



What are the equity impacts of the STM's service changes?

The Issue

Transit in Montréal had lower ridership in 2023 as compared to 2019, leading the Société de transport de Montréal (STM) to reduce service. Cuts early in the pandemic were temporary, but changes in 2022-23 may be long term, as the STM tries to close a \$78M deficit. The STM provided little detail on the location and extent of service cuts, and their equity impacts are unclear. Using STM schedules and 2016 census data, we identified the city-wide impacts of service cuts as well as their effect on areas with concentrations of marginalized groups - defined as places with lower incomes, more recent immigrants, and higher transit ridership.

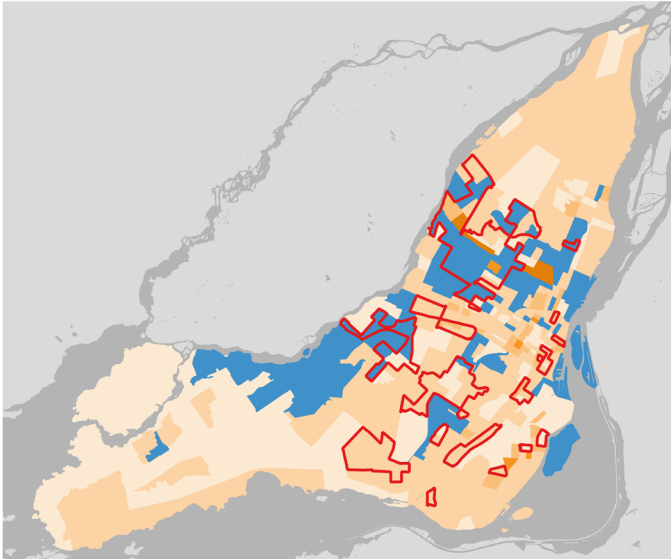
Findings

- **Stop frequency:** overall service was down in March 2023 by 1.5% compared to October 2022, and 12.5% compared to October 2019. The metro and former '10-minute max' bus lines were most affected (down by 18.0% and 22.5% compared to October 2019, respectively).
- **Accessibility to jobs:** the median census tract (CT) could now access 0.5% fewer jobs via transit in 45 minutes after the latest service cuts, and 5.8% fewer compared to October 2019.
- **Equity impacts of changes:** the reductions in stop frequency and accessibility to jobs were uncorrelated with areas with marginalized groups (see next page). This suggests that a policy of horizontal equity was pursued (where all groups are equally subjected to service cuts).

Policy Recommendations

- » Rather than pursuing horizontal equity, aim for vertical equity by minimizing service reductions in areas with concentrations of marginalized groups. This approach would lower the impact of service reductions on those who depend on transit the most.
- » Reconsider service cuts in the neighbourhoods of Parc-Extension, Montréal-Nord, and Côte-des-Neiges. These areas have more marginalized groups and were disproportionately affected.
- » Improve communication of service changes by providing detail on areas and routes where changes will occur. This would give more visibility into changes and let riders plan accordingly.

Change in transit stop frequency between October 2022 & March 2023



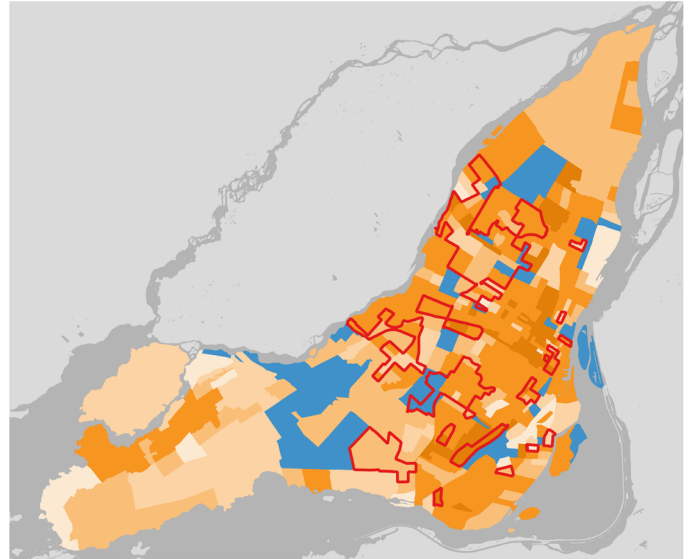
Reduction in daily weekday stops

- 20% or worse
- 10% - 20%
- 5% - 10%
- 1% to 5%
- 0% - 1%
- Increase in service

Borough boundary

Area with higher concentration of marginalized groups

Change in transit stop frequency between October 2019 & March 2023

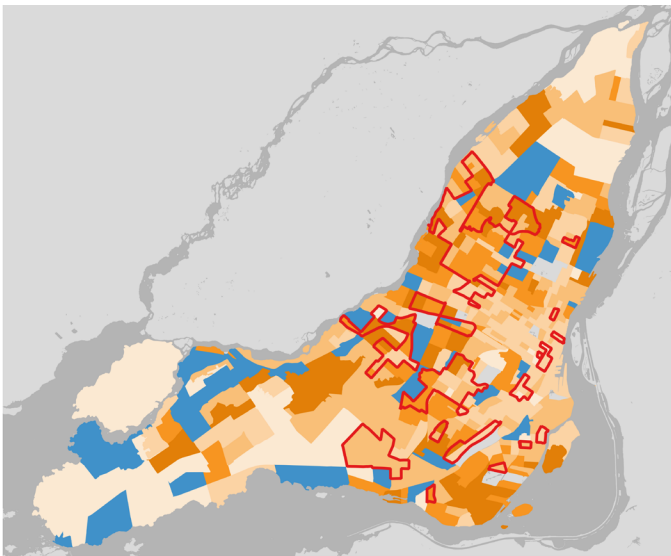


Source: STM GTFS, October 2019, October 2022 & March 2023; 2016 Canadian Census

0 5 10 km

Projection: NAD83 / MTM zone 8

Change in access to jobs by transit between October 2019 & March 2023



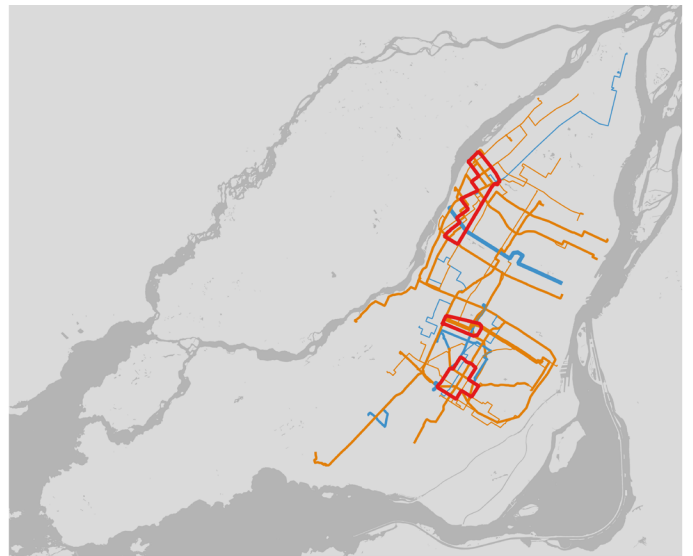
Reduction in accessibility for CT

- 20% or worse
- 10% - 20%
- 5% - 10%
- 1% to 5%
- 0% - 1%
- Increase in service

Borough boundary

Area with higher concentration of marginalized groups

Change in frequency of lines serving Parc-Ex, Montréal-Nord, & Côte-des-Neiges



Reduction in route frequency

- 30% or worse
- 10% - 30%
- 0% - 10%

Increase in route frequency

- 30% or more
- 10% to 30%
- 0% - 10%

Area with higher concentration of marginalized groups

Source: STM GTFS, October 2019, October 2022 & March 2023; 2016 Canadian Census

Projection: NAD83 / MTM zone 8

0 5 10 km