ANALYSIS OF SBA'S BROWARD COUNTY FLORIDA POST CARD CAMPAIGN: EFFECT ON NOV 3 2020 TURNOUT

David Salkever and John Loewenstein 1/17/2022
We acknowledge the work of all of SBA's volunteers as well as our friends in the Broward Democratic Party for making this study possible.

SUMMARY

Two part postcards encouraging voting by mail were sent to registered Democrats in Broward County Florida in 2020. A subset of registered Democrats in Broward South were sent get out the vote cards late in the election cycle. Taken together the cards increased the likelihood that an individual would vote in the November general election by 2.6% (95% confidence interval 0.0197-0.0322). The effect was greatest for Afro-Americans and null for Hispanic Americans.

A. THE INTERVENTION

1) A two part post card (VBM card) with instructions on how to request a mail ballot by telephone, via the County Supervisor of Elections (SOE) website, or by returning one part of the card to the SOE. The card was pre-printed with the return address of the Broward County Democratic Party, included postage on the return portion, and had a space for a handwritten message.
2) A Get Out the Vote card (GOTV card). This was a large format pre-printed post card with the addresses and photographs of the early voting sites in Broward South.

B. INITIAL INCLUSION CRITERIA AND SELECTION PROCESS

The cohort of possible subjects consisted of those registered Democrats selected for intervention by the Broward County Florida Democratic Party. People were selected for VBM throughout the County, while those selected for GOTV were only in the southern part of the County. Only registered Democrats residing in Broward County who had not requested a mail ballot were included. Broward Democrats provided voter names, addresses, and State File IDs to SBA in batches over a period from mid July 2020 to mid October 2020. SBA volunteer coordinators submitted requests for groups of voter names and addresses from the batches that they could pass on to their volunteers. Individual volunteers addressed the cards, wrote a message, put stamps on the cards, and mailed them. VBM cards were mailed from about July 28 to September 6, while GOTV cards were sent from about October 20 to October 31. Some voter names appeared in more than one request over the mailing period. Controls were selected arbitrarily from each batch, however, the individual records for each person were not randomized prior to arbitrary selection of controls.

Potential study subjects were all persons in the cohort:

1) Who were in a batch selected for VBM (note that some of each batch were held as controls, as described below),

2) who were not to be sent a GoTV card before being sent a VBM card (including those who were not sent VBM cards or GoTV cards),

4) for whom data were included on post election Broward VAN files supplied by the Broward county Democratic Party,

5) whose residence address from the VAN files could be mapped via GIS into a census block group,

6) for whom data from the ACS 2015-19 5-year summary file for their matched block group included data on educational level (by gender) and median household income, and

7) whose VAN file data did not have missing information on age or missing block group income or education data from the ACS.

A total of 250,373 voters were included in the analyses, including:

i) 228,734 who were to be sent a VBM card as a result of the first request including their name,

ii) 1,372 voters who were controls in the first request including their name but were to be sent a VBM card as a result of the second request including their name, and

iii) 20,267 voters who were not slated to be sent any VBM cards but also were not included (as either controls or card recipients) in any GoTV campaign requests.

Controls who had been selected as controls in any GoTV requests were excluded because the criteria for inclusion in the GoTV campaign were different from those in the VBM campaign and we did not have full information on these criteria. As best we know, these were very low propensity voters. To ensure comparability between the VBM voters and the controls in this analysis, therefore, we only included controls who were designated as such in VBM campaign requests. Controls who were to be sent any cards (i.e., designated as intervention subjects)in any requests (whether 1st, 2nd , 3rd, or 4th) for either a GoTV or VBM campaign were also excluded from our analysis.

In contrast, included potential intervention voters who first were to be sent cards in VBM requests were included in our analyses whether or not they were to be sent cards in later requests (i.e., they may have been sent either VBM and/or GoTV cards after the requests in which they were scheduled to be sent their first VBM card). 20,779 voters who were to be sent VBM cards in the first request, in fact also were to be sent a GoTV card in a subsequent request, and 5 additional 1st request VBM recipients were to be sent GoTV cards in 2 subsequent requests. Only 22 voters were to be sent their first VBM card in the second request (and who were VBM controls in their first request), and then were to be sent 1 GoTV card in a subsequent request. There were 5 other included voters who were to be sent 2 subsequent GoTV cards, but none of these voters were included as controls in requests prior to the request slating them for VBM card receipt.

C. DOCUMENTATION OF SPECIFIC COMPONENTS OF STEP 1 OF THE INCLUSION PROCESS: SELECTION FOR POTENTIAL INCLUSION

While 300,088 voters had intervention data available, only 261,981 were slated to receive a VBM card in the first batch request in which their name appeared. (This is indicated in the data by the variable VBMfirst=1.) Of these, 21,401 were to be sent a GoTV card from a subsequent request. Another 1,626 voters were designated as controls in the first VBM request batch in which their name was included but then were to be sent a VBM card due to inclusion of their name in a second VBM request batch. Of these only 30 were to be sent a GoTV card from a subsequent (3rd or 4th) request.

Dropping voters not matched to the VAN data file left only 239,848 voters slated to receive a VBM card in their first batch. Only 232,915 of these voters, however, had residence addresses that could be matched to census tract and block group numbers. Deleting those voters with missing median household income reduced this number further to 228,737.

Of the 1,626 voters who were to be sent their VBM card in the second request, only 1,454 could be matched to VAN data and of these only 1,396 had block-group-matchable residence addresses. Deleting voters with missing block-group median household income reduced this number further to 1,372.

36,481 voters were not slated to receive a VBM card prior to any receipt of a GoTV card and thus were excluded from the potential intervention group. Of these, 10,426 were ineligible since they were slated to receive at least one GoTV card. Of the remaining 26,055, there were 1,179 voters dropped from the potential control group because they were not included in at least one VBM request. This left a pool of 24,876 potential control voters. Of these, however, 3,572 could not be matched to the VAN file data, and an additional 1,035 could not be matched on block group. The result was 20,269 potential control group voters.

Summarizing the results of the selection process thus far, we have a potential intervention group of 230,109 voters and a potential control group of 20,269. The next step was to check for further deletions due to occasional cases of other missing data items for the explanatory variables included in the analysis (which are defined in item 4 below). This resulted in 2 additional potential intervention cases deleted due to missing voter age data and one

additional potential intervention voter deleted due to missing voter race data. Thus, the final VBM potential intervention group included 230,106 cases.

D. THE INTERVENTION VARIABLE

A single VBM card dummy 0-1 variable was used to indicate voters were in the intervention group, VBM1stdumnew. This variable was =1 for intervention and 0 for control.

It is important to note that after being slated to receive an initial VBM card, some of the voters included in the VBM tx group were slated to receive additional VBM cards and/or GoTV cards. (See Section 5 below for further details.) Thus the "treatment" we are studying is NOT the impact of being slated to receive ONLY an initial VBM card (though it is true that the overwhelming majority of voters in the VBM tx group were in fact only slated to receive that initial card). Instead, the "treatment" is defined as INITIAL assignment to a treatment path that may or may not include subsequent VBM or GoTV cards. We do not restrict our analysis to only those who were slated to receive an initial VBM card, because being included in a subsequent request for additional cards may have been due to the individual voter's response to the initial card. In statistical terms, the fact that a voter was or was not slated to receive additional cards was potentially endogenous. Thus, restricting our analysis to voters who only received an initial VBM card could have introduced a bias into our process for estimating the VBM treatment effect.

E. EXPLANATORY VARIABLES AND REGRESSION ADJUSTMENT METHOD

The designation of treatment voters (i.e., slated to receive a VBM card) versus control voters (i.e., not scheduled to receive a card) did not involve systematic matching and randomization procedures; thus, it was expected that the two groups would not be close to equivalent along some dimensions (i.e., characteristics) that were expected (based on prior research) to be relevant predictors of turnout in 2020. We therefore applied multiple regression analyses to control statistically for treatment vs. control differences in these characteristics.

In particular, we employed a logistic regression model with a binary (0-1) outcome of voted vs. did not vote in the 2020 election. In contrast to the commonly used alternative, the linear probability model, the logistic regression has several advantages, such as constraining the predicted value of the outcome (in this case the predicted probability of voting) for any one persons to be inside the 0-1 interval. Another advantage of this specific regression model is that it allows the predicted change in this probability (for any one person) due to a 1-unit change in any particular explanatory variable, while holding values of all other explanatory variables for this person unchanged, to depend on the values for that person's other explanatory variables. In the lingo of regression modelling, the logistic model assumes "interaction" effects are present rather than assuming their absence (as in the linear probability model).

The characteristics used as explanatory variables in our analysis are shown Table 1 below. Note that only 4 continuous variables are used in the analysis: Card1days, medhhinck, pctnohsdipl, and pctcolplus. In addition, we included 3 categorical variables corresponding to self-reported political party preference (PolPartgrp), self-reported race/ethnicity (racegrp), and self-reported gender(gendergrp).

TABLE 1: EXPLANATORY VARIABLE NAMES, DEFINITIONS, AND DATA SOURCES

Variable Name	Definition	Data Source*
Age35TO50	Ages 35 to 50=1, else=0; as of 12/31/2019#	VAN
age22to34	Ages 22 to 34=1, else=0; as of 12/31/2019**,#	VAN
agegt64	Over age 64=1, else=0; ; as of 12/31/2019***,#	VAN
agegt80	Over age 80=1, else=0; as of 12/31/2019#	VAN
Card1days	Days from 6/30/2020(=0) to date of first request	SBA data files (PVF)
Anyvote18	Person voted in 2018 general election	VAN
Anyvote16	Person voted in 2016 general election	VAN
PolPartgrp	D=1,R=2,NP=3,I=4,G/L/O/missing=5	VAN
racegrp	Afro-American=1; Hispanic=2, White=3,Asian=4, Native Amer.=5, Other=6	VAN

gendergrp	Female=1, Male=2, Not reported=3	VAN
medhhinck	Block group median household income (in $000's)	ACS 2015-19 summary files
pctnohsdipl	Block group % w. <HS diploma or GED educ. attainment, for age > 24****	ACS 2015-19 summary files
pctcolplus	Block group % w. bachelors, masters, professional, or doctoral degree, for age > 24***	ACS 2015-19 summary files
VBM1stdumnew	Binary tx variable, =1 if 1st card request for the voter was VBM; = 0 if the voter was in the control group.	SBA data files (PVF)

#Based on age in yrs.as of 12/31/2019.
*PVF is printed voter file maintained by SBA; VAN is voter file (from Broward County); ACS is American Communities Survey.
***Note this variable=1 for persons over 80 as well.
****Value for this variable is gender-specific. Values for gendergrp=3 are population-weighted based on block-group male and female population totals.

F. STEP 2 OF INCLUSION CRITERIA AND SELECTION PROCESS – FINAL STUDY SUBJECT SELECTION BY ADJUSTING CONTROL AND TREATMENT GROUPS FOR NON-OVERLAPPING SUPPORT

A common evaluation problem, when the control and treatment groups are imperfectly matched, is that the ranges of values for important continuous variables within each sample (sometimes called the ranges of support) do not overlap.

In our analyses, there are 2 relevant continuous characteristics for which non-overlap may be a major concern: Card1days and medhhinck. Examination of Card1days data values for all 250,375 persons who met our potential inclusion criteria for either the VBM treatment (tx) group or the VBM control (ctrl) group revealed a substantial non-overlap problem: the tx group range was from 3 days to 94 days and the ctrl group range was 41 days to 108 days. When these groups were trimmed to the same minimum and maximum values (41 to 94 days), a further non-overlap problem emerged since none of the ctrl cases had values between 79 and 108; thus the final minimum and maximum values used for common support for Card1days were 41 and 79 days respectively. A further non-overlap problem was then observed in age values for the trimmed samples, with none of the ctrl cases being younger than 22 while almost 11,000 tx cases were younger than 22. There was also a minor overlap problem for medhhinck, with tx cases having values well above the maximum values for the ctrl cases. Thus, applying a minimum age value of 22 years, a maximum medhhinck value of 210,612, and a Card1days range of 41 and 79 eliminated virtually all non-overlapping values for these 3 characteristics and a resulting analysis sample of 20,251 ctrl cases and 132,071 tx cases.

Of the 132,071 tx cases, 104,479 received only 1 VBM card. 11,792 received a GoTV card after receiving their one VBM card, 13,461 only received 2 VBM cards, 2,820 received 1 GoTV card as well as 2 VBM cards, 14 received only 3 VBM cards, 3 received 3 VBM cards and 1 GoTV card, and 2 received 1 VBM card and 2 GoTV cards. For all tx cases, the first card received was a VBM card.

G. DESCRIPTIVE STATISTICS: CONTINUOUS AND BINARY (0-1) VARIABLES

Table 2 shows the descriptive statistics for the treatment (tx) and control (Ctrl) cases for the continuous and binary (0-1) variables included in our analyses. In relative terms, the tx vs Ctrl differences that are largest pertain to the age dummy variables, which are consistent with the mean age being considerably younger for tx cases (47.62 yrs) than for Ctrl cases (55.47 yrs). Comparing the means for Anyvote16 and Any vote18, we also see that Ctrl cases were generally more likely to have voted in these prior elections while the tx vs. Ctrl difference in means for our outcome variable (Anyvote20) is somewhat smaller. Some of the smaller differential in 2020 voting may, of course, be due to the relatively higher income and education of the tx group, as well as other tx vs Ctrl differences in characteristics, the specific purpose of our regression analyses is to assess the influence of the VBM treatment on the voting turnout for the tx group.

TABLE 2: DESCRIPTIVE STATISTICS FOR CONTINUOUS AND BINARY (0-1) VARIABLES

Broward	All (n=152,322)				tx (n=132,071)				Ctrl (n=20,251)			
Variable	Mean	Std		Max	Mean	Std.		Max	Mean	Std	Min	Max

		Dev	Min			Dev	Min			Dev		
Card1days	57.01	10.7	41	79	57.54	10.2	41	79	53.532	12.8	41	79
medhhinck	68.48	34.1	14.8	210.6	69.26	34.2	14.8	210.6	63.341	32.4	14.8	210.6
pctnohsdipl	11.55	10.1	0	70.59	11.3	9.89	0	70.59	13.16	10.9	0	70.59
pctcolplus	30.16	17	0	100	30.49	17	0	100	27.963	16.7	0	100
Age in yrs.#	48.66	17	22	119	47.62	16.6	22	119	55.469	18	22	117
age22to34	0.252	0.43	0	1	0.256	0.44	0	1	0.157	0.36	0	1
age35to50	0.301	0.46	0	1	0.316	0.46	0	1	0.2045	0.4	0	1
agegt64	0.184	0.39	0	1	0.166	0.37	0	1	0.3047	0.46	0	1
agegt80	0.04	0.2	0	1	0.034	0.18	0	1	0.0785	0.27	0	1
Anyvote20	0.675	0.47	0	1	0.669	0.47	0	1	0.7139	0.45	0	1
Anyvote18	0.53	0.5	0	1	0.516	0.5	0	1	0.6244	0.48	0	1
Anyvote16	0.631	0.48	0	1	0.614	0.49	0	1	0.7448	0.44	0	1

Not included in the regressions but was the basis for defining the included age dummy variables.

H. DESCRIPTIVE STATISTICS: RACE/ETHNICITY, GENDER, AND PARTY PREFERENCE VARIABLES

Table 3 shows the descriptive statistics for the treatment (tx) and control (Ctrl) cases for the race/ethnicity, gender, and party preference variables included in our analyses. Here again tx vs. Ctrl differences are relatively quite small. The tx group is more heavily Afro-American while the Ctrl group has a higher percentage of Hispanic and White voters. The remaining groups are small, but voters classified as Asian or Other haver clearly higher percentages for the tx group. Note that despite the intent of the Broward Democrats to target registered Democrats, a small number of subjects show other affiliations. We surmise that this is because our data on party affiliation was based on post election data from the Broward SOE that was entered into the VAN files after November 3. Thus, these individuals may have changed party affiliation between the targeting date and the November election.

TABLE 3: PER CENT DISTRIBUTION BY RACE/ETHNICITY, BY GENDER, AND BY PARTY PREFERENCE

Variable	All	tx	Ctrl
Race/Ethnicity:			
Afro-American	43.2	43.81	39.25
Hispanic	17.77	16.96	23.08
White	28.38	27.76	32.39
Asian	2.86	3.15	0.97
Native American	0.35	0.36	0.27
Other	7.44	7.96	4.04
Gender:			
Female	56.71	56.48	58.19
Male	42.75	42.95	41.49
Not reported	0.54	0.57	0.31
Party Preference:			
Democratic	96.99	96.98	97.01
Republican	1.17	1.17	1.21
None	1.56	1.59	1.37
Independent	0.22	0.22	0.22
Other/not reported	0.06	0.04	0.19

I. REGRESSION RESULTS FOR VBM TREATMENT EFFECTS: ALL STUDY VOTERS OVERALL AND BY RACE/ETHNICITY

Regression coefficient estimates for each of our explanatory variables listed in Table 1 were obtained via maximum likelihood using the logistic regression functional form and assuming all observations were independent of one another. Results for these coefficients estimates are shown in Appendix Table 1a. Our principal focus, however, is not on the coefficients per se, but rather on the effects implied by these coefficients on the voters' predicted probabilities of voting. In particular, we want to ascertain the estimated impact of the treatment

intervention on the percent of voters actually voting that is implied by our regression results.[1]

In our logistic regression model, this implied impact of the treatment on the probability that an individual voter in fact voted in 2020 will vary among voters because this implied treatment impact also depends on each voter's numerical values for all the other included explanatory variables. We can, however, use the "margins" command in Stata to compute the average of this impact across all study voters; this average will in fact be the relevant estimate in our analysis of the predicted overall treatment effect on the percentage of all study voters who actually did turn out and vote in 2020. This "margins" command also allows us to compute confidence intervals around this estimated overall treatment effect.

Estimates of this treatment effect and its confidence interval are shown in Table 4 for each of 3 groups of voters: all voters in the treatment group, and all voters in the control group (as if they had in fact been treated, which in reality they were not), and all treatment plus control voters combined (again, as if controls were treated). We also report the coefficient estimate and confidence interval for the treatment variable from the OLS regression with the analogous linear probability model.

[In each row of the table, the treatment effect for each person is calculated as:

a. their predicted probability of voting based on (1) the regression coefficients, (2) their individual values of all explanatory variables except for VBM1stdumnew, and (3) the assumption that their value of VBM1stdumnew was actually=1, ***minus (b):***

b. their predicted probability of voting based on (1) the assumption that their value of VBM1stdumnew was actually=0, (2) the same regression coefficients, and (3) their same individual values of all explanatory variables except for VBM1stdumnew.

The average treatment effect in each row is just the mean of the individual treatment effects for the individuals included in that row.]

Table 4: Estimated Average VBM Treatment Effect and 95% Confidence Intervals

Row #	Group of Voters	N	Est. Ave. Tx. Effect	Conf. Int. Min.	Conf. int. Max.
1.	All treatment group voters	132,071	.0259314	.0196978	.032165
2.	All control group voters	20,251	.0222211	.0168508	.0275915
3.	All study voters	152,322	.0254381	.0193194	.0315569
4.	All study voters – OLS	152,322	.026594	.0207876	.0324003

Row 1 of the table shows an estimated average treatment effect on treatment voters ("ATT") of a 2.59% increase in the percent who voted in 2020. Row 3 shows a slightly lower average treatment effect on all study voters ("ATE") of a 2.54% increase. The ATE is slightly smaller than the ATT because the estimated model coefficients, combined with the observed explanatory variables for the control voters, suggests a 2.22% increase for the controls. The similarity between the results in Row 1 vs. Row 2 is, however, consistent with the view that the regression model accounts for a substantial amount of the differences in characteristics between the treatment and control voters.[2,3]

[1] Results for the analogous linear probability OLS regression models are presented in Appendix Table 1b.

[2] Note that the results for the average treatment effects in rows 2, 3, and 4 depend on the entire distribution of non-explanatory variable (except for the treatment variable) within each of the voter groups. The OLS regression, by contrast, assumes that the effect of treatment on per cent turnout is the same for all voters in the study.

[3] The results reported in Table 4 are based on the assumption that the unobserved random disturbances of each of the 152,322 observations on voters were independent of one another and drawn from identical distributions. We also estimated models in which we assumed the correlations of unobserved disturbances between two or more observations were non-zero, and other

Estimates of treatment effects and confidence intervals for specific race or ethnicity groupings were obtained using the same models and estimation procedures as for all groups combined, but in each case the specific models only included persons for a specific grouping. Models were run separately for each of the following groups: Afro-Americans(N=65,810), Hispanics (N=27,070), Whites (N=43,222), and all other remaining groups combined (N=16,220). These estimates are reported in Table 5; regression coefficients are reported in Appendix Tables 2a and b through 5a and b.

Our results indicate that treatment effects varied considerably among the different groups. For Hispanics, the average treatment effect estimates were very small and the lower bounds of the 95% confidence intervals were consistently less than zero. The implication is that the VBM campaign had virtually no effect on Hispanic voter turnout.[4]

The positive estimated average treatment effects were somewhat larger in the model for White study voters (1.34%) than in the model for Hispanics. The estimate was much larger in the model for all Afro-American study voters (3.84%)and precisely estimated (i.e., with a narrow estimated confidence interval). Finally, for the smallest grouping, Other, the estimated average treatment effect for all study voters was even larger, +7.09% with a lower bound of the estimated 95% confidence interval of +4.36%.[5]

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models in which random disturbances were not all drawn from the same distribution. These models yielded essentially the same results as those reported here.

[4] It is relevant to note here that this null result was found even though the designated language for the VBM card was Spanish for 92.3% of the Hispanic study voters while only 7.7% had English as the designated language.

[5] The Other group was 26.9% Asian, 3.3% Native American, and 69.8% other designation (presumably including multiple race/ethnic categorizations). We did not estimate separate effects for each of these 3 components of the Other group.

Table 5: Estimated Average VBM Treatment Effect and 95% Confidence Intervals by Race/Ethnicity					
Row #	**Race/Ethnicity Group**	N	Est. Ave. Tx. Effect	Conf. Int. Min.	Conf. int. Max.
	Afro-American Voters (AA)				
1.	(AA)Treatment group voters	57,861	.0388513	.0291179	.0485848
2.	(AA)Control group voters	7,949	.0354946	.0265699	.0444193
3.	(AA)All study voters	65,810	.0384459	.0288103	.0480815
4.	(AA)All study voters - OLS	65,810	.0384459	.0288103	.0480815
	Hispanic Voters (H)				
5.	(H) Treatment group voters	22,397	.0063201	-.0076639	.0203042
6.	(H) Control group voters	4,673	.0051049	-.0062042	.016414
7.	All study voters	27,070	.0061104	-.0074119	.0196326
8.	All study voters - OLS	27,070	.0065382	-.0061696	.0192461
	White Voters (W)				
9.	(W) Treatment group voters	36,662	.0138474	.0027343	.0249605
10.	(W) Control group voters	6,560	.0111816	.0021733	.0201898
11.	(W)All study voters	43,222	.0134428	.0026492	.0242364
12.	(W)All study voters - OLS	43,222	.0140475	.0039237	.0241714
	Other Voters (Oth)				
13.	(Oth)Treatment group voters	15,151	.0714219	.0439759	.0988679
14.	(Oth) Control group voters	1,069	.0630528	.0384306	. .087675
15.	(Oth)All study voters	16,220	.0708703	.0436109	.0981298
16.	(Oth)All study voters - OLS	16,220	.0663676	.0404665	.0922688

J. REGRESSION RESULTS FOR VBM TREATMENT EFFECTS: ALL STUDY VOTERS OVERALL BY VOTING "PROPENSITY" FOR PRIOR TWO GENERAL ELECTIONS

A frequently used categorization in analyzing voter behavior is the distinction between "hot", "warm", and "cold" voters where the labels refer to regular voters, irregular voters, and non-voters. Applying this typology to study voters' voting history in the 2016 and 2018 general elections, "hot" voters would be those classified as having voted in both elections, "warm" voters would be those who voted in only one of those two elections, and "cold" would be voters who did not vote in either of those two elections.

Using that typology, we divided study voters into those 3 groups and estimated VBM treatment effects from separate regressions for each of those groups. Resulting treatment effect estimates based on all study voters in the relevant group are shown in Table 6 below. Also included are results for the two separate portions of the "warm" group, those voting only in the 2016 general election and those voting only in the 2018 general election.[6]

Table 6: Estimated Average VBM Treatment Effect and 95% Confidence Intervals				
Group of Voters	N	Est. Ave. Tx. Effect	Conf. Int. Min.	Conf. int. Max.
All "Cold" Study Voters	46,727	.1228662	.1105034	.135229
All "Hot" Study Voters	71,370	-.0088605	-.013988	-.003733
All "Warm" Study Voters	34,223	.0030959	-.0129129	.0191047
"Warm" Study Voters (2016 only)	24,796	-.0142155	-.0330545	.0046236
"Warm" Study Voters (2018 only)	9,418	.0658661	.0309382	.1007939

[6] As in previous analyses, treatment effect estimates for only treatment voters, for only control voters, and for all voters with an OLS linear probability closely paralleled the estimates for all study voters shown in Table 6. For the sake of brevity, these are not presented in this report but are available on request.

Results in Table 6 indicate that the VBM campaign had a very large positive impact (+12.3%) on voting turn9out of "cold" voters that was precisely estimated (i.e., with a narrow estimated confidence interval). In contrast, "warm" voters showed much weaker evidence with a very small and imprecisely estimated positive turnout effect, while the estimated effect for "hot" voters was actually negative. The reasons for the latter result are unclear. Finally, the last 2 rows of table show that the "warm" voter group was actually quite heterogeneous: "warm" voters who voted in 2018 but not 2016 apparently responded strongly to the VBM treatment (+6.6%) while those voting in 2016 who did not vote in 2018 appear to have been unaffected by the treatment intervention.[7]

K. CONCLUDING COMMENTS

Results reported here provide some support for the general conclusion that the VBM intervention in Broward (defined to include an initial VBM card and, for 20.9% of treatment voters, additional VBM cards or GoTV cards) resulted in an increase in voter turnout in the 2020 general election by about 2.6%. The effect varied widely, however, by race/ethnicity grouping with Hispanic voters showing little if any turnout effect, White voters showing only about a 1.4% turnout increase, Afro-American voters showing a larger increase of about 3.8%, and Other voters showing an even larger turnout increase of about 7.1%. This strong evidence of heterogeneity may suggest that if resources (including volunteer time) are scarce, targeting specific voter groups could be desirable.

Estimates of the influence of voters' prior voting turnout record in the 2016 and 2018 general elections showed that 2020 turnout for non-voters ("cold" voters) was strongly increased by the VBM intervention, while this was not true for "hot" or "warm" voters. The category of "warm" voters, however, masked a major difference with those not voting in the 2016 election but voting in 2018 showing strong positive treatment effects on 2020 turnout, while those voting in 2016 but not 2018 showed no such effect for 2020. These results have interesting implications for targeting. In particular, our results suggest that targeting the "base" of regular voters may not an effective strategy for raising turnout while targeting those who did not vote in 2016, and especially those who did not vote in 2016 and 2018 may have strong turnout effects.

Finally, bear in mind that our analysis looked at turnout <u>regardless of which candidate's vote total benefitted from increased turnout</u>.

[7] The logistic regressions from which the estimates in Table 6 were derived (via the "margins, dydx() procedure in Stata) are included in Appendix Tables 6 – 10.

APPENDIX

FORM OF THE LOGISTIC REGRESSION MODELS

Categorical variables were included for race/ethnicity, gender, and political party preference. Interaction of the race/ethnicity and gender variables were also included. Binary (0-1) dummy variables were also included for age groups. Census block-group variables for median household income and for education were also included, and an interaction between gender and each of the two education variables were also included. To capture the voting history categories that are often used to represent voting "propensity", we included two 0-1 dummy variables and their interaction; the two dummy variables indicated whether the voter had voted in the 2016 general election and in the 2018 general election. The continuous variable Card1days was included primarily to capture the effect of sequential voter requests, since voters who had already voted or requested a VBM ballot by the time of a request were presumably excluded from the targeted groups. Thus, voters included in later requests would be less likely to actually vote and thus the expected effect of the passage of time was to reduce the probability a voter would actually vote in the 2020 general election.

REGRESSION RESULTS

Results of logit regressions for race/ethnicity groups, and for voters in the 3 voting history classes are also presented. OLS results for all voters and race-ethnicity groups are also presented though the qualitative nature of these results (in terms of signs and significance) always parallel the results from the logit regressions.

Several notation items may need explanation. The symbol "#" in the tables signifies interaction (i.e. multiplication of one variable by another). The results for the gendergrp categorical variable show 2 rows below gendergrp in eacvh table. The numbers preceding each row corresponds to the number for the category for that variable as listed in Table 1 above. The number "1" does not appear because category 1 (female) is the reference (i.e., omitted) level for that categorical variable. Similar comments apply to all other categorical variables. For the interaction of 2 categorical variables, each row in the table of results is preceded by 2 values, one for the first-listed categorical variable and then one for the second-listed variable. Interactions of continuous and categorical variables have result rows preceded only by the number corresponding to the value for the categorical variable.

Appendix Table 1.a
All Study Voters

Logistic regression — **Number of obs = 152,322**
LR chi2(37) = 57711.88
Prob > chi2 = 0.0000
Log likelihood = -67208.101 — **Pseudo R2 = 0.3004**

Anyvote20	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age22to34	-.6259849	.0192943	-32.44	0.000	-.663801	-.5881689
age35to50	-.2467239	.0190879	-12.93	0.000	-.2841356	-.2093122
agegt64	-.3285273	.0233706	-14.06	0.000	-.3743329	-.2827218
agegt80	-1.025359	.0376656	-27.22	0.000	-1.099182	-.9515355
Card1days	-.0140806	.0006957	-20.24	0.000	-.0154442	-.0127171
Anyvote18	2.151233	.0279514	76.96	0.000	2.096449	2.206017
Anyvote16	1.167286	.0168664	69.21	0.000	1.134228	1.200343
Anyvote18#Anyvote16						
1 1	.0173564	.0342966	0.51	0.613	-.0498637	.0845764
PolPartgrp						
2	1.666323	.0752447	22.15	0.000	1.518846	1.813799
3	.6866892	.0535931	12.81	0.000	.5816486	.7917297
4	1.049031	.1556899	6.74	0.000	.7438841	1.354177
5	-.1284508	.2524126	-0.51	0.611	-.6231704	.3662689
racegrp						

```
                     2  |   .2356544    .027059     8.71   0.000     .1826197    .2886891
                     3  |  -.2598255   .0237576   -10.94   0.000    -.3063895   -.2132616
                     4  |  -.0280754   .0555828    -0.51   0.613    -.1370157    .0808648
                     5  |  -.4553469   .1449372    -3.14   0.002    -.7394186   -.1712751
                     6  |    .015803   .0361985     0.44   0.662    -.0551448    .0867508
                        |
              gendergrp |
                     2  |   -.192431   .0472444    -4.07   0.000    -.2850283   -.0998336
                     3  |   .1328131   .3507034     0.38   0.705     -.554553    .8201791
                        |
      racegrp#gendergrp |
                   2 2  |    .015013   .0394976     0.38   0.704    -.0624009    .0924268
                   2 3  |   -.429613   .3674288    -1.17   0.242     -1.14976    .2905342
                   3 2  |   .1588045   .0350451     4.53   0.000     .0901174    .2274915
                   3 3  |   .5426729   .3548469     1.53   0.126    -.1528143     1.23816
                   4 2  |   .1287764   .0817807     1.57   0.115    -.0315108    .2890637
                   4 3  |   .3679213   .3959091     0.93   0.353    -.4080462    1.143889
                   5 2  |  -.0229264   .2269645    -0.10   0.920    -.4677688    .4219159
                   5 3  |   .2921624   1.029538     0.28   0.777    -1.725694    2.310019
                   6 2  |   .0994005   .0536453     1.85   0.064    -.0057423    .2045434
                   6 3  |   .2175673   .1971665     1.10   0.270     -.168872    .6040066
                        |
              medhhinck |   .0012834   .0002853     4.50   0.000     .0007242    .0018425
                        |
  gendergrp#pctnohsdipl |
                     1  |  -.0038308   .0012065    -3.18   0.001    -.0061955   -.0014661
                     2  |   -.004208   .0011191    -3.76   0.000    -.0064013   -.0020147
                     3  |   .0017228   .0112438     0.15   0.878    -.0203145    .0237602
                        |
   gendergrp#pctcolplus |
                     1  |   .0016714   .0008062     2.07   0.038     .0000912    .0032515
                     2  |   .0040508   .0007787     5.20   0.000     .0025245     .005577
                     3  |  -.0028623   .0077252    -0.37   0.711    -.0180034    .0122787
                        |
          VBM1stdumnew  |   .1934141     .02179     8.88   0.000     .1507065    .2361216
                 _cons  |   .1325939   .0539165     2.46   0.014     .0269195    .2382683
------------------------------------------------------------------------------------------
```

Appendix Table 1.b
All Study Voters

OLS Regression

```
      Source |       SS           df       MS      Number of obs   =   152,322
-------------+----------------------------------   F(37, 152284)   =   2199.77
       Model |  11641.1079        37  314.624537   Prob > F        =    0.0000
    Residual |  21780.6014   152,284  .143026197   R-squared       =    0.3483
-------------+----------------------------------   Adj R-squared   =    0.3482
       Total |  33421.7093   152,321  .219416294   Root MSE        =    .37819

------------------------------------------------------------------------------
             Anyvote20 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
             age22to34 |  -.0927905   .0027795   -33.38   0.000    -.0982383   -.0873426
             age35to50 |  -.0312343   .0026108   -11.96   0.000    -.0363514   -.0261172
               agegt64 |  -.0410763   .0031854   -12.90   0.000    -.0473197    -.034833
               agegt80 |  -.1712922   .0055353   -30.95   0.000    -.1821413   -.1604431
             Card1days |  -.0019788   .0000987   -20.05   0.000    -.0021723   -.0017854
             Anyvote18 |   .4723265   .0042848   110.23   0.000     .4639284    .4807247
             Anyvote16 |   .2703789   .0029898    90.43   0.000     .2645189    .2762389
                       |
```

Anyvote18#Anyvote16						
1 1	**-.1431406**	**.0051269**	**-27.92**	**0.000**	**-.1531893**	**-.1330919**
PolPartgrp						
2	**.2272951**	**.0090315**	**25.17**	**0.000**	**.2095935**	**.2449967**
3	**.108081**	**.0078409**	**13.78**	**0.000**	**.0927129**	**.1234491**
4	**.1452098**	**.020818**	**6.98**	**0.000**	**.104407**	**.1860127**
5	**-.0241195**	**.039045**	**-0.62**	**0.537**	**-.100647**	**.052408**
racegrp						
2	**.0335712**	**.0037499**	**8.95**	**0.000**	**.0262215**	**.0409209**
3	**-.037132**	**.0033393**	**-11.12**	**0.000**	**-.043677**	**-.0305869**
4	**-.000291**	**.0081875**	**-0.04**	**0.972**	**-.0163383**	**.0157563**
5	**-.0702926**	**.0216436**	**-3.25**	**0.001**	**-.1127136**	**-.0278717**
6	**.0048311**	**.0052123**	**0.93**	**0.354**	**-.0053849**	**.015047**
gendergrp						
2	**-.0271184**	**.006753**	**-4.02**	**0.000**	**-.0403541**	**-.0138826**
3	**.0190434**	**.0537193**	**0.35**	**0.723**	**-.0862454**	**.1243322**
racegrp#gendergrp						
2 2	**.0040799**	**.0056481**	**0.72**	**0.470**	**-.0069903**	**.0151502**
2 3	**-.0674585**	**.0572675**	**-1.18**	**0.239**	**-.1797016**	**.0447847**
3 2	**.0234652**	**.0049933**	**4.70**	**0.000**	**.0136784**	**.0332521**
3 3	**.0895502**	**.0541356**	**1.65**	**0.098**	**-.0165543**	**.1956548**
4 2	**.0168179**	**.0120485**	**1.40**	**0.163**	**-.0067968**	**.0404327**
4 3	**.0454276**	**.0577998**	**0.79**	**0.432**	**-.0678589**	**.1587141**
5 2	**-.0032506**	**.0337049**	**-0.10**	**0.923**	**-.0693115**	**.0628104**
5 3	**.0511406**	**.1573562**	**0.32**	**0.745**	**-.2572743**	**.3595556**
6 2	**.0136171**	**.0078935**	**1.73**	**0.085**	**-.001854**	**.0290883**
6 3	**.0373693**	**.0306737**	**1.22**	**0.223**	**-.0227505**	**.0974892**
medhhinck	**.0001413**	**.0000398**	**3.55**	**0.000**	**.0000634**	**.0002193**
gendergrp#pctnohsdipl						
1	**-.0005399**	**.0001711**	**-3.16**	**0.002**	**-.0008752**	**-.0002046**
2	**-.0007234**	**.0001669**	**-4.34**	**0.000**	**-.0010505**	**-.0003964**
3	**.0004883**	**.0017288**	**0.28**	**0.778**	**-.0029001**	**.0038768**
gendergrp#pctcolplus						
1	**.0002311**	**.0001136**	**2.03**	**0.042**	**8.44e-06**	**.0004537**
2	**.0005911**	**.0001123**	**5.26**	**0.000**	**.000371**	**.0008113**
3	**-.0003276**	**.0011935**	**-0.27**	**0.784**	**-.0026668**	**.0020116**
VBM1stdumnew	**.026594**	**.0029625**	**8.98**	**0.000**	**.0207876**	**.0324003**
_cons	**.4508171**	**.0076947**	**58.59**	**0.000**	**.4357356**	**.4658987**

Appendix Table 2.a
All Afro-American Study Voters

Logistic regression — Number of obs = 65,810
LR chi2(22) = 23971.83
Prob > chi2 = 0.0000
Log likelihood = -28662.108 — Pseudo R2 = 0.2949

Anyvote20	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age22to34	-.7370474	.0294472	-25.03	0.000	-.7947629	-.6793319
age35to50	-.2585012	.0300742	-8.60	0.000	-.3174456	-.1995568
agegt64	-.3141019	.0392926	-7.99	0.000	-.3911138	-.2370899

```
              agegt80 |  -.9533598   .0748774   -12.73   0.000    -1.100117   -.8066028
             Card1days |   -.012888   .0011704   -11.01   0.000    -.0151819   -.0105941
             Anyvote18 |   1.989456   .0396719    50.15   0.000     1.911701    2.067212
             Anyvote16 |   1.028988     .02716    37.89   0.000     .9757553    1.082221
                       |
  Anyvote18#Anyvote16 |
                 1 1   |   .2105147    .050119     4.20   0.000     .1122833     .308746
                       |
           PolPartgrp |
                   2   |   1.445498   .2241548     6.45   0.000     1.006163    1.884833
                   3   |   .4528232   .0948477     4.77   0.000     .2669252    .6387212
                   4   |   .3469917   .2529462     1.37   0.170    -.1487738    .8427572
                   5   |   .5882754   .5410455     1.09   0.277    -.4721544    1.648705
                       |
            gendergrp |
                   2   |  -.2597295   .0668225    -3.89   0.000    -.3906992   -.1287597
                   3   |  -.4580183   .5072341    -0.90   0.367    -1.452179    .5361424
                       |                                |
            medhhinck |   .0015267   .0005177     2.95   0.003     .0005119    .0025414
                       |
gendergrp#pctnohsdipl |
                   1   |  -.0050026   .0016686    -3.00   0.003    -.0082729   -.0017323
                   2   |  -.0042342   .0014861    -2.85   0.004    -.0071469   -.0013215
                   3   |    .016263   .0159462     1.02   0.308    -.0149909     .047517
                       |
 gendergrp#pctcolplus |
                   1   |  -.0027643   .0013008    -2.13   0.034    -.0053138   -.0002148
                   2   |   .0008783   .0013449     0.65   0.514    -.0017576    .0035142
                   3   |   .0081445   .0125785     0.65   0.517     -.016509     .032798
                       |
         VBM1stdumnew |   .2720872   .0344922     7.89   0.000     .2044837    .3396906
                _cons |   .2309737   .0810521     2.85   0.004     .0721144     .389833
------------------------------------------------------------------------------------------
```

Appendix Table 2.b
All Afro-American Study Voters

OLS Regression

```
      Source |       SS           df       MS      Number of obs   =    65,810
-------------+----------------------------------   F(22, 65787)    =   1551.06
       Model |  4792.37922        22  217.835419   Prob > F        =    0.0000
    Residual |  9239.28984    65,787  .140442486   R-squared       =    0.3415
-------------+----------------------------------   Adj R-squared   =    0.3413
       Total |  14031.6691    65,809  .213218087   Root MSE        =    .37476

------------------------------------------------------------------------------
             Anyvote20 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
             age22to34 |  -.1091115   .0041066   -26.57   0.000    -.1171604   -.1010626
             age35to50 |  -.0305857   .0039584    -7.73   0.000    -.0383443   -.0228272
               agegt64 |  -.0364777   .0051591    -7.07   0.000    -.0465895   -.0263658
               agegt80 |  -.1519203   .0110699   -13.72   0.000    -.1736173   -.1302233
             Card1days |  -.0017862    .000164   -10.89   0.000    -.0021076   -.0014648
             Anyvote18 |   .4453486    .006234    71.44   0.000       .43313    .4575673
             Anyvote16 |   .2384541   .0048412    49.26   0.000     .2289654    .2479428
                       |
  Anyvote18#Anyvote16 |
                 1 1   |  -.0988851   .0076911   -12.86   0.000    -.1139597   -.0838105
                       |
           PolPartgrp |
                   2   |   .2205426    .029584     7.45   0.000     .1625579    .2785272
                   3   |   .0723138    .014026     5.16   0.000     .0448228    .0998047
```

4	.0476956	.0348416	1.37	0.171	-.020594	.1159851
5	.1058413	.0883784	1.20	0.231	-.0673804	.2790631
gendergrp						
2	-.0361651	.0094551	-3.82	0.000	-.0546971	-.0176331
3	-.0618165	.0784484	-0.79	0.431	-.2155754	.0919423
medhhinck	.0001633	.0000705	2.32	0.021	.0000251	.0003016
gendergrp#pctnohsdipl						
1	-.0006531	.0002312	-2.82	0.005	-.0011063	-.0002
2	-.0007054	.0002213	-3.19	0.001	-.0011393	-.0002716
3	.0027258	.0024756	1.10	0.271	-.0021264	.0075779
gendergrp#pctcolplus						
1	-.000386	.0001785	-2.16	0.031	-.0007359	-.0000361
2	.0001557	.0001917	0.81	0.416	-.0002199	.0005314
3	.0011046	.0019519	0.57	0.571	-.0027211	.0049303
VBM1stdumnew	.0378557	.0047056	8.04	0.000	.0286328	.0470786
_cons	.4647224	.0114312	40.65	0.000	.4423171	.4871276

Appendix Table 3.a
All Hispanic Study Voters

Logistic regression — Number of obs = 27,070
LR chi2(22) = 8815.90
Prob > chi2 = 0.0000
Log likelihood = -12134.919 — Pseudo R2 = 0.2665

Anyvote20	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age22to34	-.4422524	.0471195	-9.39	0.000	-.534605	-.3498998
age35to50	-.1407012	.0437469	-3.22	0.001	-.2264435	-.0549589
agegt64	-.2723711	.0536695	-5.07	0.000	-.3775615	-.1671807
agegt80	-.9216221	.0860051	-10.72	0.000	-1.090189	-.7530551
Card1days	-.0035762	.0012882	-2.78	0.006	-.006101	-.0010513
Anyvote18	2.279706	.0738527	30.87	0.000	2.134957	2.424454
Anyvote16	1.268232	.0372271	34.07	0.000	1.195268	1.341196
Anyvote18#Anyvote16						
1 1	-.3025029	.0871999	-3.47	0.001	-.4734115	-.1315943
PolPartgrp						
2	1.582438	.1312103	12.06	0.000	1.325271	1.839606
3	.7529838	.1047631	7.19	0.000	.5476518	.9583157
4	1.494965	.3874559	3.86	0.000	.7355651	2.254364
5	-.161527	.6716069	-0.24	0.810	-1.477852	1.15479
gendergrp						
2	-.208013	.1105737	-1.88	0.060	-.4247334	.0087074
3	-.4349433	1.411313	-0.31	0.758	-3.201066	2.33118
medhhinck	.0006974	.0006656	1.05	0.295	-.0006072	.0020021
gendergrp#pctnohsdipl						
1	-.0070103	.0029464	-2.38	0.017	-.0127851	-.0012355
2	-.0034532	.0030108	-1.15	0.251	-.0093542	.0024478
3	.0267801	.0490283	0.55	0.585	-.0693135	.1228737
gendergrp#pctcolplus						
1	.0021586	.001819	1.19	0.235	-.0014065	.0057237
2	.0044867	.0018137	2.47	0.013	.000932	.0080414
3	-.0097932	.0291143	-0.34	0.737	-.0668562	.0472698
VBM1stdumnew	.0419738	.0473148	0.89	0.375	-.0507614	.1347091

```
                _cons |  -.2394286   .1259918    -1.90   0.057    -.4863681    .0075108
------------------------------------------------------------------------------------------
```

Appendix Table 3.b
All Hispanic Study Voters

```
OLS Regression
      Source |       SS           df       MS      Number of obs   =    27,070
-------------+----------------------------------   F(22, 27047)    =    537.23
       Model |   1729.6665         22  78.6212046   Prob > F        =    0.0000
    Residual |  3958.23113    27,047  .146346402   R-squared       =    0.3041
-------------+----------------------------------   Adj R-squared   =    0.3035
       Total |  5687.89764    27,069  .210125887   Root MSE        =    .38255

------------------------------------------------------------------------------
             Anyvote20 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
             age22to34 |  -.0660803   .0069821    -9.46   0.000    -.0797657   -.0523949
             age35to50 |  -.0182137   .0061396    -2.97   0.003    -.0302476   -.0061799
               agegt64 |  -.0358044   .0076127    -4.70   0.000    -.0507257   -.0208832
               agegt80 |  -.1589185    .013309   -11.94   0.000    -.1850048   -.1328323
             Card1days |  -.0005181   .0001823    -2.84   0.004    -.0008755   -.0001608
             Anyvote18 |   .4822852   .0107384    44.91   0.000     .4612374    .5033331
             Anyvote16 |   .3001279   .0066461    45.16   0.000     .2871013    .3131546
                       |
    Anyvote18#Anyvote16 |
                 1 1   |  -.2102331   .0123651   -17.00   0.000    -.2344694   -.1859968
                       |
            PolPartgrp |
                     2 |   .2144758   .0157423    13.62   0.000     .1836201    .2453314
                     3 |   .1135978   .0149756     7.59   0.000     .0842448    .1429507
                     4 |   .2026764    .047897     4.23   0.000     .1087959     .296557
                     5 |  -.0267563   .1061721    -0.25   0.801    -.2348591    .1813465
             gendergrp |
                     2 |  -.0317454   .0163075    -1.95   0.052     -.063709    .0002182
                     3 |   -.078752   .2279853    -0.35   0.730    -.5256151    .3681111
                       |
             medhhinck |    .000077   .0000949     0.81   0.417    -.0001089    .0002629
                       |
  gendergrp#pctnohsdipl |
                     1 |  -.0010468   .0004317    -2.43   0.015     -.001893   -.0002007
                     2 |  -.0006231   .0004587    -1.36   0.174    -.0015222    .000276
                     3 |   .0046491   .0079716     0.58   0.560    -.0109756    .0202739
                       |
   gendergrp#pctcolplus |
                     1 |   .0002574   .0002613     0.98   0.325    -.0002548    .0007695
                     2 |   .0006845    .000267     2.56   0.010     .0001611    .0012079
                     3 |  -.0016263   .0047218    -0.34   0.731    -.0108812    .0076286
                       |
          VBM1stdumnew |   .0068271   .0064516     1.06   0.290    -.0058184    .0194725
                 _cons |   .4108001   .0180868    22.71   0.000     .3753491    .4462512
------------------------------------------------------------------------------
```

Appendix Table 4.a
All White Study Voters

```
Logistic regression                             Number of obs     =     43,222
                                                LR chi2(22)       =   19845.85
                                                Prob > chi2       =     0.0000
Log likelihood = -18286.204                     Pseudo R2         =     0.3518

------------------------------------------------------------------------------
             Anyvote20 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
             age22to34 |  -.5019107   .0383329   -13.09   0.000    -.5770418   -.4267797
             age35to50 |  -.2750666   .0362414    -7.59   0.000    -.3460984   -.2040348
```

```
              agegt64 |  -.3588054   .0405604    -8.85   0.000    -.4383023   -.2793084
              agegt80 |  -1.125356    .057266   -19.65   0.000    -1.237596   -1.013117
            Card1days |  -.0256816   .0014552   -17.65   0.000    -.0285338   -.0228293
            Anyvote18 |   2.367296    .058092    40.75   0.000     2.253437    2.481154
            Anyvote16 |   1.371334     .03248    42.22   0.000     1.307674    1.434993
                      |
 Anyvote18#Anyvote16  |
                1 1   |  -.0687285   .0694833    -0.99   0.323    -.2049132    .0674562
                      |
           PolPartgrp |
                   2  |   1.946065   .1140842    17.06   0.000     1.722464    2.169666
                   3  |   .9263613   .1045379     8.86   0.000     .7214707    1.131252
                   4  |   1.548236   .2634147     5.88   0.000     1.031952    2.064519
                   5  |  -.5035855   .4075129    -1.24   0.217    -1.302296    .2951251
            gendergrp |
                   2  |   .0217099   .0952284     0.23   0.820    -.1649343    .2083541
                   3  |  -2.848095   1.420282    -2.01   0.045    -5.631796   -.0643947
            medhhinck |   .0006355   .0004774     1.33   0.183    -.0003002    .0015712
                      |
gendergrp#pctnohsdipl |
                   1  |   -.004044   .0027792    -1.46   0.146    -.0094911    .0014032
                   2  |  -.0067828   .0026916    -2.52   0.012    -.0120583   -.0015073
                   3  |   .1052638   .0544735     1.93   0.053    -.0015022    .2120299
                      |
 gendergrp#pctcolplus |
                   1  |   .0074519   .0015203     4.90   0.000     .0044721    .0104317
                   2  |   .0088376    .001386     6.38   0.000     .0061211    .0115541
                   3  |   .0823204   .0318247     2.59   0.010     .0199453    .1446956
                      |
         VBM1stdumnew |   .0998922   .0409237     2.44   0.015     .0196833    .1801012
                _cons |   .3042607   .1135819     2.68   0.007     .0816442    .5268771
------------------------------------------------------------------------------------------
```

Appendix Table 4.b
All White Study Voters
OLS Regression

```
      Source |       SS           df       MS      Number of obs   =    43,222
-------------+----------------------------------   F(22, 43199)    =   1355.09
       Model |  4059.67407        22  184.530639   Prob > F        =    0.0000
    Residual |  5882.66218    43,199  .136175888   R-squared       =    0.4083
-------------+----------------------------------   Adj R-squared   =    0.4080
       Total |  9942.33624    43,221   .23003485   Root MSE        =    .36902

------------------------------------------------------------------------------------------
             Anyvote20 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
             age22to34 |  -.0674714   .0053786   -12.54   0.000    -.0780135   -.0569293
             age35to50 |  -.0332766   .0048316    -6.89   0.000    -.0427466   -.0238066
               agegt64 |  -.0438099   .0052707    -8.31   0.000    -.0541406   -.0334792
               agegt80 |  -.1738914   .0077688   -22.38   0.000    -.1891184   -.1586644
             Card1days |  -.0036795    .000201   -18.30   0.000    -.0040735   -.0032855
             Anyvote18 |   .5075351   .0084501    60.06   0.000     .4909728    .5240975
             Anyvote16 |    .294919   .0054321    54.29   0.000     .2842721     .305566
                       |
 Anyvote18#Anyvote16   |
                1 1    |   -.152075   .0099278   -15.32   0.000    -.1715337   -.1326162
                       |
           PolPartgrp  |
                   2   |    .241906   .0126831    19.07   0.000      .217047    .2667651
                   3   |   .1406749   .0147007     9.57   0.000     .1118612    .1694886
                   4   |   .1946625   .0325536     5.98   0.000     .1308569     .258468
                   5   |  -.0669507   .0544944    -1.23   0.219    -.1737608    .0398594
                       |
            gendergrp  |
                   2   |   .0053129   .0129499     0.41   0.682    -.0200692    .0306949
```

```
                   3 |  -.3970215   .1910209    -2.08   0.038    -.7714262   -.0226169
             medhhinck |  -1.58e-06   .0000628    -0.03   0.980    -.0001247    .0001216
                       |
  gendergrp#pctnohsdipl |
                   1 |  -.0006571   .0003836    -1.71   0.087    -.0014089    .0000948
                   2 |  -.0011052   .0003723    -2.97   0.003    -.0018348   -.0003756
                   3 |   .0157793   .0083095     1.90   0.058    -.0005074     .032066
                       |
   gendergrp#pctcolplus |
                   1 |   .0010724   .0002055     5.22   0.000     .0006695    .0014753
                   2 |     .00122   .0001876     6.50   0.000     .0008524    .0015876
                   3 |   .0113683   .0038407     2.96   0.003     .0038405    .0188962
                       |
          VBM1stdumnew |   .0140475   .0051652     2.72   0.007     .0039237    .0241714
                 _cons |   .4703962   .0156505    30.06   0.000      .439721    .5010714
------------------------------------------------------------------------------
```

Appendix Table 5.a
All Other Study Voters

```
Logistic regression                             Number of obs     =     16,220
                                                LR chi2(28)       =    5172.89
                                                Prob > chi2       =     0.0000
Log likelihood = -7871.1408                     Pseudo R2         =     0.2473

------------------------------------------------------------------------------
             Anyvote20 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
             age22to34 |   -.608105   .0546775   -11.12   0.000     -.715271   -.5009391
             age35to50 |   -.289534   .0554339    -5.22   0.000    -.3981825   -.1808856
               agegt64 |  -.3667303   .0710271    -5.16   0.000    -.5059409   -.2275198
               agegt80 |  -.8409592   .1326408    -6.34   0.000     -1.10093   -.5809879
             Card1days |  -.0188771   .0022629    -8.34   0.000    -.0233123   -.0144418
             Anyvote18 |   2.062639   .0808723    25.50   0.000     1.904132    2.221146
             Anyvote16 |   1.109557   .0478206    23.20   0.000      1.01583    1.203283
                       |
    Anyvote18#Anyvote16 |
                 1 1 |  -.0780239   .1005657    -0.78   0.438     -.275129    .1190812
                       |
            PolPartgrp |
                   2 |    1.20355   .2240305     5.37   0.000      .764458    1.642642
                   3 |   .7056006   .1382077     5.11   0.000     .4347185    .9764826
                   4 |   1.054124     .54979     1.92   0.055    -.0234443    2.131693
                   5 |  -.1332209   .5334594    -0.25   0.803    -1.178782    .9123402
              racegrp |
                   5 |  -.4317427   .1511552    -2.86   0.004    -.7280014   -.1354839
                   6 |   .0244869   .0626067     0.39   0.696    -.0982199    .1471937
                       |
             gendergrp |
                   2 |   .0881139   .1551468     0.57   0.570    -.2159682    .3921959
                   3 |   1.376944   .6157443     2.24   0.025     .1701075    2.583781
                       |
      racegrp#gendergrp |
                 5 2 |  -.1450269   .2338578    -0.62   0.535    -.6033799     .313326
                 5 3 |  -.0588346   1.052682    -0.06   0.955    -2.122054    2.004385
                 6 2 |  -.0321312   .0918179    -0.35   0.726    -.2120909    .1478285
                 6 3 |  -.1215021   .3902947    -0.31   0.756    -.8864657    .6434615
                       |
             medhhinck |   .0015346   .0007909     1.94   0.052    -.0000156    .0030848
                       |
  gendergrp#pctnohsdipl |
                   1 |   .0007484   .0036627     0.20   0.838    -.0064303    .0079271
                   2 |  -.0073516   .0035077    -2.10   0.036    -.0142266   -.0004766
                   3 |  -.0284139   .0169426    -1.68   0.094    -.0616207     .004793
                       |
   gendergrp#pctcolplus |
```

```
                    1  |   .0011175   .0023453     0.48   0.634    -.0034792    .0057141
                    2  |   .0010116    .002198     0.46   0.645    -.0032964    .0053197
                    3  |  -.0212046   .0111731    -1.90   0.058    -.0431035    .0006943
                       |
          VBM1stdumnew |   .4372104   .0851483     5.13   0.000     .2703229     .604098
                 _cons |   .1882417    .175831     1.07   0.284    -.1563806     .532864
------------------------------------------------------------------------------
```

Appendix Table 5.b
All Other Study Voters
OLS Regression

```
      Source |       SS           df       MS      Number of obs   =    16,220
-------------+----------------------------------   F(28, 16191)    =    236.58
       Model |  1065.20485        28  38.0430302   Prob > F        =    0.0000
    Residual |  2603.54306    16,191  .160801869   R-squared       =    0.2903
-------------+----------------------------------   Adj R-squared   =    0.2891
       Total |   3668.7479    16,219  .226200623   Root MSE        =      .401

------------------------------------------------------------------------------
             Anyvote20 |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
             age22to34 |  -.0989159   .0087125   -11.35   0.000    -.1159934   -.0818383
             age35to50 |  -.0420509   .0085611    -4.91   0.000    -.0588316   -.0252702
               agegt64 |  -.0532319   .0109288    -4.87   0.000    -.0746536   -.0318102
               agegt80 |  -.1517951   .0218034    -6.96   0.000    -.1945323    -.109058
             Card1days |  -.0030434   .0003646    -8.35   0.000    -.0037581   -.0023288
             Anyvote18 |   .4483534   .0129632    34.59   0.000     .4229441    .4737627
             Anyvote16 |   .2595204   .0090659    28.63   0.000     .2417502    .2772906
                       |
    Anyvote18#Anyvote16 |
                 1 1   |  -.1437467   .0156916    -9.16   0.000     -.174504   -.1129895
                       |
            PolPartgrp |
                    2  |    .189368   .0323259     5.86   0.000     .1260056    .2527304
                    3  |   .1182476   .0221252     5.34   0.000     .0748798    .1616153
                    4  |   .1854805   .0855838     2.17   0.030     .0177268    .3532341
                    5  |  -.0412065   .0975147    -0.42   0.673     -.232346     .149933
                       |
              racegrp  |
                    5  |  -.0714387   .0244787    -2.92   0.004    -.1194196   -.0234578
                    6  |   .0041671   .0099788     0.42   0.676    -.0153925    .0237266
                       |
            gendergrp  |
                    2  |   .0166127   .0250047     0.66   0.506    -.0323993    .0656247
                    3  |   .2177711   .1015668     2.14   0.032      .018689    .4168533
                       |
     racegrp#gendergrp |
                  5 2  |   -.022609   .0378486    -0.60   0.550    -.0967965    .0515784
                  5 3  |   .0109393   .1748589     0.06   0.950    -.3318034    .3536821
                  6 2  |   -.005611   .0147035    -0.38   0.703    -.0344314    .0232095
                  6 3  |  -.0136765   .0617982    -0.22   0.825    -.1348078    .1074549
                       |
             medhhinck |   .0002092   .0001253     1.67   0.095    -.0000364    .0004549
                       |
  gendergrp#pctnohsdipl |
                    1  |   .0000891   .0005861     0.15   0.879    -.0010598     .001238
                    2  |  -.0012883   .0005823    -2.21   0.027    -.0024297   -.0001469
                    3  |  -.0044431   .0028369    -1.57   0.117    -.0100038    .0011176
                       |
   gendergrp#pctcolplus |
                    1  |   .0002612   .0003743     0.70   0.485    -.0004726    .0009949
                    2  |    .000161   .0003551     0.45   0.650     -.000535     .000857
                    3  |  -.0033018   .0018718    -1.76   0.078    -.0069709    .0003672
                       |
```

VBM1stdumnew	.0663676	.0132141	5.02	0.000	.0404665	.0922688
_cons	.4867318	.0280562	17.35	0.000	.4317385	.541725

Appendix Table 6
All "Cold" Study Voters

Logistic regression — **Number of obs = 46,727**; **LR chi2(34) = 2863.37**; **Prob > chi2 = 0.0000**; **Log likelihood = -27582.572**; **Pseudo R2 = 0.0493**

Anyvote20	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age22to34	-.336225	.0283558	-11.86	0.000	-.3918013	-.2806487
age35to50	-.2156582	.0287908	-7.49	0.000	-.2720871	-.1592293
agegt64	-.3225119	.0375585	-8.59	0.000	-.3961252	-.2488987
agegt80	-1.151114	.0772763	-14.90	0.000	-1.302572	-.9996547
Card1days	-.0293586	.0010732	-27.36	0.000	-.031462	-.0272553
PolPartgrp						
2	1.919274	.0966868	19.85	0.000	1.729772	2.108777
3	1.060746	.0702582	15.10	0.000	.9230429	1.19845
4	1.575045	.2095988	7.51	0.000	1.164239	1.985851
5	.1036261	.3111344	0.33	0.739	-.5061862	.7134384
racegrp						
2	.3376127	.0431933	7.82	0.000	.2529554	.4222699
3	-.3753897	.037901	-9.90	0.000	-.4496743	-.301105
4	.0810223	.0819152	0.99	0.323	-.0795284	.2415731
5	-.4793584	.2332869	-2.05	0.040	-.9365923	-.0221244
6	.0383353	.0537128	0.71	0.475	-.0669398	.1436104
gendergrp						
2	-.3622603	.0705598	-5.13	0.000	-.500555	-.2239655
3	.2215964	.4636944	0.48	0.633	-.6872279	1.130421
racegrp#gendergrp						
2 2	.0191311	.0605234	0.32	0.752	-.0994926	.1377547
2 3	-.4472255	.5456564	-0.82	0.412	-1.516692	.6222414
3 2	.2295537	.0536693	4.28	0.000	.1243638	.3347436
3 3	.2729858	.4825128	0.57	0.572	-.672722	1.218694
4 2	-.0299393	.1201039	-0.25	0.803	-.2653386	.20546
4 3	.3439777	.5123757	0.67	0.502	-.6602602	1.348216
5 2	-.3392117	.3706602	-0.92	0.360	-1.065692	.3872689
5 3	.6391106	1.454279	0.44	0.660	-2.211224	3.489445
6 2	.1855394	.0766495	2.42	0.015	.0353091	.3357696
6 3	.044199	.2490533	0.18	0.859	-.4439365	.5323345
medhhinck	-.0026413	.0004423	-5.97	0.000	-.0035082	-.0017744
gendergrp#pctnohsdipl						
1	-.0074675	.0018666	-4.00	0.000	-.011126	-.003809
2	-.0062991	.0016178	-3.89	0.000	-.0094699	-.0031284
3	-.0040119	.0151558	-0.26	0.791	-.0337168	.0256931
gendergrp#pctcolplus						
1	.0036362	.0012304	2.96	0.003	.0012247	.0060477
2	.0081608	.00113	7.22	0.000	.005946	.0103756
3	.0014931	.0102255	0.15	0.884	-.0185485	.0215346

VBM1stdumnew	**.6791412**	**.0401096**	**16.93**	**0.000**	**.6005278**	**.7577546**
_cons	**.7026694**	**.0840821**	**8.36**	**0.000**	**.5378716**	**.8674673**

Appendix Table 7
All "Hot" Study Voters

Logistic regression — Number of obs = 71,370
LR chi2(33) = 1524.30
Prob > chi2 = 0.0000
Log likelihood = -17911.867 — Pseudo R2 = 0.0408

Anyvote20	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age22to34	-1.142296	.0420132	-27.19	0.000	-1.224641	-1.059952
age35to50	-.28545	.0429543	-6.65	0.000	-.3696388	-.2012611
agegt64	-.3391384	.0485401	-6.99	0.000	-.4342752	-.2440016
agegt80	-1.120778	.0666611	-16.81	0.000	-1.251431	-.9901243
Card1days	-.0000909	.0015063	-0.06	0.952	-.0030432	.0028613
PolPartgrp						
2	.7231637	.2143586	3.37	0.001	.3030285	1.143299
3	-.1899108	.1211438	-1.57	0.117	-.4273483	.0475266
4	.001998	.3331831	0.01	0.995	-.6510288	.6550248
5	-.2956574	.7708811	-0.38	0.701	-1.806557	1.215242
racegrp						
2	-.0823932	.0562865	-1.46	0.143	-.1927126	.0279263
3	-.2587201	.0484417	-5.34	0.000	-.353664	-.1637762
4	-.3043786	.125062	-2.43	0.015	-.5494956	-.0592617
5	-.4606385	.3211705	-1.43	0.152	-1.090121	.1688441
6	-.199086	.0773019	-2.58	0.010	-.3505949	-.0475771
gendergrp						
2	-.2108674	.1011263	-2.09	0.037	-.4090714	-.0126635
3	.8942891	.8976459	1.00	0.319	-.8650645	2.653643
racegrp#gendergrp						
2 2	.1735692	.0890799	1.95	0.051	-.0010242	.3481627
2 3	-.9388201	.7588649	-1.24	0.216	-2.426168	.5485277
3 2	.2121923	.0748309	2.84	0.005	.0655265	.3588581
3 3	.307832	.8501655	0.36	0.717	-1.358462	1.974126
4 2	.204949	.1885451	1.09	0.277	-.1645925	.5744905
4 3	-.0777282	.7553614	-0.10	0.918	-1.558209	1.402753
5 2	.3271257	.5157557	0.63	0.526	-.6837368	1.337988
5 3	0	(empty)				
6 2	.1027018	.1234706	0.83	0.406	-.1392961	.3446998
6 3	.8021702	.6130676	1.31	0.191	-.3994202	2.003761
medhhinck	.0068953	.0006474	10.65	0.000	.0056264	.0081642
gendergrp#pctnohsdipl						
1	-.002697	.002403	-1.12	0.262	-.0074067	.0020128
2	-.0025878	.0025759	-1.00	0.315	-.0076365	.0024609
3	-.029383	.0270815	-1.08	0.278	-.0824618	.0236958
gendergrp#pctcolplus						
1	-.0001994	.0017201	-0.12	0.908	-.0035708	.003172
2	.0015069	.0018121	0.83	0.406	-.0020448	.0050586
3	-.0283066	.0208726	-1.36	0.175	-.0692163	.012603
VBM1stdumnew	-.1392807	.0427596	-3.26	0.001	-.223088	-.0554733
_cons	2.832559	.1126173	25.15	0.000	2.611833	3.053285

Appendix Table 8
All "Warm" Study Voters

Logistic regression — Number of obs = 34,223; LR chi2(35) = 2726.87; Prob > chi2 = 0.0000; Log likelihood = -20910.001; Pseudo R2 = 0.0612

Anyvote20	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age22to34	-.6850991	.0337047	-20.33	0.000	-.7511591	-.6190392
age35to50	-.2332189	.0343871	-6.78	0.000	-.3006164	-.1658213
agegt64	-.3656437	.0421893	-8.67	0.000	-.4483333	-.2829542
agegt80	-.9049193	.0628228	-14.40	0.000	-1.02805	-.7817889
Card1days	-.0025933	.0011913	-2.18	0.029	-.0049282	-.0002583
Anyvote18	1.054289	.0297648	35.42	0.000	.9959512	1.112627
PolPartgrp						
2	1.477346	.1347985	10.96	0.000	1.213146	1.741546
3	.3763522	.0893136	4.21	0.000	.2013007	.5514037
4	.5605843	.2529709	2.22	0.027	.0647703	1.056398
5	-.0589515	.5370486	-0.11	0.913	-1.111548	.9936445
racegrp						
2	.3307142	.043675	7.57	0.000	.2451127	.4163157
3	-.1131323	.0410495	-2.76	0.006	-.1935879	-.0326767
4	.0456136	.0909062	0.50	0.616	-.1325592	.2237865
5	-.415646	.2299374	-1.81	0.071	-.8663151	.035023
6	.1145391	.0601262	1.90	0.057	-.0033061	.2323842
gendergrp						
2	-.037762	.0825194	-0.46	0.647	-.1994971	.1239731
3	-.5048548	.5907894	-0.85	0.393	-1.662781	.6530711
racegrp#gendergrp						
2 2	-.0560263	.0662582	-0.85	0.398	-.1858899	.0738373
2 3	.0117926	.5769477	0.02	0.984	-1.119004	1.142589
3 2	.0986088	.0626582	1.57	0.116	-.0241989	.2214165
3 3	1.111976	.6319573	1.76	0.078	-.1266371	2.35059
4 2	.3087692	.1395513	2.21	0.027	.0352538	.5822847
4 3	.6577224	.7479784	0.88	0.379	-.8082883	2.123733
5 2	.1774338	.3938612	0.45	0.652	-.59452	.9493876
5 3	-.327837	1.489671	-0.22	0.826	-3.247539	2.591865
6 2	-.0258251	.090937	-0.28	0.776	-.2040583	.1524081
6 3	.0984693	.3475871	0.28	0.777	-.582789	.7797276
medhhinck	.0033831	.0005043	6.71	0.000	.0023947	.0043715
gendergrp#pctnohsdipl						
1	.0002353	.0020458	0.11	0.908	-.0037743	.0042449
2	-.0033346	.0019939	-1.67	0.094	-.0072425	.0005733
3	.020185	.0185938	1.09	0.278	-.0162581	.0566281
gendergrp#pctcolplus						
1	-.0014075	.0013713	-1.03	0.305	-.0040953	.0012802
2	-.0003536	.0013935	-0.25	0.800	-.0030849	.0023777
3	.0042621	.0129832	0.33	0.743	-.0211845	.0297088
VBM1stdumnew	.0146084	.0384859	0.38	0.704	-.0608226	.0900395
_cons	.624351	.0920212	6.78	0.000	.4439927	.8047092

Appendix Table 9

All “Warm” Study Voters who Only Previously Voted in 2016

Logistic regression — Number of obs = 24,796; LR chi2(33) = 1119.17; Prob > chi2 = 0.0000; Log likelihood = -16257.848; Pseudo R2 = 0.0333

Anyvote20	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
age22to34	-.6647664	.0378886	-17.55	0.000	-.7390267	-.5905061
age35to50	-.2277327	.0381804	-5.96	0.000	-.302565	-.1529005
agegt64	-.4126966	.046411	-8.89	0.000	-.5036605	-.3217328
agegt80	-.8620403	.0671807	-12.83	0.000	-.993712	-.7303687
Card1days	-.0004124	.0013416	-0.31	0.759	-.0030419	.0022171
PolPartgrp						
2	1.593801	.1459902	10.92	0.000	1.307665	1.879937
3	.4606487	.098561	4.67	0.000	.2674726	.6538248
4	.6806993	.2885492	2.36	0.018	.1151532	1.246245
5	-.2674591	.6463955	-0.41	0.679	-1.534371	.9994528
racegrp						
2	.3106134	.0479591	6.48	0.000	.2166153	.4046115
3	-.1173559	.045709	-2.57	0.010	-.2069439	-.0277678
4	.1020084	.0983053	1.04	0.299	-.0906665	.2946833
5	-.5505142	.2561859	-2.15	0.032	-1.052629	-.0483991
6	.0580357	.0680883	0.85	0.394	-.075415	.1914864
gendergrp						
2	-.0100761	.093829	-0.11	0.914	-.1939776	.1738255
3	-.5228031	.6957896	-0.75	0.452	-1.886526	.8409195
racegrp#gendergrp						
2 2	-.0587172	.0733361	-0.80	0.423	-.2024534	.0850189
2 3	-.0722776	.6105953	-0.12	0.906	-1.269022	1.124467
3 2	.0439449	.0704579	0.62	0.533	-.0941501	.1820399
3 3	1.049215	.6622782	1.58	0.113	-.2488263	2.347257
4 2	.2923454	.150676	1.94	0.052	-.0029742	.5876649
4 3	.4575443	.7946719	0.58	0.565	-1.099984	2.015073
5 2	.5143258	.4526977	1.14	0.256	-.3729455	1.401597
5 3	0	(empty)				
6 2	.0334894	.1038986	0.32	0.747	-.1701482	.237127
6 3	.1395218	.416508	0.33	0.738	-.6768189	.9558626
medhhinck	.003446	.0005624	6.13	0.000	.0023437	.0045482
gendergrp#pctnohsdipl						
1	.0009928	.0023113	0.43	0.668	-.0035373	.005523
2	-.0025114	.0022533	-1.11	0.265	-.0069278	.001905
3	.0198994	.0215013	0.93	0.355	-.0222424	.0620412
gendergrp#pctcolplus						
1	-.0016961	.0015561	-1.09	0.276	-.004746	.0013538
2	-.001682	.0015819	-1.06	0.288	-.0047825	.0014186
3	.004048	.0149662	0.27	0.787	-.0252853	.0333813
VBM1stdumnew	-.061513	.0417672	-1.47	0.141	-.1433752	.0203493
_cons	.5693881	.1026154	5.55	0.000	.3682657	.7705105

Appendix Table 10
All “Warm” Study Voters who Only Previously Voted in 2018

```
Logistic regression                               Number of obs     =      9,418
                                                  LR chi2(30)       =     261.19
                                                  Prob > chi2       =     0.0000
Log likelihood = -4613.0821                       Pseudo R2         =     0.0275

------------------------------------------------------------------------------
             Anyvote20 |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----------------------+------------------------------------------------------------------
            age22to34 |  -.7233255   .0750992    -9.63   0.000    -.8705171   -.5761338
            age35to50 |  -.2472653   .0797927    -3.10   0.002    -.4036561   -.0908745
              agegt64 |  -.1382504   .1054201    -1.31   0.190      -.34487    .0683691
              agegt80 |  -1.101378   .1844509    -5.97   0.000    -1.462895   -.7398611
            Card1days |  -.0089723   .0026893    -3.34   0.001    -.0142432   -.0037014
           PolPartgrp |
                    2 |   .6874207   .3414204     2.01   0.044      .018249    1.356592
                    3 |   .0037168   .2021935     0.02   0.985    -.3925753    .4000088
                    4 |   .1097021   .5007255     0.22   0.827    -.8717019    1.091106
                    5 |   .3362477   1.103799     0.30   0.761    -1.827158    2.499653
             racegrp |
                    2 |   .4047313   .1106698     3.66   0.000     .1878225      .62164
                    3 |  -.1175189    .095623    -1.23   0.219    -.3049367    .0698988
                    4 |  -.3327953   .2307845    -1.44   0.149    -.7851246    .1195341
                    5 |   .2478272   .6403996     0.39   0.699    -1.007333    1.502987
                    6 |   .3232197   .1336437     2.42   0.016     .0612828    .5851566
                      |
           gendergrp |
                    2 |  -.1081062   .1749639    -0.62   0.537    -.4510292    .2348168
                    3 |  -.7659506     1.1857    -0.65   0.518    -3.089881    1.557979
                      |
    racegrp#gendergrp |
                  2 2 |  -.0728613   .1629718    -0.45   0.655    -.3922801    .2465576
                  2 3 |           0  (empty)
                  3 2 |   .2717936   .1426258     1.91   0.057    -.0077479    .5513351
                  3 3 |           0  (empty)
                  4 2 |   .4305384   .3633181     1.19   0.236    -.2815521    1.142629
                  4 3 |           0  (empty)
                  5 2 |  -1.034512   .8581488    -1.21   0.228    -2.716453    .6474283
                  5 3 |           0  (empty)
                  6 2 |  -.2654159    .191742    -1.38   0.166    -.6412233    .1103916
                  6 3 |  -.1298163   .6504878    -0.20   0.842    -1.404749    1.145116
                      |
           medhhinck |   .0040201   .0011784     3.41   0.001     .0017104    .0063298
                      |
 gendergrp#pctnohsdipl |
                    1 |  -.0028783   .0043855    -0.66   0.512    -.0114738    .0057172
                    2 |  -.0068095   .0042383    -1.61   0.108    -.0151163    .0014974
                    3 |   .0300411   .0395142     0.76   0.447    -.0474054    .1074876
                      |
  gendergrp#pctcolplus |
                    1 |  -.0019155   .0029503    -0.65   0.516    -.0076981     .003867
                    2 |   .0020394   .0030545     0.67   0.504    -.0039474    .0080261
                    3 |   .0097087   .0283819     0.34   0.732    -.0459187    .0653362
                      |
         VBM1stdumnew |   .3840758   .0960119     4.00   0.000     .1958959    .5722557
                _cons |   1.669014   .2061939     8.09   0.000     1.264881    2.073147
------------------------------------------------------------------------------
```