Online Appendix (For Online Publication Only)

Nathan, Perez-Truglia and Zentner, "Paying Your Fair Share: Perceived Fairness and Tax Compliance"

July 20, 2025

A Further Details and Results

A.1 Perceptions Survey

A.1.1 Details about the Survey Design

The complete Perceptions Survey instrument is included in Appendix F and is summarized below:

- **Step 1 (Elicit Prior Beliefs):** We elicit respondents' perceptions about the home market value and property taxes for the average household in their county of residence as of January 1st, 2018.

- **Step 2 (Information-Provision Experiment):** On a screen, we inform all survey participants that some of them will be randomly chosen to receive information about average home values and average property taxes in their county. On the next screen, a random half of the respondents discovers whether or not they were assigned to receive the information treatment and, if selected to treatment, provided with accurate information about the average home value and property taxes (in dollars) in their county. We created the feedback for the survey using the latest available data at the time of the intervention from the US Census' 2018 American Community Survey (ACS).[44]

[44] Specifically, we used 2018 ACS's one-year estimates to compute the average home values and property taxes for 3,210 counties across all 50 U.S. states. For counties in which the required data were not available, we used 2018 ACS's five-year estimates instead. The ACS provides numbers of homes in different value ranges, so we used the number of households in each range and the midpoints of the ranges to construct a weighted average home value by county.

- **Step 3 (Elicit Posterior Beliefs):** We re-elicited subjects' guesses about average home market values and average property taxes in their county to assess learning from the treatment. Following the design from other information treatment experiments (e.g., Cavallo et al. (2017); Giaccobasso et al. (2025)), we re-elicited posterior beliefs about a different point in time (January 1st, 2020) than for the prior beliefs (January 1st, 2018). This strategy avoids asking the exact same question twice.[45]

Lastly, this survey ended with several miscellaneous questions designed to provide descriptive statistics about the sample and to be potentially useful for additional analysis.[46]

A.1.2 Details about the Survey Implementation

We conducted the Perceptions Survey on Amazon Mechanical Turk. We created a restriction so that each Mturk worker ID could only complete the survey once. We filtered out respondents who did not complete the entire survey. To address potential concerns with outliers, we followed the standard practice of filtering out the upper and lower 0.1 percentiles in prior beliefs as well as winsorizing the upper and lower 0.1 percentiles in posterior beliefs (Fuster et al., 2022).

We use screening questions from the beginning of the survey to exclude respondents who are not homeowners, respondents under the age of 18 and respondents who live with their parents. For these respondents, as well as those who lived in counties for which we did not have data from the American Community Survey (ACS), the survey ended immediately after the screening questions. Respondents who passed these filters were allowed to continue with the rest of the survey.

At the end of the survey, we included an attention check, as used in previous studies (e.g., Bottan and Perez-Truglia (2022, 2020)). A total of 99% of the respondents passed

[45] Otherwise, respondents in the control group may feel uncomfortable responding to the same question twice even though they did not receive any information. Also, using slightly different questions may put less pressure on respondents to answer exactly with the feedback given to them in Step 2.

[46] More precisely, we included questions on political identification, preferences for the government size, demographic characteristics, household characteristics, knowledge about tax protests, and a set of questions on social norms about the fair distribution of taxes.

the attention check. According to their self-reports, the respondents did not find the survey difficult: 87% said that it was "easy to understand," 12% said that it was "neither easy nor difficult," and the remaining 1% found it "difficult to understand."

A.1.3 Learning Model

In this section, we define the learning model that we use to examine the data in the Perceptions Survey. Let $\overline{\tau}_i^{prior}$ and $\overline{\tau}_i^{post}$ represent subject i's prior and posterior beliefs about the average tax rate, while $\overline{\tau}^{feed}$ represents the feedback that the subject could have received in the experiment. Subjects' responses allow us to learn about the degree of households' misconceptions about the average tax rate, as represented below:

$$\overline{\tau}^{feed} - \overline{\tau}^{prior} \tag{A.1}$$

The information from this survey experiment also allows us to study how subjects learn when given feedback. Specifically, we use a simple learning model:

$$\overline{\tau}^{post} - \overline{\tau}^{prior} = \alpha \cdot \left(\overline{\tau}^{feed} - \overline{\tau}^{prior}\right) \tag{A.2}$$

where α captures the degree of learning. The parameter α captures how much individuals ignore or adjust to the feedback given.

A.1.4 Details about the Sample

Column 1 of Table A.1 presents summary statistics for subjects in the Perceptions Survey. In this sample, the average home value is \$294,120 and the average tax rate is 1.28%. This survey includes questions on the number of bedrooms in the respondent's home, the respondent's age, and the respondent's race. The average number of bedrooms is 3.08, the average age is 42.6 years and the majority of respondents reported their race to be "White." We can compare the statistics for this survey to statistics of a representative sample of the entire United States based on data from the American Community Survey (ACS) 5-Year

(2014-2018), reported in column (5). This comparison shows similar statistics for home value, number of bedrooms, and share of White homeowners.[47] Survey respondents are younger compared to the general U.S. population of homeowners.

Table A.2 shows the treatments for the Perceptions Survey are well-balanced in terms of observable characteristics, which demonstrates that randomization was successful. This table shows the averages of the household characteristics of subjects in each treatment group. Column (1) corresponds to the average characteristics for the subjects in the Perceptions Survey. Columns (2) through (5) of Table A.2 present the pre-treatment household characteristics for respondents who were randomly assigned to each of the four treatment groups, based on whether they received two types of information. Subjects in columns (2) and (3) received information on the average home value and taxes in their county, and subjects in columns (4) and (5) did not. For respondents in columns (3) and (5), the survey made the tax rate explicit in an additional row in the table that summarized the subject's responses, while respondents in columns (2) and (4) did not receive this additional row. Column (6) reports p-values for the null hypothesis that each average characteristic is equal across these four treatment groups. Consistent with successful random assignment, the results show that the observable characteristics are well-balanced across these treatment groups.

[47] It is difficult to compare other races since the race choices that subjects have in this survey are different from the race choices in the American Community Survey.

A.2 Field Experiment: Additional Details and Robustness Checks

A.2.1 Additional Details about the Data, Design, and Implementation of the Field Experiment

This section presents supplementary details about the data, design and execution of the field experiment.

First, we describe the filters used to arrive at the main sample of 423,607 residential single-family households in Dallas County shown in column (2) of Table A.1. We started with the DCAD's full database of 736,900 real property (i.e., non-business personal property) accounts in Dallas County in 2020. We then applied a series of filters to arrive at the final sample of 423,607 households. We excluded commercial real properties, non-single-family residential properties (e.g., condos, townhouses, mobile homes, apartments, P.O. boxes, vacant lots) which are likelier to be rentals, and properties with key information missing such as the proposed value (in 2020 or 2019), taxable values, property address or owner's mailing address, or the number of bedrooms or bathrooms. Finally, we excluded households with proposed values lower than $50,000 or greater than $7.5 million.[48]

Next, we outline the filters we used to select the subject pool for the field experiment. Starting with the main sample of 423,607 residential single-family households in Dallas County described above, we excluded households with missing information on year built, households flagged by National Change of Address as invalid or having moved, households where the Census' geocoding tool did not yield an address match, and households with tax rates lower than 1 percent.

We further excluded households where the owner's mailing address did not coincide with the property address, since these households may be investors or less likely to receive our letter, and properties with certain keywords in the owner field. Specifically, we excluded keywords suggesting that a business operates in the property (e.g., "LLC," "corp," "realty"),

[48] The average tax rate (2.01%) and tax amount ($5,916) figures shown in the letters are based on all single-family homes, without making these and other exclusions.

suggesting ownership by a government body (e.g., "Texas," "city"), or where the listed owner is not a person's name (e.g., "estate," "community"). Finally, we filtered households where we could not find a comparison household that we use for a treatment we study in Nathan et al. (2025).

After applying all these filters we arrived at a sample of 78,462 households which is the subject pool used in Nathan et al. (2025). We then randomly selected 50,983 households who received a letter. Finally, we removed 589 households who had already protested before potentially receiving our letter (May 21st, 2020) to reach to the field experiment's subject pool of 50,394 households.

All the letters we mailed included information on the household's proposed market value and estimated tax amount, and we cross-randomized whether we also showed the "Average Dallas Home" column. We also cross-randomized whether the letters included an additional row with the "Estimated Tax Rate" (see Section 4.2 in the text for a description of the mailing design and see Figure 3 in the body for the first page of a sample letter with a red box highlighting the parts that were randomized).

Definitions of each of the variables disclosed in the table of the letter were summarized in the notes provided below the table. Below, we provide additional details about each of these variables:

- Proposed Value for "Your Home:" The estimated market value of the property on January 1st, 2020, as proposed by the DCAD. This is the market value included in the Notice of Appraised Value posted online by the DCAD on May 15th, 2020 and mailed to homeowners when there is a change in ownership, when the DCAD changed the property's market value, or when the DCAD changed the property's homestead exemption status.

- Proposed Value for the "Average Dallas Home:" The average market value for all single-family residential properties, excluding condos, townhomes, and mobile homes in Dallas County on January 1st, 2020, as proposed by the DCAD.

- Estimated Tax Amount for "Your Home:" This is the estimated total property taxes due, obtained by summing estimated taxes due across all applicable jurisdictions for the subject's household in the 2020 tax year. We followed a similar process as the DCAD to estimate 2020 property taxes due.[49] That is, for each jurisdiction, the property's estimated taxes due are calculated as the jurisdiction's estimated taxable value for the household (provided in the DCAD's data) multiplied by the jurisdiction's 2019 tax rate.[50]

- Estimated Tax Amount for the "Average Dallas Home:" This is the average 2020 estimated tax amounts due across all single-family residential properties in Dallas County (excluding condominiums, town homes, and mobile homes).

- Estimated Tax Rate for "Your Home:" The estimated property tax rate for the subject's household. This is calculated as the household's Estimated Tax Amount divided by its Proposed Value.

- Estimated Tax Rate for the "Average Dallas Home:" This is the average 2020 estimated property tax rate for all single-family residential properties in Dallas County (excluding condominiums, town homes, and mobile homes). It is calculated as Estimated Tax Amount of the Average Dallas Home divided by the Proposed Value of the Average Dallas Home.

We use a race prediction algorithm to impute likely race—Ethnicolr (Sood and Laohaprapanon, 2018). We ran this algorithm using the first and last names of each individual

[49] A household's property tax bill for a given jurisdiction is computed as follows: first take the lower of the homestead cap (if applicable) or the DCAD's proposed value for the home. Second, subtract any deductions for the jurisdiction. Third, apply the jurisdiction's tax rate to get the preliminary tax amount. Fourth, take the lower of the preliminary tax amount and the household's tax amount in the year an age 65 or disabled exemption was granted (if applicable). This will be the amount owed to the jurisdiction for the current year and the household's total property tax bill is the sum of the amounts due to each jurisdiction. For more details, see Nathan et al. (2025).

[50] Due to data availability, we did not include Special Districts in our calculation of estimated taxes due. This makes little difference in practice, as these special rates account for less than 0.01% of the average tax amount.

listed as a homeowners of each household. We then, for each household, average the race probabilities of each homeowner, and assign the household to the racial group with the highest probability.[51]

Column (3) of Table A.1 presents summary statistics for the subject pool used in the field experiment. Comparing the statistics in columns (2) and (3) of Table A.1 does not reveal substantial differences between the universe of 423,607 residential single-family properties in Dallas County and the subject pool that we use in the field experiment.[52]

Next, we show that the treatment groups in the field experiment are well-balanced in terms of observable characteristics, demonstrating that the randomization was successful. Table A.3 breaks down the averages of the characteristics we used in the randomization, by treatment group. Column (1) of Table A.3 corresponds to the average characteristics for the whole subject pool (which by construction is equal to column (3) of Table A.1). Columns (2) through (5) of Table A.3 present the pre-treatment characteristics for households who received a letter and were randomly assigned to each of the four treatment groups corresponding to the four types of tables (shown in Figure 4). Column (6) reports p-values for the null hypothesis that each average characteristic is equal across these four treatment groups. Consistent with successful random assignment, the results show that the observable characteristics are well-balanced across these treatment groups.

The letter we mailed included a physical address that recipients could contact and a URL of the study's website. This website provided basic information about the study (without discussing the study's hypotheses), step-by-step instructions on how to file a protest online and by mail, and contact information for both the Institutional Review Board and the researchers. Appendix D shows screenshots of the entire website.

All letters included information to help subjects with the process of filing a tax appeal, such as a link to step-by-step instructions on how to file a property tax online or by mail.

[51] For more details, see Nathan et al. (2025).

[52] We only observe the homeowners' age, which we obtained from a private vendor, for the homeowners in the subject pool we use in the field experiment.

This aid leveled the playing field for all individuals, providing them with the necessary tools to file a protest if they choose to do so. A portion of this aid was part of another treatment arm, designed to study the role of filing frictions. The results of this second treatment arm are reported in Nathan et al. (2025), which documents that the aid had a significant and positive effect on the probability of filing a tax appeal.[53]

One may consider an alternative research design to test for fairness considerations in tax compliance based on providing estimates of the true market value of the home (e.g., Zillow's estimate). An issue with this approach is the difficulty in estimating market values for homes that have not been sold recently, a process that involves significant ambiguity and subjectivity (See (Nathan et al., 2025) for more details). Furthermore, isolating the fairness channel with such an experimental design would be difficult. As shown in Nathan et al. (2025), one reason people appeal is because they expect to win the appeal and reduce their tax burden. Therefore, any effects of providing information on market values could be rationalized without any fairness concerns. More precisely, if one provides a subject information suggesting that their home value may be over-assessed by the DCAD, their expected tax savings from filing an appeal should increase, and so should the probability that they file an appeal. In contrast, in Section A.2.7 we present evidence against subjects reacting to information about the average tax rate because they inferred whether their own protests were likely to succeed.

A.2.2 More Details About the Property Tax Rate Variability across Households

In Section 2.3 in the paper, we show that exemptions and caps explain most of the variability in property tax rates across households. To further illustrate how exemptions and caps affect the variation in tax rates that households pay, we now present histograms. Figure A.1(a) shows the actual distribution of tax rates across households in the field experiment

[53] As part of that treatment arm which is the focus in Nathan et al. (2025), we cross-randomized whether the letter included an "extra aid message" with additional information on how to file a tax appeal. The "extra aid message" was included in the second page of the letter. Because this intervention was cross-randomized, our regressions include an indicator variable for the extra aid message among the control variables.

without shutting down any exemptions or caps. Figure A.1(b) shows the remaining variation in tax rates after shutting down all exemptions (disabled, over age 65, and homestead) and their associated caps.[54] Almost all of the variation in tax rates disappears after shutting down exemptions.

Next, we examine how exemptions affect the average tax rate. In Figure A.2, we progressively remove exemptions in a manner similar to Figure 1(b) from the body, but here the y-axis shows the mean tax rate. The leftmost bar (labeled "None") reflects the mean proposed tax rate for subjects in the field experiment, before removing any exemptions, at 2.10 pp. The subsequent bars illustrate how the average rate changes as exemptions are incrementally removed. The second bar shows the impact of removing the disabled exemption. This causes a minor rise in the mean rate from 2.10 to 2.12, as expected given that few households claim this exemption. The third bar demonstrates that eliminating the over age 65 exemption brings the mean rate up 2.24, as anticipated since the over age 65 exemption is more widely claimed. The fourth bar shows the effect of eliminating the homestead exemption, too. The mean rate increases significantly to 2.74. As anticipated, removing all three exemptions leads to a substantial increase in tax rates.

A.2.3 More Details about the Field Survey Implementation

Approximately 88.3% of the respondents said that they found the Field Survey "easy to understand," 10.3% found that it was "neither easy nor difficult" and the remaining 1.4% found it "difficult to understand." We included a question about the household's own tax amount, to serve as an attention check since we share this information in the letter we mailed. The responses confirm that the respondents were paying close attention to the survey. The vast majority of respondents (80.8%) provided an answer that is very close (within 5%) to their true tax amount. Regarding the rest of the responses, they were off primarily because they were rounded up or down, or because the respondent confused the assessed home value

[54] There are not any households with a historical property exemption in the field experiment.

amount and the tax amount.[55]

A.2.4 More Details about the Field Survey Sample

In this section we show how households who received our letters in the field experiment differ in terms of observable characteristics from the subset of households who responded to the Field Survey.

Table A.4 compares the characteristics of three groups of households: (a) all households who were mailed a letter (which contains a link to the Field Survey), (b) households who responded to the Field Survey, and (c) households who did not respond to the Field Survey. Column (1) corresponds to the average pre-treatment characteristics for households who received a letter and thus were invited to take the Field Survey (which by construction is equivalent to column (3) of Table A.1). Columns (2) and (3) break down recipients into those who responded to the Field Survey and those who did not. Column (4) reports p-values for the null hypothesis that the average characteristics are equal between respondents and non-respondents. The results show that survey respondents are clearly not a random sample of the subject pool: the differences between the characteristics of respondents and non-respondents are statistically significant (with the exception of the tax rate) and are often economically large. Most notably, survey respondents were almost twice as likely as non-respondents to have protested in 2019. This is consistent with the interpretation given in Section 5 that individuals who were more likely to protest taxes were more likely to choose to respond to our Field Survey.

In Table A.5 we show subjects' characteristics by treatment group for the Field Survey sample. For reference, column (1) reproduces column (4) of Table A.1 for the whole survey sample, columns (2) through (5) present the pre-treatment characteristics for the four types of tables in the letters (from Figure 4) and column (6) reports p-values for the null hypothesis that each average characteristic is equal across the four treatment groups. Recall

[55] More precisely, among the 1,885 respondents who answered this question, 173 provided a value for the tax amount value that was within 10% of the assessed home value instead of their tax amount.

that randomization was done for the field experiment sample. Since subjects self-select into answering the survey, it is possible that treatment groups could be unbalanced in the survey sample. However, the results show that these observable characteristics are well-balanced across these treatment groups.

A.2.5 More Details on Non-Compliance

We now provide additional details about non-compliance in mailing experiments. For example, some households may not have received or opened the letters. Furthermore, even for households who opened the letters on time, many may have skimmed through them without paying attention to the information on average taxes listed in the table. To illustrate how significant this concern can be, some studies have attempted to calculate the share of subjects who paid attention to the information included in mailing interventions. Using data from a follow-up survey, Perez-Truglia and Cruces (2017) estimates that only 21.5% of the subjects who received a letter actually learned the relevant information contained in it. Gerber et al. (2020) study readership from various sources, including results from the USPS Household Diary Survey and a study conducted by the U.S. Environmental Protection Agency, and argue that 50% of the recipients in their mailing experiment may have read the relevant information.[56] Nathan et al. (2025) estimates that around 26% of subjects may have not received the letter, not opened it, or opened it after the deadline to submit a protest had passed.[57].

In columns (2) and (3) of Table 2 in the body, we used a probit model to predict the probability that a household responded to the Field Survey. Below, we provide the list of variables that we used as controls in this model. These include all of the controls used in column (1) of Table 2 in the body, as well as race dummies (White, Black, Asian dummies), the actual difference between the average tax rate in the county and the household's own

[56] For more details, see Appendix A.5 of Gerber et al. (2020).
[57] The estimates in Nathan et al. (2025) are based on Mazzone and Rehman (2019) and Bottan and Perez-Truglia (2020).

tax rate (both in the level and using twenty bin dummies), the difference between the household's 2020 proposed value and the potential homestead cap, this difference interacted with a dummy for a homestead in 2020, and the history of protests by type (direct and protests through agents). This model has decent predictive power, as the AUC is 0.66. Intuitively, this value of the AUC means that if you were to randomly select a subject who responded to the letter and a subject who did not respond to the survey, the model has a 66% probability of guessing which of the two individuals responded to the survey.

A.2.6 Additional Results and Robustness Checks

In this section we present additional robustness checks of the results from the field experiment shown in Table 2 in the body.

Table A.6 builds on these results by presenting several supplementary tests. For reference, column (1) in Table A.6 reproduces the baseline results in column (4) of Table 2 using the sample of subjects who answered the Field Survey. Column (2) provides a falsification test using direct protests in the year 2019 as the dependent variable. Because the information cannot have effects until it is disclosed, we would not expect the information to have an effect on 2019 protests. As expected, the coefficient in column (2) is close to zero, statistically insignificant, and precisely estimated. This result can also be seen in Figure 5(b) in the main text which includes falsification tests for years 2015-2019; however column (2) Table A.6 also reports the standard error of the estimated effects in 2019 and the mean and standard deviation of the outcome variable.

Columns (3) through (5) of Table A.6 provide evidence that the information treatment was consequential not only in terms of its effects on whether households chose to protest, but also on their subsequent market values and estimated taxes. Column (3) examines the extensive margin: i.e., the dependent variable is an indicator that takes the value 100 if the household saw a reduction in market value through a direct protest and 0 if the protest was not successful or if the household did not file a direct protest. The coefficient from column

(3) is large (-13.881) and statistically significant (p-value=0.008), indicating that some of the protests affected by the information shock were successful. Columns (4) and (5) look at different margins of the success of direct protests. In column (4), the dependent variable is the percent-reduction in the market value as a result of a direct protest: i.e., it takes the value 0 if the protest was not successful or if the household did not protest, and it takes the value 10, for example, if the successful protest resulted in a reduction of the market value of 10%. Again, we find the coefficient on the information shock is negative (-0.798) and statistically significant (p-value=0.049). In column (5) the dependent variable is equal to the percent-reduction in the estimated taxes due to a successful direct protest: i.e., it takes the value 0 if the tax amount was not reduced or if the household did not protest directly, and (for example) it takes the value 10 if the protest resulted in a 10% reduction in the tax amount.[58] The coefficient is again negative (-0.402), although it is less precisely estimated and thus statistically insignificant. One challenge when seeking to compare the results in columns (4) and (5) to the results in column (1) is that the distribution of the outcome variables in columns (4) and (5) are quite different from the baseline results in column (1). The standardized effects, however, are comparable in magnitude: column (1) indicates that a 1 pp information shock induces an effect on protests of 0.31 ($= \frac{-12.566}{50.52}$) standard deviations, while the corresponding effects are of -0.21 ($= \frac{-0.798}{3.78}$) and -0.12 ($= \frac{-0.402}{3.48}$) standard deviations in columns (4) and (5), respectively.

We also investigate whether our treatment simply shifted the timing of protests that were likely to occur in the future anyway or if the treatment effects carried over an extended time period. Table A.6 presents the results for the Field Survey sample. In column (6), the dependent variable is coded as 100 (200, 300) if the individual protested directly once (twice, three times) in the years 2020, 2021, and 2022, and 0 if the subject did not protest in these years. In column (7), the dependent variable is an indicator variable that equals 100 if

[58] Note that, on average, the tax savings are smaller than the reduction in the market values. The main reason for that is that when the homestead cap is binding, a reduction in the market value may not affect the taxes due in the first year (but it can affect the taxes due in future years).

the individual protested at least once during this period and 0 otherwise. If our treatment administered in 2020 only influenced the timing of protests but not the decision to protest, we would expect no significant effects on these longer-term outcomes. The resulting estimates are consistent with our baseline specification, ruling out that the effects are solely due to changes in the timing of protests. Moreover, the effects in columns (6) and (7) are larger than in column (1). Although this would seem to suggest that the effect of the treatment spilled over to subsequent years too, this should be taken with a grain of salt as these differences are not statistically significant.

Next, we discuss the role of salience of the tax rate. In the field experiment, we cross-randomized whether the table included a third row with the tax rate. Since this third row does not add any new information (it is simply the ratio between the previous two rows) its inclusion should not matter if subjects are rational, but might matter if showing the additional row makes the differences across taxpayers more apparent to them. Columns (8) and (9) of Table A.6 split the sample based on whether the additional row with the average tax rate in the county was shown (column (8)) or not (column (9)). The results are essentially unchanged, and coefficient estimates in these two columns are economically and statistically indistinguishable from each other (p-value=0.844).

In column (10) of Table A.6 we conduct the analysis restricting the sample to the subjects in the Field Survey who answered that they consider it fair for everyone to pay exactly the same tax rate (i.e., proportional taxes). The results in column (10) are similar in both magnitude and statistical significance to the baseline results in the text, which are reproduced in column (1) of Table A.6.

Next, although as we mention in Section 2 our main variable of interest is direct protests, we examined protests through agents for completeness. Figure A.3 presents event study plots for the effect of the information on the average rate on protests through agents (the figure is analogous to Figure 5 in the paper, but for protests through agents). In the full sample (panel (a)), we do not detect significant effects of the information shock on protests

through agents in 2020 nor 2015-2019. Among respondents to the Field Survey (panel (b)), there is a positive and statistically significant effect on protests through agents in 2020, but the effects are very similar in four of the five pre-treatment years 2015-2018. For this reason, we interpret the result for protests through agents in the year 2020 as spurious.

Finally, we assess whether a linear specification provides a reasonable approximation for our main tests and whether outliers pose a concern. Figure A.4(a) and (b) show that a linear fit closely captures the relationship between the information shock and direct protests, and there is no indication that outliers are driving the results. Figure A.4(c) presents the relationship between the information shock and perceived fairness among Field Survey participants. While somewhat noisy, the results do not appear to be driven by outliers or non-linearities.[59]

A.2.7 Alternative Mechanism

In the paper, we interpret the effects of the information shock as operating through the fairness channel. Next, we provide evidence against a potential alternative channel: subjects might have reacted to the information on the average tax rate because they inferred from that information whether their own protests would likely be successful.

First, a household that receives information indicating that the average household pays a lower tax rate cannot rationally infer that the other households are paying a lower tax rate because those households protested successfully in the past. This is because the average tax rate does not provide any information about whether a household protested in the past or whether a household's protest was successful. Specifically, the tax rate is calculated by dividing the tax amount by the proposed value of the property. A successful protest reduces the value of both the numerator and the denominator, thus leaving the tax rate roughly unchanged. In fact, a successful protest can lead to a small *increase* in the tax rate if a

[59] Although the letters focused on tax protests and not on exemption applications, it is possible that the average rate treatment could also affect applications for new exemption statuses. We tested for effects on new exemptions (e.g., over age 65, homestead, or disabled) in both the full sample and the Field Survey subsample and found no significant effects.

household has a binding homestead cap, because the denominator would decrease while the numerator would not change. Figure A.5(b) shows that most successful protests actually lead to a slight increase in the tax rate. Therefore, if a household learns that the average household pays a tax rate that is 1 pp higher than its own, it would be irrational for the household to infer anything about its odds of a successful protest. We further show that there is no relationship between the protest success rate and the households' tax rates proposed by the DCAD. If a higher tax rate indicates that a household has higher odds of success if it protests, then we would expect a positive relation between tax rates and the odds of a successful protest. Instead, Figure A.6 shows that there is not a significant association between the proposed tax rate and the odds of a successful protest.

Moreover, the magnitude of the alternative channel is at most small and cannot come close to explaining the effect sizes that we document for the information shock. Changes in both individuals' own tax rates and the average tax rate due to protests are limited because, in addition to the fact that tax rates remain (mechanically) roughly unchanged following successful protests as explained before, only a minority of households protest. In contrast, information shocks are often large: households can discover that they pay a tax rate that is 1 pp lower or higher than the average. Indeed, a household in the 10th percentile pays a tax rate of 1.33%, while a household in the 90th percentile pays a tax rate of 2.73%. Figure A.5 provides more details; it shows that the magnitude of the changes in the tax rates due to successful protests (panel (b)) is small relative to the overall differences in tax rates between households (panel (a)).

In Table A.6 we present a test of this alternative channel. If individuals make irrational inferences from the information about the average tax rate, we should expect heterogeneous effects on households who are more familiar with and educated about how property taxes and protests operate versus those who are less familiar. Intuitively, households who protested before should have a greater understanding of how property taxes work and have more information about the odds of a successful protest from their past experience, so they should

be less prone to making any irrational inference. Columns (11) and (12) of Table 2 divide the sample into subjects who have not protested in the past five years (column (11)) versus subjects who protested at least once in the past five years (column (12)). We do not find evidence of the type of heterogeneity predicted by this alternative mechanism: the coefficients from columns (11) and (12) are similar in magnitude (-13.56 vs. -12.09) and their difference is statistically insignificant (p-value=0.880).

A.2.8 More on Interpretation of the Effects

When explaining the protest process, and with the goal of drawing attention from the subjects, the letters we mailed included a sentence with language related to fairness: "people may choose to protest because they feel they are paying more than their fair share." This sentence could in theory amplify the treatment effects by inducing protests from subjects who find out that they pay more than the average tax and displacing protests from subjects who find out that they pay less than the average tax. In such a case, the interpretation of the effect we find would arise from the combined effect of this sentence in the letter and the information on the average tax rate. We believe this sentence in the letter has a minor effect, as prior literature indicates that priming or framing subjects in tax morale experiments either does not work or has only small effects (e.g., Slemrod (2019); Antinyan and Asatryan (2024)—see also the discussion on this in Giaccobasso et al. (2025)).

A.3 Preferences Survey: Additional Details and Robustness Checks

A.3.1 Details about the Preferences Survey Design

The complete Preferences Survey instrument is presented in Appendix H. This survey has four modules that are summarized below:

- **Module 1 (Tax Allocation Experiment):** This module has a question that we use as a control, where we ask respondents to, "Imagine the government granted you

full authority to determine the property taxes for two households (Household A and Household B). Households A and B each own a primary residence worth $450,000. The government requires a total of $18,000 in annual property tax revenue from both households combined." We then request respondents to, "Use the sliders below to set the tax rates for each household (the corresponding tax amounts will be automatically calculated and displayed to ensure the target revenue is met)." The sliders show tax rates and monetary values that respondents can assign to each household. When a respondent selects a tax rate for one household, the tax amount for the household and the tax rate and amount for the other household adjust automatically so the target revenue is met, using JavaScript in Qualtrics.

We present 4 conditions (i.e., treatments). In one of the conditions ("Poorer"), we ask participants to allocate a $12,000 tax burden among two households with differently-valued homes: one household's home is valued at $150,000 and the other household's home is valued at $450,000. In the other three conditions, we ask participants to allocate an $18,000 property tax burden to two households with homes valued at $450,000; however, either (a) one household's owner is over 65 years old and the other's is under 65 years old (the "over age 65" condition), (b) one household's owner is disabled and the other's is not disabled ("Disabled"), or (c) the owner of one household lives in their property as their primary residence whereas the other household's owner is renting out their property ("Homestead").[60] All four conditions use sliders that automatically adjust the monetary amount and tax rates of taxes that respondents assign to each household. In addition, which household is labeled A and which one is labeled B, as well as the order of the conditions are all randomized to avoid order effects following best practice in survey experiments.

- **Module 2 (Fairness Experiment):** This module has two questions that we use as

[60] We used this wording because while piloting the survey we learned that many people do not know what a "homestead" is.

benchmarks. In one of these benchmarks, we tell respondents to, "Imagine there are two households (Household A and Household B). Households A and B each own a home worth $450,000 and the two households are identical. Household A receives an annual property tax bill of $6,750 (a tax rate of 1.5%) and Household B receives an annual property tax bill of $9,000 (a tax rate of 2%)." Then we ask respondents, "How fair do you find this distribution of taxes between Household A and Household B?" Respondents have to evaluate the fairness on a 0–10 scale, where 0 is "very unfair" and 10 is "very fair." We call this benchmark "Unequal" since both households are identical but one pays more in taxes than the other. In the second benchmark, we tell respondents to "Imagine there are two households (Household A and Household B). Households A and B each own a home worth $450,000. The two households are identical. Households A and B each receive an annual property tax bill of $7,875 (a tax rate of 1.75%)." Then we ask respondents, "How fair do you find this distribution of taxes between Household A and Household B?" We call this benchmark "Equal" since both households are identical and pay the same in taxes. The order of the questions in this module are randomized to avoid conditioning responses on question order.

Next, we present the four conditions (i.e., treatments). In one condition, the households have different values and pay different amounts in property taxes. Specifically, we tell respondents, "Imagine there are two households (Household A and Household B). Both households use their home as their primary residence. However, the values of their homes differ. Household A, whose home is worth $150,000, receives an annual property tax bill of $2,250 (a tax rate of 1.5%). Household B, whose home is worth $450,000, receives an annual property tax bill of $9,000 (a tax rate of 2%)." We then ask them, "How fair do you find this distribution of taxes between Household A and Household B?" and respondents can select answers on a 0 ("Very Unfair") to 10 ("Very Fair") scale. We also ask questions where Household A and Household B's home are both valued at $450,000, but one household receives an annual tax bill of $9,000 (a tax rate

of 2%) while the other receives a lower tax bill of $6,750 (a tax rate of 1.5%) due to an exemption. The household paying the lower amount either has (a) an owner that is disabled (while the other household's homeowner is not disabled), (b) an owner over 65 years old (while the other household's owner is under 65), or (c) a homestead (while the other household rents out its property to another family). See the questionnaire in Appendix H for the specific wording of the questions in the Preferences Survey.

The goal of the questions in Module 2 is to shed light on the specific mechanism at play in Module 1: fairness.

- **Module 3 (Property vs. Income Taxes. Redistribution Preferences)**

  In Module 3, we included a question to evaluate how fairness preferences on property taxes compare with fairness preferences on the income tax. Specifically, we ask respondents, "Now, instead of property taxes, you will be responsible for setting income taxes. Imagine the government granted you full authority to determine the income taxes for two households (Household A and Household B). Household A has an annual income of $25,000, while Household B has an annual income of $75,000. The government requires a total of $10,000 in annual income tax revenue from both households combined." And then we tell subjects to, "Use the sliders below to set the tax rates for each household (the corresponding tax amounts will be automatically calculated and displayed to ensure the target revenue is met)" As with the property tax version of this question (see Module 1 above), a tax rate choice for one household using the sliders automatically adjusts the tax amount for that household and the tax rate and amount for the other household. The income levels that we use in this question were calibrated using data from the Census, PEW (which in turn uses data from the IRS), and the DCAD to make them approximately comparable with the property values we use in the related question that we showed in Module 1 of the survey ($150,000 for the cheaper home and $450,000 for the more expensive home). Indeed, the goal of this question is to compare the responses to the results from the similar question from Module 1 for property taxes.

Similarly to the questions from Module 1, we randomized which household is A and which one is B along with the order of the questions to avoid order effects.

- **Module 4 (Additional Questions):** This module includes questions asking respondents about whether they consider themselves to be Republicans, Democrats, or independents, and about their demographics, their state and county of residence, and who pays the taxes for their primary residence.

Additionally, we randomized whether respondents received Module 1 or Module 2 first with 50% probability each, followed by the other module second. Modules 3 and 4 were always the third and fourth modules presented to respondents in the survey, respectively.

A.3.2 Details about the Survey Implementation and Sample

We conducted the Preferences Survey on the survey platform Prolific. Using Prolific's filters, we restricted participation to respondents who live in the U.S., are over the age of 21, and own the home that they live in. We created a restriction so that each Prolific ID could only complete the survey once. The survey offered $2 to each participant that completed the survey. We filtered out participants who did not finish the survey.

We ran the survey on January 24th, 2025 and 528 participants completed the survey. The median time to finish the survey was about 8 minutes. At the end of the survey, we included an attention check as used in previous studies (Bottan and Perez-Truglia, 2022, 2020). A total of 99% of respondents passed the attention check. Respondents reported that they did not find the survey difficult: 85% said that it was "easy to understand," 14% said that it was "neither easy nor difficult," and the remaining 1% found it "difficult to understand." The results in Section 6.1 of the body are almost identical if we drop individuals who completed the survey much faster than the median (i.e., four respondents who finished in under three minutes) and/or the individuals who failed the attention check (eight respondents).

Respondents were from 44 U.S. states, and the average age of respondents was 43 years old. About 59% of participants were female and 40% were male (the remaining 1% preferred not to say). The ethnic make-up of participants was approximately 75% White, 14% Black, 6% Asian or Pacific Islander, 4% Hispanic, and 1% Native American.

A.3.3 Property versus Income Taxes Redistribution Preferences: Results

As discussed in Section A.3.1, Module 1 of the Preferences Survey contained a question on how respondents prefer to allocate an annual property tax burden of $12,000 between two households, one worth $150,000 and another worth $450,000. The third module of the Preferences Survey contained a question on the allocation of an income tax burden of $10,000 between two households (Household A and Household B), where the households earn different amounts: $25,000 versus $75,000. Panels (a) and (b) of Figure A.8 show the results of the question for property taxes and income taxes, respectively. Let τ_H be the effective tax rate of the "high" group (either the more expensive home or the higher income household) and τ_L be the tax rate of the "low" group (either the less expensive home or lower income household). The horizontal axes in this figure show bins of possible percentage differences in the tax rates between the households for property taxes (panel (a)) or income taxes (panel (b)), measured as:

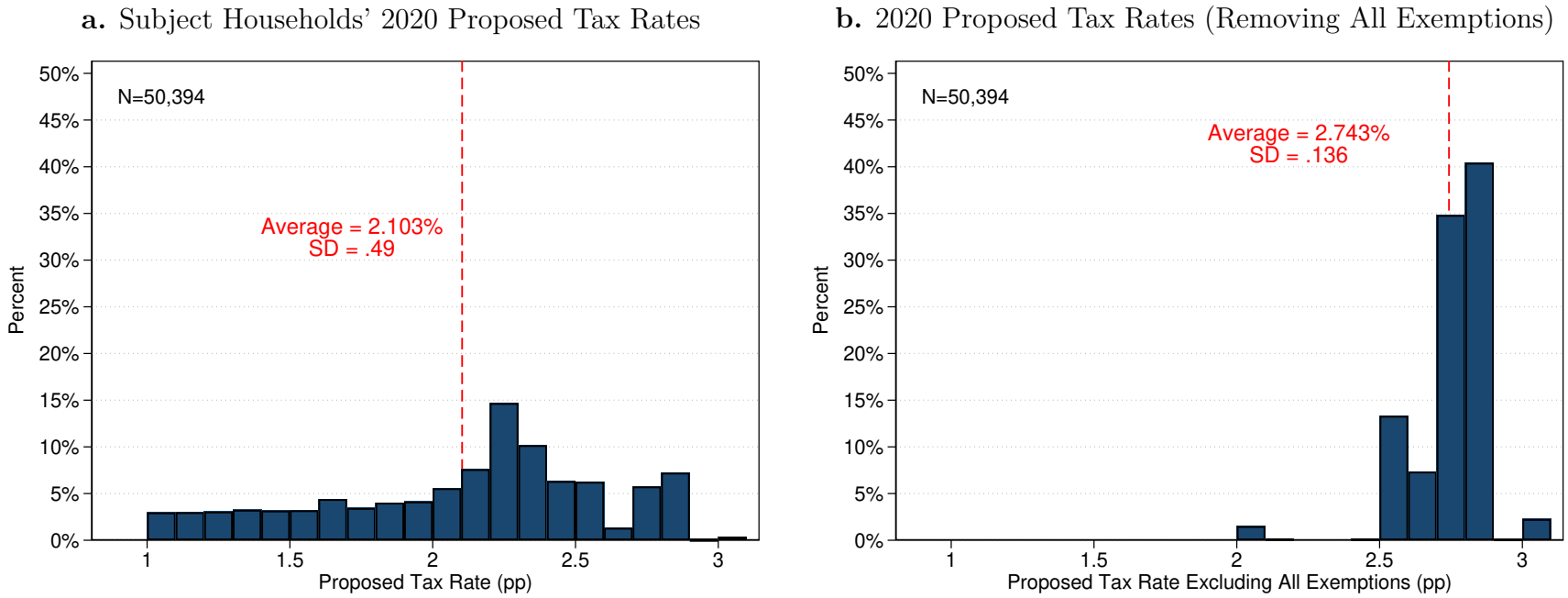
$$\frac{\tau_H - \tau_L}{\tau_L} \tag{A.3}$$

The vertical axis in each figure shows the percentage of respondents who assigned tax payments to be collected from Households A and B for the property tax (panel (a)) or for the income tax (panel (b)) that fall within each bin. Each figure shows a red vertical line representing proportional taxes, and choices to the right of this line represent preferences for progressive taxation. The rightmost bin shows a high percentage because it is top-coded (it includes all values above +150 percent). The figure indicates a stronger preference for progressivity in the context of income taxes than property taxes.

A.3.4 Redistribution Preferences: Between-Subjects Variation

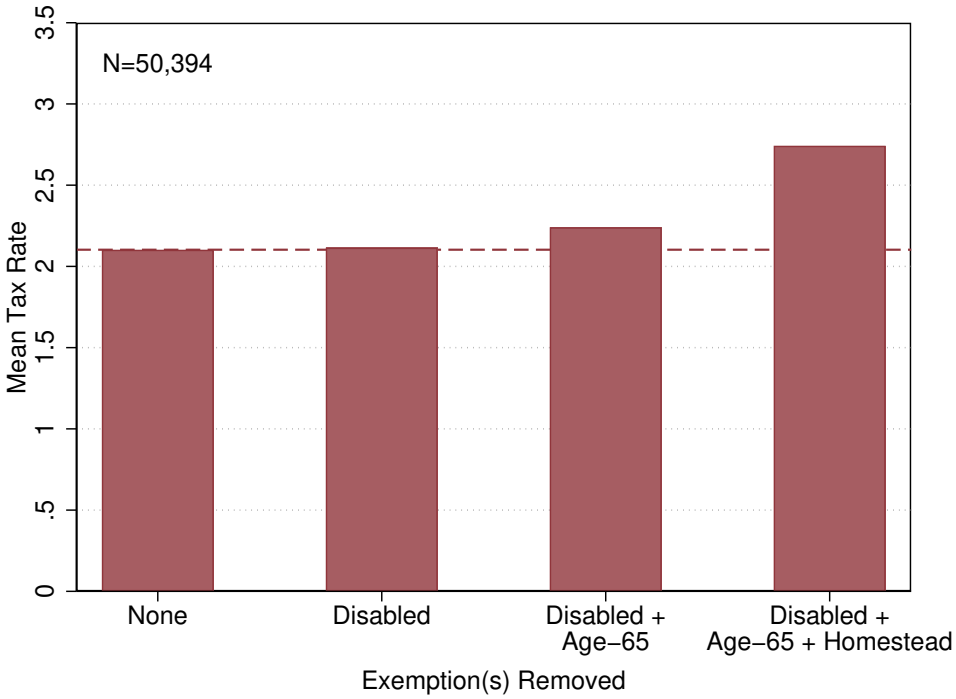
In the Preferences Survey, each respondent answered multiple questions in each module in a randomized order. To avoid potential contamination, as a robustness check, in Figure A.7 we reproduce Figure 7 from the text, but using only the first response that each subject provided in each module. Reassuringly, the results from Figure A.7 and Figure 7 are similar.

Figure A.1: The Effects of Removing Exemptions on the Distribution of Tax Rates



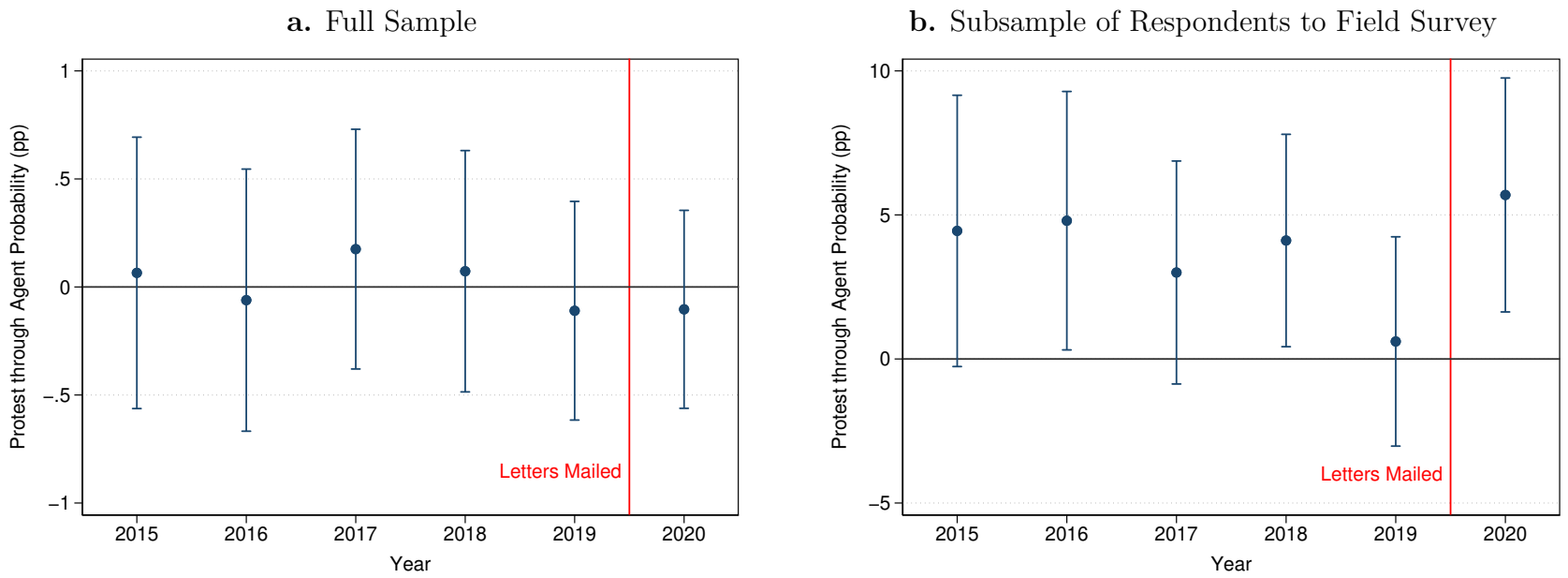
Notes: This figure compares the distribution of tax rates before and after removing all exemptions and associated caps. Panel (a) shows the distribution of 2020 proposed tax rates (i.e., prior to protesting) for subjects that were mailed a letter in the field experiment. The dashed red line indicates the average proposed tax rate across the main sample of single-family homes in the county. Panel (b) presents the distribution of 2020 proposed tax rates after removing all exemptions and associated caps, for subjects that were mailed a letter in the field experiment. Bins are left-end-point-inclusive. Proposed tax rate is defined as the household's proposed tax amount divided by its proposed market value (as notified by the DCAD). Exemptions may be applied and granted for homesteads (where the owner lives in the property as their primary residence), the owner being over age 65, or the owner living in the property as their primary residence and either being disabled per the Social Security Administration or a partly-disabled veteran per the U.S. Veterans Administration.

Figure A.2: The Effects of Removing Exemptions on the Mean Tax Rate



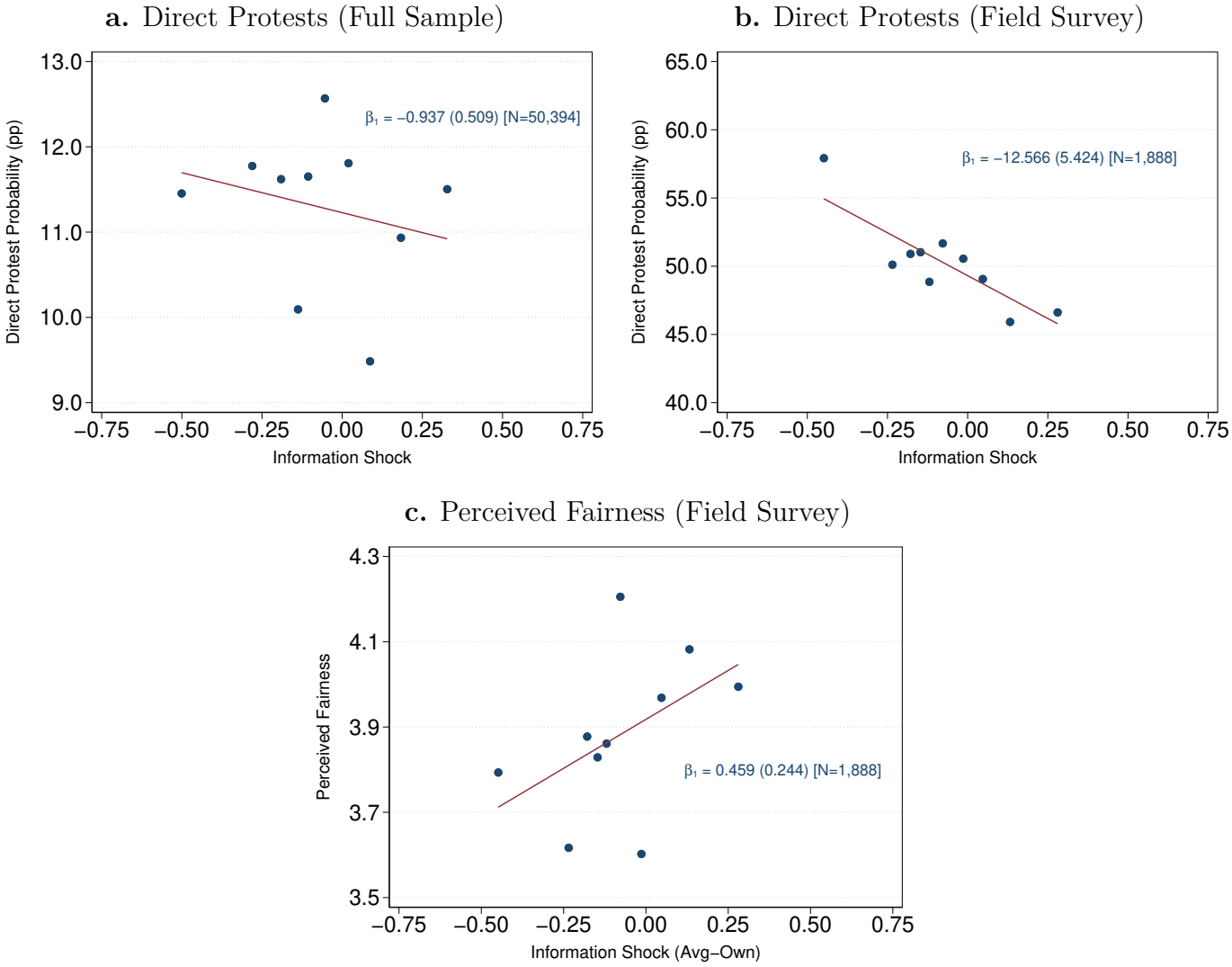
Notes: This figure shows the mean tax rate when removing each exemption status one at a time for the 50,394 subjects who received a letter in the field experiment. The vertical axis represents the mean tax rate. The horizontal axis corresponds with four scenarios, where exemptions are removed incrementally in each scenario. In the first scenario, all exemptions are in place (i.e., no exemptions removed). In the second scenario, we remove disabled exemptions. In the third scenario, we remove the over age 65 exemptions in addition to disabled exemptions. In the fourth scenario, we remove homestead exemptions in addition to disabled and over age 65 exemptions (therefore all exemptions are removed). Tax rate is defined as the household's tax amount divided by the DCAD's proposed value for the home, then multiplied by 100. Each exemption status is defined as follows: *disabled* status is available for the primary residence of a disabled person (per the Social Security Administration) or a partly-disabled veteran (per the U.S. Veterans Administration) homeowner, or their surviving spouse; *over age 65* status is available for the primary residence of a homeowner who is age 65 or older, or their surviving spouse; *homestead* status is available for a homeowner's primary residence. See Section 2.3 in the body for details about exemptions.

Figure A.3: Event-Study Falsification Tests: Protests through Agents



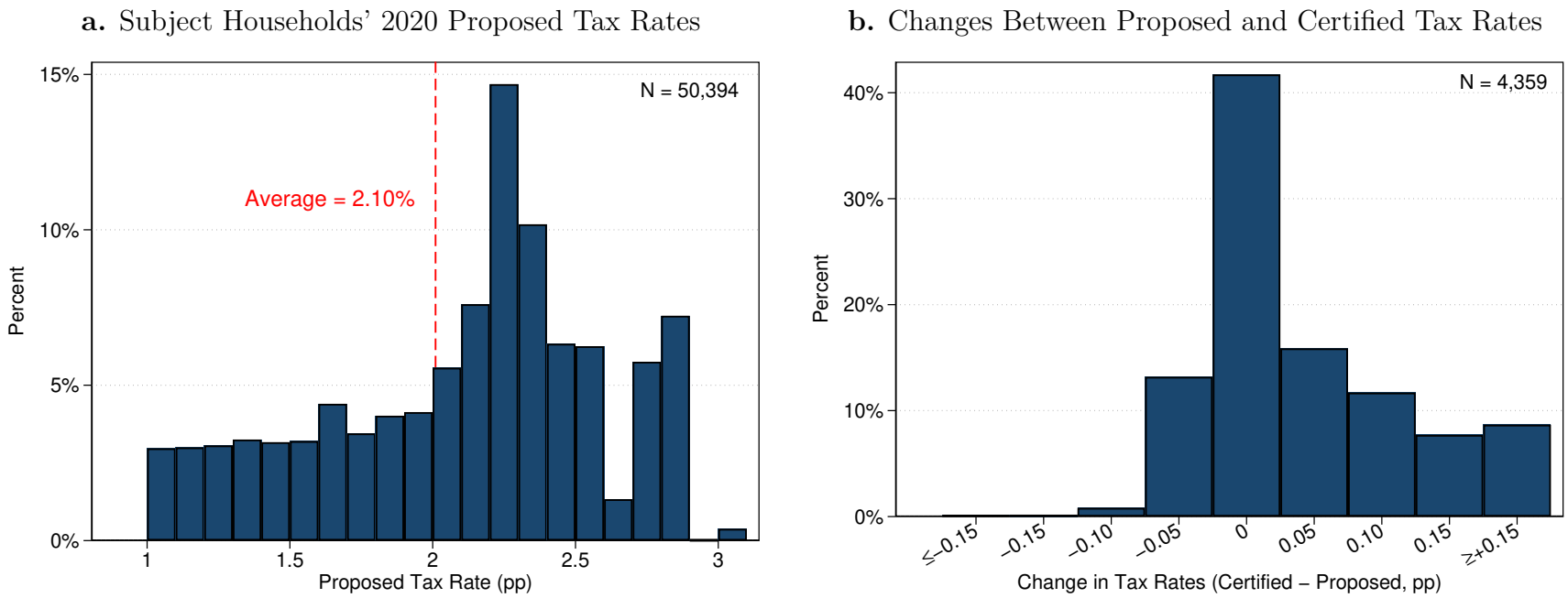
Notes: Point estimates with 90% confidence intervals in brackets, based on robust standard errors. The point estimates are computed in the same way within both panels: the point estimates within each panel only change the focal year. Panel (a): The blue dots represent the coefficient on the information shock $(D_i \cdot (\overline{\tau} - \tau_i))$ based on equation (2) from Section 4.3, with protests through agents as the dependent variable for the sample of 50,394 subjects in the field experiment who received a letter. Panel (b): same as panel (a) except that it is based on the subsample of 1,888 subjects who responded to the Field Survey. The regressions in this figure include the following controls: the 2020 proposed value in levels and its annual growth, dummies for multiple owners, school and special districts, number of years since the household's last protest, a dummy for homestead status, a dummy indicating if the household received the extra aid message, and for each previous year since 2015, a dummy indicating if the household protested in that year and the outcome of the protest (if any) as a percent-reduction in the market value (i.e., the protest history). Control variables for the protest history depend on the year in which the dependent variable is measured. For instance, if the outcome corresponds to direct protests in 2018, the protest history controls include protests in 2015, 2016, and 2017.

Figure A.4: Results from the Field Experiment: Effects of the Average Tax Rate in the County on Direct Protests and Perceived Fairness



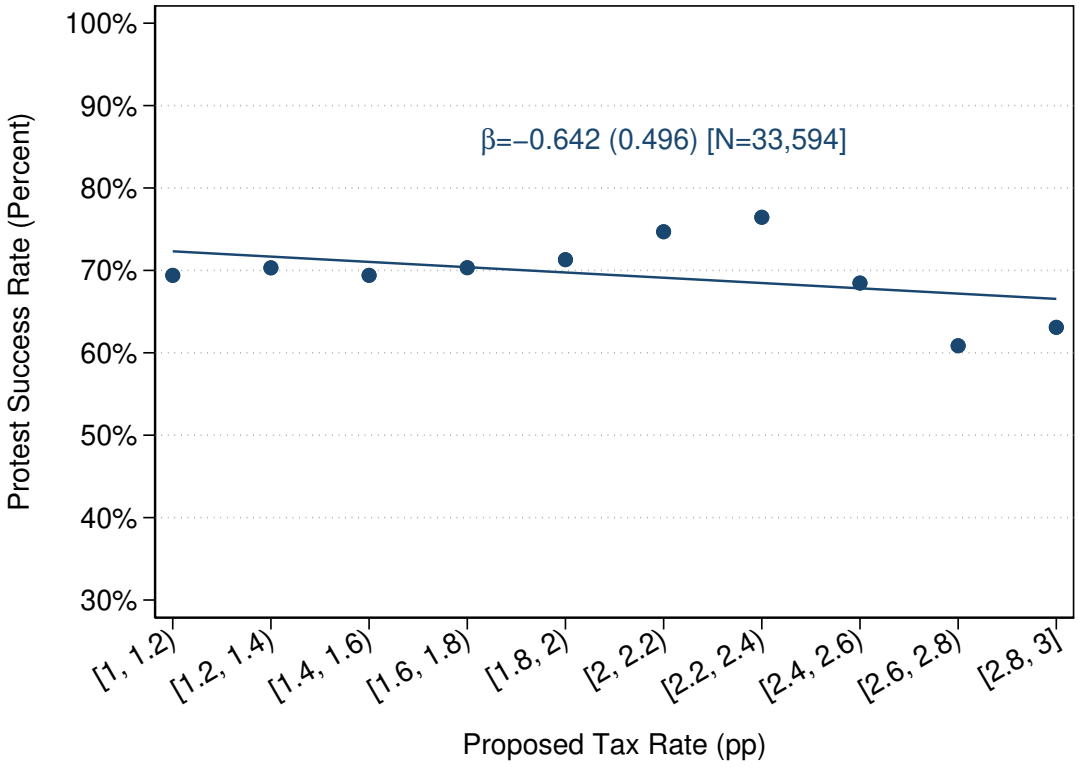
Notes: This figure depicts binned scatterplot representations of the effect of the information on the average tax rate in the county on the probability of protesting directly (panels (a) and (b)) and perceived fairness (panel (c)). Panel (a) uses the full field experiment sample, while panels (b) and (c) use the subsample that responded to the Field Survey. The x-axis corresponds to the information shock, i.e., the interaction between the respondent's *actual* relative position with respect to the county average (i.e., the difference between the feedback on the actual average tax rate in the county and the respondent's own tax rate ($\overline{\tau}^{feed} - \tau_i$)), that the respondent could receive and a dummy variable that indicates if the household was selected to receive the information on the average tax rate in the county. Each dot corresponds with a decile of the information shock. In panels (a) and (b), the y-axis corresponds to the probability of a direct protest in 2020. In panel (c), the y-axis corresponds to the level of perceived fairness, based on responses from subjects who answered the question, "Relative to the other households in the county, do you think your household pays a fair amount in property taxes?" Subjects could answer on a 1–10 scale, with 1 indicating "Very unfair" and 10 indicating "Very fair". The line in each panel corresponds to the linear fit and is shown with the corresponding slope and robust standard error (in parentheses). The 2020 direct protest, perceived fairness, and information shock variables are residualized on the control variables and the sample mean of each variable is added to its residuals before binning and plotting. The control variables are as follows: the 2020 proposed value in levels and its annual growth, dummies for multiple owners, school and special districts, number of years since the household's last protest, a dummy for homestead status, a dummy indicating if the household received the extra aid message, the difference between the average tax rate and the household's own tax rate, a dummy indicating if the household received the information on the average tax rate, and, for each previous year since 2015, a dummy indicating if the household protested in that year and the outcome of the protest (if any) as a percent-reduction in the market value (i.e., the protest history). Control variables for the protest history depend on the year in which the dependent variable is measured. For instance, if the outcome corresponds to direct protests in 2018, the protest history controls include protests in 2015, 2016, and 2017.

Figure A.5: Distributions of Subject Households' Property Tax Rates and Tax Rate Changes Due to Protesting



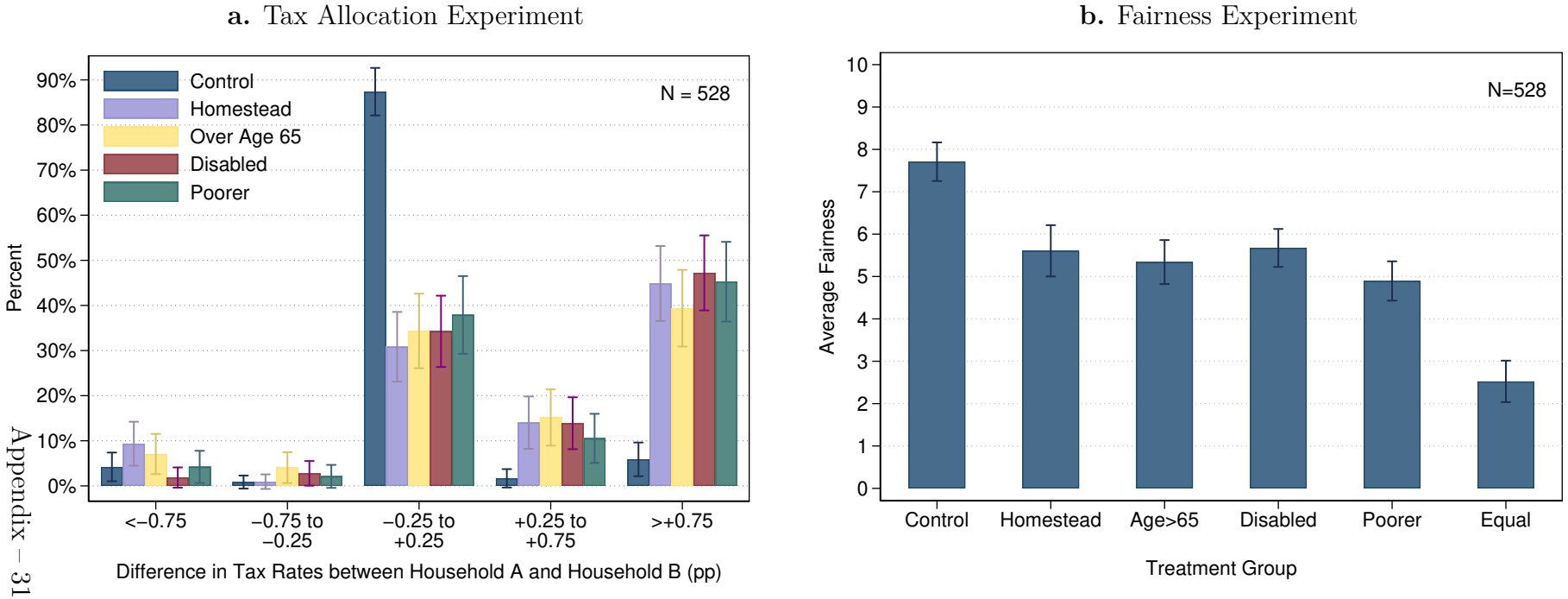
Notes: Panel (a) shows the distribution of 2020 proposed tax rates (i.e., prior to protesting) for subjects that were mailed a letter in the field experiment. The dashed red line indicates the average proposed tax rate across the main sample of single-family homes in the county. Panel (b) presents the distribution of tax rate changes, computed as the difference between a subject's 2020 certified tax rate (i.e., after protesting if the subject did so in 2020) and the 2020 proposed tax rate, for subjects that were mailed a letter in the field experiment and whose direct protests in 2020 successfully reduced their household's market value. Bins are left-end-point-inclusive. Proposed tax rate is defined as the household's proposed tax amount divided by its proposed market value (as notified by the DCAD). Certified tax rate is the certified tax amount divided by the certified market value.

Figure A.6: Successful Protests by Tax Rate



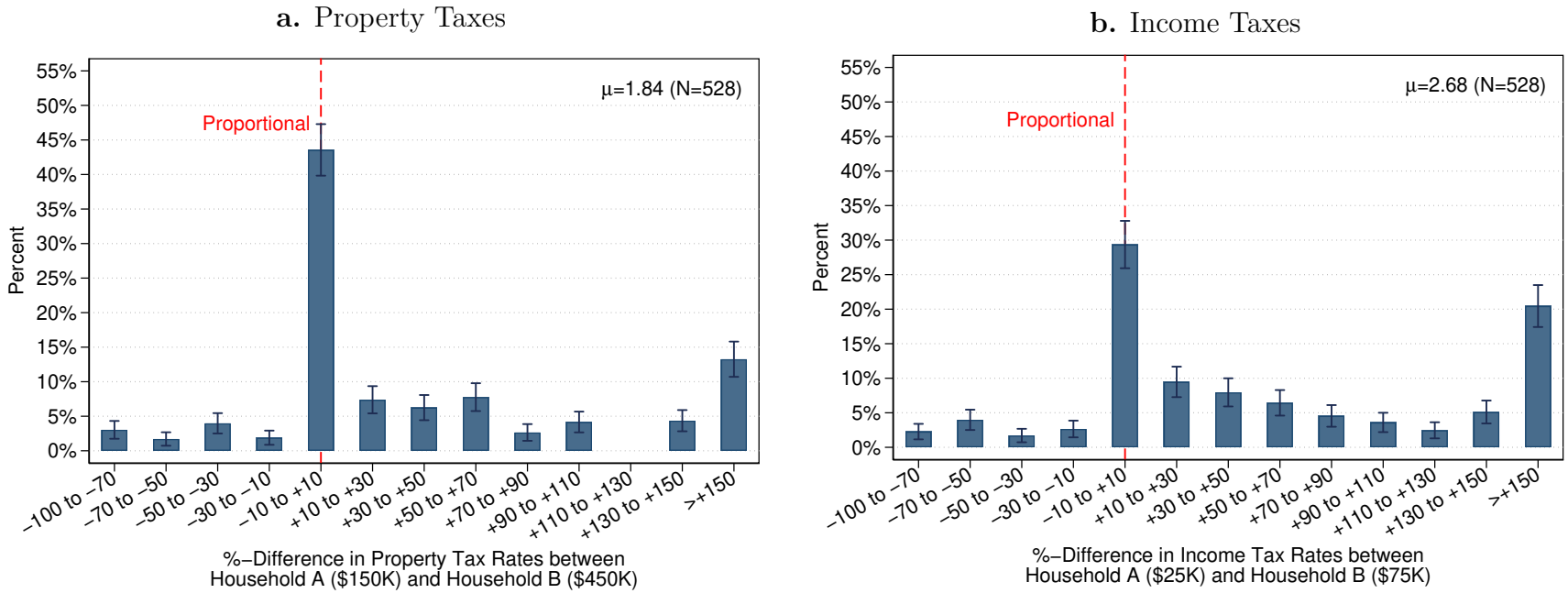
Notes: This figure features the relationship between successful direct protests and proposed tax rates. A successful protest is defined as a protest that results in a reduction of the DCAD's assessment of the household's market value. Proposed tax rate is defined as the household's proposed tax amount divided by its proposed market value (as notified by the DCAD). The sample contains households in the main sample of 423,607 single-family homes that protested directly in 2020 and had proposed tax rates between 1% and 3%. The blue dots correspond to each proposed tax rate bin. The blue line corresponds to the linear fit and is shown with the corresponding slope and robust standard error (in parentheses).

Figure A.7: Results from the Preferences Survey: Redistribution Preferences and Fairness (Using Between-Subject Variation Only)



Notes: This figure shows the results of questions included in the Preferences Survey regarding the distribution of a property tax burden. This figure is similar to Figure 7 in the body, but it uses only the between-subject variation (i.e., each panel uses only each subject's first question that they answered from the panel's question set). The survey was distributed to 528 homeowners in the U.S. over the age of 21. Panel (a) shows how respondents indicated that they would distribute a tax burden between Household A and Household B in five different scenarios. In the first four scenarios, subjects responded how they would distribute $18,000 between Household A and Household B, and in the fifth scenario subjects responded how they would distribute $12,000 between Households A and B. These five scenarios are summarized as follows. *Control*: Households A and B are identical. *Homestead*: Households A and B are identical, but the owner of Household A lives in their property as their primary residence and the owner of Household B does not live in their property as their primary residence. *Over age 65*: Households A and B are identical, but the owner of Household A is over age 65 and the owner of Household B is under age 65. *Disabled*: Households A and B are identical, but the owner of Household A is disabled and the owner of Household B is not disabled. *Poorer*: Household A's home is valued at $150,000, and Household B's home is valued at $450,000. The horizontal axis shows bins for the difference in tax rates between Household A and Household B in pp. The vertical axis presents the share of the responses for each bin. Panel (b) shows how respondents rated the fairness of different tax distribution scenarios between Households A and B on a scale from 0 (very unfair) to 10 (very fair). The horizontal axis corresponds to six scenarios which are summarized as follows. *Control (Equal)*: Households A and B are identical, each own a home worth $450,000, and both pay a tax rate of 2%. *Homestead*: Households A and B are identical and each own a home worth $450,000, but the owner of Household A (who lives in their property as their primary residence) pays a tax rate of 1.5% and the owner of Household B (who rents out their property) pays a tax rate of 2%. *Over age 65*: Households A and B are identical and each own a home worth $450,000, but the owner of Household A (who is over age 65) pays a tax rate of 1.5% and the owner of Household B (who is under age 65) pays a tax rate of 2%. *Disabled*: Households A and B are identical and each own a home worth $450,000, but the owner of Household A (who is disabled) pays a tax rate of 1.5% and the owner of Household B (who is not disabled) pays a tax rate of 2%. *Poorer*: Household A owns a home valued at $150,000 and pays a tax rate of 1.5%, while Household B owns a home valued at $450,000 and pays a tax rate of 2%. *Control (Unequal)*: Households A and B are identical and each own a home worth $450,000, but Household A pays a tax rate of 1.5% and Household B pays a tax rate of 2%. The vertical axis shows the average fairness rating for each scenario. Both panels contain point estimates with 90% confidence intervals in brackets. See Section 6.1 for details on the design and implementation of the Preferences Survey.

Figure A.8: Results from the Preferences Survey: Redistribution Preferences for Property Taxes and Income Taxes



Notes: This figure shows the results of questions included in the Preferences Survey regarding the distribution of tax burden in two separate scenarios. Panel (a) shows how subjects responded that they would distribute $12,000 of annual *property taxes* between Household A whose property is valued at $150,000, and Household B whose property is valued at $450,000. Panel (b) shows how subjects responded that they would distribute $10,000 of annual *income taxes* between Household A who earns $25,000 of annual income, and Household B who earns $75,000 of annual income. In both panels, the horizontal axis shows bins for the difference in tax rates between Household A and Household B and is computed as (tax rate of Household A − tax rate of Household B)/(tax rate of Household A). The property tax rate for each household in panel (a) is computed as the tax amount for that household divided by the household's property value. The income tax rate for each household in panel (b) is computed as the tax amount for that household divided by the household's annual income. The vertical axis in each panel presents the share of the responses for each bin. Both panels contain point estimates with 90% confidence intervals in brackets.

Table A.1: Descriptive Statistics: Perceptions Survey, Dallas County Single Family Homes, Field Experiment and Field Survey Samples

	(1)	(2)	(3)	(4)
2020 Home Value ($1,000s)	294.12	306.91	343.16	394.98
	(5.70)	(0.56)	(1.41)	(6.99)
2020 Property Tax Rate (%)	1.28	1.98	2.10	2.11
	(0.02)	(0.00)	(0.00)	(0.01)
2019 Owner-Protest (%)		5.93	5.85	10.33
		(0.04)	(0.10)	(0.70)
2019 Agent-Protest (%)		7.96	4.60	5.67
		(0.04)	(0.09)	(0.53)
2020 Homestead Exemption (%)		74.24	83.76	92.80
		(0.07)	(0.16)	(0.60)
Number of Bedrooms	3.08	3.24	3.30	3.41
	(0.02)	(0.00)	(0.00)	(0.01)
Age	42.69		52.37	52.68
	(0.28)		(0.08)	(0.34)
White (%)	82.95	38.58	44.28	56.57
	(0.83)	(0.07)	(0.22)	(1.14)
Hispanic (%)	4.50	30.46	27.32	15.31
	(0.46)	(0.07)	(0.20)	(0.83)
Black (%)	4.84	20.21	18.68	17.69
	(0.47)	(0.06)	(0.17)	(0.88)
Asian (%)	7.07	10.75	9.72	10.43
	(0.56)	(0.05)	(0.13)	(0.70)
Survey Experiment	✓			
Dallas County		✓		
Mailed a Letter			✓	
Responded to Field Survey				✓
Observations	2,065	423,607	50,394	1,888

Notes: Average pre-treatment characteristics (i.e., prior to the letter delivery) are shown in columns (1)–(4), with standard errors in parentheses. Column (1) corresponds to the individuals recruited from Amazon Mechanical Turk who participated in the Perceptions Survey. Column (2) corresponds to the sample of 423,607 single-family homes in Dallas County in 2020. Column (3) corresponds to the subsample of the subjects from column (2) who were selected to participate in the field experiment and were mailed a letter. Column (4) corresponds to the subsample of the subjects from column (3) who responded to the Field Survey. *Home Value* is the proposed value (or the market value, in the case of the Perceptions Survey); *Property Tax Rate* is the ratio of the property tax amount over the home value; *Owner-Protest* and *Agent-Protest* indicate whether the subject protested directly or through an agent, respectively; *2020 Homestead Exemption* indicates an effective homestead exemption; *Number of Bedrooms* is the number of bedrooms in the home. Column (1) is based on responses from the Perceptions Survey. In columns (2)–(3), the first seven variables are obtained from the county's administrative records, the age variable is provided by a private company, and the ethnicity variables are inferred using an algorithm that analyzes the homeowners' first and last names. Column (4) is based on responses from the Field Survey.

Table A.2: Randomization Balance Test: Perceptions Survey

		By Table Type (Average Tax Info./Rate Explicit)				
	(1) All	(2) No/No	(3) Yes/No	(4) No/Yes	(5) Yes/Yes	(6) P-value
2018 Average Home Value ($1,000s)	253.485	250.000	254.914	242.397	266.297	0.372
	(4.755)	(8.865)	(9.073)	(7.642)	7.642	
2018 Average Property Tax Rate (%)	1.388	1.355	1.430	1.376	1.392	0.609
	(0.020)	(0.038)	(0.043)	(0.041)	0.041	
Number of Bedrooms	3.081	3.103	3.077	3.076	3.067	0.917
	(0.019)	(0.038)	(0.038)	(0.037)	0.037	
Age	42.689	42.719	43.386	42.115	42.519	0.436
	(0.278)	(0.549)	(0.549)	(0.569)	0.569	
White (%)	82.954	81.489	84.363	82.505	83.462	0.640
	(0.828)	(1.698)	(1.597)	(1.696)	1.696	
Hispanic (%)	4.504	5.725	3.668	4.771	3.846	0.382
	(0.456)	(1.016)	(0.827)	(0.951)	0.951	
Black (%)	4.843	5.534	4.054	4.573	5.192	0.683
	(0.473)	(1.000)	(0.867)	(0.932)	0.932	
Asian (%)	7.070	6.489	7.529	7.555	6.731	0.871
	(0.564)	(1.077)	(1.160)	(1.180)	1.180	
Observations	2,065	524	518	503	520	

Notes: Average pre-treatment characteristics of respondents, with robust standard errors in parentheses. Column (1) corresponds with the entire Perceptions Survey sample, while columns (2)–(5) break the sample by treatment groups: i.e., whether they were provided with feedback on their county's average property taxes (only subjects in columns (2) and (3) received this feedback) and whether the tax rate was made explicit in an additional row in the table summarizing their responses (only subjects in columns (3) and (5) received the additional row). Column (6) reports the p-value of the test of equal means across the four treatment groups. *Average Home Value* is the prior belief (i.e., elicited before the information-provision experiment) about the average property value in the county. *Average Property Tax Rate* is the ratio of *Average Property Tax Amount* over *Average Home Value*. *Number of Bedrooms* is the number of bedrooms in the respondent's home.

Table A.3: Detailed Randomization Balance Test: Full Sample from the Field Experiment

		By Table Type (Average Tax Info./Explicit Rate)				
	(1) All	(2) No/No	(3) Yes/No	(4) No/Yes	(5) Yes/Yes	(6) P-value
Home Value ($1,000s)	343.162	340.086	345.895	337.883	344.581	0.181
	(1.406)	(3.377)	(2.497)	(3.329)	(2.433)	
Property Tax Rate (%)	2.103	2.107	2.104	2.093	2.104	0.252
	(0.002)	(0.005)	(0.004)	(0.005)	(0.004)	
Owner-Protest in 2019 (%)	5.854	5.831	6.032	5.549	5.837	0.492
	(0.105)	(0.254)	(0.184)	(0.252)	(0.180)	
Agent-Protest in 2019 (%)	4.598	4.597	4.707	4.822	4.380	0.352
	(0.093)	(0.227)	(0.164)	(0.236)	(0.158)	
2020 Homestead Exemption (%)	83.760	83.318	83.593	84.139	83.963	0.400
	(0.164)	(0.404)	(0.286)	(0.402)	(0.282)	
Number of Bedrooms	3.304	3.306	3.306	3.307	3.300	0.785
	(0.003)	(0.007)	(0.005)	(0.007)	(0.005)	
White (%)	44.275	43.945	44.234	44.057	44.589	0.748
	(0.221)	(0.538)	(0.384)	(0.547)	(0.383)	
Hispanic (%)	27.321	28.110	27.296	26.633	27.285	0.201
	(0.199)	(0.487)	(0.344)	(0.487)	(0.343)	
Black (%)	18.685	18.316	18.704	19.496	18.454	0.185
	(0.174)	(0.419)	(0.301)	(0.436)	(0.299)	
Asian (%)	9.719	9.628	9.767	9.815	9.672	0.969
	(0.132)	(0.320)	(0.229)	(0.328)	(0.228)	
Observations	50,394	8,506	16,761	8,253	16,874	

Notes: Average pre-treatment (i.e., before the start of letter delivery) characteristics of subjects in the field experiment, with standard errors in parentheses. Column (1) corresponds to the entire field experiment sample, while columns (2)–(5) break the sample into treatment groups: i.e., whether they were provided with feedback on their county's average property taxes (only subjects in columns (2) and (3) received this feedback) and whether the tax rate was made explicit in the table (only subjects in columns (3) and (5) received the explicit tax rate). Column (6) reports the p-value of the test of equal means across the last four treatment groups. *Home Value* is the proposed assessment value; *Property Tax Rate* is the ratio of the property tax amount over the home value; *Owner-Protest in 2019* and *Agent-Protest in 2019* indicates whether the subject protested directly or through an agent in 2019, respectively; *2020 Homestead Exemption* indicates an effective homestead exemption. *Number of Bedrooms* is the number of bedrooms in the respondent's home. *White*, *Hispanic*, *Black*, and *Asian* are the fraction of homeowners by each imputed race.

Table A.4: Characteristics of Respondents to the Field Survey

		Responded to Field Survey		
	(1) Letter	(2) Yes	(3) No	(4) P-value
2020 Home Value ($1,000s)	343.162	394.983	341.145	<0.001
	(1.406)	(6.987)	(1.434)	
2020 Proposed Tax Rate (%)	2.103	2.107	2.102	0.658
	(0.002)	(0.010)	(0.002)	
2019 Owner-Protest (%)	5.854	10.328	5.680	<0.001
	(0.105)	(0.701)	(0.105)	
2019 Agent-Protest (%)	4.598	5.667	4.556	0.040
	(0.093)	(0.532)	(0.095)	
2020 Homestead Exemption (%)	83.760	92.797	83.408	<0.001
	(0.164)	(0.595)	(0.169)	
Number of Bedrooms	3.304	3.410	3.300	<0.001
	(0.003)	(0.015)	(0.003)	
Observations	50,394	1,888	48,506	

Notes: Average pre-treatment (i.e., before the start of letter delivery) characteristics of subjects in the field experiment, with standard errors in parentheses. Column (1) corresponds to all subjects in the field experiment who were mailed a letter. Columns (2)–(3) break down that sample into households that responded to the Field Survey and households that did not respond to the Field Survey, respectively. Column (4) reports the p-value of the test of equal means across the respondent and non-respondent groups. *Home Value* is the proposed assessment value; *Property Tax Rate* is the ratio of the property tax amount over the home value; *Owner-Protest* and *Agent-Protest* indicate whether the subject protested directly or through an agent, respectively; *2020 Homestead Exemption* indicates an effective homestead exemption. *Number of Bedrooms* is the number of bedrooms in the respondent's home.

Table A.5: Randomization Balance Test: Field Survey

		By Table Type (Average Tax Info./Explicit Rate)				
	(1) All	(2) No/No	(3) Yes/No	(4) No/Yes	(5) Yes/Yes	(6) P-value
Home Value ($1,000s)	394.983	395.884	379.275	393.847	413.135	0.278
	(6.987)	(17.027)	(10.423)	(17.172)	(13.905)	
Property Tax Rate (%)	2.107	2.085	2.100	2.063	2.152	0.008
	(0.010)	(0.023)	(0.016)	(0.024)	(0.017)	
Owner-Protest in 2019 (%)	10.328	10.198	10.615	10.313	10.088	0.992
	(0.701)	(1.613)	(1.209)	(1.703)	(1.268)	
Agent-Protest in 2019 (%)	5.667	7.082	6.000	3.125	5.841	0.057
	(0.532)	(1.367)	(0.932)	(0.974)	(0.987)	
2020 Homestead Exemption (%)	92.797	94.618	92.154	92.500	92.566	0.440
	(0.595)	(1.203)	(1.056)	(1.475)	(1.105)	
Number of Bedrooms	3.410	3.445	3.368	3.425	3.428	0.200
	(0.015)	(0.036)	(0.024)	(0.034)	(0.027)	
White (%)	56.568	57.224	56.000	52.500	59.115	0.287
	(1.141)	(2.637)	(1.948)	(2.796)	(2.070)	
Hispanic (%)	15.307	15.014	16.154	14.688	14.867	0.908
	(0.829)	(1.904)	(1.445)	(1.982)	(1.498)	
Black (%)	17.691	18.414	17.846	20.938	15.221	0.188
	(0.878)	(2.066)	(1.503)	(2.278)	(1.513)	
Asian (%)	10.434	9.348	10.000	11.875	10.796	0.722
	(0.704)	(1.552)	(1.178)	(1.811)	(1.307)	
Observations	1,888	353	650	320	565	

Notes: Average pre-treatment (i.e., before the start of letter delivery) characteristics of subjects that responded to the Field Survey, with standard errors in parentheses. Column (1) corresponds to the entire Field Survey sample. Columns (2)–(5) break down the Field Survey subjects by the letter treatments they were assigned to receive: i.e., by whether the table in the letter included an additional column (i.e., the column averages, only subjects in columns (2) and (3) received this information) and whether the tax rate was made explicit in an additional row in the table (only subjects in columns (3) and (5) received the explicit tax rate). Column (6) reports the p-value of the test of equal means across the last four treatment groups. *Home Value* is the proposed assessment value; *Property Tax Rate* is the ratio of the property tax amount over the home value; *Owner-Protest in 2019* and *Agent-Protest in 2019* indicates whether the subject protested directly or through an agent, respectively; *2020 Homestead Exemption* indicates an effective homestead exemption. *Number of Bedrooms* is the number of bedrooms in the respondent's home. *White*, *Hispanic*, *Black*, and *Asian* are the fraction of homeowners by each imputed race.

Table A.6: Additional Results from the Field Experiment

	(1) P^d_{2020}	(2) P^d_{2019}	(3) $P^{d,won}_{2020}$	(4) ΔMV^d_{2020}	(5) ΔT^d_{2020}	(6) $\#P^d_{2020-2022}$	(7) $Any^d_{2020-2022}$	(8) P^d_{2020}	(9) P^d_{2020}	(10) P^d_{2020}	(11) P^d_{2020}	(12) P^d_{2020}
Information Shock ($\overline{\tau}$)	-12.566**	-2.284	-13.881***	-0.798**	-0.402	-21.617**	-15.607***	-10.455	-13.027*	-12.990**	-13.566*	-12.094
	(5.424)	(2.822)	(5.243)	(0.405)	(0.297)	(8.680)	(5.491)	(8.012)	(7.602)	(6.373)	(7.047)	(8.707)
Field Survey	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Rate Salience								Explicit	Not Explicit			
Proportional Taxes Preference										Yes		
Protested in Recent Past											No	Yes
Mean Outcome (Control)	50.52	10.25	38.48	2.37	1.64	74.84	56.83	53.75	47.59	51.99	46.26	55.08
Std. Dev. Outcome (Control)	50.03	30.36	48.69	3.78	3.48	77.09	49.54	49.94	50.01	50.01	49.93	49.82
Observations	1,888	1,888	1,888	1,888	1,888	1,888	1,888	885	1,003	1,412	1,008	880

Notes: All columns present regression results from equation (2) in Section 4.3 for the sample of Field Survey respondents. The variable *Information Shock* ($\overline{\tau}$) corresponds to the information shock term ($D_i \cdot (\overline{\tau} - \tau_i)$). Columns (8) and (9) present results of the same regression in column (1) splitting the sample based on whether or not the letter included the household's tax rate. The Field Survey contained a question that asked respondents how to distribute a total tax burden of $10,000 between Household A (which is worth $100,000) and Household B (which is worth $400,000). Column (10) uses the subsample of subjects who chose the option that equalized tax rates between the households (i.e., proportional tax rates). Columns (11) and (12) split the sample used in column (1) in two groups: i) subjects who did not protest during 2015 through 2019 (column (11)) and ii) subjects who protested at least once during 2015 through 2019 (column (12)). The dependent variables are defined as follows: P^d_{2020} is an indicator variable that takes the value 100 if the owner filed a direct protest in 2020 and 0 otherwise; $P^{d,won}_{2020}$ indicates if a direct protest resulted in a reduction in the market value; ΔMV^d_{2020} is the percentage reduction in the market value due to protesting, which by construction takes the value 0 if the household did not protest or if the protest was unsuccessful; ΔT^d_{2020} is the estimated percentage reduction in the tax amount due to protesting. $\#P^d_{2020-2022}$ is the total number of protests in the years 2020-2022 (multiplied by 100 to make it comparable to the estimates in column (1)). $Any^d_{2020-2022}$ is an indicator that takes the value 100 if the subject protested directly in 2021, 2022, or 2023. The regressions in this table include the following controls: the 2020 proposed value in levels and its annual growth, dummies for multiple owners, school and special districts, number of years since the household's last protest, a dummy for homestead status, a dummy indicating if the household received the extra aid message, and, for each previous year since 2015, a dummy indicating if the household protested in that year and the outcome of the protest (if any) as a percent-reduction in the market value (i.e., the protest history). Control variables for the protest history depend on the year in which the dependent variable is measured. For instance, if the outcome corresponds to direct protests in 2018, the protest history controls include protests in 2015, 2016, and 2017. Significant at *10%, **5%, ***1%. Robust standard errors in parentheses.

B Sample of Full Letter

THE UNIVERSITY OF TEXAS AT DALLAS
Naveen Jindal School of Management

May 15th, 2020

Dear Joan Robinson,

We are researchers at The University of Texas at Dallas and we are reaching out to you as part of a research study. **You can lower your tax burden by protesting the taxable value assessment of your property**. We want to share information that we hope will be useful.

Some people may choose to protest because they feel they are paying more than their fair share. Find below some information about the estimated 2020 taxes for your home at 5329 Jordan Ridge D (Dallas, TX) in Dallas County*:*

	YOUR HOME	**AVERAGE DALLAS HOME**
Proposed Value	*$174,810*	*$294,846*
Estimated Tax Amount	*$3,057*	*$5,916*
Estimated Tax Rate	*1.75%*	*2.01%*

Source: *Data provided by Dallas Central Appraisal District (CAD). Proposed Value is Dallas CAD's estimate of the home's market value as of January 1st, 2020. Estimated Tax Amount is our estimate of taxes due this year using the latest tax rates available (some exemptions might not be included). Estimated Tax Rate is the estimated tax amount divided by Proposed Value. Average Dallas Home values are based on all single-family homes in Dallas County, excluding condos, townhomes, and mobile homes.*

The deadline to protest is June 15th, 2020. You can fill out a short form online or mail it in. You can find instructions on how to do this on the study's website:

https://www.utdallas.edu/taxproject/

If you would like to help us with our study, we kindly ask you fill out the following confidential survey. It only takes a couple of minutes, and we would greatly appreciate your participation:

Visit http://www.utdallas.edu/taxsurvey/ and enter validation code **AAFOGD**

800 W. Campbell Road
Richardson, TX 75080

Website: https://www.utdallas.edu/taxproject/

Please recycle

If you'd like to file a protest, it is really simple. You do not need an agent. You do not need to attend a hearing if you accept an online settlement offered by the county. If the county schedules a hearing and you do not attend it, the protest will simply be dismissed with no penalty.

When you protest you need to provide an argument in a few sentences. For example, you may argue that the appraised market value is too high. In that case, you could use the following:

☑ Value is over market value Opinion of value: $160,000

And remember to attach a separate page (or file, if protesting online) with your argument:

> I found a home that is similar to mine but was recently sold for less than my home's appraised market value. The property located at 5148 Ronryan Rd (Dallas, TX) is 0.29 miles away from my home, and has the same number of bedrooms and a similar square footage. That property was sold on 10/31/2019 for $160,000.

You can find information about this sale by searching for the property's address on Zillow.com or Redfin.com. On these websites you can find other comparable properties to support your protest. You can also protest based on the appraised market values of comparable properties, which can be found on www.dallascad.org/SearchAddr.aspx.

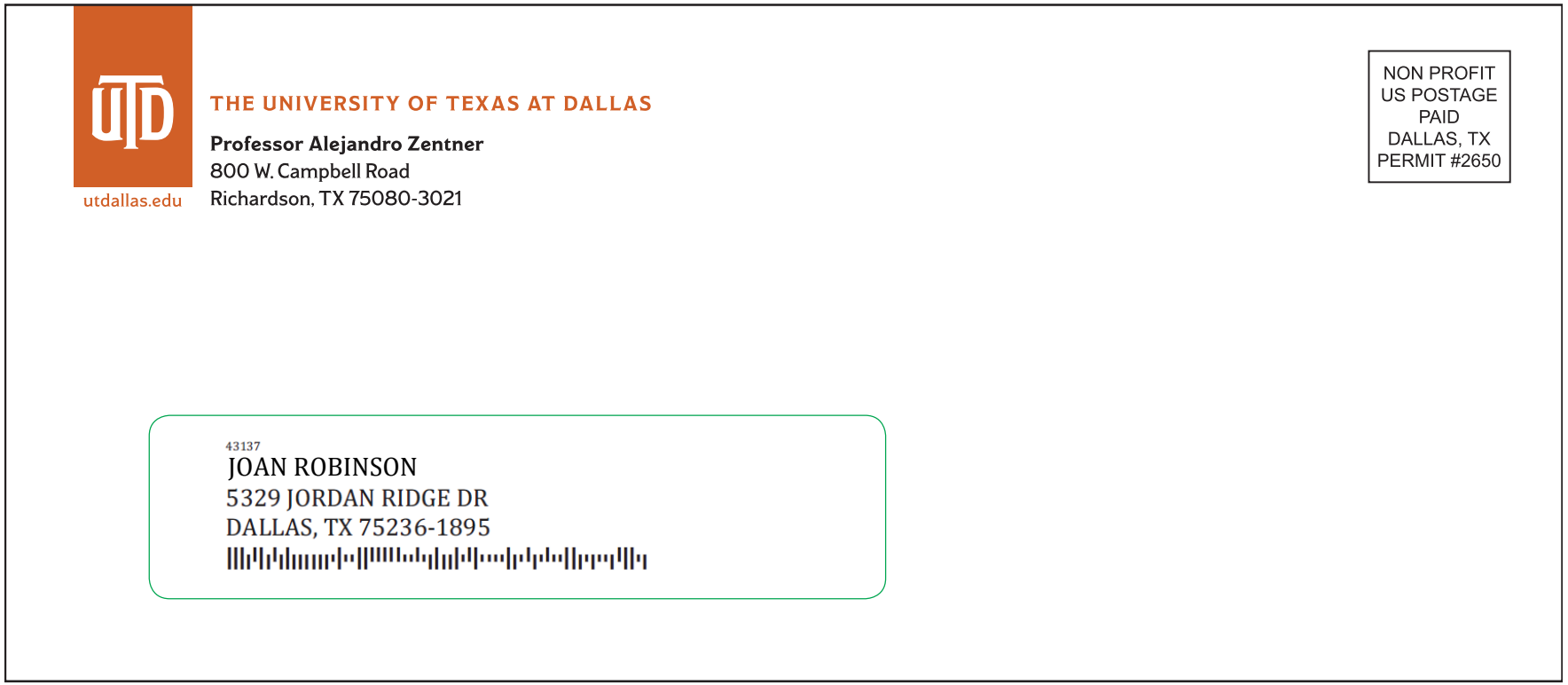
Your household was randomly chosen to receive this letter. *We will not send you any more letters in the future.* If you have any questions about the study, you can find contact information on the study's website.

Thank you for your attention!

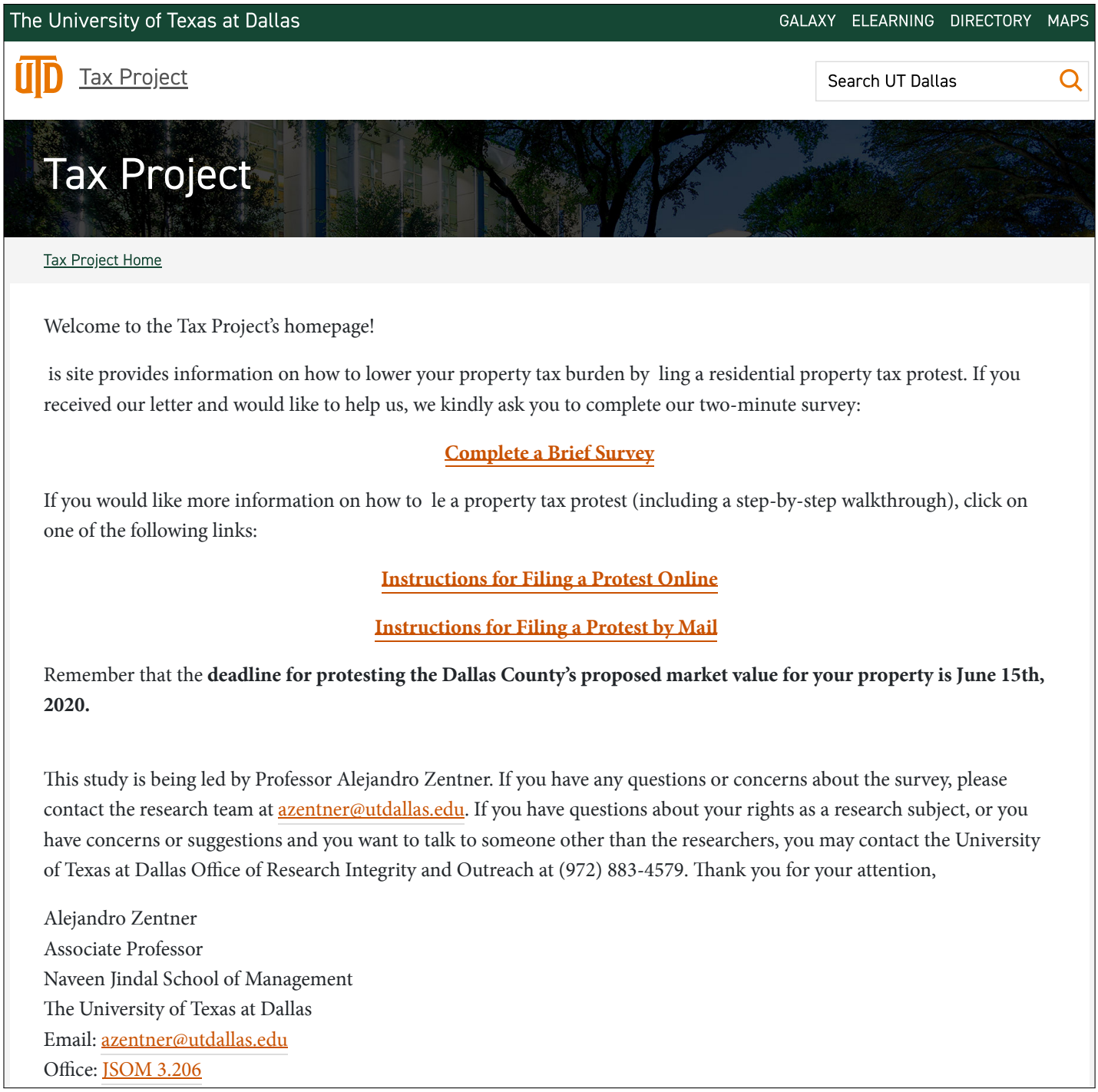
Alejandro Zentner
Associate Professor
University of Texas at Dallas

43137
DOLORES M MORENO
5329 JORDAN RIDGE DR
DALLAS, TX 75236-1895

C Sample Envelope



D Project's Website



E Sample of Online 2020 Appraisal Notice

DALLAS CENTRAL APPRAISAL DISTRICT
NOTICE OF APPRAISED VALUE - RESIDENTIAL
TAX YEAR 2020

www.dallascad.org (214) 905-9402

Mailing Address:
Residential Division
PO Box 560348
Dallas, TX 75356-0348

Account Number: 008035000N0240000
Ownership:

JOAN ROBINSON
5329 JORDAN RIDGE DR
DALLAS, TX 75236-1895

Property Address:
5329 JORDAN RIDGE DR
DALLAS

Legal Description:

Dear Property Owner:

This letter is your official notice of the **2020** proposed property tax appraisal for the account listed above. The Dallas Central Appraisal District (DCAD) appraises all of the property in Dallas County for property tax purposes. State law requires that appraisal districts appraise all taxable property at its fair market value. Your county, city, school district and other local governments use the appraisal in calculating your property taxes. Property taxes support critical services such as schools, police and fire protection, street maintenance and many others.

As of January 1, 2020, the DCAD appraised your real property at:

2020 Market Value:	$174,810
2020 Appraised Capped Value:	$133,428
2020 Estimated Taxes (using last year's tax rates):	$3,057

DO NOT PAY FROM THIS NOTICE. THIS IS NOT A TAX BILL.

Your current year exemptions are: Homestead

The Texas legislature does not set the amount of your local taxes. Your property tax burden is decided by your locally elected officials and all inquiries should be directed to those officials.

The governing body of each taxing jurisdiction decides whether or not taxes on your property will increase. The DCAD only determines the value of the property in accordance with the Texas Constitution and Statutes.

The percentage difference between the 2015 appraised value of $82,850 and the proposed 2020 appraised value is an increase of 61.05% over a 5-year period.

To **PROTEST** the proposed 2020 value or other issues, you must file a protest with the Appraisal Review Board (ARB) by using the online **uFile** system **(preferred method)** or by submitting a written protest (form enclosed).

If you agree with the proposed value, no further action is required.

Deadline for filing a protest: June 15, 2020

Location of ARB hearings: 2949 N. Stemmons Fwy, Dallas, TX 75247

More information about your appraisal and the protest process is on the back of this notice and on the inserts enclosed.

Homestead "Capped" Limitation: The Texas Constitution provides that property with a homestead exemption may not be increased in value more than 10% per year, excluding any new improvements made. This provision takes effect the first year following the year the owner qualified for a homestead. Because of this constitutional limitation, if you received a homestead exemption on this property in the previous year, it will be "**capped**" at the appropriate limit.

052-2193

DALLAS CENTRAL APPRAISAL DISTRICT
NOTICE OF APPRAISED VALUE - RESIDENTIAL
Tax Year 2020
www.dallascad.org

Owner Name: JOAN ROBINSON
Account Number: 008035000N0240000
Property Address: 5329 JORDAN RIDGE DR

CURRENT YEAR 2020	County and School Equalization	City	School	Hospital	College	Special District	Canceled/ Reduced Exemption
Jurisdictions	Dallas County	City of Dallas	Duncanville ISD	Parkland Hospital	Dallas Co Community College		
Market Value - Land	$ 35,000	$ 35,000	$ 35,000	$ 35,000	$ 35,000		
Market Value - Structure(s)	$ 139,810	$ 139,810	$ 139,810	$ 139,810	$ 139,810		
Market Value	$ 174,810	$ 174,810	$ 174,810	$ 174,810	$ 174,810		
Less Deductions							
Homestead Capped Limitation	$ 41,382	$ 41,382	$ 41,382	$ 41,382	$ 41,382		
Ag-use Value							
Absolute Exemption							
Appraised Value	$ 133,428	$ 133,428	$ 133,428	$ 133,428	$ 133,428		
Less Exemption Amount							
Homestead	$ 26,685	$ 26,685	$ 25,000	$ 26,685	$ 26,685		
Exemption Amount Subtotal	$ 26,685	$ 26,685	$ 25,000	$ 26,685	$ 26,685		
Estimated Taxable Value	$ 106,743	$ 106,743	$ 108,428	$ 106,743	$ 106,743		Total
Last Year's Tax Rate	0.253100	0.776600	1.418300	0.269500	0.124000		2.841500
Estimated Taxes Due*	$ 270	$ 829	$ 1,538	$ 288	$ 132		$ 3,057

PRIOR YEAR 2019	County and School Equalization	City	School	Hospital	College	Special District
Jurisdictions	Dallas County	City of Dallas	Duncanville ISD	Parkland Hospital	Dallas Co Community College	
Market Value - Land	$ 25,000	$ 25,000	$ 25,000	$ 25,000	$ 25,000	
Market Value - Structure(s)	$ 128,090	$ 128,090	$ 128,090	$ 128,090	$ 128,090	
Market Value	$ 153,090	$ 153,090	$ 153,090	$ 153,090	$ 153,090	
Less Deductions						
Homestead Capped Limitation	$ 31,791	$ 31,791	$ 31,791	$ 31,791	$ 31,791	
Ag-use Value						
Absolute Exemption						
Appraised Value	$ 121,299	$ 121,299	$ 121,299	$ 121,299	$ 121,299	
Less Exemption Amount						
Homestead	$ 24,259	$ 24,259	$ 25,000	$ 24,259	$ 24,259	
Exemption Amount Subtotal	$ 24,259	$ 24,259	$ 25,000	$ 24,259	$ 24,259	
Estimated Taxable Value	$ 97,040	$ 97,040	$ 96,299	$ 97,040	$ 97,040	

Tax Ceiling: If you received the Age 65 or Older or the Disabled Person homestead exemption, your school, county, and certain city taxes for this year will not be any higher than they were for the year in which you first received the exemption, unless you have made new improvements to your home. If you improved your property by remodeling or adding an addition, your school, county, and certain city taxes may increase for new improvements. If you are the surviving spouse of a person who was age 65 or older or disabled at death and you were age 55 or older at the time of death, you may retain the school, county, and certain city tax ceilings.

APPRAISAL REVIEW BOARD OF DALLAS COUNTY
NOTICE OF PROTEST - RESIDENTIAL
TAX YEAR 2020

www.dallascad.org (214) 905-9402

Account Number: 008035000N0240000

JOAN ROBINSON
5329 JORDAN RIDGE DR
DALLAS, TX 75236-1895

Property Address:
5329 JORDAN RIDGE DR
DALLAS

Legal Description:

Deed Transfer Date:

Proposed Value: $174,810

CHANGE OF ADDRESS: _____

It is my desire to file a protest based on the issue(s) checked below. Also, I understand that the Appraisal Review Board (ARB) must notify me of any hearing not later than the 15th day before the date of the hearing pursuant to §41.46 of the Texas Property Tax Code. At the time your account is scheduled for an ARB hearing, the evidence that the Chief Appraiser will introduce at your hearing will be available on the DCAD website. You may access this evidence on the website by using the property account number and PIN located on your notice of appraised value and hearing notice.

It is my desire to protest based on the following issue(s) and I have checked the applicable boxes:

- ☐ Value is over market value
- ☐ Value is unequal compared with other properties
- ☐ Property not located in district
- ☐ Exemption was denied or cancelled (Specify _____)
- ☐ Ownership is incorrect (Specify _____)
- ☐ Ag-Use: Change in use of land appraised as agricultural use, open-space, etc.
- ☐ Ag-Use: Open-Space or other special appraisal denied or cancelled
- ☐ Property should not be taxed in district or in one or more taxing units
- ☐ Other: (Specify _____)

Additional Requests: _____ Opinion of Value: _____

If you wish to expedite your hearing by waiving the required deadline date under Section 41.46 of the Texas Property Tax Code, please check the following box: ☐

_____	_____	_____
Signature of Owner (or Agent)	Date Filed	(Agent Registration No., if applicable)
_____	_____	_____
Printed Name	Daytime/Cell Phone No.	E-Mail Address

DEADLINE FOR FILING A PROTEST: June 15, 2020

GENERAL INSTRUCTIONS: Pursuant to §41.41 of the Texas Property Tax Code, a property owner has the right to protest certain actions taken by the appraisal district. There are two options to file a protest, 1) use the online **uFile** system, or 2) mail a protest form.

uFile ONLINE PROTEST & SETTLEMENT SYSTEM: The **preferred method** of protesting your property is to use the online **uFile** Protest & Settlement System. You may access the system by searching your account on our website at **www.dallascad.org** and select the link "Online Protest System". For easy access, you may request your individual PIN through this system or use the PIN located at the top left-side of your Notice of Appraised Value. Once you utilize the **uFile** system to protest your property, you may also be eligible to use the settlement program and settle your protest online. **If you file a protest using the online uFile system, please do not file a written or duplicate protest.**

uFile is the preferred method of filing a protest in order to expedite and insure timely delivery of your protest.

PROTEST FORM: This form is for use by a property owner or designated agent who would like the ARB to hear and decide a protest. If you are leasing the property, you are subject to the limitations set forth in Texas Property Tax Code §41.413. Please review the ownership and property information provided on this protest form and make any necessary corrections.

If you wish to mail your protest and supporting documents, the envelope must be postmarked by U.S. Postal Service on or before the deadline.

Appraisal Review Board of Dallas County
Residential Division
PO Box 560348
Dallas, TX 75356-0348

HOW TO SETTLE THE VALUE OF YOUR PROPERTY

Informal Hearing Process: Due to the COVID-19 Pandemic the DCAD will not be holding face to face informal hearings. Please read the insert titled **Health Alert: Dallas Central Appraisal District Operations / uFile Online Protest and Settlement System**. If you are unable to use DCAD's uFile system then please mail in your protest form with your supporting documentation. You can also drop off your protest form and documentation at DCAD 's office but you will not be able to discuss your issues with an appraiser in person. You may call the number listed on the Notice of Appraised Value and speak to an appraiser about an individual property. Please understand that we mail thousands of notices at this time. Our phone lines will be very busy. Keep trying. You have several weeks to respond before the deadline noted on the Notice of Appraised Value. You may also write our office at 2949 N. Stemmons Freeway, Dallas, TX 75247-6195, or inquire on our website at **www.dallascad.org**. If you provide supporting documentation with your protest, DCAD will make every effort to have an appraiser contact you prior to your scheduled ARB Hearing. Please make sure you provide an e-mail address and/or daytime phone number on your protest form.

UFILE - PREFERRED METHOD

uFile Online Protest & Settlement System: The preferred method of protesting your property is to use the online **uFile** Protest & Settlement System. You may access the system by searching for your account on our website at **www.dallascad.org** and select the link "Online Protest System". For easy access, you may request your individual PIN through this system or use the PIN located at the top left-side of your Notice of Appraised Value. Requesting a PIN does not constitute filing a uFile protest. You must complete the uFile protest process. Once you utilize the **uFile** system to protest your property, you may also be eligible to use the settlement program and settle your protest online. All uFile protests will eventually be scheduled for an ARB Hearing if the protest issue(s) remain unresolved. Once scheduled for an ARB Hearing, DCAD will post the ARB Hearing Date and Time on your account on our website. The ARB will also mail you an ARB Hearing Notification. **If you file a protest using the online uFile system, please do not file a written or duplicate protest.**

WRITTEN PROTEST

Protest Form: If you choose not to use the **uFile** online system, you may use the protest form provided. You should attach to your protest form any documentation that supports your opinion of value or any other protested issue (reference the Standards of Documentation). **If you are protesting more than one account, be sure to staple or bundle together all protest forms and documents to avoid receiving multiple dates and times for your accounts**.

Useful Information: If you have purchased your property within the last three years, please include, with your protest form, a copy of your closing statement or other official record that validates the purchase price.

Filing Deadlines: While June 15 is the deadline to file a residence homestead protest, a different deadline will apply to you if 1) your notice of appraised value was mailed to you after May 15; 2) your protest concerns a change in use of agricultural, open-space, or timber land; 3) the Appraisal Review Board (ARB) made a change to the appraisal records that adversely affects you and you received notice of the change; 4) the DCAD or the ARB was required by law to send a notice about your property and did not; or 5) you had good cause for missing the June 15 protest filing deadline. Contact the DCAD for questions about your specific protest filing deadline.

Weekends and Holidays: If your deadline falls on a Saturday, Sunday, or legal holiday, it is postponed until midnight of the next business day.

Appraisal Review Board (ARB): Members of the ARB are not employees of the DCAD. They serve as jurors to arbitrate issues brought before them. The Texas Property Tax Code outlines specific duties for the ARB to follow. The goal of the ARB is to ensure that each property owner is given a fair and impartial hearing in the most efficient and timely manner.

Hearing Process and Delivery of Requested Information: Once the Appraisal Review Board (ARB) receives and processes your protest your account will be scheduled for an ARB hearing. Once scheduled for an ARB Hearing, your hearing date and time will be posted on the DCAD website. You will also receive an ARB hearing notice by first class mail with your hearing date, time, and location to appear before the ARB. If you do not receive an ARB hearing notice then please call the DCAD to inquire about your ARB hearing date or check your account on the DCAD website. You may request in writing that your ARB hearing notice be sent to you by certified mail but you may be charged for this request. You can also request your ARB hearing notice to be e-mailed to you if you provide an e-mail address on the protest form and request this in writing. If you would like for the ARB to send your hearing notice by certified mail or you want your hearing notice sent to your e-mail address then please indicate so on the attached Protest Form under Additional Requests. If you do not want your ARB Hearing conducted with only one ARB member please indicate so under additional requests. Prior to your ARB hearing, you may request a copy of the evidence DCAD plans to introduce at the hearing to establish any matter at issue. Before an ARB hearing on a protest or immediately after the hearing begins, you or your agent and the CAD are required to provide each other with a copy of any materials (evidence) intended to be offered or submitted to the ARB at the hearing. Evidence may be submitted for any ARB hearing type either in paper or on a small portable device (such as a CD, USB flash drive or thumb drive) which will be kept by the ARB. Do NOT bring evidence by smart phone. At the time your account is scheduled for an ARB hearing, evidence that the Appraisal District will introduce at your hearing will be available on the DCAD website. You may access this evidence on DCAD 's website by using the property account number and PIN located on your notice of appraised value and hearing notice. You may also request this information at the DCAD office.

Telephone Hearings: Due to the COVID-19 Pandemic, the Appraisal Review Board (ARB) will be conducting all protest hearings by telephone. You will be notified of the date and time of your hearing, and will be called by the ARB at the time of your scheduled hearing. Please make sure you provide a daytime phone number on your protest form so the ARB can contact you to start your ARB Hearing.

Hearing Postponements: As a property owner, you are entitled to one postponement of the hearing without showing good cause. You are also entitled to postpone your hearing if you or your agent shows reasonable cause for postponement. You must request this postponement to the ARB before the hearing date. The ARB will determine if good cause exists for missing your hearing.

Residence Homestead Exemptions: If the property is your home and you occupy it as your principal place of residence, you may qualify for one or more residence homestead exemptions, which will reduce the amount of taxes imposed on the property. If you are single or a married couple filing together, you may be eligible to **apply online** for the **Homestead Exemption** at **www.dallascad.org**. If you are filing for the Age 65 or Older or Disabled Person exemption or the property is owned by multiple owners, you are *not* eligible to file online. However, you may select the link "Print Homestead Exemption Form" from the DCAD website or you may call 214-631-0910.

Special Service Accommodations: The DCAD offices are wheelchair accessible and parking spaces for the disabled are provided. The DCAD will provide sign interpretation services for the hearing impaired at any scheduled hearing or meeting if at least 72 hours advance notice is given. The hearing impaired can call TDD at (214) 819-2368.

If you desire any special assistance during the hearing process to accommodate any disability you have, please specify:

_____

Additionally, to arrange for any special service to accommodate a disability, you may contact the Assistant Director of Administration at (214) 631-0520, extension 1107.

F Questionnaire: Perceptions Survey

Welcome to our web-based survey that examines residents' preferences regarding property taxes. Please read the consent form below and click "I Agree" when you are ready to start the survey:

The study is being conducted by a team of researchers led by Professor Alejandro Zentner of The University of Texas at Dallas, and it has been designated by The University of Texas at Dallas Office of Research Integrity and Outreach as exempt from review by an Institutional Review Board. No deception is involved, and the study involves no more than minimal risk to participants (i.e., the level of risk encountered in daily life). Participation in the study typically takes 15 minutes and is strictly confidential. All responses are treated as confidential.

○ Yes, I would like to take part in this study and confirm that I am 18 years of age or older, I understand the statements above, and freely consent to participate in the study.

What is the state and county of your primary residence (the place where you usually live)?

State: California

County: Alameda County, California

Do you currently live with your parents or legal guardians?

- ○ Yes
- ○ No

Do you (or your parents/legal guardians) rent or own your primary residence?

- ○ Rent
- ○ Own

How many years have you (or your parents/legal guardians) owned your primary residence for?

- ◯ Less than 1 year
- ◯ 1 year
- ◯ 2 years
- ◯ 3 years
- ◯ 4 years
- ◯ 5 or more years

Who pays the property taxes on your primary residence?

- ◯ You
- ◯ Your spouse or partner
- ◯ Other:

How do you typically pay for the property taxes on your main residency?

- ○ Monthly (for example, with your mortgage payments)
- ○ Once a year
- ○ Twice a year
- ○ Other:

Next, we will ask you a few questions about home values and property taxes in **2018**.

Consider the **AVERAGE HOME** in your county. What do you think was its **market value** as of **January 1st, 2018**?

$ _____

Note: Please *do not* write in dollar signs, commas or decimal points. If you are not sure, just provide your best guess.

How confident are you about this value?

Not at all confident	Somewhat confident	Confident	Very confident
○	○	○	○

Consider the **AVERAGE HOME** in your county in 2018. What dollar amount you think that home paid in **PROPERTY TAXES in 2018**?

$ _____ Annually

Note: Please do not write in dollar signs, commas or decimal points. These were the property taxes that households either paid monthly from January to December of 2018 or in one lump sum typically around December 2018 or January 2019. If you are not sure, just provide your best guess.

How confident are you about this value?

Not at all confident	Somewhat confident	Confident	Very confident
○	○	○	○

Next, a group of individuals participating in this survey will be randomly chosen to receive some information related to the market values and property taxes in your county as of 2018.

Please continue to the next screen to find out if you will be selected to receive information.

You have been selected to receive the following information. According to the latest data from the American Community Survey, the following are the average market values and property taxes in your county (Alameda County, California) as of **2018**:

Average home value as of January 1st, **2018: $886,452**

Average property taxes paid in **2018: $6,771**

Please take some time to read and understand this information carefully, because you will not be able to go back to this screen. When you are ready, proceed to the next screen.

The previous questions were about home values and property taxes in **2018**. Now, we want to ask you questions about **2020**.

We want to know about **YOUR HOME**. What do you think was the **market value** of your home as of **January 1st, 2020**?

$ [ ]

Note: Please do not write in dollar signs, commas or decimal points. If you are not sure, just provide your best guess.

How confident are you about this value?

Not at all confident	Somewhat confident	Confident	Very confident
○	○	○	○

What is the dollar amount **YOUR HOUSEHOLD** will pay in **property taxes** for your home in **2020**?

$ _____ Annually

Note: Please do not write in dollar signs, commas, or decimal points. These are the property taxes that you either pay monthly from January to December of 2020 or in one lump sum typically around December 2020 or January 2021. If you do not know the exact amount, just provide your best gues

How confident are you about this value?

Not at all confident	Somewhat confident	Confident	Very confident
○	○	○	○

Consider the **AVERAGE HOME** in your county in 2020. What do you think was the **average market value** as of **January 1st, 2020**?

$

Note: Please do not write in dollar signs, commas or decimal points. If you are not sure, just provide your best guess.

Consider the **AVERAGE HOME** in your county in 2020. What dollar amount you think that home paid in **property taxes in 2020**?

$ _____ Annually

Note: Please do not write in dollar signs, commas or decimal points. These are the property taxes that households will either pay monthly from January to December of 2020 or in one lump sum typically around December 2020 or January 2021. If you do not know the exact amount, just provide your best guess.

Find below a **summary of your answers:**

	Your Home	Average Home in your County
Market Value:	**$800,000**	**$800,000**
Tax Amount:	**$8,000**	**$5,000**
Tax Rate:	**1.00%**	**0.63%**

Relative to the other households in your county, do you feel the dollar amount that your household pays in property taxes is too little, too much, or about right?

- ◯ 0 - I pay too little
- ◯ 1
- ...
- ◯ 5 - I pay about right
- ...
- ◯ 9
- ◯ 10 - I pay too much

Do you consider the amount of property taxes you pay to be too low, about right, or too high?

- ◯ My taxes are too low
- ◯ My taxes are about right
- ◯ My taxes are too high

Imagine you could change how much YOU pay in property taxes (just you, without changing how much others have to pay). What is the dollar amount of **property taxes** you would consider fair for your household in **2020**?

$ _____ Annually

Note: Please do not write in dollar signs, commas or decimal points. These are the property taxes that you either pay monthly from January to December of 2020 or in one lump sum typically around December 2020 or January 2021.

Some counties allow households to file a protest of their home's assessed value or property taxes. For example, a household may file a form to dispute the county's appraisal of its home's value. To the best of your knowledge, does your county allow you to file these types of protests?

- ◯ Yes
- ◯ No

Do you expect to file a protest of your home's assessed value or property taxes **next year (in 2021)**?

- ○ Very likely
- ○ Likely
- ○ Unlikely
- ○ Very unlikely

How likely are you to be **late** on payment of your property taxes next year (in 2021) by at least three months?

- ○ Very likely
- ○ Likely
- ○ Unlikely
- ○ Very unlikely

Imagine the government gave you full power to choose the property taxes that each household must pay, as long as the total property taxes collected stays the same.

You can set taxes any way you want, based on what you consider fair. **What property taxes would you choose for each home?** These two values must add up to $30,000.

Household A (its home is worth $400,000)	$ 0
Household B (its home is worth $1,100,000)	$ 0
Total	$ 0

Which of the following alternatives would you prefer?

- ○ Lower property taxes (your taxes and the taxes of everyone else decrease but you get worse government services)
- ○ Property taxes do not change (your taxes and the taxes of everyone else are held constant and so are government services)
- ○ Higher property taxes (your taxes and the taxes of everyone else increase to provide better government services)

In politics, as of today, do you consider yourself a Republican, a Democrat, or an independent?

- ◯ Democrat
- ◯ Republican
- ◯ Independent

We are almost done. We would like to ask you a few more questions about yourself before finishing the survey.

Please indicate your gender:

- ◯ Female
- ◯ Male
- ◯ Other

How old are you?

Which of the following best describes your ethnicity?

- ◯ White
- ◯ Black or African American
- ◯ Asian or Native Hawaiian and other Pacific Islander
- ◯ American Indian or Alaska Native
- ◯ Hispanic or Latino origin

Are you currently married or living with a partner (not including roommates)?

- ◯ Yes
- ◯ No

Do you have kids?

- ◯ Yes
- ◯ No

Please indicate the type of your current primary residence. Is your primary residence a:

- ◯ Single-Family Home
- ◯ Apartment/Condo/Co-op
- ◯ Townhouse/Duplex
- ◯ Mobile/Manufactured home
- ◯ Other

How many bedrooms does your primary residence have?

- ○ 0 Bedrooms/Studio
- ○ 1 Bedroom
- ○ 2 Bedrooms
- ○ 3 Bedrooms
- ○ 4 Bedrooms
- ○ 5+ Bedrooms

Recent research on decision making shows that choices are affected by the context in which they are made. Differences in how people feel, in their previous knowledge, experience, and in their environment can influence the choices they make. To help us understand how people make decisions, we are interested in information about you. Specifically, whether you actually take the time to read the instructions. If you don't, some results may fail to tell us very much about decision making in the real world. To help us confirm that you have read these instructions, please ignore the question about how you are feeling.
Instead, only check the "none of the above" option. Thank you very much.

☐ Interested	☐ Hostile	☐ Nervous
☐ Distressed	☐ Enthusiastic	☐ Determined
☐ Excited	☐ Proud	☐ Attentive
☐ Upset	☐ Irritable	☐ Jittery
☐ Strong	☐ Alert	☐ Active
☐ Scared	☐ Inspired	☐ None of the above

In your opinion, were the questions included in this survey easy or difficult to understand?

- ◯ Easy to understand
- ◯ Neither easy nor difficult
- ◯ Difficult to understand

Feel free to share any comments with us below. For example, let us know if there is a question you did not understand.

G Questionnaire: Field Survey

Welcome to our web-based survey that examines residents' preferences regarding property taxes. Please read the consent form below and click "I Agree" when you are ready to start the survey:

The study is being conducted by a team of researchers led by Professor Alejandro Zentner of The University of Texas at Dallas, and it has been designated by The University of Texas at Dallas Office of Research Integrity and Outreach as exempt from review by an Institutional Review Board. No deception is involved, and the study involves no more than minimal risk to participants (i.e., the level of risk encountered in daily life). Participation in the study typically takes 2-minutes and is strictly confidential. Participants begin by entering the validation code included in the letter received by mail and then answer questions related to property taxes and demographics. All responses are treated as confidential.

○ Yes, I would like to take part in this study and confirm that I am 18 years of age or older, I understand the statements above, and freely consent to participate in the study.

Please enter the validation code included in the letter (next to the URL of this survey, inside the black box) to begin:

When did you read the letter that included the link to this survey?

- ○ Today
- ○ Yesterday
- ○ This week
- ○ More than a week ago

The Dallas Central Appraisal District (CAD) just released their 2020 estimates of home market values and property taxes.

For your main residency, how much are your estimated annual property taxes for 2020? (don't worry if you don't remember exactly, we just need your best guess)

Relative to the other households in the county, do you think your household pays a fair amount in property taxes?.

1 - Very unfair	2	3	4	5 - Neither fair nor unfair	6	7	8	9	10- Very fair
○	○	○	○	○	○	○	○	○	○

You have time until June 15th, 2020 to protest Dallas CAD's proposed value of your property. Do you intend to protest this year?

- ◯ Very likely
- ◯ Likely
- ◯ Unlikely
- ◯ Very unlikely

If you can, please explain why you will (or will not) protest in 2020:

Imagine the government gave you full power to choose the property taxes that each household must pay. You can set taxes any way you want, based on what you consider fair.

Household A's home is worth $100,000 and Household B's home is worth $400,000. Which one of the following property taxes would you choose?

- ◯ Household A pays $10,000 and Household B pays $0
- ◯ Household A pays $9,000 and Household B pays $1,000
- ◯ Household A pays $8,000 and Household B pays $2,000
- ◯ Household A pays $5,000 and Household B pays $5,000
- ◯ Household A pays $2,000 and Household B pays $8,000
- ◯ Household A pays $1,000 and Household B pays $9,000
- ◯ Household A pays $0 and Household B pays $10,000

Recent research on decision making shows that choices are affected by the context in which they are made. Differences in how people feel, in their previous knowledge, experience, and in their environment can influence the choices they make. To help us understand how people make decisions, we are interested in information about you. Specifically, whether you actually take the time to read the instructions. If you don't, some results may fail to tell us very much about decision making in the real world. To help us confirm that you have read these instructions, please ignore the question about how you are feeling. Instead, only check the "none of the above" option. Thank you very much.

☐ Interested	☐ Hostile	☐ Nervous
☐ Distressed	☐ Enthusiastic	☐ Determined
☐ Excited	☐ Proud	☐ Attentive
☐ Upset	☐ Irritable	☐ Jittery
☐ Strong	☐ Alert	☐ Active
☐ Scared	☐ Inspired	☐ None of the above

In your opinion, were the questions included in this survey easy or difficult to understand?

- ◯ Easy to understand
- ◯ Neither easy nor difficult
- ◯ Difficult to understand

Feel free to share any comments with us below.

H Questionnaire: Preferences Survey

Welcome to our survey that examines residents' preferences regarding taxation.

Please click "I Agree" when you are ready to start the survey:

○ I Agree

What is your Prolific ID?

Please note this response should auto-fill with the correct ID.

Imagine the government granted you full authority to determine the property taxes for two households (Household A and Household B). Households A and B each own a primary residence worth $450,000. The government requires a total of $18,000 in annual property tax revenue from both households combined.

Use the sliders below to set the tax rates for each household (the corresponding tax amounts will be automatically calculated and displayed to ensure the target revenue is met):

0% **1%** **2%** **3%** **4%**

Household A: Tax Rate of 0% ($0 in taxes for a home valued at $450,000)

Household B: Tax Rate of 0% ($0 in taxes for a home valued at $450,000)

Please adjust at least one slider before proceeding.

Imagine the government granted you full authority to determine the property taxes for two households (Household A and Household B). Both households use their home as their primary residence. However, the *values* of their homes differ: Household A's home is worth $150,000, while Household B's home is worth $450,000. The government requires a total of $12,000 in annual property tax revenue from both households combined.

Use the sliders below to set the tax rates for each household (the corresponding tax amounts will be automatically calculated and displayed to ensure the target revenue is met):

0% 1% 2% 3% 4% 5% 6% 7% 8%

Household A: Tax Rate of 0% (i.e., $0 in taxes for a home *valued at $150,000*)

Household B: Tax Rate of 0% (i.e., $0 in taxes for a home *valued at $450,000*)

Please adjust at least one slider before proceeding.

Imagine the government granted you full authority to determine the property taxes for two households (Household A and Household B). Households A and B *each* own a primary residence worth $450,000. The owner of Household A is *over 65 years old* and the owner of Household B is *under 65 years old*. The government requires a total of $18,000 in annual property tax revenue from both households combined.

Use the sliders below to set the tax rates for each household (the corresponding tax amounts will be automatically calculated and displayed to ensure the target revenue is met):

0% **1%** **2%** **3%** **4%**

Household A: Tax Rate of 0% ($0 in taxes from an owner who is *over* the age of 65)

Household B: Tax Rate of 0% ($0 in taxes from an owner who is *under* the age of 65)

Please adjust at least one slider before proceeding.

Imagine the government granted you full authority to determine the property taxes for two households (Household A and Household B). Households A and B each own a primary residence worth $450,000. The owner of Household A is *disabled* and the owner of Household B is *not* disabled. The government requires a total of $18,000 in annual property tax revenue from both households combined.

Use the sliders below to set the tax rates for each household (the corresponding tax amounts will be automatically calculated and displayed to ensure the target revenue is met):

0% **1%** **2%** **3%** **4%**

Household A: Tax Rate of 0% ($0 in taxes from an owner who is *disabled*)

Household B: Tax Rate of 0% ($0 in taxes from an owner who is *not disabled*)

Please adjust at least one slider before proceeding.

Imagine the government granted you full authority to determine the property taxes for two households (Household A and Household B). Households A and B each own a property worth $450,000. The owner of Household A *lives in their property as their primary residence* whereas the owner of Household B is *renting out their property*. The government requires a total of $18,000 in annual property tax revenue from both households combined.

Use the sliders below to set the tax rates for each household (the corresponding tax amounts will be automatically calculated and displayed to ensure the target revenue is met):

0% 1% 2% 3% 4%

Household A: Tax Rate 0% ($0 in taxes from an owner who *lives in their property as their primary residence*)

Household B: Tax Rate 0% ($0 in taxes from an owner who *is renting out their property*)

Please adjust at least one slider before proceeding.

Imagine there are two households (Household A and Household B). Households A and B each own a home worth $450,000. The two households are identical.

Household A receives an annual property tax bill of $6,750 (a tax rate of 1.5%) and Household B receives an annual property tax bill of $9,000 (a tax rate of 2%). How fair do you find this distribution of taxes between Household A and Household B?

0 - Very unfair	1	2	3	4	5	6	7	8	9	10 - Very fair
○	○	○	○	○	○	○	○	○	○	○

Imagine there are two households (Household A and Household B). Households A and B each own a home worth $450,000. The two households are identical.

Households A and B each receive an annual property tax bill of $7,875 (a tax rate of 1.75%). How fair do you find this distribution of taxes between Household A and Household B?

0 - Very unfair	1	2	3	4	5	6	7	8	9	10 - Very fair
○	○	○	○	○	○	○	○	○	○	○

Imagine there are two households (Household A and Household B). Both households use their home as their primary residence. However, the *values* of their homes differ.

Household A, whose home is *worth $150,000*, receives an annual property tax bill of $2,250 (a tax rate of 1.5%). Household B, whose home is *worth $450,000*, receives an annual property tax bill of $9,000 (a tax rate of 2%). How fair do you find this distribution of taxes between Household A and Household B?

0 - Very unfair	1	2	3	4	5	6	7	8	9	10 - Very fair
○	○	○	○	○	○	○	○	○	○	○

Imagine there are two households (Household A and Household B). Households A and B each own a property worth $450,000. The two households are identical, except that one pays less in property taxes due to an exemption.

Household A, who *lives in their property as their primary residence,* receives an annual property tax bill of $6,750 (a tax rate of 1.5%). Household B, who *rents out their property*, receives an annual property tax bill of $9,000 (a tax rate of 2%). How fair do you find this distribution of taxes between Household A and Household B?

0 - Very unfair	1	2	3	4	5	6	7	8	9	10 - Very fair
○	○	○	○	○	○	○	○	○	○	○

Imagine there are two households (Household A and Household B). Households A and B each own a home worth $450,000. The two households are identical, except that one pays less in property taxes due to an exemption.

Household A, whose owner is *disabled*, receives an annual property tax bill of $6,750 (a tax rate of 1.5%). Household B, whose owner is *not* disabled, receives an annual property tax bill of $9,000 (a tax rate of 2%). How fair do you find this distribution of taxes between Household A and Household B?

0 - Very unfair	1	2	3	4	5	6	7	8	9	10 - Very fair
○	○	○	○	○	○	○	○	○	○	○

Imagine there are two households (Household A and Household B). Households A and B each own a home worth $450,000. The two households are identical, except that one pays less in property taxes due to an exemption.

Household A, whose owner is *over* 65 years old, receives an annual property tax bill of $6,750 (a tax rate of 1.5%). Household B, whose owner is *under* 65 years old, receives an annual property tax bill of $9,000 (a tax rate of 2%). How fair do you find this distribution of taxes between Household A and Household B?

0 - Very unfair	1	2	3	4	5	6	7	8	9	10 - Very fair
○	○	○	○	○	○	○	○	○	○	○

Now, instead of *property taxes*, you will be responsible for setting *income taxes*.

Imagine the government granted you full authority to determine the income taxes for two households (Household A and Household B). Household A has an annual income of $25,000, while Household B has an annual income of $75,000. The government requires a total of $10,000 in annual income tax revenue from both households combined.

Use the sliders below to set the tax rates for each household (the corresponding tax amounts will be automatically calculated and displayed to ensure the target revenue is met):

0% 5% 10% 15% 20% 25% 30% 35% 40%

Household A: Tax Rate 0% ($0 in taxes on an annual income of $25,000)

Household B: Tax Rate 0% ($0 in taxes on an annual income of $75,000)

Please adjust at least one slider before proceeding.

In politics, as of today, do you consider yourself a Republican, a Democrat, or an independent?

- ○ Democrat
- ○ Republican
- ○ Independent

If you had to pick between one of the two, which better describes you?

- ○ Democrat
- ○ Republican
- ○ I would rather not say

We are almost done. We would like to ask you a few more questions about yourself before finishing the survey.

Who pays the property taxes on your primary residence?

- ○ You
- ○ My spouse/partner
- ○ Someone else

What is the state and county of your primary residence (the place where you usually live)?

State

County

How old are you?

Which of the following best describes your ethnicity?

- ○ White
- ○ Black or African American
- ○ Asian or Native Hawaiian and other Pacific Islander
- ○ American Indian or Alaska Native
- ○ Hispanic or Latino origin

Recent research on decision making shows that choices are affected by the context in which they are made. Differences in how people feel, in their previous knowledge, experience, and in their environment can influence the choices they make. To help us understand how people make decisions, we are interested in information about you. Specifically, whether you actually take the time to read the instructions. If you don't, some results may fail to tell us very much about decision making in the real world. To help us confirm that you have read these instructions, please ignore the question about how you are feeling. Instead, only check the "none of the above" option. Thank you very much.

- ☐ Interested
- ☐ Distressed
- ☐ Excited
- ☐ Upset
- ☐ Strong
- ☐ Scared
- ☐ Hostile
- ☐ Enthusiastic
- ☐ Proud
- ☐ Irritable
- ☐ Alert
- ☐ Inspired
- ☐ Nervous
- ☐ Determined
- ☐ Attentive
- ☐ Jittery
- ☐ Active
- ☐ None of the above

In your opinion, were the questions included in this survey easy or difficult to understand?

- ○ Easy to understand
- ○ Neither easy nor difficult
- ○ Difficult to understand

Feel free to share any comments with us below. For example, let us know if there is a question you did not understand.