Fundamentals :

In order to predict the National Popular Vote, we need to include some macro-indicators that would reveal the state of the US during years before the election. It has been studied that macoeconomic indicators could influence widely the outcome of a presidential election. In our work, we decided to focus on:

* Current president’s popularity: the *Net Approval Rating* (NAP)
* Economic indicators: GDP, Real Disposable Income for citizens (RDI), Payrolls of citizens
* Stock Indicators: Evolution of the Dowjones (Stock)

The sources for this data were: **GallUp Polls** and **Federal Reserve Economic Data**. We extracted aggregated (mean or median) values for every indicator according to different frequencies (for instance, the NAP was extracted every month 6 months before the election, whereas the GDP was extracted 6 times, 1 per year without election and 3 per election year). Last, another macro indicator of the state of the election was whether the current president was seeking for reelection, or if the previous president had accomplished his second mandate.

*Special Election 2020 Note:* Since all the economic indicators have been shaken for the last 6 months because of the covid19 crisis, we decided to ‘lower’ the impact of the crisis in order for the model to reflect the real behaviour of the citizens. This would allow to treat the 2020 election point as in-distribution and not Out of Distribution.

This allowed to construct **26** features per election year.