**Relationship between Credit Scores and Economic Demographics of Toronto Neighbourhoods**

Grisham Nathan | GGRC30 | 1001314927**Introduction**

# **Background**

We have all heard about the recurring statistics on how bad the average Canadian’s debt

is in Canada. In fact, it was just reported this month that household debt to income ratio

has hit another all-time record of $1.67 of debt for every dollar earned. There are many

stories on the internet and on the news about how there are people in Toronto, Vancouver

and throughout Canada (typically homeowners), who could only make the minimum

payment on their credit cards. Typically what happens to them is that their payments

towards their condo or mortgage increased and they started getting more credit cards just

so they can juggle around their daily expenses. In the end, they start drowning in debt and

usually what happens is, their bank calls and offers solutions like a debt consolidation

loan at a lower interest rate or a second mortgage. The problem with this is that it does

really solve the problem. Even if the bank advises them to sell their home, it still would

not be enough to cover all the compound interest accumulated. A common alternative

solution now is to visit an insolvency trustee. These lawyers propose an offer to each of

the client’s creditors to pay a “portion of debt under a strict plan over a period of time”

and the remainder will be written off. “Creditors typically agree to these arrangements

since they are guaranteed to get at least some of the money that they lent back.”

**Study area**

For my research project, I looked at one of Canada’s most indebted cities, Toronto. I will look at Neighbourhoods data mostly downloaded from City of Toronto websites. The study area for this project is Toronto and the analysis and examination of this study area will be done mostly on a neighbourhood scale. There is data that I have included in my analysis, in which it is displayed at the census tract scale for Toronto.

**Purpose**

The purpose of this research project is to help debt consolidation companies, liquidation companies, bankruptcy law firms and pawn shops understand where to set up or expand in Toronto. Also, this project will help these debt dealing businesses understand where there can most possibly be the most potential clients, in which they can target or promote their services to.

**Research Questions**

The research questions are:

What are the best Toronto neighbourhoods to set up debt reconciliation/debt dealing firms?

and

What is the relationship between average credit scores and economic demographics of Toronto neighbourhoods?

# **Research and Analysis**

**Methodology**

1. Gather the data from the Toronto open data website and Simply Analytics
2. Make chloropleth maps for:
   1. Credit Scores
   2. Home Prices
   3. How many people are employed from each neighbourhood?
   4. Social Assistance Recipients
   5. Average Mortgage Payments
3. Examine the clustering in each map and the correlations between each map

**Findings**

High credit scores in the range of 752 to 793, tend to cluster around Southern Etobicoke, Islington, and the Yonge Street Corridor. High home prices in the range of $666,205 to $1,849,084 also tend to cluster around the areas of where high credit scores cluster, indicating that there is high positive correlation between these two factors. Local Employment and social assistance recipients maps tends to be more random than clustered, as I do see clusters of high Local employment but still random and does not have much significant correlation with the other maps. Average Mortgage Payments tend to cluster around the areas of where high credit scores and high home prices cluster, indicating that there is high positive correlation between these three factors.

**Limitations**

* Local Employment chloropleth map doesn’t factor in the effect of people commuting to work
* Competition from other businesses
* Business startup costs
* Must take into account that there are people that do not care about their debt or their credit score, as they do not seek to borrow money in the future. Debt reconciliation businesses could risk losing money or not finding any potential clients because of this.

As a result, predictions on what neighbourhoods to set up debt reconciliation/debt dealing businesses could be too generalized or biased. Perhaps creating a suitability model with heavy weights on credit scores, home prices, average mortgage payments, frequency of debt delinquencies, startup costs and etc, will remedy this issue

**Conclusions and Recommendations**

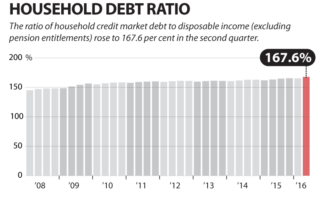
In conclusion, I recommend that we place the debt reconciliation businesses in the northwest area of Toronto or perhaps in Islington-Etobicoke or the Yonge Street Corridor. It all depends on the demographic market the business wants to target to. For example, if the business wants to target a more affluent demographic then they should locate in Yonge Street Corridor or Islington-Etobicoke. If not, I otherwise recommend the business to locate in the Northwest area of Toronto and provide services to the poorer, indebted demographic, as they tend to have the lowest credit scores in Toronto.

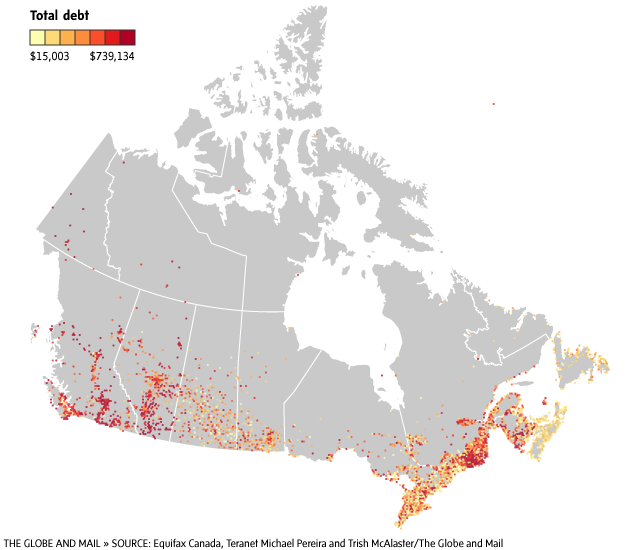
**References**

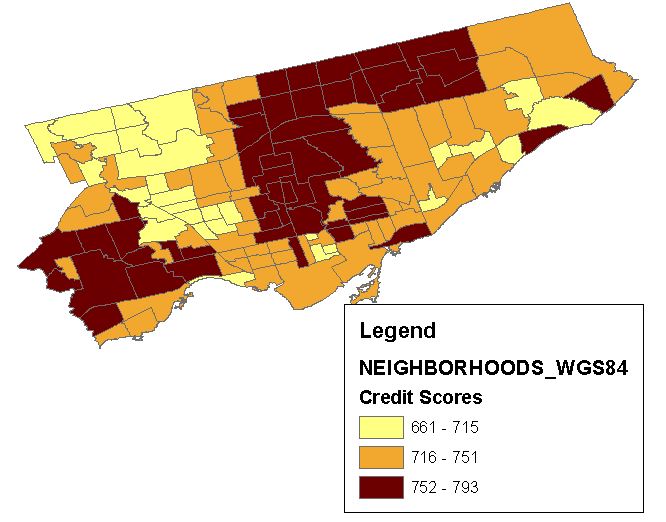
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* Neighbourhood boundaries - <https://www1.toronto.ca/wps/portal/contentonly?vgnextoid=04b489fe9c18b210VgnVCM1000003dd60f89RCRD>
* Simply Analytics - <http://simplyanalytics.com/>
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* <http://sydenhamcurrent.ca/2016/12/06/canadian-household-debt-hits-record-high/>
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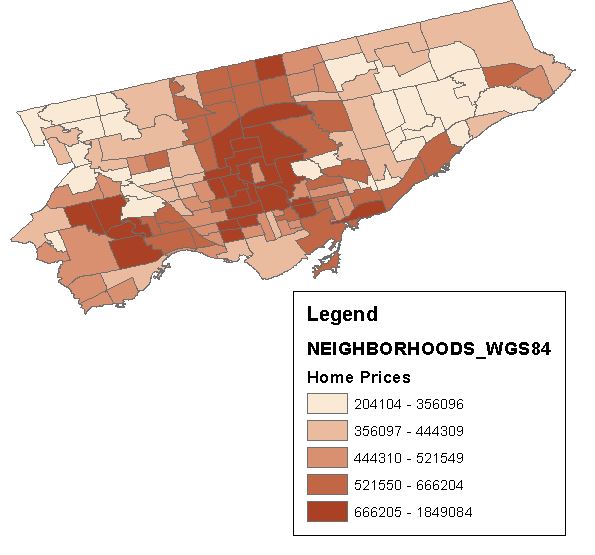
**Appendices**

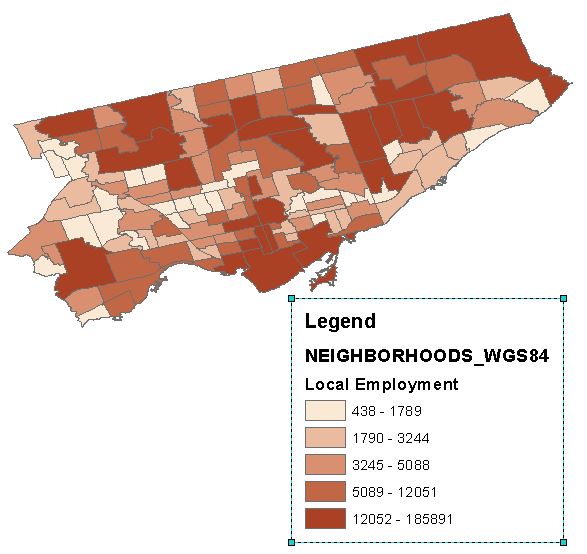
**Maps, Figures and Tables**

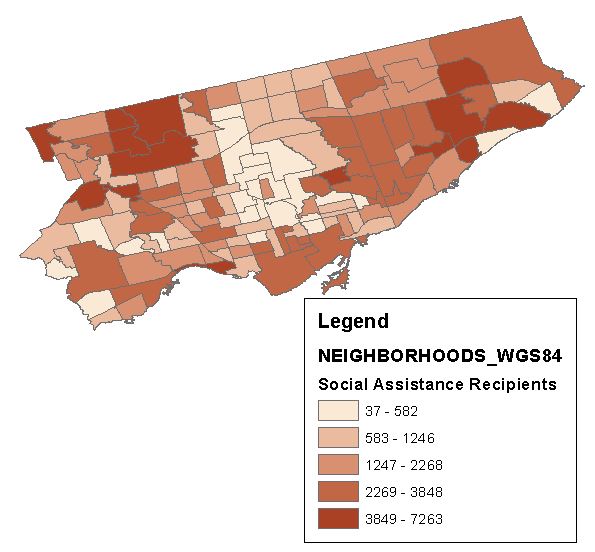
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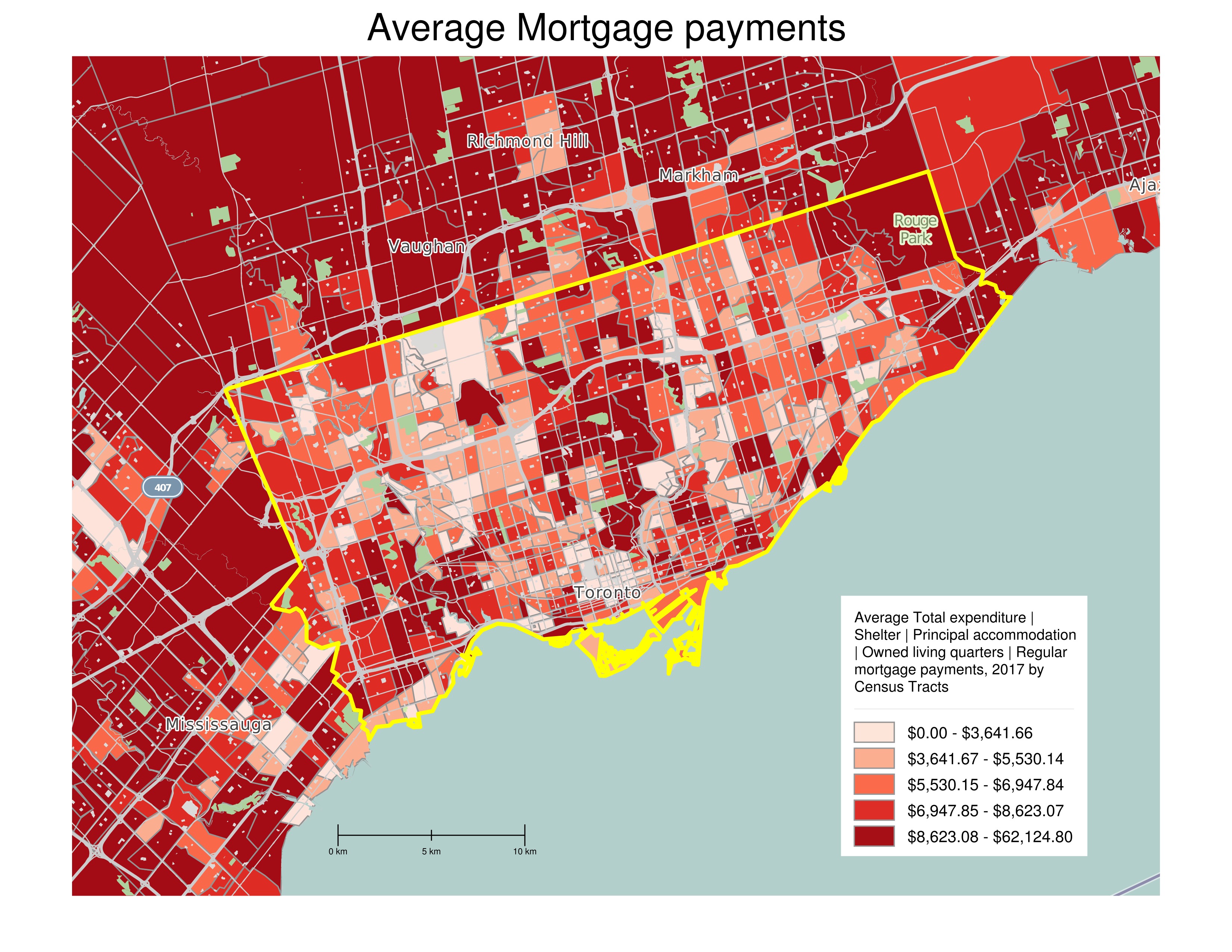
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