

## Problem Set 1 - 'Establishing foundations' (10%): due midnight, 27 September 2020

- Please either:
  1. find some observational data of interest to you from the Toronto Open Data Portal (<https://open.toronto.ca/>) and download it via the opendatatoronto R Package (<https://sharlagelfand.github.io/opendatatoronto/>); or
  2. find some survey data from the 2019 Canadian Election Study (<http://www.ces-eeec.ca/>) and download it via the cesR R package (<https://hodgettsp.github.io/cesR/>).
- Appropriately describe the dataset that you use.
- Find something interesting and make a graph of it using ggplot.
- Discuss your findings and graph.
- Given your finding, go back and write an introduction.
- Check that you have referenced everything. Strong submissions will draw on related literature in the discussion and would be sure to also reference those. The style of references does not matter, provided it is consistent.
- Add an abstract and a descriptive title (Hint: 'Problem Set 1' is not descriptive. There should be no evidence that this is a class assignment.) (Hint: if your abstract is longer than four sentences then you should redo it.)
- Pull this all together in a blog post that you add to your Blogdown website hosted via GitHub.
- Your blog post must be well written and able to be understood by the average reader of, say, 538. This means that you are allowed to use mathematical notation, but you must explain all of it in plain english. Similarly, you can (hint: and should) use surveys/sampling/observational data terminology, but again, you need to explain it. Your graph and discussion must be extremely clear, and of comparable quality to 538.
- Check that your blog has a title, date, authorship, abstract, introduction, data discussion, graph, graph discussion, and references. (Hint: Strong submissions would include a 'weaknesses and next steps' section.)
- Via Quercus, submit: 1) a link to your blogpost; and 2) the associated GitHub repo (Hint: Comment. Your. Code.). Your entire workflow must be entirely reproducible.
- We work in public where it is at all possible. If you have a personal situation for not wanting your name to be public, then please email me a request for this - please do NOT reveal your personal situation to me - just make the request and suggest a work-around.