Online Appendix – DRAFT Voluntary Taxation and Beyond: The Promise of Subgroup Social-Contracting Voting Mechanisms Ian Ayres

ONLINE APPENDIX I. DATA SOURCES

A. Google Consumer Surveys

When a member of the Internet-using population in the United States visits one webpage in "a network of premium online news, reference and entertainment sites" (which include, for example, Gannett Company sites like desmoinesregister.com¹), they must take a survey before viewing the content.² The researcher pays a small fee to have respondents take their survey, which is split between Google Consumer Surveys ("GCS") and the content provider.³ This "surveywall" is flexible, in the sense that respondents can respond to the survey, click "Show me a different question," or click "Skip survey" (see Online Appendix Exhibit 1). Response rates for our questions averaged 13.3% (see Online Appendix Table 1).⁴

The largest benefit to GCS is its representativeness of the U.S. Internet-using population (in July 2015, 76% of U.S. population over 18 reported Internet use, according to the Current Population Survey⁵). GCS uses stratified sampling to show each survey to a representative group of Internet users,⁶ using the Current Population Survey to define the target population.⁷ Once data has been collected, GCS calculates post-stratification weights to compensate for sampling inaccuracies.⁸ For this project, GCS respondents were sampled and weighted such that gender, age, and region are representative of the U.S. Internet-using population as a whole.

http://www.google.com/insights/consumersurveys/how (accessed April 15, 2016).

¹ desmoinesregister.com, accessed April 18, 2016. YouTube, "Google Consumer Surveys: Publisher Case Study – Gannett," available at <u>https://www.youtube.com/watch?v=OsvGyc8wrFA</u> (accessed April 18, 2016. When launched, GCS worked with "20 online publishers, including Pandora, AdWeek, the New York Daily News and the Texas Tribune" (quotes in original). Mashable, "Google Partners with Publishers on A New Kind of Paywall," available at http://mashable.com/2012/03/30/google-surveypaywall/#jfhaGZaT2aqS (accessed April 18, 2016). ² Google Consumer Surveys, "How It Works," available at

³ Seth Stephens-Davidowitz and Hal Varian. 2015. "A Hands-on Guide to Google Data," 18, available at http://people.ischool.berkeley.edu/~hal/Papers/2015/primer.pdf (accessed April 16, 2016).

⁴ For reference, among about 24,000 responses to surveys run by Google as part of a white paper, the response rate was 16.75%. Paul McDonald, Matt Mohebbi, Brett Slatkin. "Comparing Google Consumer Surveys to Existing Probability and Non-Probability Based Internet Surveys," available at http://www.google.com/insights/consumersurveys/static/consumer_surveys_whitepaper.pdf, 12 (accessed April 15, 2016). ⁵ See Online Appendix Table 2.

⁶ According to Google, "Consumer Surveys utilized the users' DoubleClick cookies to infer age and gender. Approximate location was determined using the IP address of the respondent. Income and urban density were computed by mapping the location to census tracts and using the census data to infer income and urban density." McDonald et al., supra note 4, at 5.

⁷ Ibid., 4.

⁸ Ibid., 5-6.

Both Google and the Pew Foundation have performed audits of the GCS methodology.⁹ A Google white paper suggests that their methodology produces more accurate results than other Internet survey methodologies, as compared to "gold standard" telephone survey benchmarks. The average absolute error (by question and sample) was 3.76% compared to the benchmarks.¹⁰ The 2012 Pew report found a median difference of 3% from 43 benchmark measures using the GCS methodology.¹¹ GCS data has been used for papers in, for example, economics,¹² law,¹³ marketing,¹⁴ and political science¹⁵ since its launch in 2012.

There are three drawbacks to the GCS platform. First, respondents have little incentive to pay attention to the question content, as their ultimate goal is to view the online content on the other side of the "surveywall."

Second, a 175-character limit allows only certain types of questions to be asked of respondents. Thus, many surveys run on MTurk (including the other surveys conducted for this project) or other platforms would not be possible to run on GCS.

Third, the lack of an internal randomization function means that if a researcher is asking more than one version of the same question, no internal tool assigns each respondent to a survey arm at random. Therefore, different surveys need to be set up and run for each version of a question. However, there are two reasons to conclude that, if handled properly, this does not produce unbalanced samples and therefore biased results. First, each group is sampled and weighted to produce identical distributions on gender, age, and region. This produces perfect balance on these covariates (see Online Appendix Table 6). Second, no respondent can take the

⁹ NORC at the University of Chicago, an independent social research organization, also published an audit as a 2013 white paper, concluding that GCS "may be a useful supplement to existing surveys." Erin R. Tanenbaum, Parvati Krishnamurty, and Michael Stern. 2013. "How Representative are Google Consumer Surveys?: Results from an Analysis of a Google Consumer Survey Question Relative National Level Benchmarks with Different Survey Modes and Sample Characteristics." JSM 2013 - Survey Research Methods Section, available at

http://www.amstat.org/sections/srms/proceedings/y2013/files/308821_81587.pdf (accessed April 18, 2016).

¹⁰ McDonald et al., supra note 4, at 7.

¹¹ Pew Research Center. 2012. "A Comparison of Results from Surveys by the Pew Research Center and Google Consumer Surveys," available at <u>http://www.people-press.org/2012/11/07/a-comparison-of-results-from-surveys-by-the-pew-research-center-and-google-consumer-surveys/</u> (accessed April 15, 2016).

¹² Bo Cowgill. 2015. "Competition and Productivity in Employee Promotion Contests," Working Paper, available at http://www.columbia.edu/~bc2656/papers/PromotionContests.pdf (accessed April 16, 2016).

¹³ Conor Clarke and Edward Fox. 2015. "Perceptions of Taxing and Spending: A Survey Experiment," 882 Yale Law Journal 124, 2015, available at <u>http://www.yalelawjournal.org/note/perceptions-of-taxing-and-spending</u> (accessed April 15, 2016).

¹⁴ Shane Frederick, Leonard Lee, and Ernest Baskin. 2014. "The Limits of Attraction," Journal of Marketing Research 51:4.

¹⁵ David E. Broockman and Daniel M. Butler. 2015. "The Causal Effects of Elite Position-Taking on Voter Attitudes: Field Experiments with Elite Communication," American Journal of Political Science.

survey twice (if certain protocols are followed): once a respondent passes a "surveywall" for a certain site, they will not see another survey on that site for 24 hours or one week, depending on the site and the length of the survey.¹⁶ Therefore, if data collection for all surveys is completed in less than 24 hours and the respondent does not visit another "surveywall" site and thus risk exposure to another arm of the survey, the respondent cannot take the survey twice. An analysis of IP addresses was performed on the final GCS dataset for this project, and no IP address appeared more than once.

For this research, GCS was paid \$.10 per response. The data was collected on February 22, 2016.

B. Amazon Mechanical Turk

Amazon Mechanical Turk ("MTurk") is an online task completion marketplace. For this project, respondents followed a link from MTurk's website to a survey hosted by Qualtrics, an online survey platform. Any worker located in the U.S. who wanted to take the survey could do so. The MTurk marketplace has been used extensively to produce data for papers in economics,¹⁷ law,¹⁸ political science, and other social science disciplines.¹⁹

The drawback of the MTurk methodology is that the MTurk worker population, while restricted to the U.S., is not representative of the U.S. population at large or the Internet-using U.S. population. Prior research into this population shows that demographic characteristics are skewed.²⁰ Our analysis corroborates these findings (see Online Appendix Table 1). The samples are 55-58% male and are younger than average (nearly 50% of the samples are between 25-34 years old). Nearly 60% voted for Obama in 2012, while less than 20% voted for Romney. 45% were registered Democrats and only 18-19% were registered Republicans. Nearly 80% were white.

¹⁶ Phone call with Google Consumer Surveys, February 21, 2016.

¹⁷ See e.g., Ilyana Kuziemko, Michael I. Norton, Emmanuel Saez and Stefanie Stantcheva. 2015. "How Elastic Are Preferences for Redistribution? Evidence from Randomized Survey Experiments." American Economic Review, 105(4):1478-1508.

¹⁸ See e.g., Ian Ayres, Emad Atiq, Sheng Li, Michelle Lu, Christine Tsang, and Tom Maher. 2014. "A Randomized Experiment Assessing the Accuracy of Microsoft's 'Bing It On' Challenge Claims," 26 Loyola Law Review 1.

¹⁹ See e.g., Connor Huff and Dustin Tingley. 2015. "'Who are these people?' Evaluating the demographic characteristics and political preferences of MTurk survey respondents," Research and Politics, 1.

²⁰ Berinsky et. al. argue that MTurk workers are more representative than "convenience samples," but less so than expensive representative samples like the Current Population Survey. Adam J. Berinsky, Gregory A. Huber, Gabriel S. Lenz. 2012. "Evaluating Online Labor Markets for Experimental Research: Amazon.com's Mechanical Turk," Political Analysis 20 (3). Huff and Tingley (2015) extend this analysis.

The benefits to the MTurk platform are control over survey wording and randomization procedures. Much more complex survey design may be pursued using the MTurk worker pool, such as those utilized for this project.

For this research, MTurk respondents were paid between \$.25 and \$.50. Amazon charges a 40% commission based on respondent payment amounts. The data was collected between February 15, 2016 and April 2, 2016.

Online Appendix II. Screenshots of Survey Treatments

Online Appendix Exhibit 1 GCS Carbon Tax (Fixed Provision Points) Survey Screenshot

Please complete the following survey to access this premium content.
Would you volunteer to pay a 10% carbon tax on electricity if at least 50% of other U.S. households also volunteered to pay?
O No
◯ Yes
OR
← Show me a different question
Skip survey
Google INFO PRIVACY

Online Appendix Exhibit 2 MTurk Carbon Tax (Fixed Provision Points) Survey Screenshot



Online Appendix Exhibit 3 MTurk Carbon Tax (Variable Provision Points) Survey Screenshot – Utility Control

Imagine that U.S. electric utility companies have announced a new voluntary carbon tax initiative where customers can commit to pay an additional 10% per kilowatt hour as a way to encourage reduced energy consumption. Your household would only have to pay the tax if a sufficient percentage of other households also paid. Any revenue collected by the electric utilities would be forwarded to the federal government as a voluntary tax.

What percentage of households would also have to volunteer to pay the tax before you would volunteer to pay? Move the sliding bar below to answer, or click the box below if you don't want to volunteer regardless of what other households do.



A percentage between 0 and 100 indicates the minimum percentage of households that would also need to volunteer to pay for you to volunteer.

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Online Appendix Exhibit 4

MTurk Carbon Tax (Variable Provision Points) Survey Screenshot – Government Control



Online Appendix Exhibit 5 MTurk Carbon Tax (Variable Provision Points) Survey Screenshot – Government Plus Rebate



Online Appendix Exhibit 6 MTurk Carbon Tax (Variable Provision Points) Survey Screenshot – Government Plus Renewable Energy



Online Appendix Exhibit 7 MTurk Civil Disobedience Survey Screenshot – Fixed Probability (5%)

pedestrians to o crime. What's w	u are 25 and live in a la question them in a prop rorse, it has come out t e-based policing policy	portion that far ex that the mayor and	ceeds their particip d the chief of police	ation in local
will block a maj for volunteers t are drawn agree	atter" organizers hope or freeway and be subj o take part in a civil dis a to participate in the p ipation to assure that a	ect to misdemear sobedience lottery rotest. The lottery	or arrest. Organize , where volunteers will only be held if	rs have asked whose names there is
Would you be w name being dra	villing to participate in t wn?	the lottery if there	was a 1 in 20 (5%)	chance of your
Yes				
No				

Online Appendix Exhibit 8 MTurk Civil Disobedience Survey Screenshot – Variable Probability

Imagine that you are 25 and live in a large U.S. city. The police are stopping minority pedestrians to question them in a proportion that far exceeds their participation in local crime. What's worse, it has come out that the mayor and the chief of police explicitly agreed to a race-based policing policy to target black and Hispanic men. "Black Lives Matter" organizers hope to hold a protest this weekend in which 50 people will block a major freeway and be subject to misdemeanor arrest. Organizers have asked for volunteers to take part in a civil disobedience lottery, where volunteers whose names are drawn agree to participate in the protest. The lottery will only be held if there is sufficient participation to assure that at least 50 people will be subject to misdemeanor arrest. If you could choose the probability of your name being drawn, what probability between 1% and 100% would you pick? Move the sliding bar below to answer, or click the box below if you are not willing to participate. I am not willing to participate. 1 11 21 31 41 51 60 70 80 90 100 % >>

Online Appendix Exhibit 9 MTurk Civil Disobedience Survey Screenshot – Fixed Probability (100%) With Sentence About 50 People Needed for Protest to Occur

pedestria crime. W	ins to question th hat's worse, it ha	em in a proporti s come out that	on that far exceed	ce are stopping mi s their participatic chief of police ex spanic men.	n in local
will block held if the	a major freeway	and be subject	to misdemeanor a	veekend in which rrest. The protest 50 people will be s	will only be
Would yo	ou be willing to pa	rticipate in the p	protest?		
• Yes					
No					
					>>

Online Appendix Exhibit 10 MTurk Civil Disobedience Survey Screenshot – Fixed Probability (100%) Without Sentence About 50 People Needed for Protest to Occur

pedestriar crime. Wh	hat you are 25 and live in a large U.S. city. The police are stons to question them in a proportion that far exceeds their p at's worse, it has come out that the mayor and the chief of a race-based policing policy to target black and Hispanic n	articipation in local police explicitly
	es Matter" organizers hope to hold a protest this weekend a major freeway and be subject to misdemeanor arrest.	in which 50 people
Would you	be willing to participate in the protest?	
Yes		
No		

Online Appendix Exhibit 11 MTurk Sexual Assault Survey Screenshot – Control



Online Appendix Exhibit 12 MTurk Sexual Assault Survey Screenshot – Matching Escrow



Online Appendix Exhibit 13 MTurk Sexual Assault Survey Screenshot – Lottery Escrow



Online Appendix Exhibit 14 MTurk Demographic Questions Screenshots



What is your household's yearly income?

- \$0-\$24,999
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000-\$149,999
- \$150,000 or more

What is your marital status?

- Single (never married)
- Currently married
- Divorced, separated, or widowed

What is the highest level of education you have completed?

- Less than high school
- High school or GED
- Associates degree
- Bachelors degree
- Graduate degree

What is your registered political party?

- Democratic
- Republican
- Independent (no party or other party)
- Not registered to vote

Who did you support in the last presidential election?

- Obama (Democrat)
- Romney (Republican)
- Other candidate
- Did not support any candidate

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ONLINE APPENDIX III. GOOGLE CONSUMER SURVEYS RESPONSE RATE

Question	Response Rate
10%	14.7%
20%	13.6%
30%	12.8%
40%	13.0%
50%	14.1%
60%	13.4%
70%	12.1%
80%	12.2%
90%	12.5%
99%	13.5%
Control	14.3%
Average	13.3%

Online Appendix Table 1 GCS Response Rate

Note: "Average" represents the simple average of the response rate across the 11 questions.

Online Appendix IV. Summary Statistics for July 2015 Current Population Survey, GCS, and MTurk

Online Appendix Table 2 Summary Statistics for Survey Samples

	CPS (July 2015)	GCS		MTurk	
Variable	U.S. Adults Over Age 18	Carbon Tax (Fixed Provision Points) Survey Sample	Carbon Tax (Fixed Provision Points) and Civil Disobediance Survey Sample	Carbon Tax (Variable Provision Points) Survey Sample	Sexual Assault Survey Sample
Gender: Male	0.48	0.48	0.55	0.58	0.55
Gender: Female	0.52	0.52	0.45	0.42	0.44
Gender: Other	-	-	0.00	0.00	0.00
Region: West	0.23	0.24	0.21	0.20	0.20
Region: South	0.37	0.35	0.35	0.38	0.36
Region: Midwest	0.21	0.22	0.23	0.23	0.23
Region: Northeast	0.18	0.19	0.21	0.20	0.21
Race: Asian	0.06	-	0.08	0.06	0.09
Race: Black	0.12	-	0.06	0.06	0.05
Race: Hispanic	0.12	-	0.06	0.04	0.05
Race: White	0.65	-	0.76	0.81	0.78
Race: Mixed Race	0.03	-	0.03	0.02	0.02
Race: Other	0.01	-	0.03	0.02	0.02
Age: 24 or less	0.01	0.14	0.18	0.14	0.15
Age: 24 or less Age: 25-34	0.18	0.14	0.18	0.48	0.15
Age: 35-44	0.17	0.19	0.19	0.19	0.19
Age: 45-54	0.18	0.19	0.09	0.09	0.11
Age: 55-64	0.17	0.16	0.06	0.08	0.08
Age: 65+	0.20	0.12	0.01	0.02	0.03
Sexual Orientation: Heterosexual	-	-	0.89	0.91	0.92
Sexual Orientation: Homosexual	-	-	0.04	0.03	0.05
Sexual Orientation: Bisexual	-	-	0.06	0.05	0.01
Sexual Orientation: Other	-	-	0.01	0.01	0.00
Income: \$25,000 or less	0.20	0.08	0.19	0.19	0.19
Income: \$25,000-\$49,999	0.25	0.59	0.32	0.32	0.32
Income: \$50,000-\$74,999	0.19	0.25	0.22	0.24	0.24
Income: \$75,000-\$99,999	0.13	0.06	0.13	0.13	0.12
Income: \$100,000-\$149,999	0.13	0.02	0.10	0.09	0.09
Income: \$150,000 or more	0.11	0.00	0.04	0.03	0.04
Marital Status: Single	0.27	-	0.56	0.52	0.53
Marital Status: Married	0.54	-	0.36	0.39	0.39
Marital Status: Divorced/Separated/Widowed	0.19	-	0.07	0.09	0.08
Education: Less Than High School	0.11	-	0.01	0.01	0.00
Education: High School	0.49	-	0.28	0.29	0.27
Education: Associates Degree	0.10	-	0.16	0.16	0.14
Education: Bachelors Degree	0.20	-	0.41	0.40	0.42
Education: Graduate Degree	0.11	-	0.15	0.14	0.17
Political Party: Democrat	-	-	0.45	0.46	0.45
Political Party: Republican	-	-	0.18	0.20	0.19
Political Party: Independent	-	-	0.33	0.31	0.32
Political Party: Not Registered	-	-	0.04	0.03	0.04
Voted in 2012: Obama	-	-	0.59	0.59	0.58
Voted in 2012: Colama Voted in 2012: Romney	-	-	0.00	0.19	0.19
Voted in 2012: Other		-	0.08	0.07	0.07
Voted in 2012. Other Voted in 2012: None	-	-	0.08	0.16	0.16
Urban Density: Rural	-	- 0.17	U. 17	U. 10	U. 16 -
	-	0.17	-	-	-
Urban Density: Suburban	-	0.47	-	-	-
Urban Density: Urban	-	0.30	-	-	-
Uses the Internet	0.76	4 000	-	-	-
N	-	4,283	2,228	998	1,049

Notes: The GCS sample is weighted using GCS-provided weights (weighted by gender, age, and region). Missing values (not shown) in the GCS sample are 71 for income and 103 for urban density. Proportions for those variables are calculated omitting these missing values.

Online Appendix Table 3 Orthogonality Tests for GCS Carbon Tax (Fixed Provision Points) Survey Sample (N = 4,283)

													regression of var on treatment	
	AI	10%	20%	30%	40%	50%	60%	70%	80%	90%	%66	Control	groups	p-value
Gender: Female	51.7%	51.4%	52.0%	51.9%	52.0%	52.0%	52.0%	52.0%	52.0%	50.3%	52.0%	51.0%	0.0442	1.000
Age: 24 or Less	14.2%	14.3%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.1%	14.6%	14.1%	14.1%	0.00661	1.000
Age: 25-34	19.5%	19.6%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	20.1%	19.4%	19.4%	0.00977	1.000
Age: 35-44	18.8%	19.0%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%	18.7%	19.4%	18.7%	18.7%	0.00938	1.000
Age: 45-54	19.3%	19.6%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	19.4%	17.9%	19.4%	19.4%	0.0500	1.000
Age: 55-64	16.1%	16.2%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.6%	16.0%	16.0%	0.00782	1.000
Age: 65+	12.2%	11.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	11.5%	12.3%	12.3%	0.0527	1.000
Income: \$24,999 or Less	7.7%	10.2%	7.1%	6.6%	5.4%	8.8%	7.4%	4.9%	8.9%	9.7%	10.1%	6.3%	1.919	0.038
Income: \$25,000-\$49,999	59.3%	55.0%	58.0%	66.3%	58.5%	59.3%	56.2%	60.7%	61.7%	56.4%	56.5%	62.8%	1.827	0.051
Income: \$50,000-\$74,999	25.0%	25.3%	26.3%	19.2%	27.7%	24.9%	26.1%	26.4%	24.2%	23.8%	25.3%	25.4%	0.973	0.465
Income: \$75,000-\$99,999	5.6%	5.8%	5.9%	6.4%	4.9%	4.7%	8.1%	6.5%	3.5%	6.0%	6.0%	4.2%	1.151	0.32
Income: \$100,000-\$149,999	2.1%	3.5%	2.4%	1.3%	2.3%	2.3%	2.2%	1.4%	1.7%	3.3%	1.4%	1.1%	1.180	0.299
Income: \$150,000 or More	0.3%	0.2%	0.2%	0.2%	1.2%	0.0%	0.0%	0.0%	0.0%	0.9%	0.7%	0.2%	1.958	0.034
Region: Midwest	22.1%	22.2%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.0%	22.7%	22.0%	22.0%	0.0114	1.00
Region: Northeast	18.6%	17.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	18.9%	16.2%	18.9%	18.9%	0.177	0.99
Region: South	35.5%	35.8%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	35.3%	36.5%	35.3%	35.3%	0.0223	1.00
Region: West	23.9%	24.1%	23.8%	23.8%	23.8%	23.8%	23.8%	23.8%	23.8%	24.6%	23.8%	23.8%	0.0127	1.000
Urban Density: Rural	17.0%	12.6%	14.1%	17.8%	19.4%	17.3%	15.1%	16.7%	15.0%	21.5%	16.0%	20.9%	2.078	0.02
Urban Density: Suburban	47.0%	47.1%	50.4%	42.9%	47.0%	48.2%	47.0%	46.3%	51.3%	44.2%	45.8%	47.0%	0.883	0.548
Urban Density: Urban	36.0%	40.3%	35.5%	39.3%	33.7%	34.6%	37.9%	37.0%	33.7%	34.3%	38.2%	32.0%	1.179	0.300
E-test statistic from regression of acch treatment assignment on all above covariates (omitting one construction of account)		0.942	0.235	0.954	0.995	0.237	0.612	0.576	0.682	1.211	0.449	0.707		
p-value		0.520	0.999	0.506	0.459	0.999	0.877	0.904	0.815	0.250	0.969	0.790		
Number of Observations	4283	379	369	384	407	392	386	390	396	377	392	411		

Notes: Table reports F-test values and *p*-values from weighted OLS regressions of treatment assignment on the covariates (bottom rows) and covariates on treatment assignment (right-hand columns). Weights provided by GCS for gender, age, and region. *P*-values for F-tests for gender, age, and region rows are .998 or greater, as expected.

Online Appendix Table 4 Orthogonality Tests for MTurk Carbon Tax (Fixed Provision Points) and Civil Disobedience Survey Sample (N = 2,228)

														Fixed	Fixed			F-test from	
														Probability - 100% (With		Prot	Variable	of var on treatment	
ander: Female	AII 44 7%	42 2%	43.7%	20%	30% 46.4%	45 3%	44 0%	40.2%	49 4%	50.5%	39.1%	42 99%	51 4%	45.1%	44 1%	42 4%	47.2%	groups	0.290
Gender: Male	55.1%	57.8%	56.3%	58.0%	53.6%	53.6%	56.0%	59.8%	50.6%	48.9%	60.9%	56.6%	48.6%	54.4%	55.8%	57.4%	52.8%	1.186	0.279
Age: 24 or Less	17.8%	22.2%	15.3%	18.1%	21.3%	13.8%	14.8%	19.1%	21.1%	16.8%	15.1%	18.0%	18.4%	16.9%	17.9%	19.0%	17.4%	0.827	0.6
Age: 25-34	46.8%	47.8%	52.6%	46.8%	49.7%	43.6%	50.0%	45.4%	45.0%	54.9%	42.7%	42.9%	40.5%	45.2%	47.3%	47.6%	47.0%	1.157	0.302
Age: 35-44	19.1%	18.3%	17.4%	19.1%	16.9%	20.4%	19.8%	20.1%	17.8%	14.7%	18.8%	24.3%	21.1%	21.2%	17.6%	16.8%	20.9%	0.957	0.4
Age: 45-54	8.8%	6.1%	7.9%	5.9%	6.0%	14.4%	12.1%	9.8%	8.3%	7.6%	13.0%	4.8%	9.2%	9.0%	10.2%	7.9%	8.0%	1.917	0.0
Age: 55-64	6.1%	4.4%	5.8%	9.0%	4.9%	6.6%	2.7%	5.2%	5.6%	4.3%	8.9%	6.3%	8.6%	6.1%	5.3%	7.3%	5.4%	1.214	0.2
Age: 65+	1.5%	1.1%	1.1%	1.1%	1.1%	1.1%	0.5%	0.5%	2.2%	1.6%	1.6%	3.7%	2.2%	1.6%	1.6%	1.4%	1.3%	0.838	0.6
Race: Asian	8.3%	10.6%	10.5%	8.5%	8.2%	9.4%	6.0%	6.7%	9.4%	7.1%	6.3%	10.1%	7.0%	8.3%	7.9%	8.6%	8.5%	0.548	0.9
Race: Black	5.7%	6.1%	6.3%	4.3%	4.9%	3.9%	7.1%	5.2%	5.6%	6.5%	5.7%	6.3%	7.0%	6.3%	6.8%	4.5%	5.4%	0.512	0.9
Race: Hispanic	6.2%	6.1%	7.4%	5.3%	6.6%	4.4%	6.6%	8.2%	4.4%	7.6%	4.7%	5.3%	8.1%	8.3%	5.5%	6.5%	4.7%	0.969	0.483
Race: Mixed Race	2.7%	5.6%	1.6%	2.7%	2.2%	3.9%	2.7%	2.1%	1.7%	3.3%	2.1%	2.1%	3.2%	2.5%	2.4%	2.8%	3.3%	0.771	0.7
Race: Other	0.5%	1.1%	1.1%	0.0%	0.0%	0.0%	1.1%	0.5%	0.0%	1.1%	0.0%	0.5%	0.5%	0.0%	0.4%	0.5%	1.1%	1.218	0.2
Race: White	76.5%	70.6%	73.2%	79.3%	78.1%	78.5%	76.4%	77.3%	78.9%	74.5%	81.3%	75.7%	74.1%	74.7%	77.1%	77.1%	77.0%	0.842	0.6
Education: Less Than High School	0.6%	0.0%	0.5%	1.1%	0.0%	1.1%	0.5%	1.5%	0.0%	0.5%	1.0%	0.5%	0.5%	0.9%	1.1%	0.3%	0.2%	N/A	NIA
Education: High School	27.6%	31.1%	28.9%	29.3%	25.1%	22.7%	26.4%	30.9%	26.1%	27.7%	30.2%	21.7%	31.4%	27.1%	27.8%	26.9%	28.9%	0.837	0.6
Education: Associates Degree	15.6%	12.8%	15.8%	11.2%	19.1%	16.0%	14.8%	17.5%	16.7%	16.3%	12.0%	17.5%	17.3%	14.7%	13.7%	16.8%	17.1%	0.880	0.5
Education: Bachelors Degree	41.2%	41.1%	38.9%	44.1%	43.2%	44.8%	45.1%	37.1%	42.8%	38.0%	43.8%	38.6%	37.8%	41.5%	42.6%	39.8%	41.2%	0.609	0.8
Education: Graduate Degree	14.9%	15.0%	15.8%	14.4%	12.6%	15.5%	13.2%	12.9%	14.4%	17.4%	13.0%	21.7%	13.0%	15.8%	14.8%	16.2%	12.7%	1.062	0.3
Income: \$24,999 or Less	19.2%	17.8%	23.2%	21.3%	18.6%	17.7%	17.0%	21.6%	20.6%	16.3%	23.4%	16.4%	16.2%	17.4%	19.4%	18.8%	21.2%	0.885	0.5
Income: \$25,000-\$49,999	32.0%	32.2%	27.9%	32.4%	33.3%	38.1%	40.1%	29.4%	28.3%	32.6%	32.3%	23.8%	33.5%	33.8%	32.2%	31.8%	30.1%	1.371	0.1
Income: \$50,000-\$74,999	22.4%	27.2%	22.1%	22.3%	19.1%	19.3%	20.3%	17.5%	25.0%	21.7%	19.8%	30.2%	24.9%	23.9%	22.1%	20.2%	23.6%	1.340	0.175
noome: \$75,000,599,999	12.0%	9.4%	16.3%	10.1%	12.6%	8.3%	11.5%	11.3%	15.0%	10.8%	13.5%	14.3%	11.9%	11.5%	13.3%	12.9%	12.7%	1.020	0.4
nome: \$150 000 or More	3.0%	0.076	3 7%	0 494	3 3%	F F.0.70	3.8%	F. 70/	3 392	3.8%	4.0%	5.8%	3 2%	3.8%	3 704	5.1.02	3 294	1.17	
Mantal Status: Single	56.1%	57.8%	55.8%	58.0%	59.6%	58.0%	53.8%	55.2%	56.7%	54.3%	56.3%	52.4%	55.7%	55.3%	59.0%	53.8%	56.4%	0.476	0.947
Marital Status: Married	36.4%	36.1%	34.2%	33.0%	33.3%	34.8%	39.6%	39.2%	34.4%	40.2%	36.5%	39.7%	36.2%	38.6%	34.9%	37.0%	35.2%	0.590	0.875
Marital Status:	7.5%	6.1%	10.0%	9.0%	7.1%	7.2%	6.6%	5.7%	8.9%	5.4%	7.3%	7.9%	8.1%	6.1%	6.0%	9.2%	8.3%	0.863	0.600
Divorced/separated/www.wed	200	24 70	20 60	24.292	202	22.26	24 40	20 20	100 70	10 00	24.400	10 200	24.00	24 60	200 200	40.00	24.40	1 000	2
Region: Montheast	20.7%	19.4%	20.0%	21.3%	21.3%	23.8%	17.0%	20.3%	23.3%	20.1%	21.4%	19.6%	18.9%	10 4%	24.3%	21.5%	24.1%	0.505	0 0
Region: South	35.4%	33.9%	36.3%	38.3%	31.1%	35.4%	35.7%	36.1%	33.3%	39.1%	32.8%	33.9%	38.4%	36.1%	33.8%	37.2%	34.3%	0.508	0.9
Region: West	20.9%	25.0%	23.2%	18.6%	23.5%	17.7%	13.2%	19.1%	16.1%	21.2%	24.5%	27.0%	21.1%	19.9%	21.8%	22.2%	19.6%	1.595	0.0
Sexual Orientation: Bisexual	5.6%	7.2%	4.7%	4.3%	7.7%	5.0%	5.5%	4.6%	4.4%	4.3%	5.7%	6.3%	7.6%	5.6%	5.5%	5.9%	5.4%	0.460	0.9
Sexual Orientation: Heterosexual	88.9%	85.6%	88.4%	91.5%	87.4%	91.7%	88.5%	90.7%	90.0%	90.2%	88.5%	86.8%	87.0%	87.6%	89.2%	89.0%	89.7%	0.660	0.8
Sexual Orientation: Homosexual	4.2%	3.9%	6.3%	3.2%	4.4%	2.8%	4.9%	3.6%	4.4%	3.8%	3.1%	5.8%	3.8%	4.7%	3.7%	4.0%	4.4%	0.484	0.9
Sexual Orientation: Other	1.3%	3.3%	0.5%	1.1%	0.5%	0.6%	1.1%	1.0%	1.1%	1.6%	2.6%	1.1%	1.6%	2.2%	1.6%	1.0%	0.5%	1.192	0.2
Political Party: Democrat	45.0%	42.8%	45.8%	45.2%	49.1%	43.0%	41.3%	41.8%	40.1%	40.0%	97.0%	40.U%	41.0%	43.4%	40.1%	40.2%	44.0%	4 4 9 0) (J
Political Party: Republican	270.00	10.0%	04 40/	V0 00	33.0%	35.0%	10.7%	10.0%	20.0%	10.0%	70 CC	07.070	10.270	10.7%	10.0%	19.0%	11.270	1.130	
Political Party: Independent	V 201	A A01.0	5.8%	3 79/	1 1 92	A A94	705 5	A 69/	70.070	7 1 %	3 10/	3 70.070	A 0%	3 10/ 5	A 0.0%	A 0.0%	A 7.92	0.877	2 4
Voted for in 2012: Ohama	58.6%	56 7%	63.0%	60 1%	61.0%	53.0%	60 4%	54 R%	FA 7%	50 R%	57 3%	60 4 %	57 3%	58 5%	57 2%	50 0%	5,8 A 9/	0.639	0.0
Inted for in 2012: Romney	16.8%	13 9%	16.3%	12 2%	13 7%	19.3%	14.3%	18.5%	20.0%	17.4%	21 9%	17.5%	18.4%	20.1%	14 4%	15 9%	16.7%	1 358	0 16
Voted for in 2012: No Candidate	16.7%	21.1%	13.2%	20.2%	16.4%	17.7%	14.3%	19.1%	18.3%	16.8%	14.6%	14.3%	15.1%	14.5%	18.3%	17.1%	17.1%	0.895	0.56
Voted for in 2012: Other	7.9%	8.3%	7.4%	7.4%	8.7%	9.9%	11.0%	9.8%	5.0%	6.0%	6.3%	5.8%	9.2%	6.8%	10.1%	7.2%	7.6%	1.040	0.409
test statistic from regression of																			
each treatment assignment on all		0.968	0.866	0.811	0.780	1.146	1.294	0.780	0.680	0.841	1.117	1.519	0.643	1.147	0.825	1.107	0.963		
above covanates (omitting one																			
		0 701	0 600	0 773	0.815	2 200	A 490								0 753				
category in each group) p-value						0.200		0.815	0.920	0.729	0.295	0.028	0.946	0.257		0.308	0.529		
category in each group) p-value					0000	0.200	0.120	0.815	0.920	0.729	0.295	0.028	0.946	0.257	0.700	0.308	0.529		

Notes: Table reports F-test values and *p*-values from OLS regressions of treatment assignment on the covariates (bottom rows) and covariates on treatment assignment (right-hand columns).

Online Appendix Table 5 Orthogonality Tests for MTurk Carbon Tax (Variable Provision Points) Survey Sample (N = 998)

F-test from

						F-test from regression of var on Government, Government + Rebate, and	
					Government +	Government +	
	All	Utility	Government	Rebate	Renewable	Renewable	p-value
Gender: Female	42.4%	42.7%	40.7%	41.9%	44.2%	0.225	0.879
Gender: Male	57.6%	57.3%	59.3%	58.1%	55.8%	0.225	0.879
Age: 24 or Less	13.6%	12.4%	15.9%	11.7%	14.3%	0.774	0.509
Age: 25-34	48.2%	44.9%	52.7%	47.2%	47.7%	1.091	0.352
Age: 35-44	19.3%	23.1%	16.3%	23.0%	15.5%	2.741	0.042
Age: 45-54	8.9%	8.5%	7.4%	9.7%	10.1%	0.469	0.704
Age: 55-64	7.7%	9.4%	5.4%	6.9%	9.3%	1.335	0.262
Age: 65+	2.2%	1.7%	2.3%	1.6%	3.1%	0.548	0.650
Race: Asian	6.2%	4.3%	6.6%	8.9%	5.0%	1.732	0.159
Race: Black	6.4%	8.1%	5.0%	6.0%	6.6%	0.671	0.570
Race: Hispanic	4.0%	3.4%	3.9%	3.6%	5.0%	0.342	0.795
Race: Mixed Race	1.9%	3.4%	2.3%	1.2%	0.8%	1.843	0.138
Race: Other Race: White	0.8% 80.7%	0.9% 79.9%	0.8% 81.4%	0.8% 79.4%	0.8% 81.8%	0.00428	1.000 0.892
Education: Less Than High School	0.5%	0.0%	1.9%	0.0%	0.0%	N/A	N/A
Education: High School	29.2%	24.4%	31.4%	34.7%	26.0%	2.732	0.043
Education: Associates Degree	15.9%	15.0%	14.7%	13.7%	20.2%	1.600	0.188
Education: Bachelors Degree	40.3%	48.3%	38.0%	37.9%	37.6%	2.732	0.043
Education: Graduate Degree	14.1%	12.4%	14.0%	13.7%	16.3%	0.534	0.659
Income: \$24,999 or Less	19.3%	19.2%	17.8%	19.4%	20.9%	0.265	0.851
Income: \$25,000-\$49,999	31.9%	31.2%	34.5%	29.8% 27.0%	31.8%	0.446	0.720
Income: \$50,000-\$74,999	23.7% 12.9%	24.4%	21.7%		22.1% 14.0%	0.831	0.477
Income: \$75,000-\$99,999		12.4%	11.6%	13.7%		0.273	0.845
Income: \$100,000-\$149,999	9.0%	10.3%	10.9%	7.3%	7.8%	0.978	0.402
Income: \$150,000 or More Marital Status: Single	3.1% 51.8%	2.6% 48.3%	3.5% 53.5%	2.8% 52.4%	3.5% 52.7%	0.181 0.523	0.909
Marital Status: Single Marital Status: Married	39.3%	48.3%	37.2%	39.5%	37.6%	0.523	0.667
Marital Status: Married	39.3%	43.2%	31.2%	39.5%	37.0%	0.750	0.522
Divorced/Separated/Widowed	8.9%	8.5%	9.3%	8.1%	9.7%	0.165	0.920
Region: Midwest	22.8%	22.6%	24.8%	21.4%	22.5%	0.297	0.828
Region: Northeast	19.6%	19.2%	18.2%	20.6%	20.5%	0.207	0.892
Region: South	38.0%	39.7%	36.0%	37.1%	39.1%	0.316	0.814
Region: West	19.5%	18.4%	20.9%	21.0%	17.8%	0.439	0.725
Sexual Orientation: Bisexual	5.3%	3.0%	5.8%	4.8%	7.4%	1.637	0.179
Sexual Orientation: Heterosexual	91.1%	93.6%	92.2%	89.5%	89.1%	1.394	0.243
Sexual Orientation: Homosexual	2.9%	2.1%	1.6%	4.8%	3.1%	1.833	0.139
Sexual Orientation: Other	0.7%	1.3%	0.4%	0.8%	0.4%	0.633	0.594
Political Party: Democrat	45.8%	43.2%	43.0%	47.2%	49.6%	1.052	0.369
Political Party: Republican	19.5%	20.5%	22.1%	19.0%	16.7%	0.872	0.455
Political Party: Independent	31.3%	31.2%	31.0%	31.5%	31.4%	0.00482	1.000
Political Party: Not Registered	3.4%	5.1%	3.9%	2.4%	2.3%	1.310	0.270
Voted for in 2012: Obama	58.9%	62.0%	53.5%	59.3%	61.2%	1.544	0.202
Voted for in 2012: Romney	18.6%	21.8%	21.3%	16.1%	15.5%	1.823	0.141
Voted for in 2012: No Candidate	15.7%	10.7%	16.7%	16.1%	19.0%	2.262	0.080
Voted for in 2012: Other	6.7%	5.6%	8.5%	8.5%	4.3%	1.852	0.136
<i>F</i> -test statistic from regression of each treatment assignment on all above covariates (omitting one category in each group)		1.235	1.145	0.859	1.083		
p-value		0.169	0.262	0.700	0.343		
Number of Observations	998	234	258	248	258		

Notes: Table reports F-test values and *p*-values from OLS regressions of treatment assignment on the covariates (bottom rows) and covariates on treatment assignment (right-hand columns).

Online Appendix Table 6 Orthogonality Tests for MTurk Sexual Assault Survey Sample (N = 1,049)

			Lottery	Matching	F-test from regression of var on Lottery Escrow and Matching	
	All	Control	Escrow	Escrow	Escrow	p-value
Gender: Female	44.1%	44.4%	45.0%	43.0%	0.145	0.865
Gender: Male	55.5%	55.3%	55.0%	56.1%	0.0470	0.954
Age: 24 or Less	14.8%	13.8%	12.0%	18.5%	3.148	0.043
Age: 25-34	44.4%	44.1%	45.8%	43.3%	0.238	0.788
Age: 35-44	19.4%	21.5%	17.8%	18.8%	0.825	0.438
Age: 45-54	11.2%	11.5%	13.2%	8.8%	1.695	0.184
Age: 55-64	7.7%	6.6%	8.9%	7.7%	0.643	0.526
Age: 65+	2.6%	2.6%	2.3%	2.8%	0.108	0.898
Race: Asian	9.0%	7.2%	8.6%	11.1%	1.715	0.180
Race: Black	4.9%	5.4%	4.6%	4.6%	0.191	0.826
Race: Hispanic	5.1%	5.4%	4.6%	5.4%	0.170	0.844
Race: Mixed Race	2.5%	2.0%	3.2%	2.3%	0.517	0.596
Race: Other	0.7%	0.6%	0.9%	0.6%	0.146	0.864
Race: White	77.9%	79.4%	78.2%	76.1%	0.570	0.566
Education: Less Than High School	0.1%	0.0%	0.0%	0.3%	N/A	N/A
Education: High School	27.2%	27.5%	26.9%	27.1%	0.0159	0.984
Education: Associates Degree	13.8%	14.9%	11.2%	15.4%	1.557	0.211
Education: Bachelors Degree	42.3%	41.8%	43.6%	41.6%	0.163	0.850
Education: Graduate Degree	16.6%	15.8%	18.3%	15.7%	0.579	0.561
ncome: \$24,999 or Less	19.2%	16.3%	19.2%	21.9%	1.776	0.170
ncome: \$25,000-\$49,999	32.2%	32.7%	30.9%	33.0%	0.200	0.819
ncome: \$50,000-\$74,999	24.1%	22.3%	27.8%	22.2%	1.933	0.145
ncome: \$75,000-\$99,999	12.2%	14.6%	11.5%	10.5%	1.488	0.145
ncome: \$100,000-\$149,999	8.7%	10.0%	7.2%	8.8%	0.911	0.402
	3.6%	4.0%	3.4%	3.4%	0.113	0.402
ncome: \$150,000 or More Marital Status: Single	52.6%	51.3%	52.1%	54.4%	0.366	0.693
Marital Status: Single Marital Status: Married						
Marital Status: Married	39.2%	42.4%	37.8%	37.3%	1.151	0.317
Divorced/Separated/Widowed	8.2%	6.3%	10.0%	8.3%	1.610	0.200
Region: Midwest	22.9%	23.5%	22.3%	22.8%	0.0659	0.936
Region: Northeast	22.9%	18.6%	21.8%	23.9%	1.479	0.938
9	35.8%	39.0%	21.8%	23.9%	2.198	0.228
Region: South	19.8%	18.9%	18.9%	21.7%	0.551	0.576
Region: West						
Sexual Orientation: Bisexual	1.4%	0.9%	2.3%	1.1%	1.428	0.240
Sexual Orientation: Heterosexual	91.6%	92.3%	90.3%	92.3%	0.622	0.537
Sexual Orientation: Homosexual	4.9%	5.2%	4.6%	4.8%	0.0620	0.940
Sexual Orientation: Other	0.0%	0.0%	0.0%	0.0%	N/A	N/A
Political Party: Democrat	44.7%	46.1%	43.0%	45.0%	0.360	0.698
Political Party: Republican	19.4%	16.6%	23.2%	18.5%	2.569	0.077
Political Party: Independent	32.3%	35.2%	31.2%	30.5%	1.046	0.352
Political Party: Not Registered	3.5%	2.0%	2.6%	6.0%	4.788	0.008
Voted for in 2012: Obama	57.8%	58.5%	57.6%	57.3%	0.0538	0.948
Voted for in 2012: Romney	18.8%	20.3%	17.5%	18.5%	0.481	0.618
Voted for in 2012: No Candidate	16.3%	13.8%	16.6%	18.5%	1.475	0.229
Voted for in 2012: Other	7.1%	7.4%	8.3%	5.7%	0.933	0.394
F-test statistic from regression of ach treatment assignment on all bove covariates (omitting one ategory in each group)		0.980	1.277	1.125		
p-value		0.502	0.134	0.287		
Number of Observations	1049	349	349	351		

Notes: Table reports F-test values and *p*-values from OLS regressions of treatment assignment on the covariates (bottom rows) and covariates on treatment assignment (right-hand columns).

ONLINE APPENDIX VI. REGRESSION RESULTS WITH DEMOGRAPHIC CONTROL COEFFICIENTS

Online Appendix Table 7

Carbon Tax Fixed Probability Regression Results (GCS and MTurk) with Demographic Coefficients

		ogle		izon
Variable	Answers "Yes"	Answers "Yes"	Answers "Yes"	Answers "Yes'
10% Group			0.020	0.027
			(0.049)	(0.049)
20% Group	0.040	0.041	-0.024	-0.029
	(0.035)	(0.036)	(0.048)	(0.049)
30% Group	-0.013 (0.033)	-0.008 (0.034)	0.006 (0.049)	-0.003 (0.049)
40% Group	-0.023	-0.011	0.048	0.061
40% Group	(0.034)	(0.035)	(0.050)	(0.050)
50% Group	0.004	0.009	0.117**	0.126**
	(0.033)	(0.034)	(0.050)	(0.050)
60% Group	-0.003	0.002	0.081	0.094*
	(0.033)	(0.035)	(0.049)	(0.049)
70% Group	0.009	0.023	0.139***	0.147***
	(0.034)	(0.035)	(0.051)	(0.050)
80% Group	0.060	0.065*	0.205***	0.213***
	(0.037)	(0.038)	(0.051)	(0.050)
90% Group	0.024	0.020	0.184*** (0.050)	0.213***
0.0	(0.034)	0.034)	0.271***	(0.050) 0.278***
99% Group	(0.036)	(0.036)	(0.050)	(0.050)
Control Group	-0.036	-0.030	0.116**	0.118**
Sonadi Group	(0.032)	(0.032)	(0.050)	(0.050)
Gender: Female	(0.002)	-0.043***	(0.000)	-0.017
		(0.015)		(0.021)
Region: West		-0.000		0.028
-		(0.025)		(0.032)
Region: South		-0.051**		0.047*
		(0.025)		(0.028)
Region: Midwest		-0.042*		0.041
Deves Aslas		(0.025)		(0.031)
Race: Asian				-0.001
Race: Black				(0.039)
haue, blauk				-0.006 (0.047)
Race: Hispanic				0.063
auto, mopuno				(0.043)
Race: Mixed Race				-0.049
				(0.064)
Race: Other				-0.051
				(0.139)
Age: 25-34		-0.026		-0.054*
		(0.025)		(0.030)
Age: 35-44		-0.017		-0.068*
		(0.026)		(0.037)
Age: 45-54		-0.051* (0.027)		-0.145*** (0.044)
Age: 55-64		-0.029		-0.079
		(0.027)		(0.052)
Age: 65+		-0.022		-0.037
		(0.030)		(0.092)
Sexual Orientation: Homosexual				0.025
				(0.057)
Sexual Orientation: Bisexual				0.014
				(0.045)
ncome: \$25,000-\$49,999		-0.043		0.050*
ncome: \$50,000-\$74,999		(0.028) -0.007		(0.030) 0.047
100118. 000,000-074,999		(0.030)		(0.047
ncome: \$75.000-\$99.999		(0.030)		0.050
		(0.046)		(0.039)
ncome: \$100,000-\$149,999		0.076		0.096**
		(0.063)		(0.041)
ncome: \$150,000 or more		0.030		0.018
		(0.110)		(0.059)
Marital Status: Married				-0.042*
				(0.026)
Marital Status: Divorced/Separated/Widowed				0.016
				(0.043)
Education: Less Than High School				-0.023
ducation: Accordiates Degree				(0.123)
Education: Associates Degree				0.021 (0.032)
Education: Bachelors Degree				0.040
Lange Contraction and Contraction				(0.026)
Education: Graduate Degree				0.069**
				(0.034)
Political Party: Republican				-0.260***
				(0.028)
Political Party: Independent				-0.120***
Political Party: Not Registered				(0.024) -0.102*
				(0.052)
Jrban Density: Rural		-0.035 (0.022)		
Urban Density: Suburban		-0.052***		
steart a stratty, output out		(0.016)		
Constant	0.209***	0.334***	0.311***	0.363***
	(0.025)	(0.046)	(0.035)	(0.055)
Observations	4,283	4,136	2,228	2,228
R-squared	0.006		0.032	0.088

Notes: Robust standard errors are in parentheses. The omitted treatment category is 10% for GCS and 1% for MTurk. The omitted demographic profile for GCS is an urban, under age 25 male with a household yearly income of less that \$25,000 from the Northeast. The omitted demographic profile for MTurk is a white, under age 25, heterosexual, single, high schooleducated, registered Democrat, male with a household yearly income of less that \$25,000 from the Northeast.

Online Appendix Table 8 Carbon Tax Variable Probability Regression Results (MTurk) with Demographic Coefficients

Variable	Opts Out (=1)	Opts Out (=1)	That Also Need to	Minimum Percentage of Other Households That Also Need to Volunteer (0-100%)
Government Control	-0.018	-0.018	-4.473	-3.255
Government Control	(0.042)	(0.042)	(3.198)	(3.227)
Government Plus Rebate	-0.123***	-0.122***	-7.010**	-6.170**
	(0.040)	(0.040)	(3.008)	(3.039)
Government Plus Renewable Energy Grants	-0.096**	-0.080**	2.109	3.368
Gender: Female	(0.040)	(0.040) -0.022	(3.112)	(3.112) 2.193
		(0.029)		(2.169)
Region: West		0.007		2.393
Region: South		(0.042) 0.047		(3.247) 3.641
		(0.038)		(2.869)
Region: Midwest		0.068		5.713*
Race: Asian		(0.043) -0.010		(3.149) 4.838
		(0.053)		(4.667)
Race: Black		-0.052		2.484
Pace: Hispanic		(0.054)		(3.844)
Race: Hispanic		-0.041 (0.069)		-2.801 (5.549)
Race: Mixed Race		-0.009		-3.960
Deere Other		(0.099)		(7.950)
Race: Other		-0.064 (0.151)		12.290 (9.761)
Age: 25-34		0.086**		3.614
		(0.042)		(3.176)
Age: 35-44		0.157***		9.031**
Age: 45-54		(0.050) 0.107*		(3.846) 6.557
		(0.062)		(4.873)
Age: 55-64		0.088		13.499***
Age: 65+		(0.067) -0.018		(4.880) 17.757***
-		(0.104)		(6.509)
Sexual Orientation: Homosexual		0.008		-5.640
Sexual Orientation: Bisexual		(0.076) 0.063		(6.022) -5.163
		(0.066)		(4.152)
Income: \$25,000-\$49,999		-0.032		1.403
Income: \$50,000-\$74,999		(0.040) 0.007		(3.147) 2.968
		(0.044)		(3.527)
Income: \$75,000-\$99,999		0.013		-6.161
Income: \$100,000-\$149,999		(0.052) -0.088		(4.102) 3.868
		(0.056)		(4.606)
Income: \$150,000 or more		-0.072		-0.868
Marital Status: Married		(0.083) -0.044		(5.443) -0.657
Martar etates martea		(0.033)		(2.510)
Marital Status: Divorced/Separated/Widowed		-0.010		-7.865*
Education: Less Than High School		(0.059) 0.112		(4.738) -8.629
Education. Less man high ochool		(0.201)		(24.972)
Education: Associates Degree		0.009		0.089
Education: Bachelors Degree		(0.044) -0.045		(3.452) 1.149
Education. Bachelors Degree		(0.036)		(2.669)
Education: Graduate Degree		-0.028		-3.635
Political Party: Republican		(0.047) 0.244***		(3.635) 9.912***
, and a rung, rupublican		(0.041)		(3.162)
Political Party: Independent		0.071**		1.059
Political Party: Not Registered		(0.031) 0.241***		(2.431) 0.131
- shada r arty. Hor registered		(0.086)		(7.378)
Constant	0.321***	0.180***	63.201***	51.500***
	(0.031)	(0.064)	(2.374)	(5.221)
Observations	998	998	738	738
Observations				

Notes: Robust standard errors are in parentheses. The omitted category is "Utility Control." The omitted demographic profile is a white, under age 25, heterosexual, single, high school-educated, registered Democrat, male with a household yearly income of less that \$25,000 from the Northeast.

Online Appendix Table 9 Civil Disobedience Regression Results with Demographic Coefficients

Variable	Opts in (=1)	Opts in (=1)	Probability at Which Willing to Volunteer (0-100%)
Fixed 100% Probability - Without "Sufficient Participation" Sentence	0.008	0.008	
Fixed 5% Probability	(0.026) 0.053**	(0.025) 0.058**	
	(0.026)	(0.025)	
Variable Probability	0.228*** (0.028)	0.233*** (0.027)	
Gender: Female	. ,	0.022	3.306
Region: West		(0.020) - 0.028	(2.244) 2.206
Region: South		(0.030) -0.027	(3.664) 1.996
-		(0.026)	(3.043)
Region: Midwest		-0.003 (0.029)	0.073 (3.207)
Race: Asian		-0.038 (0.034)	-3.714 (4.268)
Race: Black		0.252***	3.193
Race: Hispanic		(0.046) 0.132***	(5.109) 3.544
		(0.043)	(5.840)
Race: Mixed Race		-0.031 (0.059)	5.934 (7.065)
Race: Other		-0.045	4.559
Age: 25-34		(0.140) - 0.037	(10.185) 2.072
Ago: 25.44		(0.029)	(3.518) -1.414
Age: 35-44		-0.053 (0.035)	(3.870)
Age: 45-54		-0.087** (0.041)	-0.832 (4.593)
Age: 55-64		-0.058	4.302
Age: 65+		(0.049) - 0.225***	(6.498) 8.201
		(0.054)	(8.169)
Sexual Orientation: Homosexual		-0.030 (0.051)	-1.976 (5.333)
Sexual Orientation: Bisexual		0.150***	6.363
Sexual Orientation: Other		(0.047) 0.279***	(6.186) -7.986
Income: \$25,000-\$49,999		(0.091) -0.016	(6.753) 0.052
		(0.029)	(3.281)
Income: \$50,000-\$74,999		-0.046 (0.031)	-1.391 (3.373)
Income: \$75,000-\$99,999		-0.017 (0.037)	-2.665 (3.871)
Income: \$100,000-\$149,999		-0.062	1.686
Income: \$150,000 or more		(0.038) - 0.038	(4.424) 6.105
		(0.053)	(7.624)
Marital Status: Married		-0.011 (0.024)	0.600 (2.606)
Manital Status: Divorced/Separated/Widowed		-0.003	-9.339**
Education: Less Than High School		(0.041) -0.044	(3.728) 63.616***
		(0.090) 0.073**	(5.225)
Education: Associates Degree		(0.031)	1.177 (3.718)
Education: Bachelors Degree		0.007 (0.024)	-3.676 (3.036)
Education: Graduate Degree		0.016	-3.442
Political Party: Republican		(0.031) -0.157***	(3.932) -8.165**
Political Party: Indonomicant		(0.025) -0.077***	(3.390)
Political Party: Independent		(0.023)	-2.790 (2.646)
Political Party: Not Registered		-0.146*** (0.043)	0.447 (5.797)
Constant	0.242***	0.331***	15.424***
	(0.018)	(0.046)	(4.979)
Observations	2,228	2,228	551
R-squared	0.039	0.110	0.062

Notes: Robust standard errors are in parentheses. The omitted category is "Fixed 100% Probability – With Sentence About 50 People Needed for Protest to Occur." The omitted demographic profile is a white, under age 25, heterosexual, single, high school-educated, registered Democrat, male with a household yearly income of less than \$25,000 from the Northeast.

Online Appendix Table 10 Sexual Assault Regression Results with Full Demographics

Group	Do Nothing	Do Nothing	Informal Report	Informal Report	Formal Complaint	Formal Complaint	Escrow Option	Escrow Option
Lottery Escrow	-0.029	-0.029	-0.049	-0.046	0.063**	0.064**	0.014**	0.010
Matching France	(0.038)	(0.038)	(0.036) -0.099***	(0.036) -0.109***	(0.031)	(0.031)	(0.006)	(0.007)
Matching Escrow	(0.038)	-0.005 (0.038)	(0.035)	(0.036)	0.013 (0.030)	0.016 (0.030)	0.100*** (0.016)	0.099*** (0.016)
Gender: Female	(0.000)	-0.035	(0.000)	0.005	(0.000)	0.036	(0.010)	-0.005
		(0.033)		(0.030)		(0.027)		(0.011)
Gender: Other		0.109 (0.232)		-0.047 (0.259)		0.021 (0.199)		-0.083 (0.054)
Region: West		-0.003		-0.003		0.009		-0.003
		(0.049)		(0.047)		(0.039)		(0.019)
Region: South		0.096**		-0.098**		0.013		-0.011
Region: Midwest		(0.043) -0.020		(0.041) -0.049		(0.033) 0.085**		(0.017)
region. microst		(0.047)		(0.044)		(0.039)		(0.019)
Race: Asian		-0.009		0.047		0.010		-0.048***
De seu Disels		(0.057)		(0.055)		(0.045)		(0.011)
Race: Black		-0.112 (0.074)		0.085 (0.070)		0.006 (0.060)		0.021 (0.033)
Race: Hispanic		-0.124*		-0.014		0.142**		-0.005
		(0.069)		(0.066)		(0.067)		(0.025)
Race: Mixed Race		-0.144		0.094		0.068		-0.019
Race: Other		(0.098) -0.316**		(0.098) 0.001		(0.088) 0.354*		(0.039) -0.040*
Race. Other		(0.126)		(0.165)		(0.191)		(0.023)
Age: 25-34		0.019		-0.053		0.043		-0.009
		(0.050)		(0.047)		(0.039)		(0.019)
Age: 35-44		0.054 (0.059)		-0.089 (0.055)		0.060 (0.046)		-0.025 (0.021)
Age: 45-54		0.013		-0.034		0.022		-0.001
		(0.068)		(0.065)		(0.052)		(0.028)
Age: 55-64		0.012		-0.044		0.021		0.011
Anna CEA		(0.073) 0.107		(0.071)		(0.058)		(0.032)
Age: 65+		(0.114)		-0.077 (0.101)		(0.086)		(0.046)
Sexual Orientation: Homosexual		-0.014		0.049		-0.033		-0.002
		(0.071)		(0.069)		(0.058)		(0.029)
Sexual Orientation: Bisexual		-0.073		-0.073		0.126		0.021
Income: \$25,000-\$49,999		(0.146) 0.019		(0.128) -0.029		(0.121) 0.034		(0.063)
		(0.046)		(0.042)		(0.036)		(0.021)
Income: \$50,000-\$74,999		0.038		-0.014		0.034		-0.057***
Language 675 000 600 000		(0.050)		(0.046)		(0.040)		(0.019)
Income: \$75,000-\$99,999		-0.030 (0.059)		0.056 (0.058)		0.028 (0.048)		-0.053** (0.023)
Income: \$100,000-\$149,999		0.053		0.012		0.014		-0.079***
		(0.067)		(0.062)		(0.052)		(0.020)
Income: \$150,000 or more		-0.111		0.040		0.148*		-0.077***
Marital Status: Married		(0.088)		(0.091) 0.048		(0.082) 0.009		(0.021) 0.003
Warter Otatos. Warried		(0.038)		(0.036)		(0.031)		(0.016)
Marital Status: Divorced/Separated/Widowed		-0.039		0.033		-0.004		0.010
		(0.064)		(0.057)		(0.052)		(0.028)
Education: Less Than High School		-0.350*** (0.099)		-0.238*** (0.091)		0.649*** (0.082)		-0.061* (0.034)
Education: Associates Degree		-0.077		0.066		0.026		-0.015
		(0.053)		(0.049)		(0.043)		(0.019)
Education: Bachelors Degree		-0.043		0.042		-0.006		0.006
Education: Graduate Degree		(0.040) -0.032		(0.037) -0.028		(0.032) 0.031		(0.015) 0.029
Education. Gladuate Degree		(0.052)		(0.047)		(0.042)		(0.021)
Political Party: Republican		0.027		-0.026		-0.010		0.010
Political Party: Independent		(0.044)		(0.041)		(0.037)		(0.016)
		0.007 (0.037)		-0.016 (0.034)		-0.001 (0.030)		0.011 (0.013)
Political Party: Not Registered		-0.097		0.086		0.030)		-0.027
		(0.085)		(0.082)		(0.078)		(0.026)
Constant	0.458***	0.482***	0.358***	0.411***	0.183***	0.055	0.000	0.052
	(0.027)	(0.072)	(0.026)	(0.067)	(0.021)	(0.055)	(.)	(0.034)
Observations	1,049	1,049	1,049	1,049	1,049	1,049	1,049	1,049
R-squared	0.001	0.033	0.008	0.033	0.004	0.038	0.053	0.084

Notes: Robust standard errors are in parentheses. The omitted category is "Control." The omitted demographic profile is a white, under age 25, heterosexual, single, high school-educated, registered Democrat, male with a household yearly income of less that \$25,000 from the Northeast.

Online Appendix Figure 1 Figure 1 with July 2015 CPS Post-Stratification Weights



Notes: N = 4,283 for GCS, N = 2,228 for MTurk. MTurk data have been weighted using poststratification weights based on the July 2015 Current Population Survey using gender, age group, and region joint distribution proportions. GCS data have been re-weighted using poststratification weights based on the July 2015 Current Population Survey using gender, age group, and region joint distribution proportions. The GCS-provided weights were not used.