

Transit and Healthcare Accessibility in the Toronto Filipino Communities

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INTRODUCTION

For my project, I am focusing on Toronto, the city that I have lived in for over 20 years. Not only is the diversity of the city makes it an interesting case study for spatial analysis, but my familiarity with its human and physical geography makes it an easy choice for my very first GIS project. Being a Filipino immigrant myself, I wanted to observe and analyze a brief snapshot of the five federal Toronto ridings (2013 representation order) that have the highest per-capita Filipino population based on the 2021 Census, and map out its relationships with hospital locations and transit lines. By doing so, I hope to map out and analyze any potential patterns that can be utilized when discussing transit accessibility and health inequalities affecting the city's Filipino community.

METHODOLOGY

Using ArcGIS Pro, I will map the said five federal ridings by digitizing polygons on a satellite basemap of Toronto. I will also digitize 10 red lines that roughly map the Toronto Transit Commission's 10 busiest bus routes from 2023 based on ridership, as well as several points (each represented by a health symbol) that map out the locations of hospitals officially under "Ontario Health Toronto".

DATA COLLECTION AND SOURCES

CENSUS DATA:

<https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E>

DATA ON BUSIEST BUS LINES:

https://www.thestar.com/interactives/which-ttc-route-had-the-most-delays-in-2023-which-had-the-most-breakdowns-or/article_713836f8-92bd-11ee-8ac7-ffa407d80fe3.html

LIST OF HOSPITALS ACCORDING TO THE PROVINCE OF ONTARIO:

<https://www.ontario.ca/page/general-hospital-locations#section-4>

TORONTO FEDERAL RIDINGS WITH HIGHEST PER-CAPITA FILIPINO POPULATION:

RIDING NAME	FILIPINO POPULATION (AS PERCENTAGE)
York Centre	19.3
Scarborough Centre	13.1
Eglinton–Lawrence	10.9
Scarborough–Rouge Park	8.9
Scarborough–Guildwood	8.8

RESULTS AND DISCUSSION

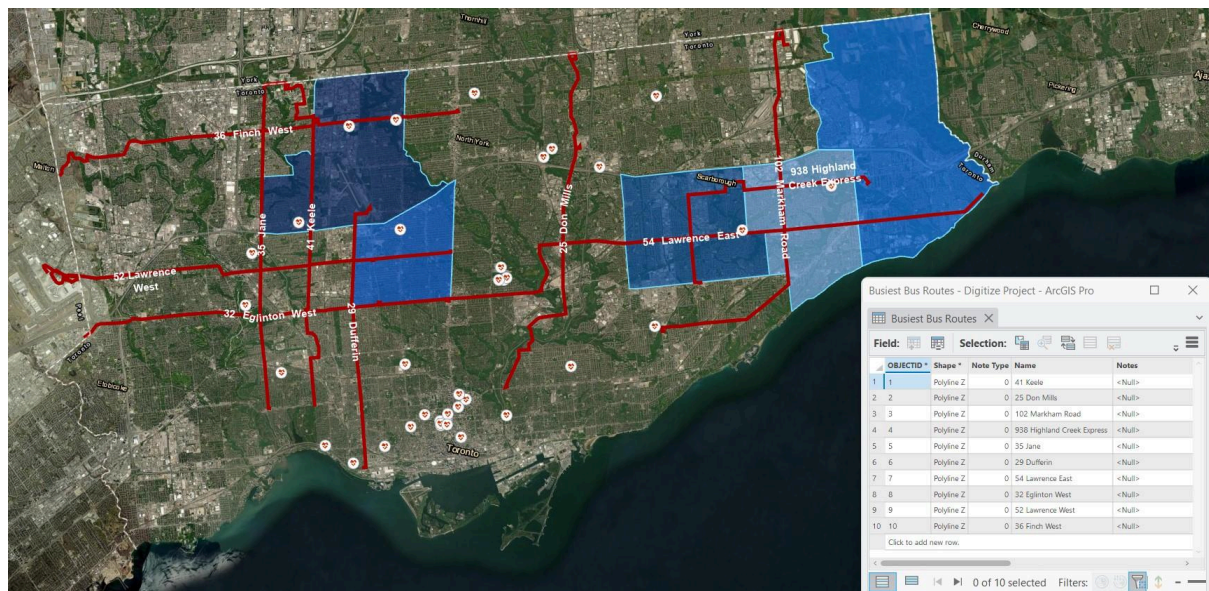


IMAGE DESCRIPTION: Satellite map of Toronto. 5 digitized blue polygons representing the 5 federal ridings in Toronto that have the highest per-capita Filipino population (per 2021 Census). Darker blue shades represent higher percentage, and lighter blue shades represent lower percentage. 10 digitized red lines with labels represent the 10 busiest bus routes from 2023 by ridership. Several digitized points (heart symbol in white circle) represent locations of hospitals in Toronto. Attribute table of the 10 lines is shown, with the list going in ascending order from 10th busiest to most busiest.

Notice that they are concentrated in Toronto's northern suburb (North York) and eastern suburb (Scarborough). Observe that 7 of the 10 busiest routes traverse the highlighted ridings, and two more straddling one or more of their borders. Also observe that the hospitals are more concentrated in the downtown while they become more sparse in the suburbs, especially in Scarborough, despite the fact that well over half a million people live in Scarborough.

While the analysis and mapping is elementary and not very comprehensive, it does raise some questions about transit accessibility and healthcare inequality. There are of course

many factors that go behind the deployment of buses, as well as higher ridership numbers, but given that many Filipinos, like many immigrant groups in Toronto, rely on public transit, one has to wonder if resources are being allocated equitably. The same could be said for healthcare. While the lower density of hospitals doesn't necessarily mean poorer health quality (and hospitals are by no means monolithic), it once again raises questions about whether healthcare is accessible enough in Scarborough. As seen from the COVID-19 pandemic, there remains inequalities in healthcare that disproportionately impacts migrant and BIPOC communities, making the analysis of the locations of hospitals across Toronto more important.