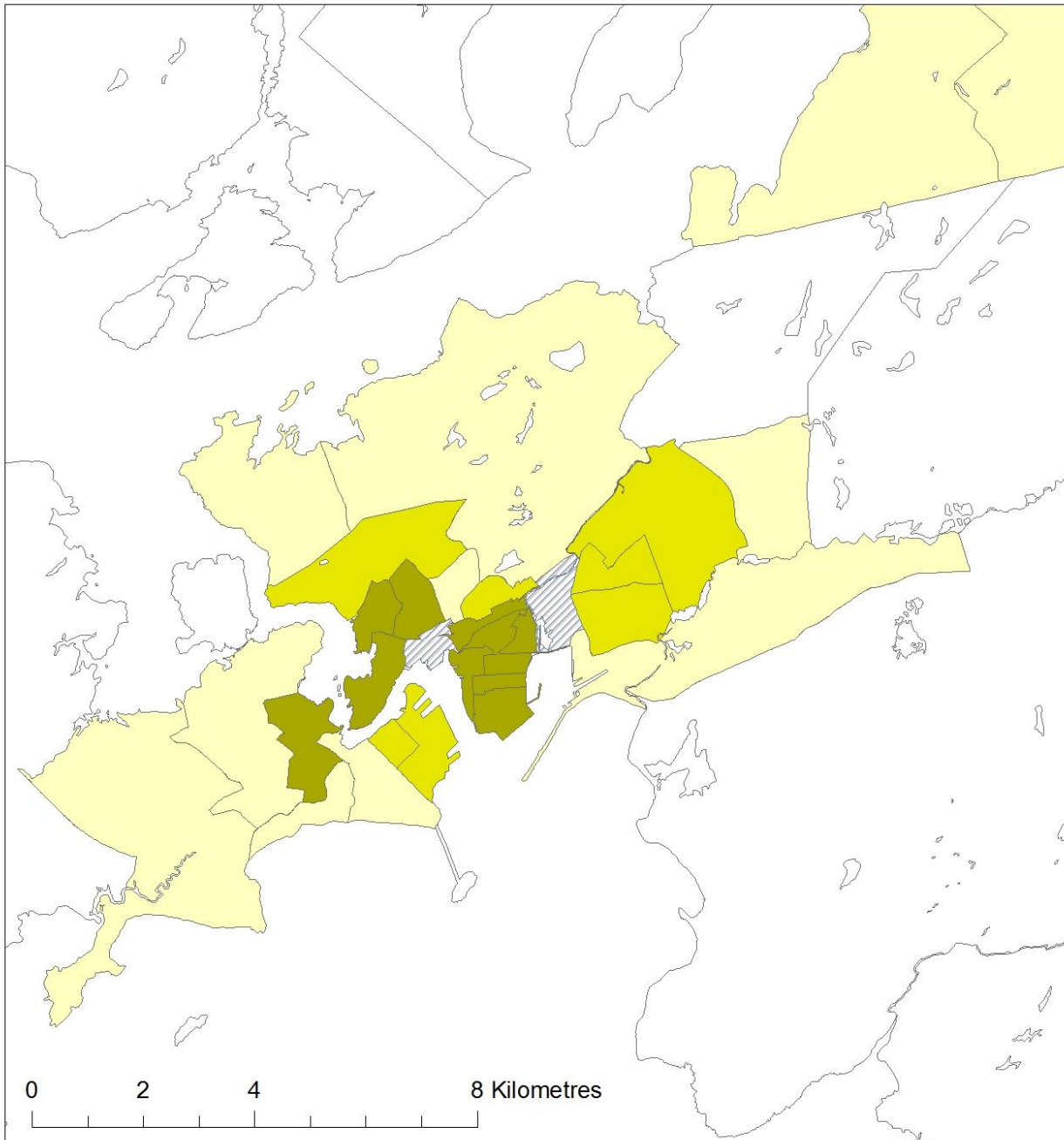
Saint John

Transportation T9 Method

Legend



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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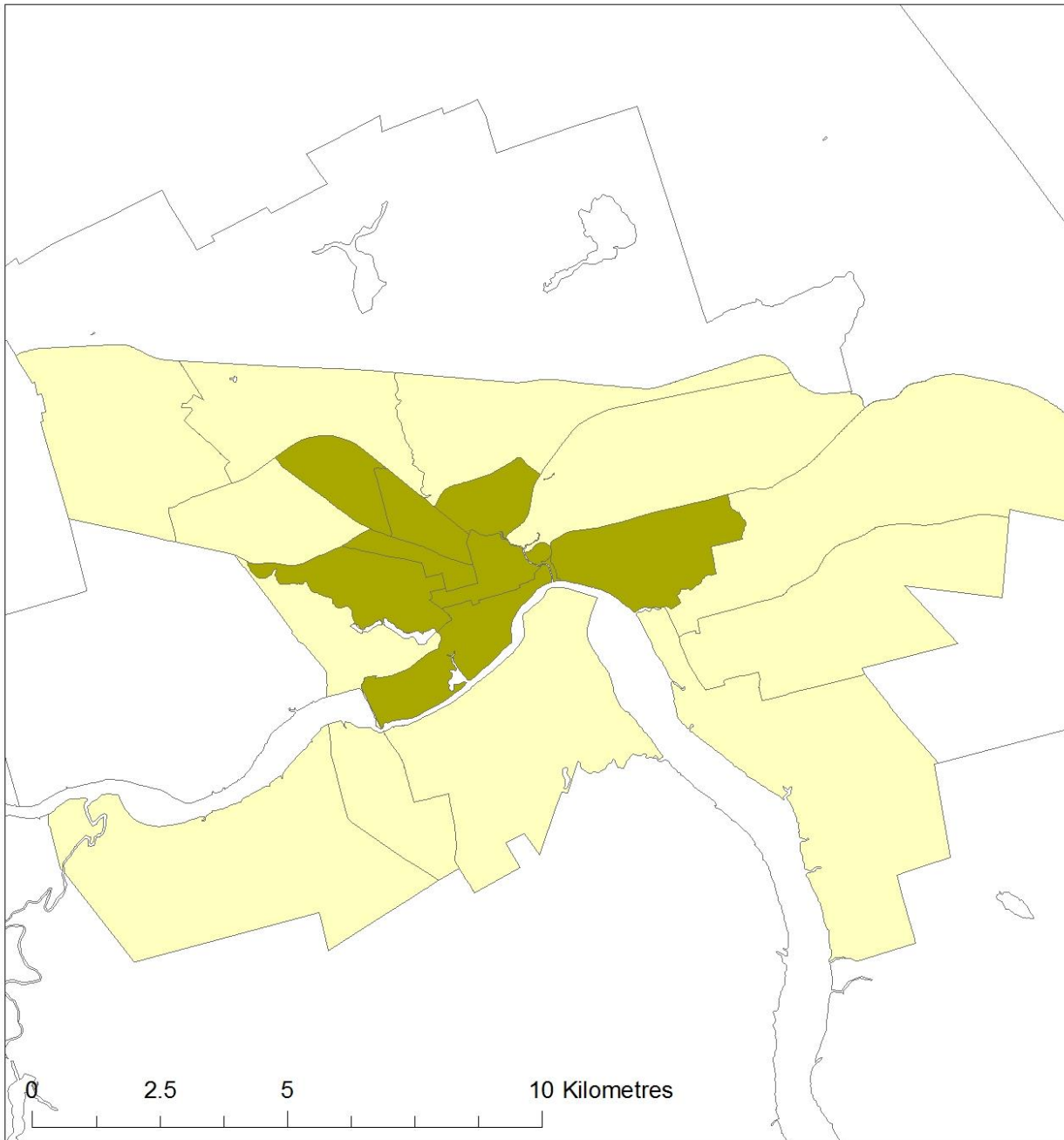
Moncton

Transportation T9 Method

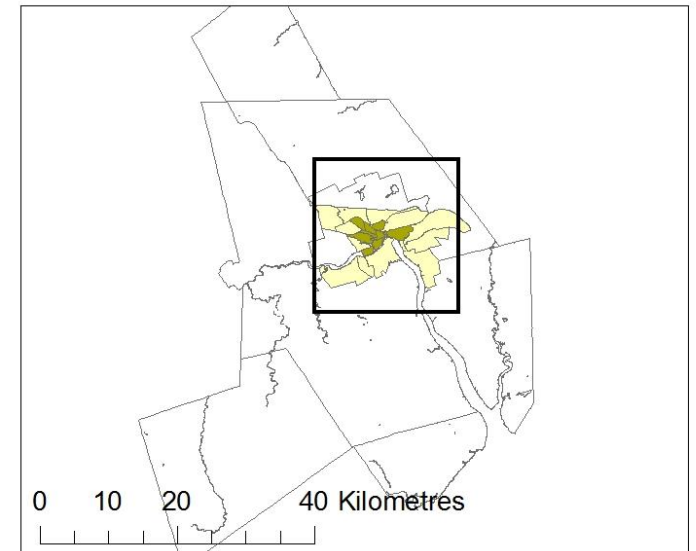
Legend

- Active Core
- Auto Suburb
- Exurban

Active Core: 19%
Auto Suburb: 57%
Exurban: 24%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016








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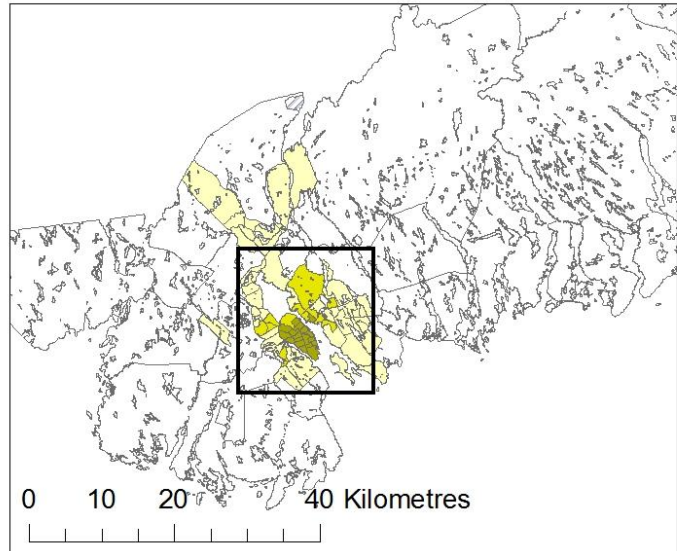
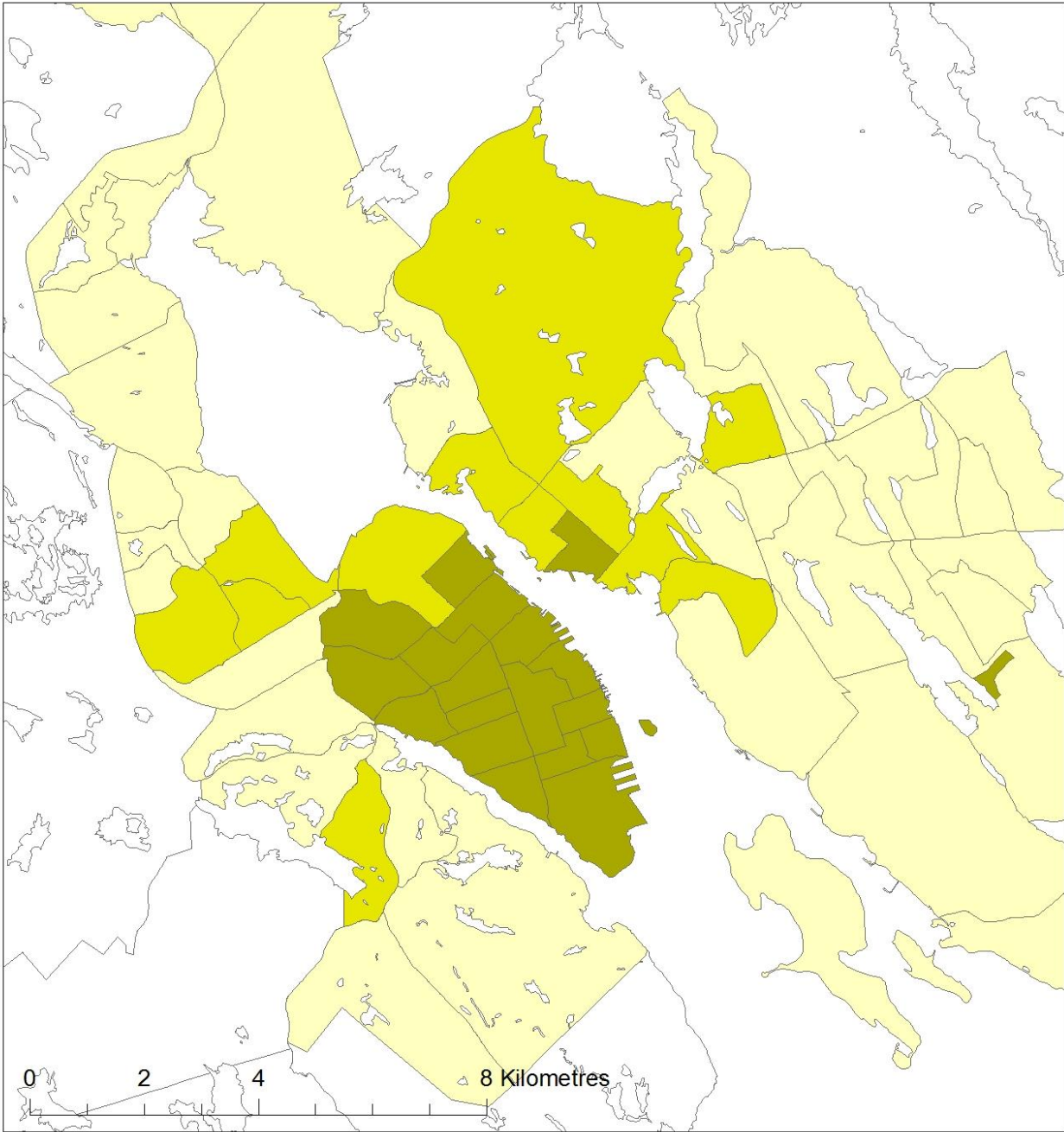
Halifax

Transportation T9 Method

Legend

	Active Core	Active Core: 15%
	Transit Suburb	Transit Suburb: 13%
	Auto Suburb	Auto Suburb: 48%
	Exurban	Exurban: 24%
	Unclassified	

Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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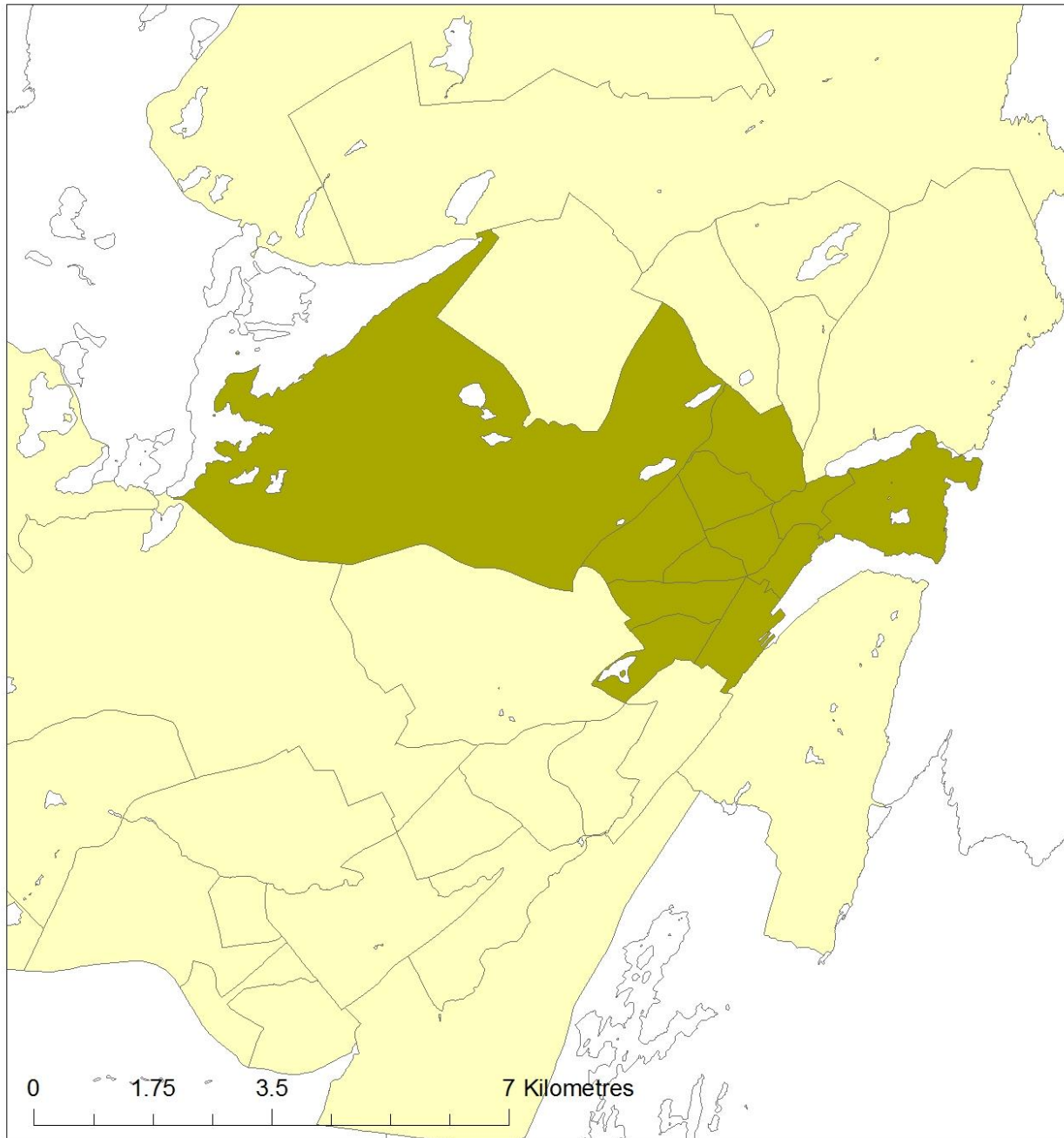
St. John's

Transportation T9 Method

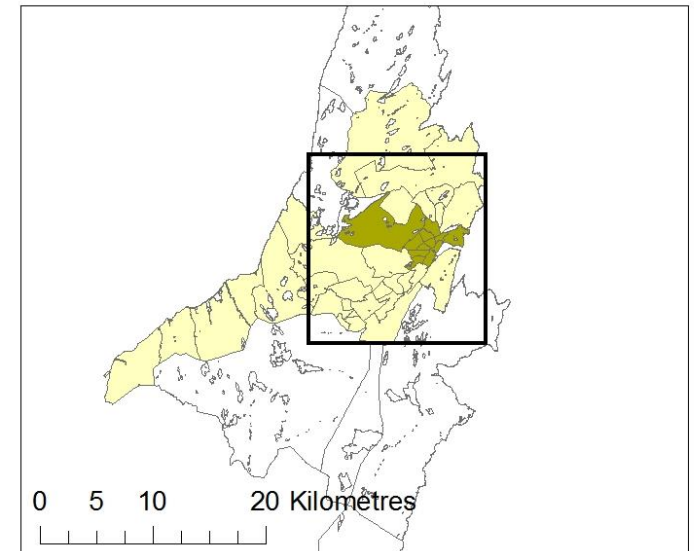
Legend

- Active Core
- Auto Suburb
- Exurban

Active Core: 15%
Auto Suburb: 74%
Exurban: 11%



Census Tracts and Population Data: 2016 Census
Census Tract Classification: 2016



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