

# Paper 1 [working title]\*

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## Abstract

In Toronto, before a neighbourhood change application can be processed for consideration, the city must first consult the opinions of property owners, residents and businesses from the affected area via polls. Regardless of whether changes are good or bad, it is important to know which types of neighbourhood modifications resident stakeholders are most resistant to. In this particular analysis, we gathered polling data from the City of Toronto Open Portal to examine which types of neighbourhood change receive lower response rates. Interestingly enough, it appears that Torontonians are very passionate about parking but less eager about traffic changes.

## 1 Introduction

In Toronto, before a neighbourhood change application can be processed for consideration, the city must first consult the opinions of property owners, residents and businesses from the affected area via polls. Regardless of whether changes are good or bad, it is important to know which types of neighbourhood modifications resident stakeholders are most resistant to. Knowing which polls receive low response rates can help the city determine which sectors may require more persuasive messaging than others. Lower response rates may also be an indication of low interest, indifference, or even resistance to particular neighbourhood changes. The benefit of analyzing poll response rates will be beneficial to improving the infrastructure for the city of Toronto.

In this particular analysis, we gathered polling data from the City of Toronto Open Portal to examine which types of neighbourhood change receive lower response rates. The polls are conducted by the City Clerk's Office on behalf of the city divisions. In particular, these polls focus on changes involving sidewalk cafes, off-street parking, permit parking, traffic calming, and business improvement areas. In order for an application to be voted "in favour," specific benchmarks must be met; in addition to poll results, each poll needs to meet a percentage of returned ballots to be considered valid. These response rates are the variables of interest in order to examine which neighbourhood changes may require more attention.

Interestingly enough, based on our collected polling data, it appears that Torontonians are very passionate about parking but less eager about traffic changes. Front yard parking has the most amount of polls conducted, with its response rate threshold being met almost every time. Similarly, almost each poll in regards to front yard parking ended with an "in favour" verdict. It is also important to note that the second most polls conducted are in regards to appealing front yard parking changes. With such high engagement in front yard parking, it is shocking to see that traffic calming, a change that most would assume to be important to residents, fails to meet its response rate threshold more than half the time, resulting in its applications to be automatically removed from the approval process. Although the reasons for these discrepancies cannot be shown through this analysis, it is clear that more investigation must be made to figure out why there is such high variance in polling engagement between the two topics.

The remainder of this paper will go through the analysis process as follows: Section 2 explains the data collected and the process by which it was cleaned and analyzed. Section 3 covers the results of the findings and explores the different polling engagement rates for different developmental changes.

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\*Code and data are available at: [https://github.com/pengwinny/starter\\_folder](https://github.com/pengwinny/starter_folder).

Table 1: First ten rows of a dataset of economic indicators for Australia, Ethiopia, India, and the US

Response Rate Met	Poll Type
Yes	Front Yard Parking
Yes	Front Yard Parking
Yes	Front Yard Parking
No	Traffic Calming
Yes	Boulevard Cafe
No	Traffic Calming
No	Commercial Boulevard Parking
Yes	Appeal - Front Yard Parking
No	Traffic Calming
Yes	Front Yard Parking

## 2 Data

Paragraph or two introducing the data set broadly. We obtain our data set from the City of Toronto open Data Portal, using the `opentorontodata` package (Gelfand 2020) and the statistical programming language R (R Core Team 2020).

Then show an extract of the data set (Table 1.

Paragraph or two more about Table.

We are interested in the relationship between A and B.

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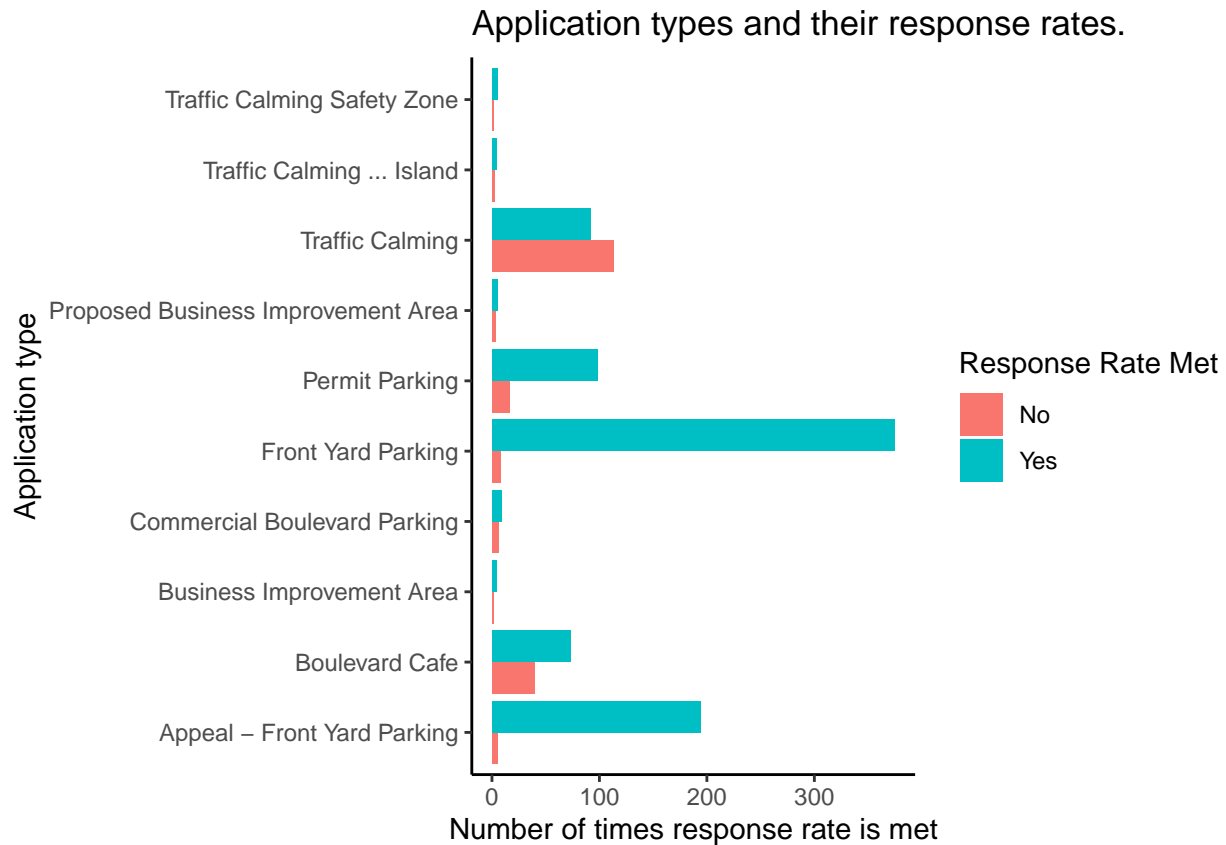


Figure X shows the relationship between Y and Z.

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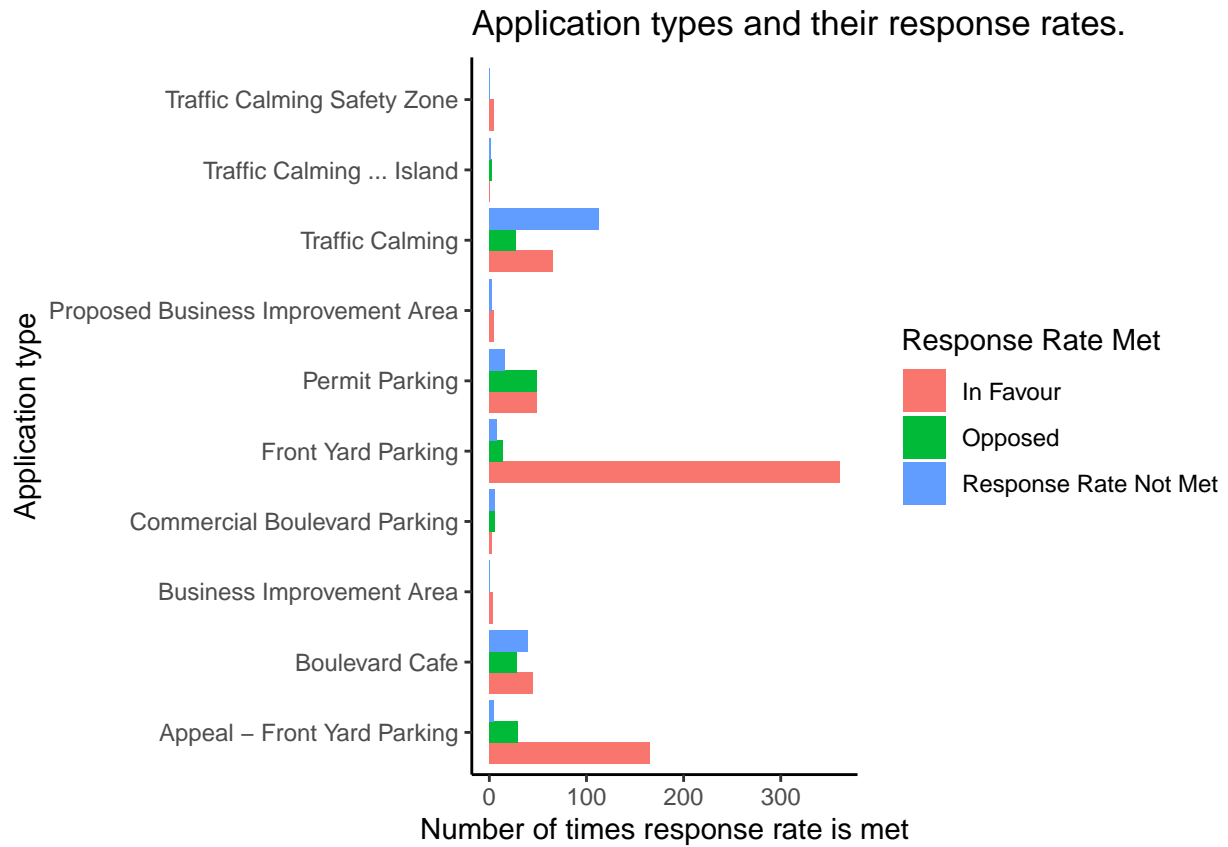
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```



Talk more about it.

Also bills and their average. (Notice how you can change the height and width so they don't take the whole page?)

Talk way more about it.

### 3 Results

## References

- Gelfand, Sharla. 2020. *Opendatatoronto: Access the City of Toronto Open Data Portal*.
- R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. <https://www.R-project.org/>.