A historical analysis of the evolution of active travel behaviour in Canada

Alice Anonymous^{a,*}, Bob Security^a, Cat Memes^a

^aBig Wig University, 1 main street, Gotham, 123456, State, United States

Abstract

Appendix A

After performing the Kruskal-Wallis test (to assess whether there was a statistically significant difference between the distributions of empirical travel time values, considering the time differences for each destination and the weight of each episode) and the pairwise Wilcoxon test, we were able to identify the destinations where a statistically significant difference was detected. For both active transportation modes, the possible destinations had at least two year with statistically significant difference in travel times (p-value < 0.05, Table 1).

 $^{^*}$ Corresponding author

Email addresses: alice@example.com (Alice Anonymous), bob@example.com (Bob Security), cat@example.com (Cat Memes)

Table 1: P-values of the pairwise Wilcoxon test.

| Mode | Destination | Year | 1992 | 1998 | 2005 | 2010 | 2015 |
|---------|--|--|---|--|--|--|--|
| Walking | Home | 1998 | 0.00e+00 | | | | |
| | Home | 2005 | 0.00e+00 | 0.00e+00 | | | |
| | Home | 2010 | 0.00e+00 | 0.00e+00 | 0.00e+00 | | |
| | Home | 2015 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e+00 | |
| | Home | 2022 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e + 0 |
| | Work or school | 1998 | 7.09e-211 | | | | |
| | Work or school | 2005 | 0.00e+00 | 0.00e+00 | | | |
| | Work or school | 2010 | 0.00e+00 | 0.00e+00 | 0.00e+00 | | |
| | Work or school | 2015 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e+00 | |
| | Work or school | 2022 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e + 0 |
| | Grocery store | 2010 | | | 0.00e+00 | | |
| | Grocery store | 2015 | | | 0.00e + 00 | 0.00e + 00 | |
| | Grocery store | 2022 | | | 0.00e + 00 | 0.00e + 00 | 0.00e + 0 |
| | Neighbourhood | 2022 | | | | | 0.00e + 0 |
| | Sport area | 2022 | | | | | 0.00e + 0 |
| | Outdoors | 2010 | | | 4.33e-29 | | |
| | Outdoors | 2015 | | | 0.00e + 00 | 0.00e + 00 | |
| | Outdoors | 2022 | | | 0.00e+00 | 0.00e+00 | 0.00e + 0 |
| | Restaurant | 2010 | | | 2.09e-295 | | |
| | Restaurant | 2015 | | | 0.00e+00 | 0.00e+00 | |
| | Restaurant | 2022 | | | 0.00e+00 | 0.00e+00 | 1.11e-17 |
| | Other's home | 1998 | 0.00e+00 | | | 2.222100 | |
| | Other's home | 2005 | 0.00e+00 | 1.79e-83 | | | |
| | Other's home | 2010 | 0.00e+00 | 0.00e+00 | 0.00e+00 | | |
| | Other's home | 2015 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e+00 | |
| | Other's home | 2022 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00e+0 |
| | Health clinic | 2022 | 0.000 00 | 0.000 00 | 0.000 00 | 0.000 00 | 4.12e-21 |
| | Cultural venues | 2010 | | | 4.52e-273 | | 4.120-21 |
| | Cultural venues | 2015 | | | 0.00e+00 | 0.00e+00 | |
| | Cultural venues | 2013 | | | 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 | 0.00e + 0 |
| | Place of worship | 2010 | | | 0.00e+00 | 0.000 | 0.000+0 |
| | Place of worship | 2015 | | | 0.00e+00 0.00e+00 | 0.00e + 00 | |
| | Place of worship | 2013 | | | 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 | 3.76e-18 |
| | Business | 2022 | | | 0.000+00 | 0.000 | 1.18e-30 |
| Cycling | Grocery store | 2010 | | | 0.00e+00 | | |
| Cycling | Grocery store | 2015 | | | 0.00e+00 | 0.00e+00 | |
| | Grocery store | 2013 | | | 0.00e+00 | 0.00e+00 | 0.00e + 0 |
| | Home | 1998 | 1.08e-230 | | 0.00e+00 | 0.00e+00 | 0.00e+0 |
| | | | 1.08e-230 1.45e-24 | 0.00e+00 | | | |
| | Home | 2005 | | | 0.00.100 | | |
| | Home Home | 2010 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.00 +00 | |
| | Homo | 2015 | 0.00e+00 | 8.44e-236 | 0.00e+00 | 0.00e+00 | 0.00 : 0 |
| | | 0000 | | | | 0.00e + 00 | 0.00e + 0 |
| | Home | 2022 | 0.00e+00 | 0.00e+00 | 0.00e+00 | 0.000-00 | |
| | Home Work or school | 1998 | 0.00e+00 | | 0.00e+00 | 0.00e+00 | |
| | Home Work or school Work or school | $1998 \\ 2005$ | 0.00e+00 9.62e-228 | 0.00e+00 | | 0.00e+00 | |
| | Home Work or school Work or school Work or school | $1998 \\ 2005 \\ 2010$ | 0.00e+00 9.62e-228 1.30e-221 | 0.00e+00 0.00e+00 | 0.00e+00 | | |
| | Home Work or school Work or school Work or school Work or school | 1998 2005 2010 2015 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 | 0.00e+00 | |
| | Home Work or school | 1998 2005 2010 2015 2022 | 0.00e+00 9.62e-228 1.30e-221 | 0.00e+00 0.00e+00 | 0.00e+00 | | 0.00e+0 |
| | Home Work or school Health clinic | 1998 2005 2010 2015 2022 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 | 0.00e+0 |
| | Home Work or school Work or school Work or school Work or school Health clinic Restaurant | 1998 2005 2010 2015 2022 2022 2010 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 | 0.00e+00 0.00e+00 | 0.00e+0 |
| | Home Work or school Health clinic Restaurant Restaurant | 1998 2005 2010 2015 2022 2022 2010 2015 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 | 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 |
| | Home Work or school Work or school Work or school Work or school Health clinic Restaurant | 1998 2005 2010 2015 2022 2022 2010 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 | 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 |
| | Home Work or school Health clinic Restaurant Restaurant | 1998 2005 2010 2015 2022 2022 2010 2015 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 | 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 |
| | Home Work or school Work or school Work or school Work or school Health clinic Restaurant Restaurant Restaurant | 1998 2005 2010 2015 2022 2022 2010 2015 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 | 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 |
| | Home Work or school Work or school Work or school Work or school Health clinic Restaurant Restaurant Sport area | 1998 2005 2010 2015 2022 2022 2010 2015 2022 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 |
| | Home Work or school Work or school Work or school Work or school Health clinic Restaurant Restaurant Restaurant Sport area Outdoors | 1998 2005 2010 2015 2022 2022 2010 2015 2022 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 0.00e+0 |
| | Home Work or school Work or school Work or school Work or school Health clinic Restaurant Restaurant Restaurant Sport area Outdoors Outdoors | 1998 2005 2010 2015 2022 2022 2010 2015 2022 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 0.00e+0 |
| | Home Work or school Health clinic Restaurant Restaurant Restaurant Sport area Outdoors Outdoors Outdoors | 1998 2005 2010 2015 2022 2022 2010 2015 2022 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+0 |
| | Home Work or school Health clinic Restaurant Restaurant Restaurant Sport area Outdoors Outdoors Outdoors Other's home Other's home | 1998 2005 2010 2015 2022 2022 2010 2015 2022 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 0.00e+00 2.60e-122 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 0.00e+0 |
| | Home Work or school Health clinic Restaurant Restaurant Restaurant Sport area Outdoors Outdoors Outdoors Other's home Other's home | 1998 2005 2010 2015 2022 2022 2010 2015 2022 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 0.00e+00 2.60e-122 0.00e+00 6.63e-41 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 0.00e+00 0.00e+00 0.00e+00 3.60e-287 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 0.00e+0 |
| | Home Work or school Health clinic Restaurant Restaurant Restaurant Sport area Outdoors Outdoors Outdoors Other's home Other's home | 1998 2005 2010 2015 2022 2022 2010 2015 2022 2022 | 0.00e+00 9.62e-228 1.30e-221 0.00e+00 0.00e+00 2.60e-122 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 1.03e-106 0.00e+00 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+00 0.00e+00 0.00e+00 0.00e+00 | 0.00e+0 0.00e+0 0.00e+0 0.00e+0 |