

Motivation: Jim's motivation (as a part of the organization Fair Vote) is to help propose a proportional voting system for Toronto, or to at least help argue, with this simulator, that it's feasible.

There are four kinds of voting systems: FPTP, MMP, STV, SNTV

Voting can be broken down into three scaled: ridings, census tracks, and polls. Polls are where people vote, census tracks are groups of polls, and ridings are groups of census tracks. Each scale maintains different aspects of data on voting. Census tracks contain demographic data, polls contain the votes, and at the riding level you will find the candidates' expenses.

Our goal is to create a simulation model that maps effort that the campaign manager allocates to the results that they are likely to get based on all the retrievable data from the three levels over the years. We will give the user the ability to specify the effort they want to allocate from the district they want to target to the amount of funds they would contribute.

The model itself will most likely be a non-linear model. Jim said he would 'knock on the doors of some political-sci professors' to determine what the model would look like.

Since Jim's project is politically-driven, he stressed that having 'pretty pictures' that could be generated from the software would be important to potentially show to city officials.

There are four kinds of archetypes of people that we will have to accommodate: Implementor, Election Master, Player, Presenter.

There is one implementor per party. In this case, we would think as Jim as an implementor. Their role is to install the software so they would want it packaged, and easily-extendable. Their job is mainly to cater the system to the Election Master. The job of the Election Master is to advise the Player on what decisions should be made. There are several election masters per party. The job of the Election Master would be to specify the parameters for the system, after it's been configured by the implementor. There is one Player per party who makes all the decisions based on the advice from the Election Masters. Once the decisions have been made by the Player, the data gets sent to the Presenter who presents it in a neat and very appealing format to pitch to City Council.