# TTC Streetcar Delays based on Times of the Day\*

My subtitle if needed

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First sentence. Second sentence. Third sentence. Fourth sentence.

#### 1 Introduction

The TTC Streetcars is one of the ways people commute and get around in Toronto. However, this mode of transportation is not always predictable and can have a lot of delays depending on the time of day. This is because at different ties of day, the city experiences different traffic patterns or other operational incidents. This paper will analyze the delays for each streetcar line running so that it is easier to commute in the city and adjust for delay times so that people can reach their desired destinations on time.

#### 2 Data

Some of our data is of penguins (?@fig-bills), from Horst, Hill, and Gorman (2020).

Talk more about it.

And also planes (?@fig-planes). (You can change the height and width, but don't worry about doing that until you have finished every other aspect of the paper - Quarto will try to make it look nice and the defaults usually work well once you have enough text.)

Talk way more about it.

<sup>\*</sup>Code and data are available at: LINK.

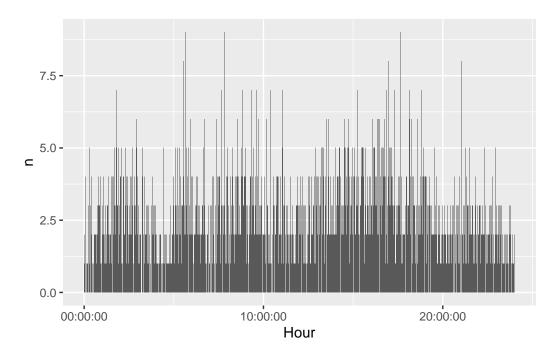


Figure 1: Delay Data

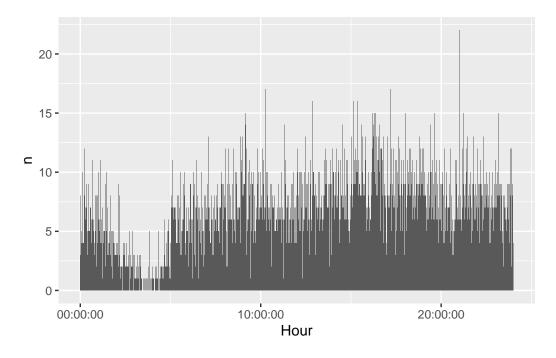


Figure 2: Delay Data

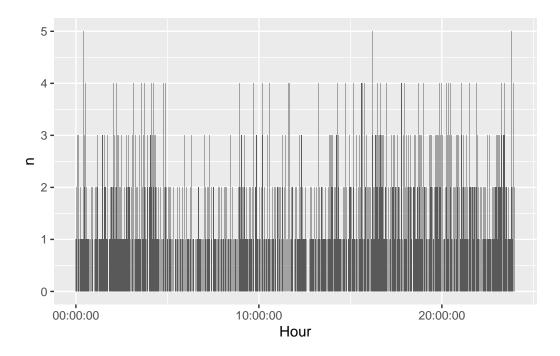


Figure 3: Delay Data

Table 1: Explanatory models of flight time based on wing width and wing length

## 3 Results

Our results are summarized in Table 1.

The data section shows that

## 4 Discussion

#### 4.1 First discussion point

If my paper were 10 pages, then should be be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

## 4.2 Second discussion point

## 4.3 Third discussion point

## 4.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

## **Appendix**

### A Additional data details

#### **B** Model details

#### **B.1** Posterior predictive check

In **?@fig-ppcheckandposteriorvsprior-1** we implement a posterior predictive check. This shows...

In **?@fig-ppcheckandposteriorvsprior-2** we compare the posterior with the prior. This shows...

Examining how the model fits, and is affected by, the data

#### **B.2 Diagnostics**

?@fig-stanareyouokay-1 is a trace plot. It shows... This suggests...

?@fig-stanareyouokay-2 is a Rhat plot. It shows... This suggests...

Checking the convergence of the MCMC algorithm

## References

Horst, Allison Marie, Alison Presmanes Hill, and Kristen B Gorman. 2020. *Palmerpenguins: Palmer Archipelago (Antarctica) Penguin Data*. https://doi.org/10.5281/zenodo.3960218.