The Relationship between
Property Taxes and Built Form:
Mapping the City of Winnipeg

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Executive Summary

Planners and city officials usually forget that property taxes shape our cities. By imposing property taxes, city officials are creating urban adaptations that occur, when residents may desire municipality's services, but do not want to pay enough tax to finance these services (Fischel, 2001, p. 158). The idea of desire for services without paying for them has created innovate strategies, that try to avoid paying taxes. These ingenious strategies have resulted in the creation of different types of behaviours, urban and architectural forms. For example, for a brief period, Paris property taxation was determined by the square footage of all floors, but attics were excluded (McCabe, 2000, p. 161).
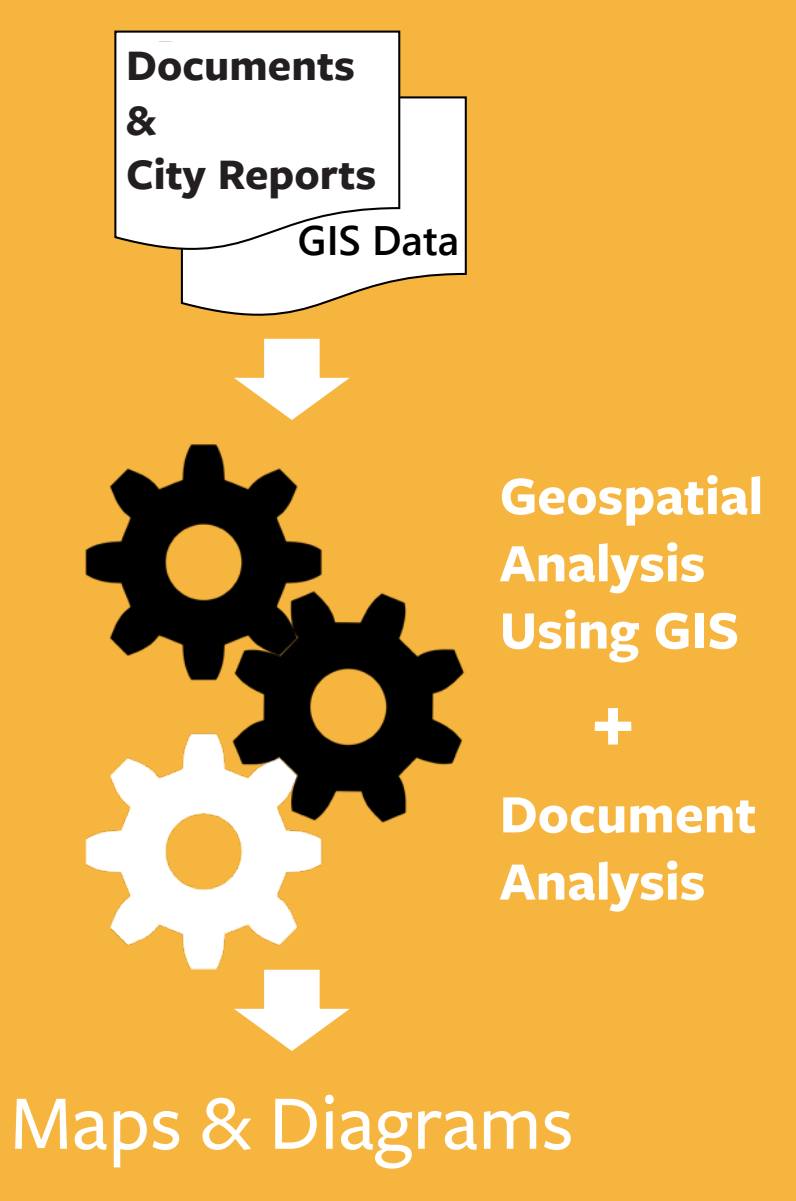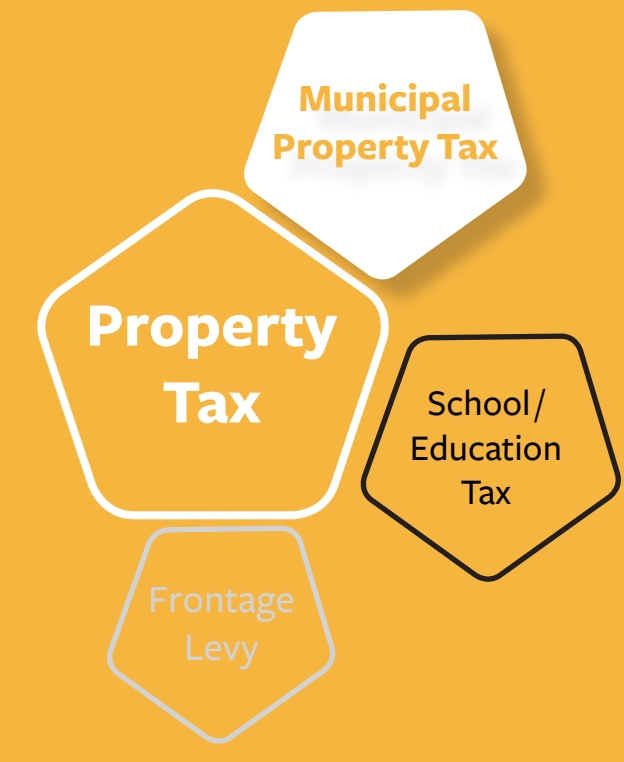
Also, considering that the municipal property tax is the primary source of revenue for the City of Winnipeg, as it represents almost 53 percent of its income on average, between 2014 and 2018 , Winnipeg's municipal property tax plays an important role in funding capital projects and shaping the urban form. Moreover, city reports show that the City ipeg, 2018, p. 9). Therefore, city officials need to identify aspects of the current taxation system that might influence the urban form to reduce the gap between total capital investment requirements and estimated future capital funding.

By using the method of spatial analysis of secondary data, this capstone maps and analyses elements of the municipal property tax and the urban form that influence the spatial arrangement of persons, goods, information and physical features in the City of Winnipeg. The reader will be able to identify which neighbourhoods provide more revenue to the city through property tax and compared those neighbourhoods with key aspects of their urban form. This study aims to provide a better understanding of municipal property tax and aspects of the urban form. By identifying the urban form of neighbourhoods that provide more revenue to the city, city officials and policymakers could encourage private developers to create neighbourhoods that have similar characteristics to the ones identified in this study. Therefore, planning and taxation could be used as tools that will help to reduce the current infrastructure deficit in the City of Winnipeg.

Municipal Property Tax

Property Tax

School/ Education Tax

Frontage Levy

Methodology

This study uses secondary data that include official reports, data sets, and documents, that were available at the open data portal on the City of Winnipeg website. Also, the present research contains Geographic Information System (GIS) data that were obtained from the University of Manitoba Library.
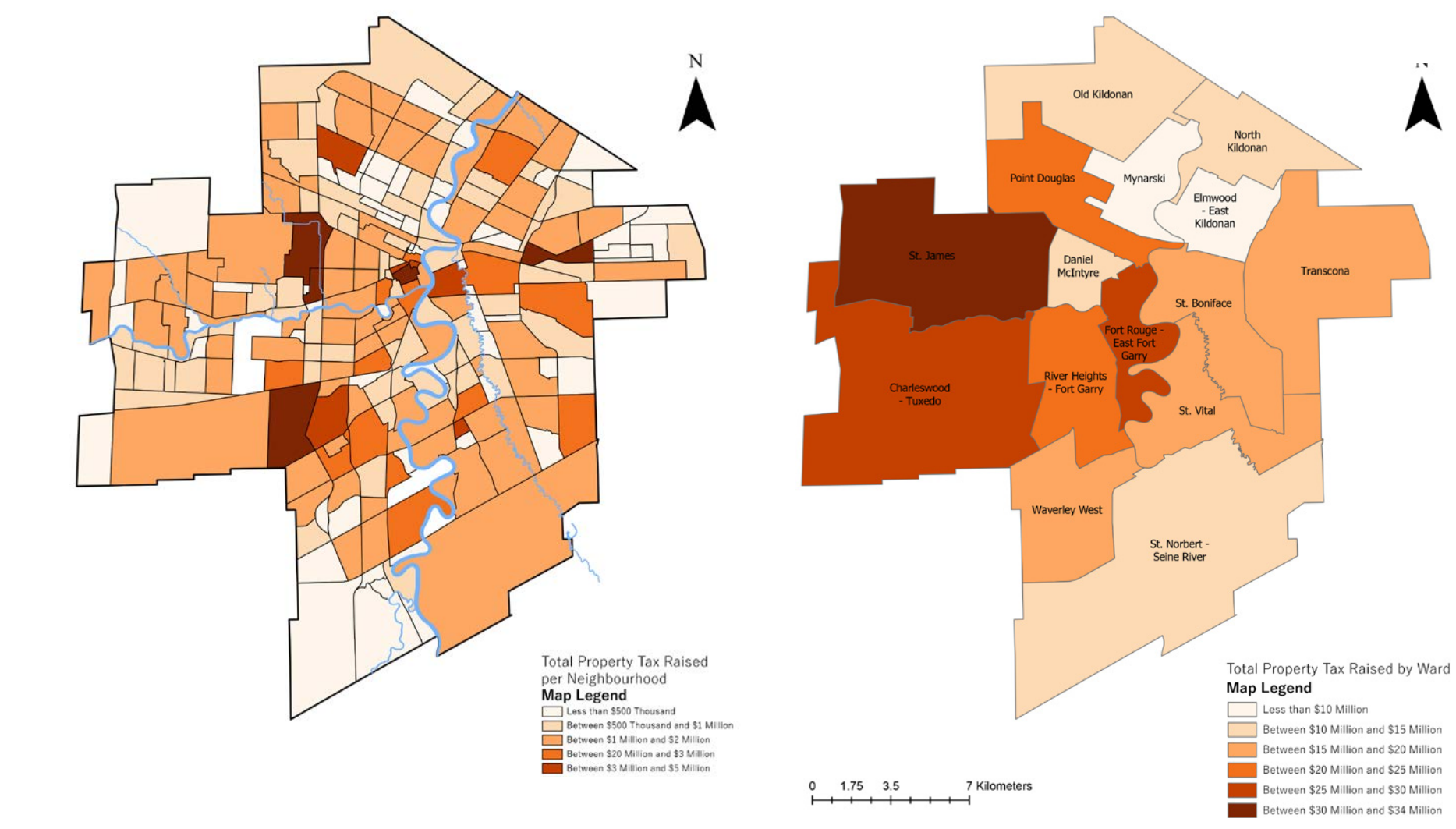
Results from this research were obtained using the method of spatial analysis of secondary data and document analysis. GIS is a powerful tool that helps investigators to collect, organize, explore and analyse data that assists researchers in multiple ways. By using the method of spatial analysis of secondary data, this capstone maps and analyses elements of the municipal property tax and the urban form that influence the spatial arrangement of persons, goods, information and physical features in the City of Winnipeg

Documents & City Reports
GIS Data

Geospatial Analysis Using GIS
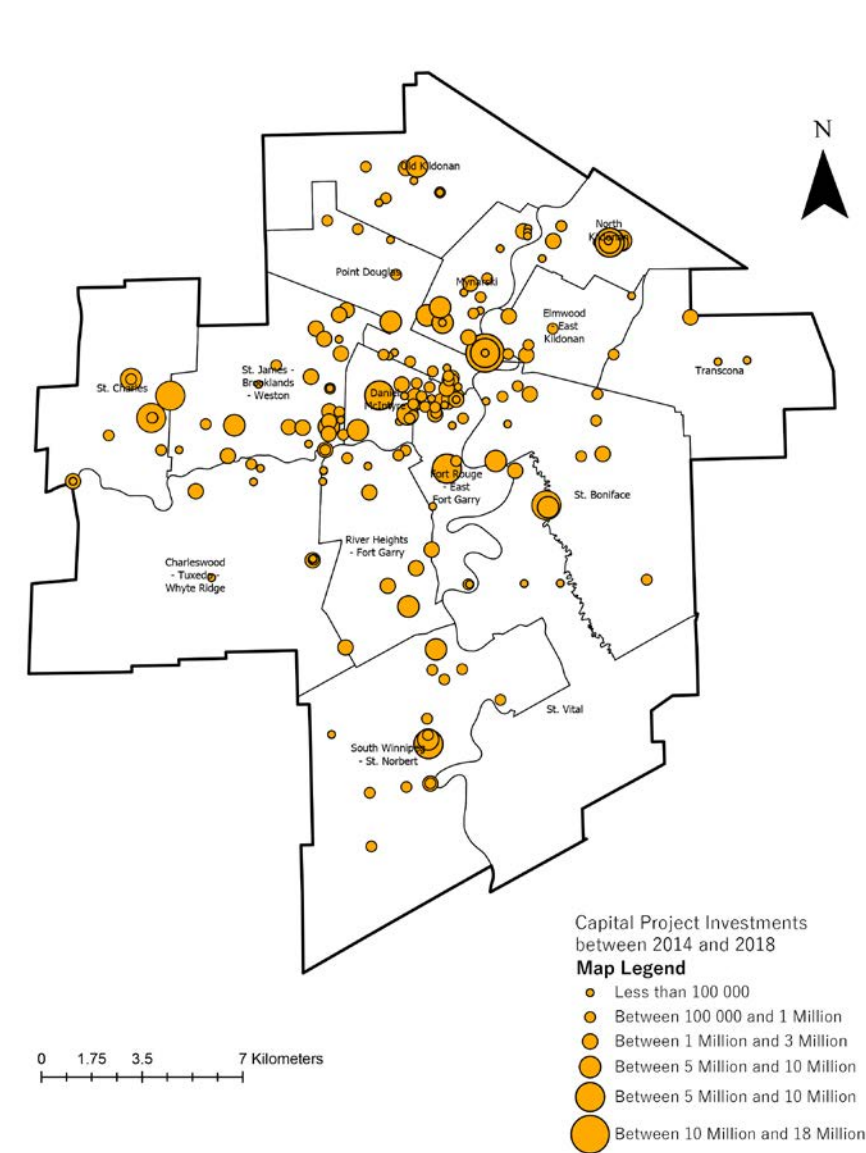### +
Document Analysis

Maps & Diagrams

Winnipeg's Revenue from Municipal Property Tax

Fischel (2001) argues that the property tax could be considered as a benefit tax, as it encompasses the benefits received from local services. However, this empirical research shows that Winnipeg's municipal property tax does not reflect services and amenities that the city provides. Instead, this study confirms what Slack (2002) argues about property tax, as a system that promotes sprawl developments. In fact, Winnipeg's municipal property tax system seems to subsidize low-density neighbourhoods and single-family houses, as the percentage of the assessed value is the same for all types of housing.
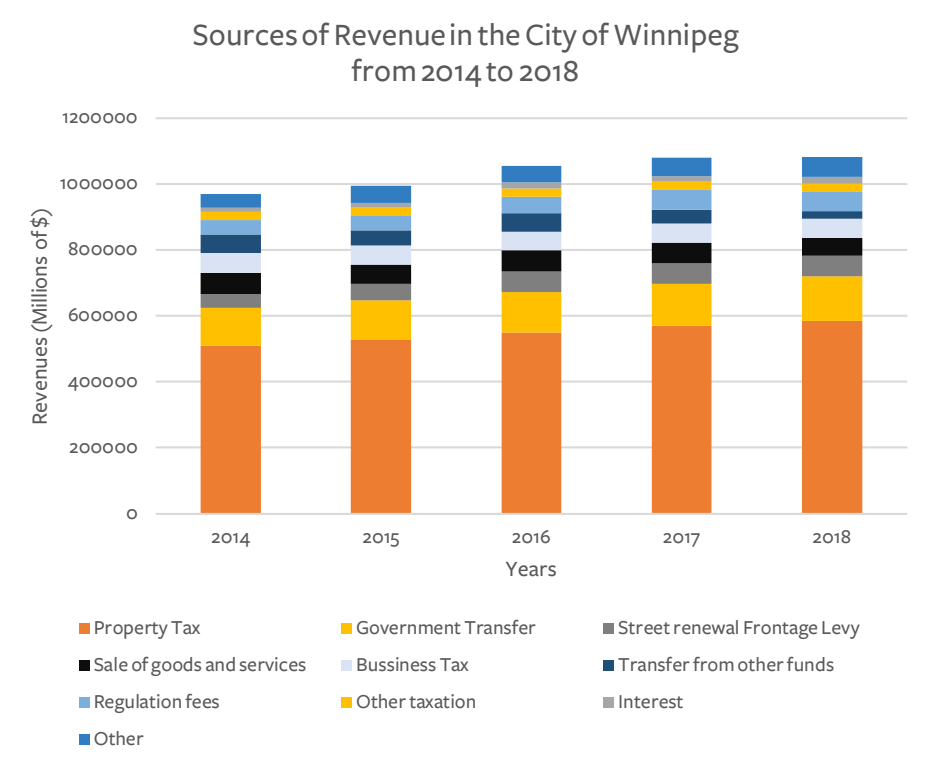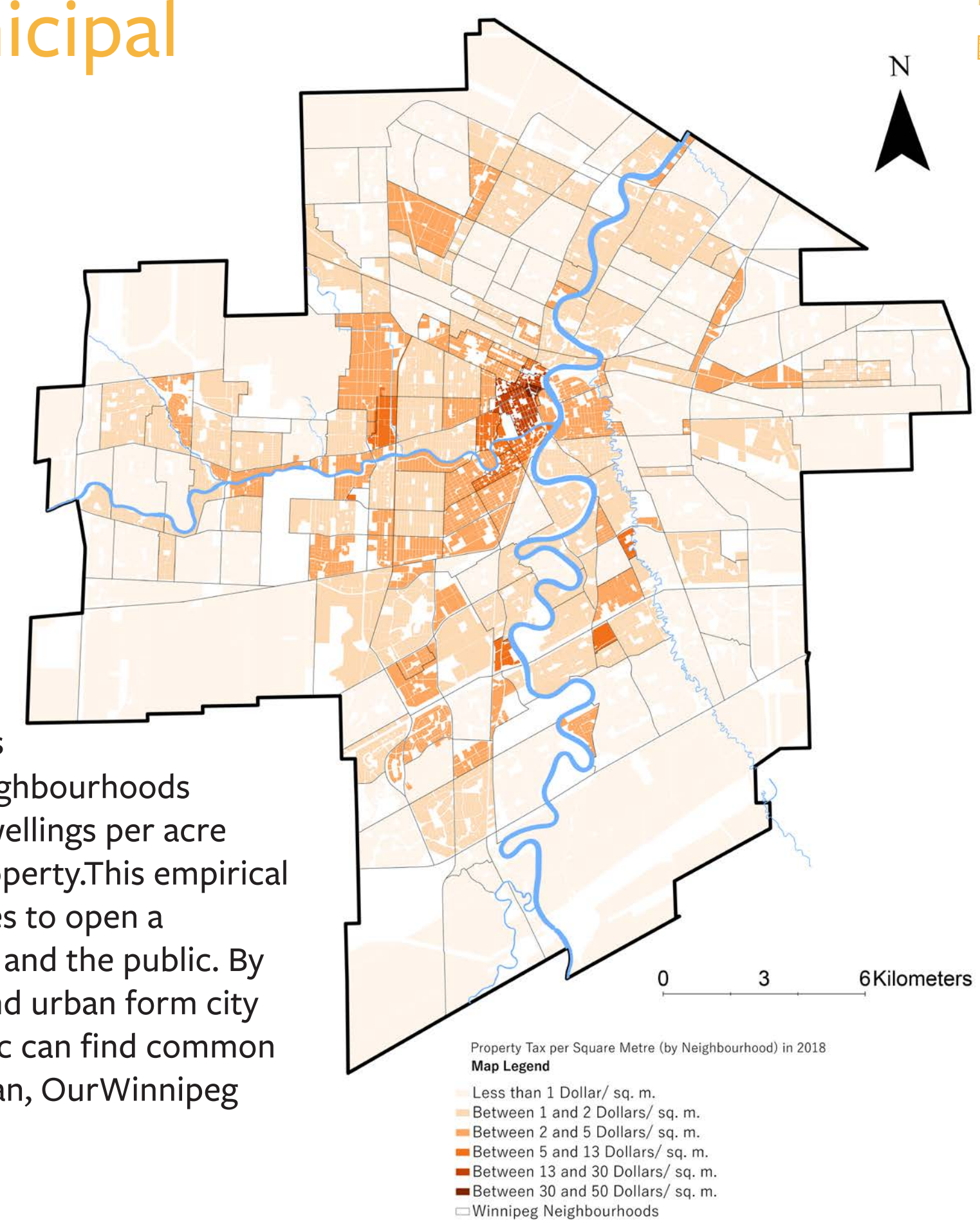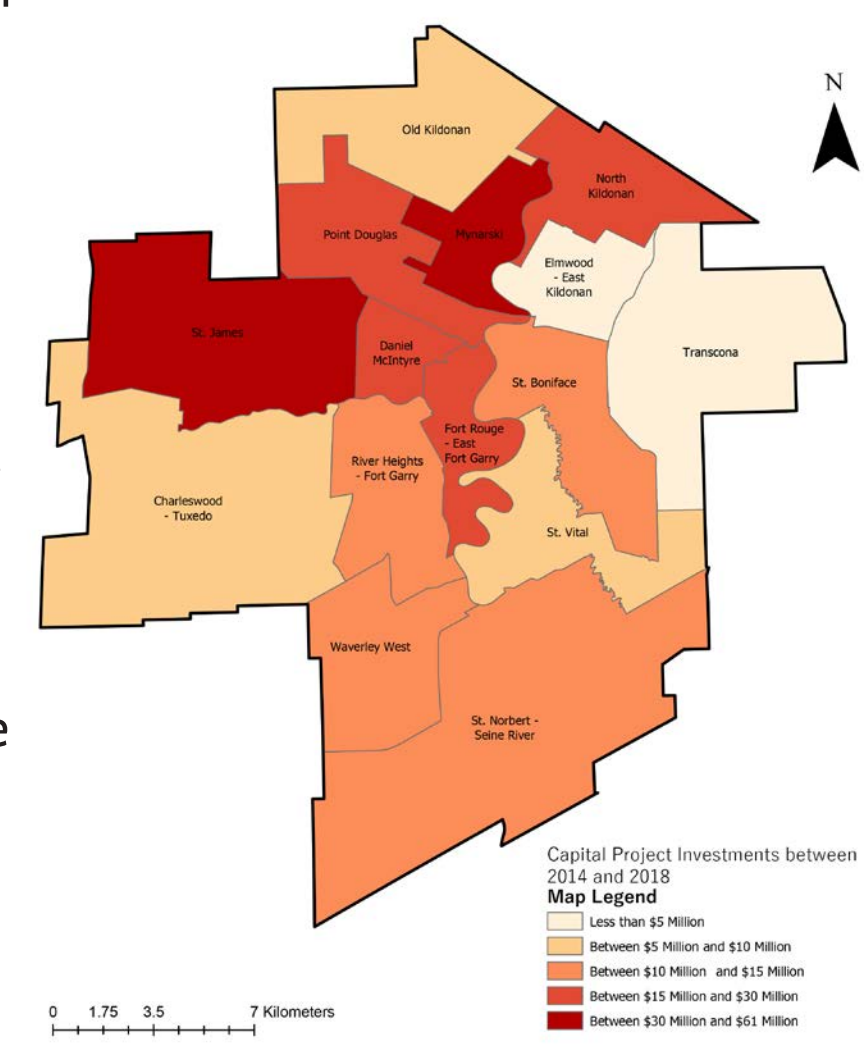
This research that confirms the urgent need to think collectively and holistically of how the municipal property tax can re-shape Winnipeg's urban form. For example, some of the planning contradictions are neighbourhoods that have a higher percentage of parks and open spaces, and lower dwellings per acre contribute with no more than a dollar per square meter of private property. This empirical research has important implications for the City of Winnipeg as, it tries to open a conversation among city departments, politicians, private developers, and the public. By understanding the relationship between the municipal property tax and urban form city officials from different departments, private developers and the public can find common grounds and establish policies that follow Winnipeg's development plan, OurWinnipeg (2011).

Property Tax per Square Metre (by Neighbourhood) in 2018
Map Legend
Less than 1 Dollar/ sq. m.
Between 1 and 2 Dollars/ sq. m.
Between 2 and 5 Dollars/ sq. m.
Between 5 and 13 Dollars/ sq. m.
Between 13 and 30 Dollars/ sq. m.
Between 30 and 50 Dollars/ sq. m.
Winnipeg Neighbourhoods

Total Property Tax Raised per Neighbourhood
Map Legend
Less than $900 Thousand
Between $900 Thousand and $1 Million
Between $1 Million and $2 Million
Between $3 Million and $4 Million
Between $4 Million and $5 Million

Total Property Tax Raised by Ward
Map Legend
Less than $10 Million
Between $10 Million and $15 Million
Between $15 Million and $20 Million
Between $20 Million and $25 Million
Between $25 Million and $30 Million
Between $30 Million and $34 Million

Sources of Revenue in the City of Winnipeg from 2014 to 2018

Property Tax · Government Transfer · Street renewal Frontage Levy · Sale of goods and services · Bussiness Tax · Transfer from other funds · Regulation fees · Other taxation · Interest · Other
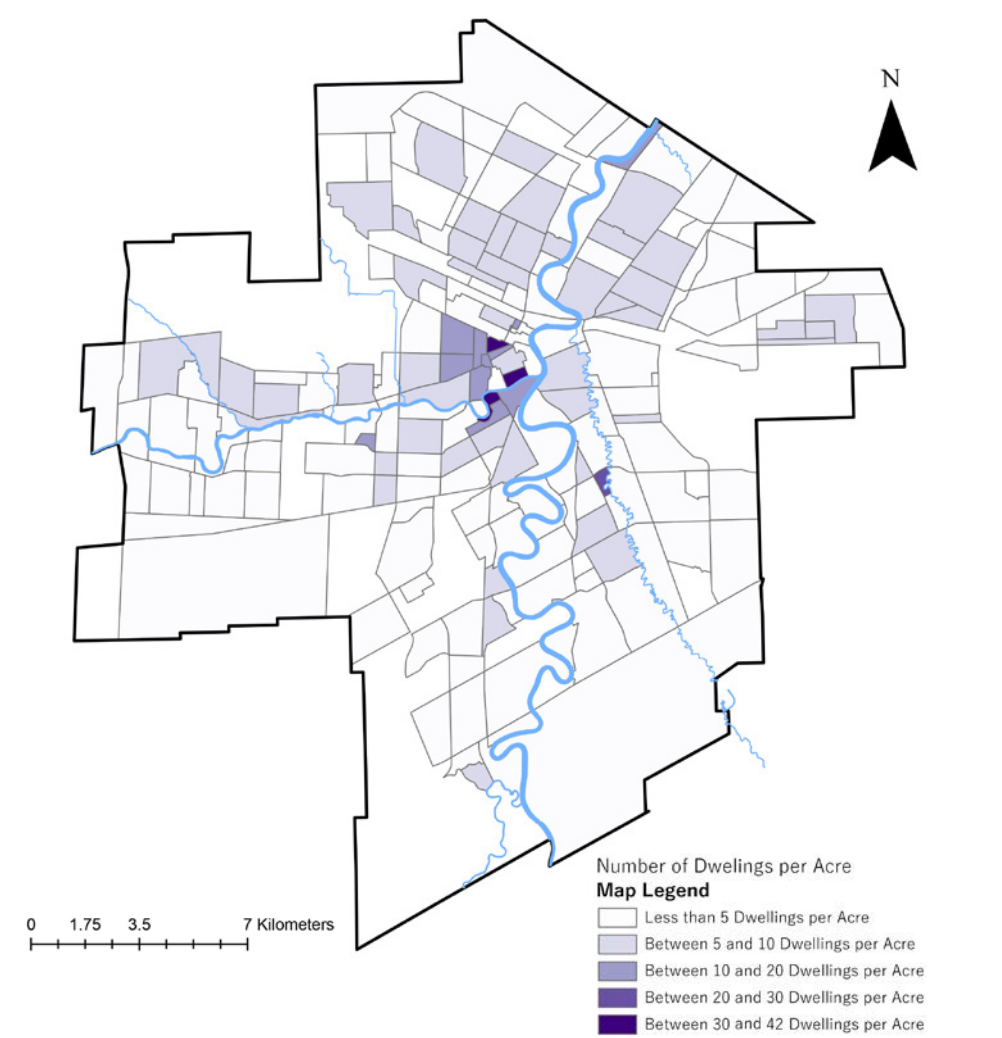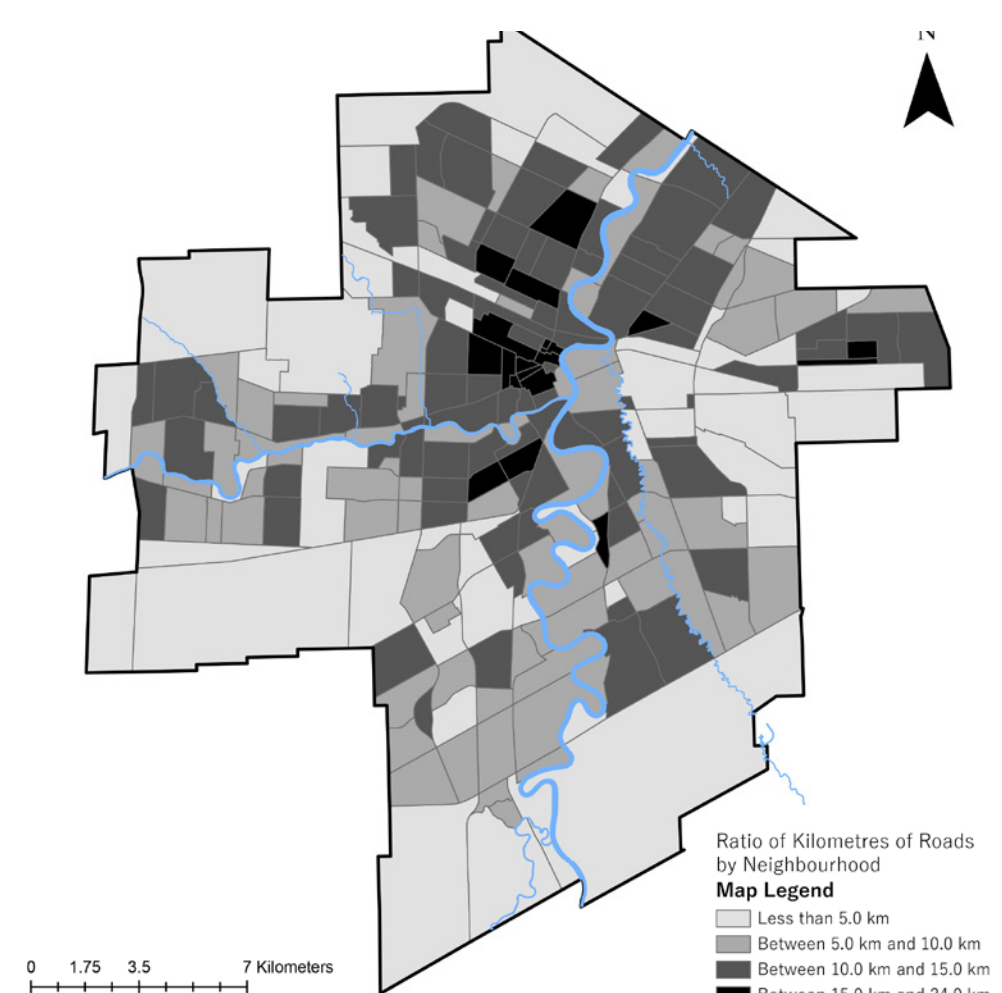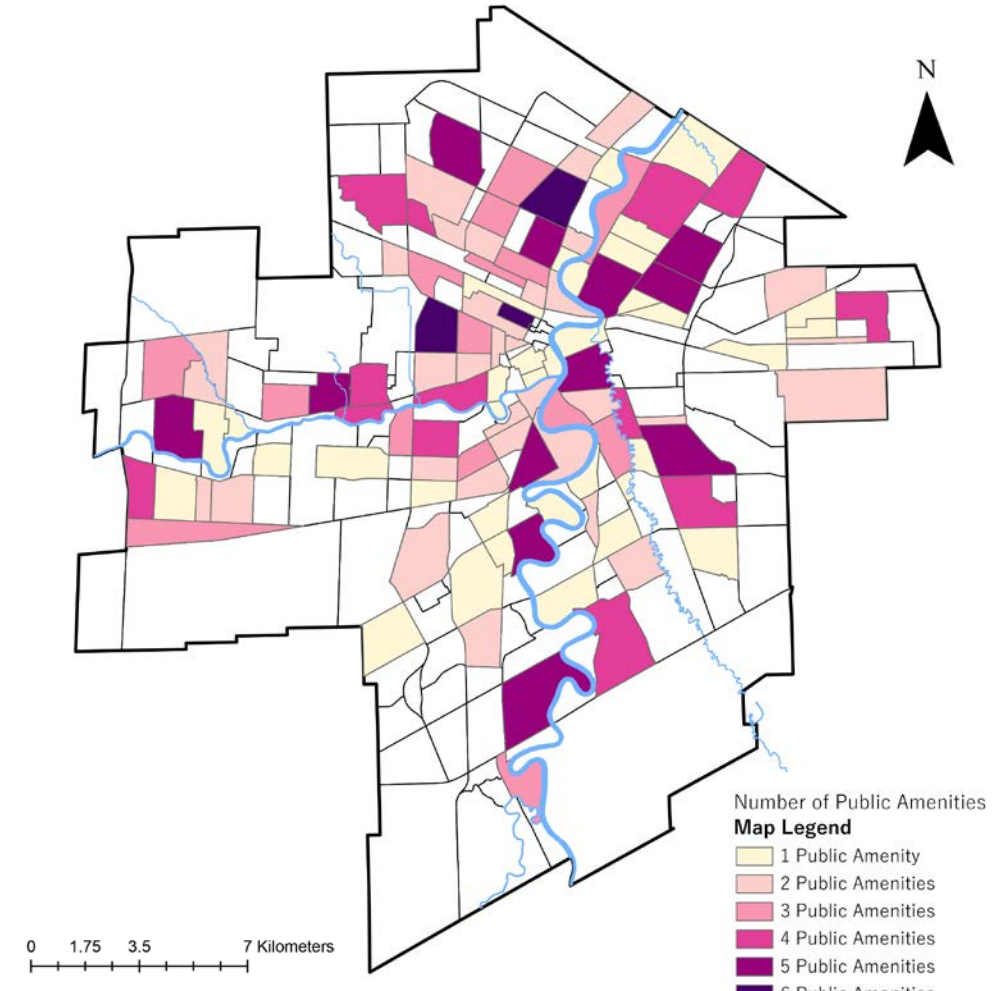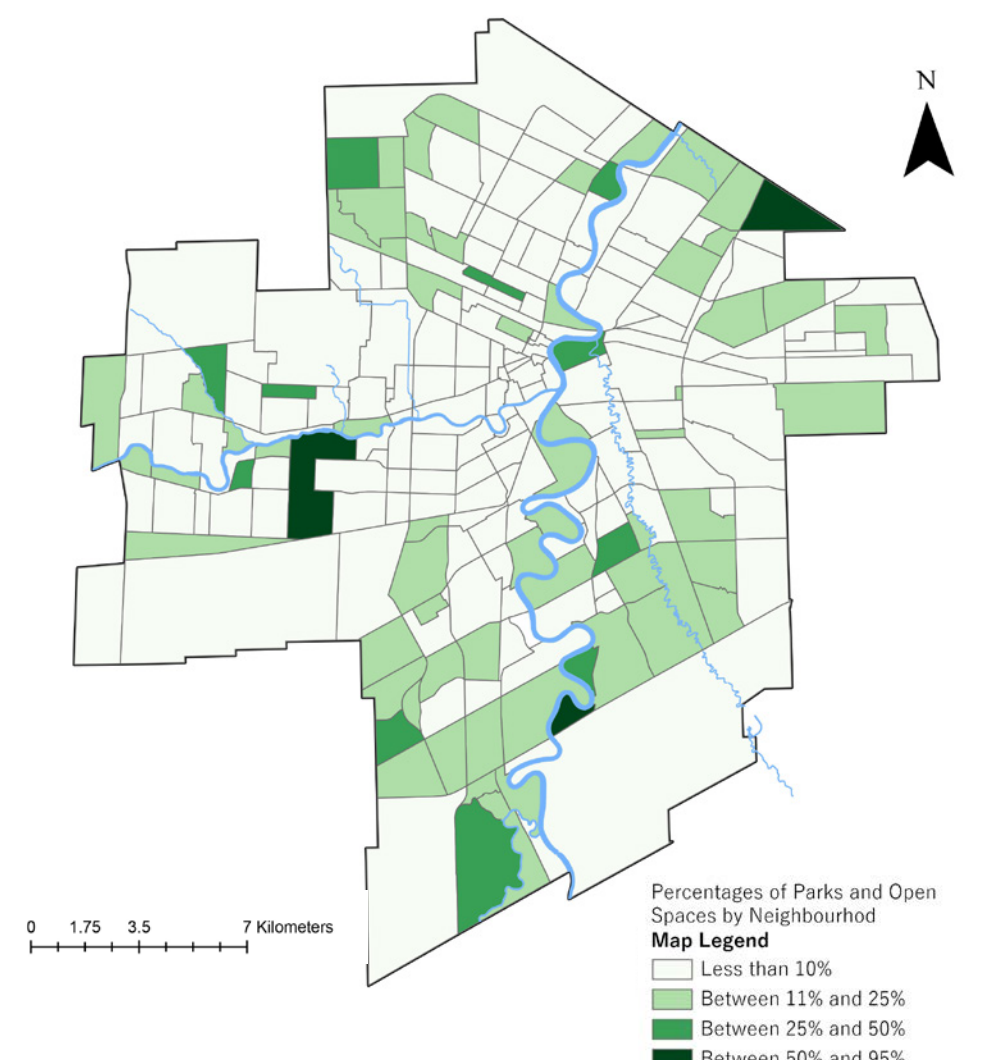
Winnipeg's Investments in Capital Projects between 2014 and 2018

Although there are various limitations on the Winnipeg's capital investments data between 2014 and 2018. The information gathered outlines areas of the city where important capital investments have occurred in the last five years. For example, while comparing the map that shows revenue per ward with the map that shows investments, the reader can find that in general there is not a correlation between the number of dollars raised from the municipal property tax and investments in capital projects between 2014 and 2018. For example, the Ward of Mynarski provides less than 10 million dollars in municipal property tax, but it the Ward of Mynarski that has received the most investment on capital projects in the last five years compared with any other ward in the city. Also, the Ward of Charleswood provided an important amount of money to Winnipeg's budget in 2018. However, the city has invested no more than 10 million dollars in capital projects between 2014 and 2018.

Capital Project Investments between 2014 and 2018
Map Legend
Less than 100 000
Between 100 000 and 1 Million
Between 1 Million and 3 Million
Between 5 Million and 10 Million
Between 5 Million and 10 Million
Between 10 Million and 18 Million

Capital Project Investments between 2014 and 2018
Map Legend
Less than $5 Million
Between $5 Million and $10 Million
Between $10 Million and $15 Million
Between $15 Million and $30 Million
Between $30 Million and $51 Million

Main Features of the Urban Form

% of Parks and Open Spaces by Neighbourhood in 2018

Percentages of Parks and Open Spaces by Neighbourhood
Map Legend
Less than 10%
Between 11% and 25%
Between 25% and 50%
Between 50% and 95%

Public Amenities per Neighbourhood in 2018

Number of Public Amenities
Map Legend
1 Public Amenity
2 Public Amenities
3 Public Amenities
4 Public Amenities
5 Public Amenities
6 Public Amenities

Ratio of Kilometres of Roads by Neighbourhood in 2018

Ratio of Kilometres of Roads by Neighbourhood
Map Legend
Less than 5.0 km
Between 5.0 km and 10.0 km
Between 10.0 km and 15.0 km
Between 15.0 km and 24.0 km

Ratio of Kilometres of Roads by Neighbourhood in 2018

Number of Dwellings per Acre
Map Legend
Less than 5 Dwellings per Acre
Between 5 and 10 Dwellings per Acre
Between 10 and 20 Dwellings per Acre
Between 20 and 30 Dwellings per Acre
Between 30 and 42 Dwellings per Acre