Sampling and Weighting Methodology for the October 2010 Texas Statewide Study

For the survey, YouGovPolimetrix interviewed 914 respondents between October 11 and 19, 2010, who were then matched down to a sample of 800 to produce the final dataset. The respondents were matched on gender, age, race, education, party identification, ideology and political interest. YouGovPolimetrix then weighted the matched set of survey respondents to known marginals for the registered voters of Texas from the 2008 Current Population survey and the 2007 Pew Religious Life Survey.

Sampling Frame and Target Sample
YouGovPolimetrix constructed a national sampling frame from the 2007 American Community Survey, including data on age, race, gender, education, marital status, number of children under 18, family income, employment status, citizenship, state, and metropolitan area. The frame was constructed by stratified sampling from the full 2007 ACS sample with selection within strata by weighted sampling with replacements (using the person weights on the public use file). Data on voter registration status and turnout were matched to this frame using the November 2008 Current Population Survey. Data on interest in politics and party identification were then matched to this frame from the 2007 Pew Religious Life survey, using the following variables for the match: age, race, gender, education, marital status, number of children under 18, family income, employment status, citizenship, state. The target sample of 800 Texas registered voters was selected with stratification by age, race, gender, education, and with simple random sampling within strata.

Weighting
Because matching is approximate, rather than exact, and response rates vary by group, the sample of completed interviews normally shows small amounts of imbalance that can be corrected by post-stratification weighting.

Raking, first proposed by Deming and Stephan (1940), adjusts an initial set of weights to match a known set of population marginals, using a method of iterative proportional fitting (see Bishop, Fienberg and Holland, 1975 for details). In this procedure, the weights are adjusted sequentially to match the marginal distribution of each weight variable. The process proceeds until all marginals are matched. It does not require any information about the joint distribution of the variables (though, if these data are available and believed to be important, they can be employed by defining a marginal distribution involving a cross-classification of two variables).

Post-stratification weights are calculated by raking the completed interviews to known marginals for the general population of Texas from the November 2008 Current Population Survey for the following variables: age, race, gender, and education.