

MRP Data Scientist Challenge

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Multilevel regression and post-stratification (MRP) is a method to estimate public opinion across geographic units using individual-level survey data.

Your task is to generate state-level public opinion estimates of Right Direction/Wrong Track, Obama Approval, and Top Issue using the attached ~2,000 person survey of U.S. registered voters conducted in the past month

Your submission should include:

- A detailed description of the variables (i.e., individual level, state level, and/or interactions) used in the model, the post-stratification set, and findings.
- A discussion of how your approach compares with, extends and/or improves previous modeling approaches and findings from the considerable social science literature on MRP.
- At least 2 compelling state maps displaying your findings
- A comparison of MRP results with alternative modeling strategies such as raking and/or a validation of MRP results with other recent state-level public opinion data (where available).
- All source code and supporting materials in a reproducible format

Notes on attachments:

- See “data.csv” for the raw data and “codebook.docx” for the codebook
- The three dependent variables you should predict are 1) % Right Track (i.e., nr1=1), 2) % Approve President Obama (i.e, nr2 <=2), and 3) % say economic issues are their top issue (nr3 = 1).

Good Luck!