

Climate Cabinet is a nonprofit that advises policymakers in drafting climate legislation. To better understand how fossil fuel interests influence campaign finance, they asked the University of Chicago's Data Science clinic to create a network graph showing the flow of campaign donations among entities such as organizations, Political Action Committees, and individual donors in state elections. Figure 1 outlines the process that was used to accomplish this task.

Most of the effort was directed towards record linkage strategies to identify similarities between entities. With both deterministic and probabilistic classification strategies, the main challenge was distinguishing between entities with variable attributes, such as same names but different addresses. This differentiation was vital to mapping the network of influence each entity holds in state elections.

After deduplication, the classification stage was performed manually, and involved pouring through the data to find individuals and organizations who could be identified as belonging to either fossil fuel or clean energy industries.

Figure 2 displays a network graph from the graphing stage, highlighting the connections and donations from various nodes (entities) to a key node, the "Democratic Legislative Campaign Committee".

Going forward, this result may be enhanced by creating a fully interactive version, which researchers could explore to understand the structure of electoral spending.

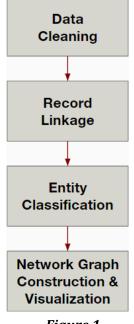


Figure 1

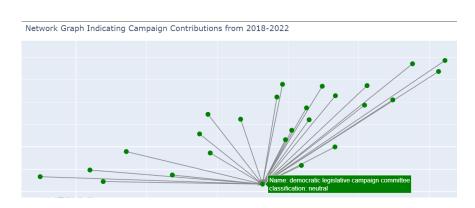


Figure 2