Analysis of Montreal's Island Identifying Ahunstic-Cartierville as Borough of Interest

Legend

Ahuntsic-Cartierville Borough

Sites of Interest

- Metro Stations
- O REM/EXO Stations
- Bike Paths

Ranking of Areas with Potential for Covertion to Public Transit Use in Regards to High Car Usage and Low Travel Time

Score from 1 to 30



Our vision

Our overall goal is to get the residents of the Ahuntsic-Cartierville borough to commute to the existing transit hubs in the area, such as the metro and REM/EXO commuter stations, and bus stations, by using active modes of transport. By doing this, we will be increasing accessibility to public transit and better connecting the area, reducing the use of cars as the main mode of transportation.

Even if the neighborhood was built with a car-oriented approach, we believe that, with the help of case studies, we can transform it and make it more walkable, especially for seniors and people with disabilities, as well as making active transport safer, more comfortable and more efficient, that will cater more to children of all ages and young adults.

Methodology

From our first analysis we identified the areas with favorable mobility, taking in consideration, bicycle lanes, Metro Stations, REM/EXO stations and pedestrian streets. We excluded proximity to green spaces (public spaces) in order to identify areas that could benefit from public space access expansion.

In our latest analysis we searched to identify areas with high percentage of car usage (within total available modes) and short journeys to work times (under 30 minutes). We then joined both analyses to identify areas with most potential to transition from car usage to public transit and active transportation usage.

Outcomes

We identified Ahunstic-Cartierville as the borough with most potential to adopt alternative modes of transportation, as we see in the Montreal map it is located at the beginning of the dominant car usage area that covers the west end.

Sources: Census Tract Boundary, Montreal en Statistiques, REM Approximate Georeference Map, ARTM Origin Destination Survey 2018, Concordia GIS lab data.

Authors: Sebastian Diaz, Christos Lazaris, Francisco Monroy, Oscar Vargas.

The borough has 3 metro stations within and 3 REM/EXO stations as well. We believe that with more secure cycling and pedestrian infrastructure this existing transit infrastructure can be reinforced and encourage car users to get on the road to alternative modes.

On the Road to Alternative Modes Activating Ahunstic-Cartierville Borough



Strenghts

- Pre-existing transportation hubs, like EXO train and REM stations.
- Lots of Parks and recreational spaces.
- Neighbourhoods that are full of life and greenery.

Weaknesses

- Many freeways make the car dependency clear to be seen.
- Residential neighbourhoods with suburban characteristics (i.e. cars prevail over all others, and public transit is not as common as urban areas).
- Strict land-use separation (i.e. only residential zones where commercial and mixed-used zones are harder to be built).

Opportunities

- The chance to create new economic opportunities based on the philosophy of TOD.
- This ultimately creates a ripple effect across the neighbourhood with new public spaces, local businesses and jobs.
- Through the right implementations of policy, we can make massive changes while also maintaining the borough's characteristics.

Challenges

- When talking about expanding public transit, people should consider aspects that affect personal lives, like tariffs.
- Heavy automobile traffic is unfavorable for cyclists and pedestrians.
- With the current existing infrastructure it is much more convenient for car usage to take people across the borough and city.

Bicycle Parking and Accessibility, 2015, Denver, Colorado

A design issue that we want to fix in our site that this case study addresses is increase and improve bike access to transit, modify and enhance bike parking and enhance bike implementation. We believe that we should put adequate secure bike parking at main transit hubs and at secluded bus stops that are on the edge of the bus route to give an option to individuals who live too far to walk to the bus stops.

Pedestrian Network Analysis, 2011, Portland, Oregon

This case study addresses the topic of improving pedestrian access to transit. This plan has the goal of making the walk to transit safer, easier and more comfortable by improving four areas that pedestrians use. Those being roadway and sidewalk corridors, roadway corners, roadway crossings and transit stops. To do this, they put wider sidewalks, marked pedestrian crossings, fewer driveways and parking lots, added street trees and bike lanes.

Bike Plan, 2016, Portland, Oregon

This case study helped us find ways to make the cycling experience more comfortable and most of all safer for cyclists. To achieve this, the case study suggested concrete islands to separate bikers from automobiles and buses. If this modification is not possible, they suggested having bike lanes completely separated from the street on its own.

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