My title*

My subtitle if needed

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Abstract

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

1 Introduction

You can and should cross-reference sections and sub-sections. For instance, Section 2. R Markdown automatically makes the sections lower case and adds a dash to spaces to generate labels, for instance, Section 5.1.

2 Data

Our data is of penguins (Figure **??**).

Talk more about it.

Also bills and their average (Figure 2). (Notice how you can change the height and width so they don't take the whole page?)

```
Spadina_fort_York_data <-
  cleaned_data |>
  filter(WARDNAME == "Spadina-Fort York")

Toronto_cerntre_data <-
  cleaned_data |>
  filter(WARDNAME == "Toronto Centre")

University_Rosedale_data <-
  cleaned_data |>
  filter(WARDNAME == "University-Rosedale")
```

```
Spadina_fort_York_data |>
  ggplot(mapping = aes(x = YEAR_BUILT, y = SCORE)) +
  geom_jitter() +
  geom_point(alpha = 0.5) +
  theme_minimal() +
  labs(x = "Builded Year",
       y = "Score of the apartment",
       caption = "Data source: OPEN DATA TORONTO.") +
  scale_color_brewer(palette = "Set1") +
  theme(legend.position = "bottom")
```

*Code and data are available at: LINK.

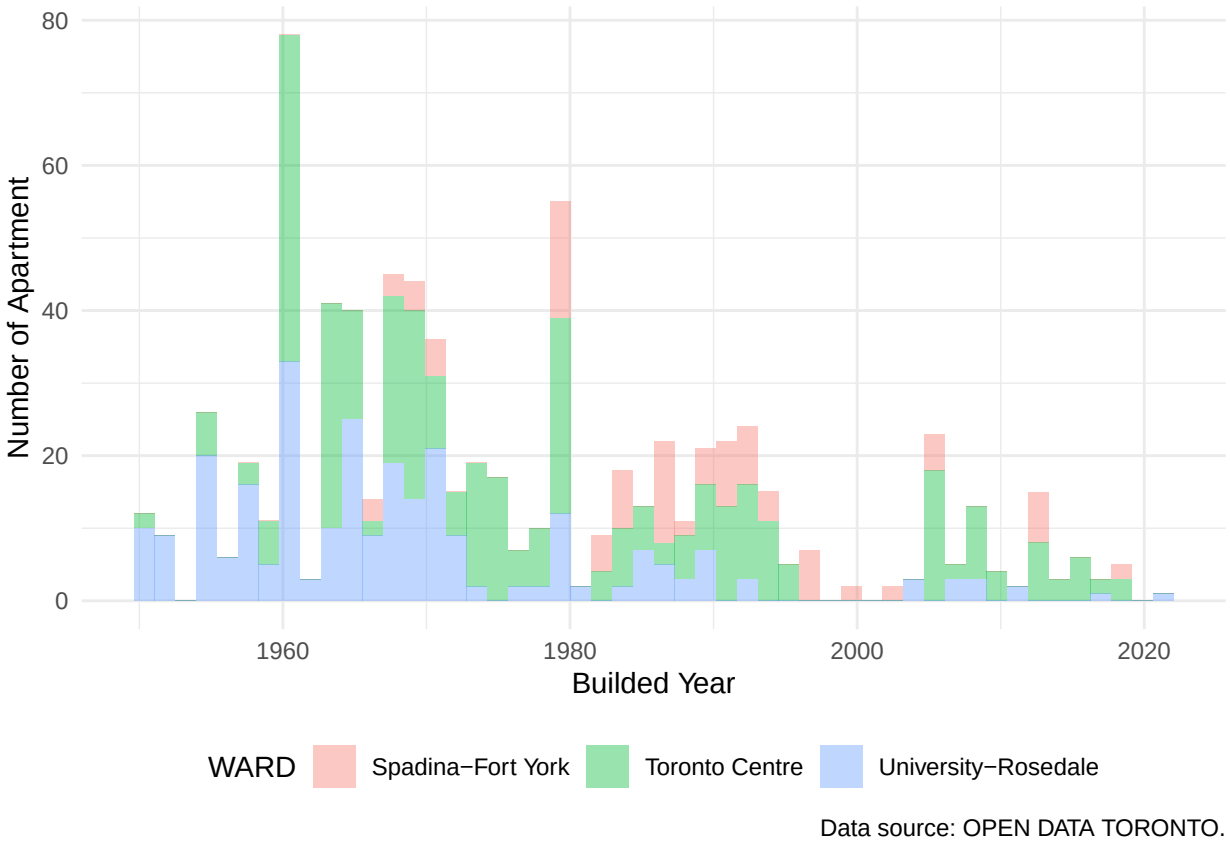
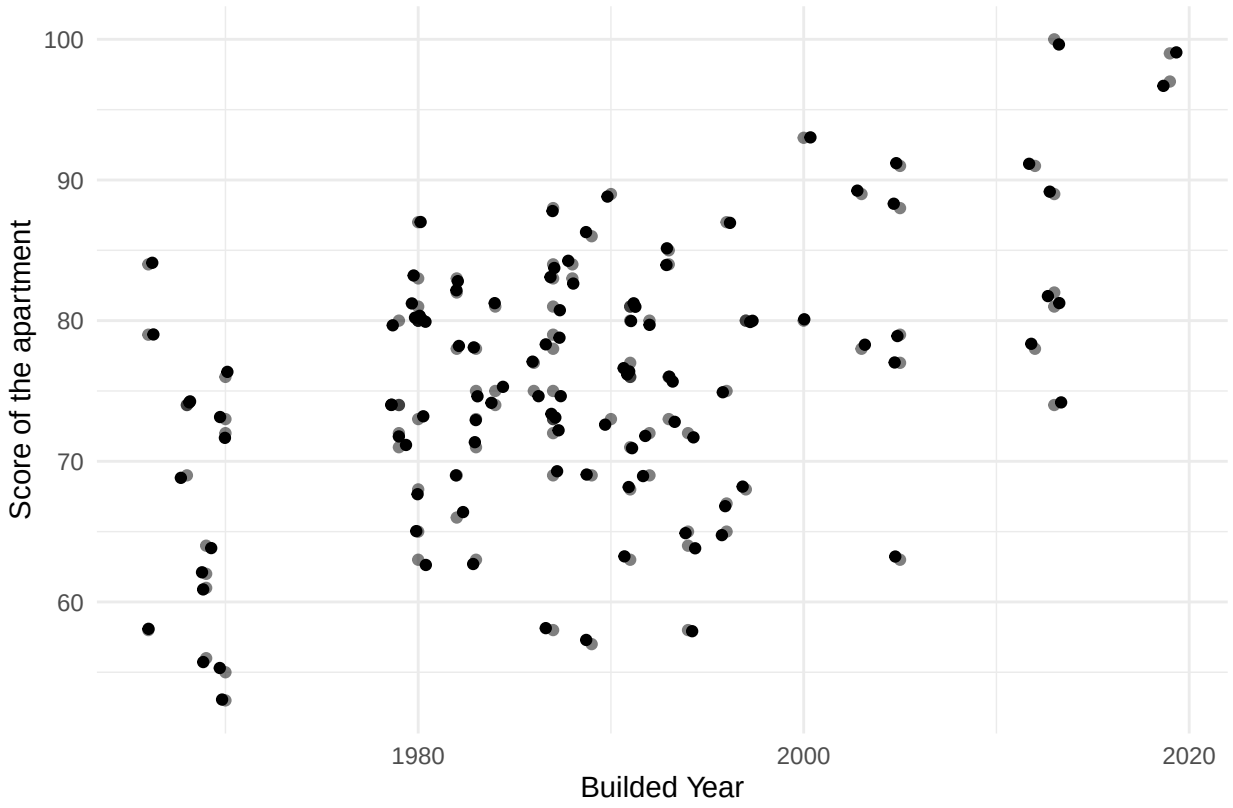


Figure 1: Builded year distributino in three wards




```
Toronto_cerntre_data |>
  ggplot(mapping = aes(x = YEAR_BUILT, y = SCORE)) +
  geom_jitter() +
  geom_point(alpha = 0.5) +
  theme_minimal() +
  labs(x = "Builded Year",
       y = "Score of the apartment",
       caption = "Data source: OPEN DATA TORONTO.") +
  theme(legend.position = "bottom")
```

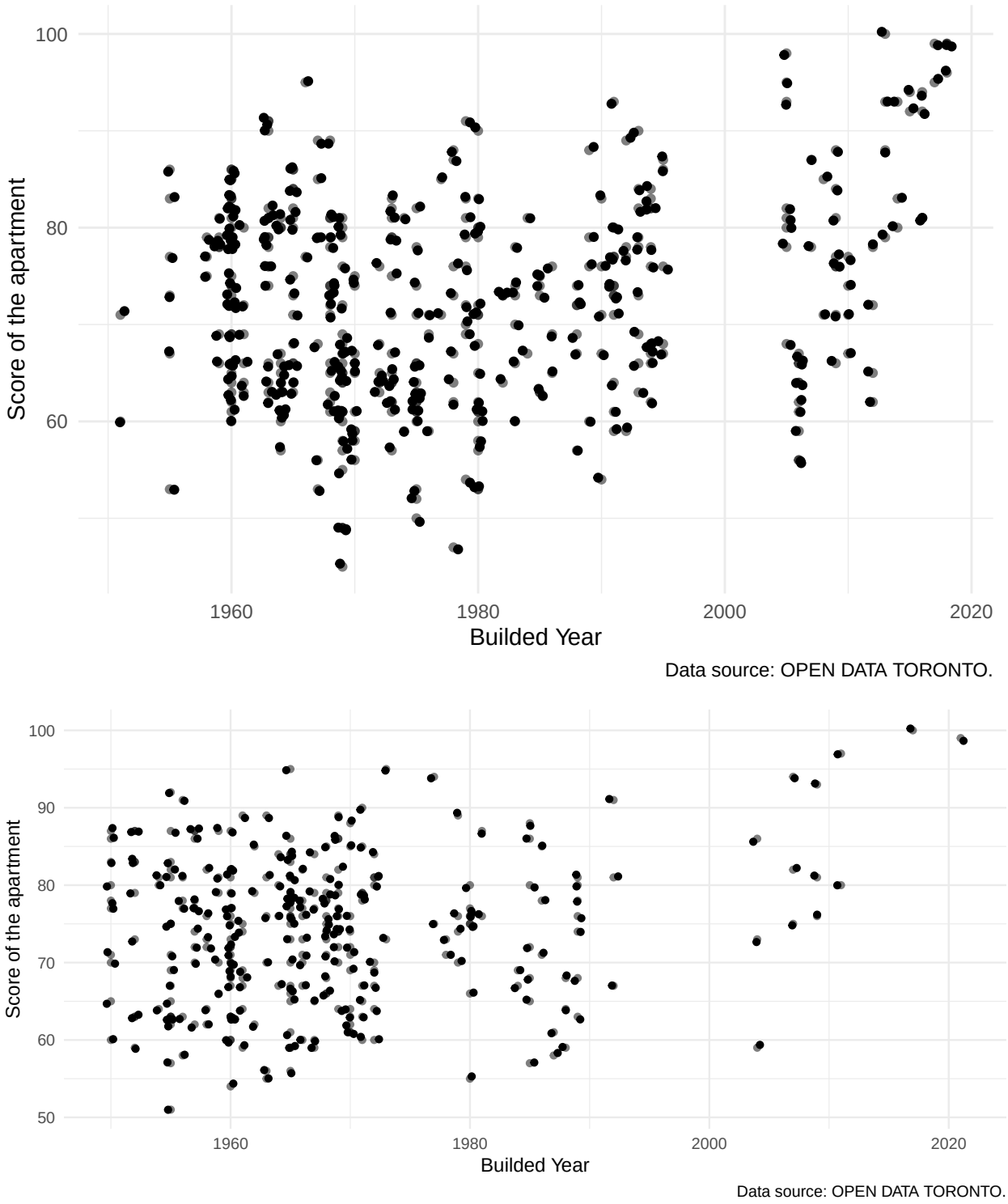
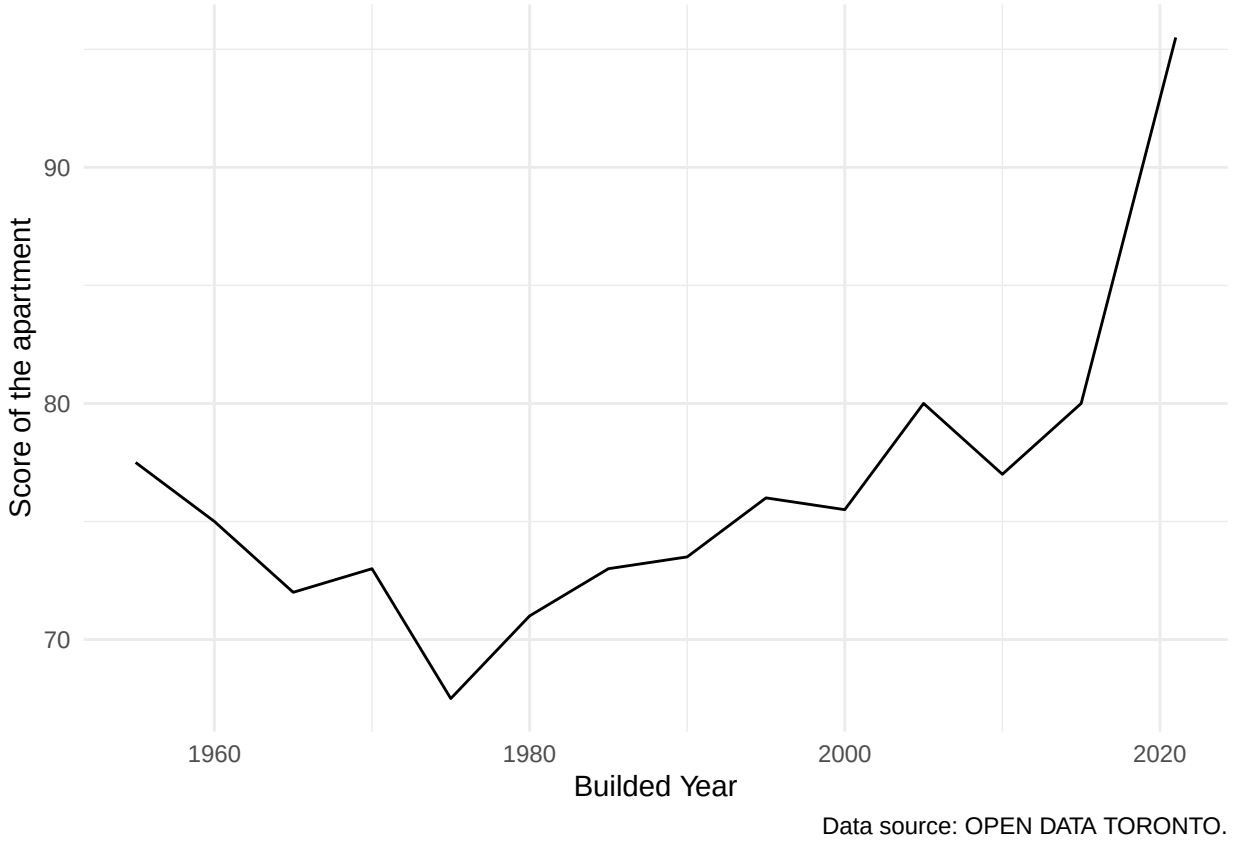


Figure 2: More bills of penguins

Talk way more about it.

```
Average_score |>
  ggplot(mapping = aes(x = Year_in_5, y = Average_year)) +
  geom_line() +
```

```
theme_minimal() +
labs(x = "Builded Year",
     y = "Score of the apartment",
     caption = "Data source: OPEN DATA TORONTO.")
```



3 Model

Here's a dumb example of how to use some references: In paper we run our analysis in `R` (R Core Team 2020). We also use the `tidyverse` which was written by Wickham et al. (2019) If we were interested in baseball data then Friendly et al. (2020) could be useful.

We can use maths by including latex between dollar signs, for instance θ.

4 Results

5 Discussion

5.1 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.

5.2 Second discussion point

5.3 Third discussion point

5.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A Additional details

References

Friendly, Michael, Chris Dalzell, Martin Monkman, and Dennis Murphy. 2020. *Lahman: Sean 'Lahman' Baseball Database*. https://CRAN.R-project.org/package=Lahman.

R Core Team. 2020. *R: A Language and Environment for Statistical Computing*. Vienna, Austria: R Foundation for Statistical Computing. https://www.R-project.org/.

Wickham, Hadley, Mara Averick, Jennifer Bryan, Winston Chang, Lucy D'Agostino McGowan, Romain François, Garrett Grolemund, et al. 2019. "Welcome to the tidyverse." *Journal of Open Source Software* 4 (43): 1686. https://doi.org/10.21105/joss.01686.