

Restrictive Mail Voting Rules Burden Minority Voters: Evidence from Texas*

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This paper assesses the effects of Texas' Senate Bill 1 on elections in 2022. Texas, like many other states, passed restrictive voting legislation in the aftermath of the 2020 elections. One particularly onerous aspect of SB1 was a requirement that voters know whether they originally registered to vote with their driver's license or social security number to vote by mail; if they used the wrong number, their mail application or ballot would be rejected. We show that this led to ballot rejection rates in excess of 10% in the 2022 primary, with large racial discrepancies—white voters had their applications and ballots rejected at far lower rates. We further show that rejections in the primary reduced turnout in the 2022 general election. A future version of this paper will incorporate a survey of voters whose mail ballots and applications were and were not rejected to better understand the policy preferences of disenfranchised voters.

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1 Introduction

In the aftermath of the 2020 presidential campaign, President Donald Trump became the first losing major party candidate in American history who failed to concede the election. In an effort to overturn his defeat, Trump and his allies cast aspersions on election officials and sowed doubt in the integrity of the vote count, falsely claiming that insecure systems and voter fraud allowed Democrats to steal the election. Trump’s team made unsubstantiated allegations of fraud on social media, in press conferences and television appearances, and in courtrooms. Much of this rhetoric centered on the integrity of mail ballots cast in unprecedented numbers in the 2020 election, which coincided with the COVID-19 pandemic.

Elite signals can provide a powerful force shaping the mass public’s views of election fraud prevalence (Berlinski et al., 2023). A considerable swath of the public was susceptible to elite influence about election fraud in 2020 (Berlinski et al., 2023; Calvillo, Rutchick and Garcia, 2021; Enders et al., 2021), and Trump was able to galvanize some of his supporters around false fraud claims. Among people who accept the so-called “Big Lie” that Trump advanced in 2020, beliefs in election fraud are sincere and deeply held (Graham and Yair, 2023). Indeed, there is evidence that Trump’s criticism of mail ballots had influenced public views of mail ballot fraud prevalence well *before* the election (Clinton et al., 2022; Mitchell et al., 2020).

With such strong belief in election fraud among the public, it is probably not surprising that the aftermath of the 2020 election saw a flurry of restrictive voting legislation, with a particular focus on one of Trump’s central concerns: narrowing the conditions in which mail ballots could be cast. In 2021, a total of 32 laws were passed in 14 states restricting mail voting in some way, such as shortening application and/or return deadlines or implementing stricter requirements for voter identification.¹ Three more states passed restrictive mail voting laws in 2022.²

¹Brennan Center for Justice. 2021. “Voting Laws Roundup: October 2021.”

²Brennan Center for Justice. 2022. “Voting Laws Roundup: October 2022.”

In all but two cases, these bills were passed by Republican legislators who surely acted in part due to pressure from voters influenced by Trump’s post-election rhetoric. However, the political environment also raised concerns that bills purportedly designed to enhance election integrity were actually vehicles to shape the electorate to Republicans’ benefit. Substantially more Democrats than Republicans cast mail ballots in 2020, and some work has found that low propensity voters such as younger people or racial minorities are more likely to turn out in all-mail elections (Bonica et al., 2021). Furthermore, many of the states that restricted their mail voting laws had until the Supreme Court’s 2013 ruling in *Shelby County v. Holder* (570 U.S. 529 (2013)) been banned from making changes to election policies without federal oversight, due to previous racial disenfranchisement.

Critics of mail ballot voting restrictions therefore voiced concern about the potential for the regulatory changes to create disproportionate burdens on minority voters. The U.S. Department of Justice made allegations to this effect in a complaint against Georgia’s SB 202, which passed in 2021 and made several changes to that state’s election laws.³ The complaint claims that the Georgia legislature restricted absentee voting after a “dramatic increase in Black Georgians’ use of” that method, and that the law was enacted “with knowledge of the disproportionate effect that these provisions would have on Black voters’ ability to participate in the political process on an equal basis with white voters.” Thus, there is reason to scrutinize restrictive voting laws, especially in jurisdictions that were formerly covered by the Voting Rights Act.

This paper is one of the first efforts to examine how a post-2020 mail voting restriction impacted voters and particularly, voters of color. We examine the effect of Texas’ Senate Bill 1 (SB 1) on voters in that state’s 2022 primary, which occurred in March of that year. SB 1—like Georgia’s SB 202—imposed significant new constraints on mail voting. In Texas, the most controversial new restriction were signature and identification requirements requiring officials to reject mail ballots and/or ballot applications that did not match information from

³<https://www.justice.gov/opa/press-release/file/1406456/download>

existing administrative records. We posit that such regulations are likely to reduce the rate of mail ballot/application rejections, and are particularly likely to impact voters of color. We show that these new regulations led to widespread ballot application and ballot rejections for *all* racial groups, but that they fell disproportionately on voters of color.

The effects of the policy may not have ended in the primary. We document how “downstream disenfranchisement”—the lingering effect of experiencing disenfranchisement on subsequent political participation—shaped behavior even in the 2022 *general* election. We show that voters who were disenfranchised in the primary were less likely to vote in the general at all and, when they did cast a ballot, switched to in-person modes at very high rates.

A future version of this paper will also incorporate a survey of individuals who were and were not disenfranchised during the primary election, allowing us to construct a robust picture of the characteristics of individuals disenfranchised by restrictive voting laws.

Our results raise important questions about the effects of the recent wave of restrictive voting legislation in the United States, and the potential lingering effects of these restrictions even when courts rule them illegal.⁴

2 Background: Texas SB 1

In 2021, Texas joined several other states in passing a major elections bill that substantially narrowed mail voting. The law, Senate Bill 1 (SB 1), was enacted after Democrats fled the state in an ultimately unsuccessful effort to break legislative quorum. The law reduced local election officials’ ability to make decisions in response to emergencies and criminalized official obstruction of partisan poll watchers. It also banned 24-hour and drive-thru voting and restricted the allowable hours for in-person early voting.

A final area that SB 1 affected—of particular importance for this paper—was the distribution and submission of mail (“absentee”) ballots. Texas did not have permissive

policies with respect to mail ballots, even prior to SB 1. For instance, while people 65 or older were allowed to cast mail ballots with no documented hardship, in order to receive a mail ballot, all other voters had to demonstrate absence from the jurisdiction or a documented illness or disability that would have made in-person voting difficult. SB 1 kept these rules in place, but added new restrictions on mail ballots. One change was that election officials were no longer allowed to encourage voting by mail, or to automatically send ballots to voters who had cast mail ballots in the past. SB 1 also added identification requirements for voters who chose to cast a ballot by mail in 2022 and beyond. Beginning in 2022 elections, voters were required to submit either their state identification number or a partial social security number on their application for mailed ballots, and then again on the underside of the ballot envelope flap upon submitting it.

This identification requirement drew the attention of journalists and others both before the election and in the early period of mail ballot processing; these observers were concerned that the enhanced ID requirements would lead to unusually high rejection rates for at least two reasons. First, SB 1 required voters to write the number from the same identification they included with their initial voter registration application, which in many cases had been completed years prior. If voters had registered with say, a driver's license number but submitted a partial social security number instead, election officials were required to reject their mailed ballots. Huseman (2021) noted the potential for this requirement to lead to high rejection rates more than six months prior to the primary election.

The second issue was the location of the field soliciting identification numbers on the ballot submission envelope. The identification requirement was prominently featured on the ballot application, immediately to the right of the fields requesting voters' name, address, and date of birth. If their application was approved—that is, they met the requirements for casting a mail ballot *and* correctly completed the application—voters would receive a ballot via the mail, which they would complete and return. The identification field was less prominent when it came time to return mail ballots, however. Voters were required to write

the correct identification number on the underside of the return envelope flap, a location that may have been easy to miss altogether. During the mail ballot period in advance of the primary, election officials noted high rates of ballots submitted without identification numbers, which were rejected pending efforts to notify voters that they needed to “cure” those ballots by submitting complete information (Ura, 2022). Following the election, the Secretary of State’s office acknowledged they did not think “it would be too much of a stretch to think that some people thought it was just an optional section,” (quoted in Lopez, 2022), and good-government groups like the Center for Civic Design pushed the state to make changes to the envelope’s design for precisely this reason (Lopez, 2022). Thus, in the months preceding the 2022 Texas Primary, there was ample concern that SB 1 would disenfranchise eligible voters. Yet, there is also reason to believe that the voters *most* deterred by SB 1’s mail voting restrictions are non-white.

3 Who Votes By Mail?

The past three decades have seen what Gronke (2012) describes as a “quiet revolution” in election administration, whereby voters are becoming much more likely to use so-called “convenience voting” methods such as early in-person or mail voting to cast their votes well before Election Day. Mailed “absentee” ballots were originally conceived as a way to help deployed military personnel vote, but they became available to civilians who could document an inability to vote on Election Day after World War 1 before expanding throughout the country in the latter 20th Century (Gronke, 2012). While roughly one-quarter of the states maintained the excuse requirement well into the 21st Century, most have now adopted no-excuse policies, which allow voters to request a mail ballot for any reason. Several states—mainly in the West—have gone even farther. In these states, *all* ballots are transmitted to voters via U.S. Mail. While voters have the option of mailing them back, for myriad reasons most opt to return them in-person via special ballot drop boxes (Menger and Stein,

2020). Regardless, for voters in these places, the traditional Election Day, in-person voting experience is a relic of the past.

In states where mail voting is not mandatory, many voters still avail themselves of the option to cast a mail ballot. This is usually a two-stage process whereby voters first apply for a mail ballot (providing an excuse if required) and if approved, receive and return their ballot. Cumulatively, the combination of mandatory and optional mail voting policies has led to substantial shifts in the percentage of people who cast their vote before Election Day. In 2016, nearly 24% of voters attempted to vote by mail.⁴ In the 2020 election, which occurred during the COVID-19 pandemic, this figure rose to 43%; a marked increase in early in-person voting (another form of “convenience voting”) that same year meant that in 2020, only about 30% of voters cast their ballots in-person on Election Day—the first time a minority of voters had done so.⁵

One of the reasons that convenience reforms like mail voting have become so popular is that they are seen by many as lowering barriers to participation, which should ultimately result in higher turnout (Downs, 1957). Some previous work has argued that convenience voting may actually *decrease* turnout by de-emphasizing the importance of Election Day, thus making the motivation to vote seem less acute (Burden et al., 2014). However, McDonald et al. (2023) caution against conflating the timing of convenience voting with its modality, and encourage researchers to distinguish between the expected effects of mailed ballots from those of in-person ballots—whenever they happen to be cast.

In line with this approach, a large body of work examined how the implementation of mail voting specifically has affected turnout. Much of the early work in this vein focused on Oregon—an early mover in statewide vote-by-mail—and found that all-mail voting increased turnout by as much as ten points (Karp and Banducci, 2000; Richey, 2008; Southwell and

⁴United States Election Assistance Commission. 2016. *The Election Administration and Voting Survey, 2016 Comprehensive Report*. Figure Obtained from Overview Table 2, U.S. Total. https://www.eac.gov/sites/default/files/eac_assets/1/6/2016_EAVS_Comprensive_Report.pdf

⁵United States Election Assistance Commission. 2020. *The Election Administration and Voting Survey, 2020 Comprehensive Report*. Page 1. https://www.eac.gov/sites/default/files/document_library/files/2020_EAVS_Report_Final_508c.pdf

Burchett, 1997, 2000a; Southwell, 2010). As universal vote by mail has expanded to additional jurisdictions, researchers have found evidence of heightened turnout among their electorates as well (Amlani and Collitt, 2022; Barber and Holbein, 2020; Bonica et al., 2021; Gerber, Huber and Hill, 2013; McGhee, Paluch and Romero, 2022; Thompson et al., 2020; Yoder et al., 2021). Prior work examining the impact of mail voting nationally, as opposed to jurisdictions where voters have no choice but to vote by mail, has also found a correlation between higher turnout and both the availability (Larocca and Klemanski, 2011) and prevalence (McDonald et al., 2023) of no-excuse mail voting.

Other work provides important caveats, however. For instance, Gronke and Miller (2012) find that the turnout bump in Oregon diminishes as the time series of available data extends, noting that the apparent turnout effects reported in prior work may have stemmed from a short-term “novelty effect” of a new voting method. Amlani and Collitt (2022) find that mail voting policies that fall short of universal vote-by-mail may actually *decrease* turnout by increasing information costs for voters. And some work that has examined universal vote-by-mail in California has found that the policy is associated with at best no difference in turnout there as well (Bergman and Yates, 2011; Elul, Freeder and Grumbach, 2017; Kousser and Mullin, 2007), though as Bonica et al. (2021) note, this could be due to the fact that mail voting there was implemented in rural areas with minimal state investment in voter education. Thus, while considerable academic evidence points to mail voting increasing turnout, context matters: More expansive policies, such as universal vote-by-mail, seem more likely than smaller changes (such as moving from excuse to no excuse absentee voting) to compel higher turnout—at least in the short term.

It is less clear however whether the availability of mail voting affects *who* votes. There are sound theoretical reasons to expect that making mail voting easier should expand the electorate for people who find in-person voting difficult, such as those with disabilities (Kuhlmann and Lewis, 2022; Miller and Powell, 2016). Yet, there is also a learning curve to convenience voting, and we might therefore expect more informed (Shino, Suttman-Lea

and Smith, 2022; Southwell and Burchett, 2000b) or more interested (Yoder et al., 2021) voters to vote early. While some recent work suggests that mail voting is a promising means to increase turnout among low propensity voters (Bonica et al., 2021), a number of early studies found that mail voting was most effective among people who are already habituated voters, and was not an overly effective means of mobilizing new ones (Berinsky, Burns and Traugott, 2001; Karp and Banducci, 2000; Southwell and Burchett, 2000b). In total, these findings suggest that mail voting may simply make voting easier for people who were already going to vote, leaving the shape of the electorate relatively unchanged.

If this is true, we should not expect that mail voting confers an advantage to one party’s candidates. Existing work points to this conclusion, finding that increasing the prevalence of mail voting does not result in a systemic advantage for one party or the other (Amlani and Collitt, 2022; Barber and Holbein, 2020; Berinsky, Burns and Traugott, 2001; Hassell, 2017; McGhee, Paluch and Romero, 2022; Southwell and Burchett, 2000b; Thompson et al., 2020; Yoder et al., 2021). Democrats were approximately twice as likely as Republicans to vote by mail in 2020.⁶ However, these results suggest that rather than drawing new Democratic voters into the fold, mail voting simply allowed Democrats who would have otherwise voted in person to cast their vote early.

Yet, Yoder et al. (2021) note that regardless of the evidence to the contrary, journalists and professionals in both parties *believe* that expanding mail voting benefits Democrats. Given the elite signaling described above, this is not particularly surprising (e.g, Berlinski et al., 2023). As such, restricting a favored voting method of their opponents could therefore have encouraged Republicans after the 2020 election to shape policies that they perceived would raise the costs of voting for Democratic voters. While this belief may be founded on a mistaken notion, there is evidence that raising the bar for mail ballot acceptance could lead to disproportionate rejection rates for some voters: A growing body of work examines whose mail ballots are more likely to be rejected, and finds disproportionate subgroup effects

⁶Pew Research Center. 2020. “The Voting Experience in 2020.” <https://www.pewresearch.org/politics/2020/11/20/the-voting-experience-in-2020/>

across a range of geographies. Specifically, these studies point to young and/or inexperienced voters, non-English speakers, minority voters, and those affiliated with the military as being more likely to have their mail ballots rejected (Alvarez, Hall and Sinclair, 2008; Baringer, Herron and Smith, 2020; Cottrell, Herron and Smith, 2021; Shino, Suttman-Lea and Smith, 2022).

Texas' SB 1 was likely to affect these populations to a larger extent than others. The convenience methods that SB 1 targeted—including curbside, early, and mail voting—had been heavily utilized in counties with larger Democratic and/or minority populations in 2020. Opponents of SB 1 saw the law as an attempt to raise the cost of voting for Democrats; because Democratic voters in Texas are less white on average than Republicans, there is a parallel concern that SB 1 would disenfranchise more minority voters than white voters. Existing work examining another ostensibly racially neutral Texas law—its voter identification law passed hours after the *Shelby County* ruling—found that the population of Texas voters who lacked required identification was disproportionately Black and/or Latino (Fraga and Miller, 2022).

Thus, there is ample reason to investigate whether SB 1 more heavily impacted minority voters in Texas. A spate of federal lawsuits have alleged a disparate racial effect stemming from nearly all of SB 1's provisions.

In this project, we examine only one of SB 1's changes: the identification requirement in mail ballots. Using data on mail ballot rejections in the 2022 Texas Primary Election—the first election since the passage of SB 1—we consider whether voters who had their ballot rejected were disproportionately Black and/or Latino. We also explore the effect of a disenfranchisement in the primary on turnout in that fall's general election. Finally, we describe our plans for a survey in January 2024, to gain a deeper understanding of how the law may have affected Texas voters.

4 Data and Methods

The empirical section of this project proceeds in 3 parts. We begin by exploring the effects of SB1 on the March 2022 primary elections, demonstrating the extent and racially disparate nature of mail ballot and ballot application rejections. We then show that a rejection in the *primary* directly reduced turnout in the *general* election that fall. We turn then to a survey of individuals who (tried to) participate in the 2022 primaries to explore whether SB1 disenfranchised a population with distinct policy preferences from those whose applications and ballots were not rejected.

Here, we detail the data and methods used in each of the three studies.

4.1 Rejections in the 2022 Primary Election

We obtained individual-level data on mail ballot application forms and mail ballots in the 2022 Texas Primary from a public records request to the Texas Secretary of State. The records note whether the application was successful and, if not, the reason for the rejection. The same is true of the ballot records, which contain a list of voters who submitted mail ballots, the status of those ballots, and the reason for rejection (if applicable). The records allow us to tell which applications and ballots would have been accepted had SB1 not been law of the land. A number of counties did not report their application rejections to the state and did not make them available in a county-specific records request; these counties are thus excluded in the results that follow. In the Supplementary Materials (SM), we discuss this further and provide robustness checks indicating that it is highly unlikely these missing data impact our conclusions. We also exclude the 2–3% of rejections that we cannot match to the registered voter file.

We joined these records to a snapshot of the Texas registered voter file dated May 5th, 2022, obtained from the data provider L2. The voter file indicates whether and how each voter participated in the primary, and geocodes each voter to their home census tract.

We employ Bayesian Improved Surname Geocoding (BISG) via the `wru` package in R (Imai and Khanna, 2016) to predict each voter’s race using their surname and location. Rather than assign each voter to a discrete racial group, BISG returns the predicted probability that each voter is white, Black, Latino, Asian, or “other.” By summing these probabilities, rather than just the most-likely race, we incorporate uncertainty about voters’ race into the models. Voters’ age, gender, county, and past turnout come from the L2 voter file as well. Although voters do not formally register with a party in Texas, we use the party in whose primary they (attempted to) vote in to determine their partisanship. Table 1 presents the characteristics of voters who attempted to or successfully did vote by mail.

We then present linear regression models estimating the likelihood that voters of different races were disenfranchised under the new requirements imposed by Texas SB1, using models that account only for race, and others that also control for other individual-level characteristics. These data allow us to test **Hypothesis 1**: other things being equal, SB1 disproportionately disenfranchised voters of color.

4.2 Causal Impact on 2022 General Election Turnout

After describing the population disenfranchised by the new SB1 requirements in the primary election, we turn to the general election, and measure the downstream disenfranchisement of facing an application or ballot rejection in the primary election. As discussed above, there is good reason to think that a rejection in the primary will have downstream effects for at least 2 reasons. On the one hand, the annual absentee request form means that most individuals who had their application accepted for the primary were automatically sent a mail ballot for the general election; those voters whose ballot applications were rejected, meanwhile, would not have automatically received a ballot. We call this “mechanical” disenfranchisement, because the “cost” of voting in the general was directly impacted by the rejection in the primary. On the other hand, we expect that some voters experience “de facto” disenfranchisement through the experience of trying to vote but being unable to do so. This, we expect, undermines

both internal and external political efficacy, reducing subsequent turnout.

Examining the individuals whose applications were accepted, but ballot rejected, can give us a clear insight into the “de facto” disenfranchisement. Because these individuals had their mail ballot applications accepted earlier in the year, they were presumably sent ballots for the general election. If they abstained at higher rates than their controls, this is therefore *not* attributable to the higher cost of seeking a ballot, and can instead be attributed to the decreased efficacy accompanying a rejection in the primary election.

To test whether being rejected in the primary election had a causal effect on general election turnout we incorporate turnout information from a second Texas voter file, provided again by L2 and dated March 12, 2023. This second voter file indicates whether and how each voter cast a ballot (that is, by mail, early in-person, or in-person on election day) in November.

Of course, it is possible that individuals whose applications or ballots were rejected in the primary election might have different underlying general-election turnout propensities than other voters. In other words, the general-election turnout of voters “treated” by an application or ballot rejection in the primary might have turned out at different rates that November than “control” voters (those who did *not* have an application or ballot rejected) even if they had not been disenfranchised by SB1 in the primary. To account for this possibility, we use a difference-in-differences model.

The idea behind difference-in-differences is simple: we assume that the treated and control groups would have moved in parallel but-for the treatment. This requires incorporating information about each voter’s turnout prior to the 2022 general election. In the case at hand, we incorporate each voter’s turnout in the 2010–2018 general midterm elections as our base period, and assume that the gap between the “treated” and “control” groups would have been the same in 2022 as it had been historically if SB1 had not been enacted. Any difference in the size of the gap in 2022 can then be considered the causal effect on general-

election turnout of being disenfranchised in the primary election.⁷ Because the timing of the treatment is not staggered—all treated voters were treated by a disenfranchisement between the 2018 and 2022 elections—we do not need to implement many of the recent advances in difference-in-differences models (see Roth et al., 2023).

In addition to estimating the difference-in-differences models testing the causal effect of a primary-election disenfranchisement on general-election turnout, we test whether being disenfranchised in the primary impacted *how* voters cast their ballots. We use a multinomial logit to determine whether treated voters shifted to different vote modes in 2022 relative to the base period at higher rates than control voters.

These data allow us to test **Hypothesis 2** and **3**: Being disenfranchised in the primary election reduced turnout in the general; and, Voters disenfranchised in the primary were more likely to switch to in-person voting methods in the general.

4.3 Evidence from a Survey⁸

NB for SPSA: We haven't sent out the survey yet, but we here include information about how the survey panel has been constructed, and how we anticipate analyzing the results.

The above sections rely exclusively on administrative records of application and ballot rejections, along with the voter file. While these data are excellent for determining who was disenfranchised by SB1, and such a rejection's implications for future participation, they do not tell us whether the sorts of voters disenfranchised in the primary election had different policy preferences than those who cast an absentee ballot without issue. To test whether specific policy preferences were disproportionately excluded from the 2022 primary, we surveyed voters who did and did not have an application or ballot rejected.

We began by randomly selecting half of the individuals who had either a ballot or

⁷As we show in the SM, individuals whose applications or ballots were rejected in the primary had very rejection rates in the general election. In other words, they were not directly re-disenfranchised by SB1 in November.

⁸All analyses in this section were preregistered. Please see the SM for the pre-analysis plan.

Table 1: Sample Characteristics, Broken out by Rejected and Non-Rejected Recruits

Name	Rejected Voters		Non-Rejected Voters		Universe	
	Population	Sample	Population	Sample	Population	Sample
P(White)	56.2%	56.3%	63.3%	63.3%	62.3%	62.3%
P(Black)	17.1%	17.2%	13.7%	13.8%	14.2%	14.3%
P(Latino)	19.8%	19.7%	16.4%	16.3%	16.9%	16.8%
P(Asian)	2.5%	2.4%	2.0%	2.0%	2.1%	2.0%
Age	78.2	78.2	76.8	76.8	77	77
Male	38.6%	38.2%	40.9%	40.5%	40.6%	40.2%
Democrat	48.5%	48.9%	54.1%	53.0%	53.3%	52.4%
Submitted Mail Ballot	61.1%	61.1%	77.1%	77.1%	74.9%	74.8%
N	30,683	15,342	184,797	15,342	215,480	30,684

application rejected in the 2022 primary (here, we look at any rejection, not just one attributable to SB1), stratified by type of rejection (that is, we select exactly half the individuals with an application rejection, and half the individuals with a ballot rejection). We expect this pool to accurately reflect the underlying characteristics of this pool of voters; in Table 1 we show that this is the case. The pool of individuals who did not experience a rejection is similarly constructed to be representative of that pool of voters, though we select a smaller share. Among the pool with no rejections, we randomly select 15,342 (that is, the same number of individuals selected from the pool of voters who experienced a rejection). Table 1 shows the characteristics of the sample versus the whole population. The final columns account for the oversample of the rejected voters.

In January 2024 we sent each of these 30,684 individuals a postcard to recruit them to our survey. Each postcard had recruitment language in English and either Spanish or Vietnamese, and respondents could scan a QR code or manually type in a shortened URL on the device of their choosing. Voters received English and Spanish if the L2 data indicated they spoke Spanish at home or, if L2 did not have that information, if their predicted probability of being Latino was higher than their predicted probability of being Asian; others

received English and Vietnamese.⁹ See the SM for images of these materials. In addition to the recruitment materials, the survey itself was translated into Spanish and Vietnamese; if a respondent used the QR code or URL associated with the Spanish or Vietnamese recruitment, they were automatically directed to the Spanish or Vietnamese version of the survey. They could also manually change the language in which they took the survey on the consent page. We included a “participant ID code” that allowed us to tie survey responses to data in the voter file and determine whether someone had an application rejected, a ballot rejected, or neither.

By the time we ended data collection on XX, we had received XX responses (after removing the XX who failed to pass attention checks and other validation processes outlined in the pre-analysis plan, included in the SM).

The survey instrument (see the SM) included a series of 10 policy statements (such as “Raise the minimum wage from \$7.25 an hour to \$12 an hour,” or “Ban diversity, equity, and inclusion offices on public university campuses in Texas”). Some policies had to do specifically with Texas, and others spoke to federal issues. We asked respondents on a scale of 1–5 how strongly they agreed with the statements. Responses were reverse-coded, where necessary, such that high values correspond to the more typically liberal position on each issue. The Cronbach’s alpha was XX, indicating that the scale was highly reliable.

In addition to gauging participant’s general policy preferences, we explored whether individuals whose application or ballot was rejected thought differently about *voting* policies in Texas. Furthermore, we investigated whether knowledge about the rejected status of their application or ballot impacted their attitudes toward these election related policies. Using an embedded survey experiment, we randomly assigned some participants to be reminded of their rejection in order to see if this information influenced their support, specifically, absentee voting policies, but also for other election policies. These mail-voting and general-voting indices also hold together well, with an alpha of XX and XX, respectively. Finally,

⁹The 1,359 individuals without one of these home languages and who BISG determined were 0% likely to be Asian or Latino were sent English and Spanish cards.

we test whether reminding a respondent of their rejection increased the rate at which they sought out information (via a provided link) about confirming the status of their materials in the future.

The survey and survey experiment allow us to test our final 2 hypotheses:

Hypothesis 4: Voters who were disenfranchised by SB1 had more liberal policy preferences than those who were not disenfranchised, other things being equal.

Hypothesis 5: Reminding individuals that their application or ballot was rejected increased their liberalism on voting-related policies.

Hypothesis 6: Reminding individuals that their application or ballot was rejected increased the likelihood that they clicked a link to information about tracking their mail ballot.

5 Results

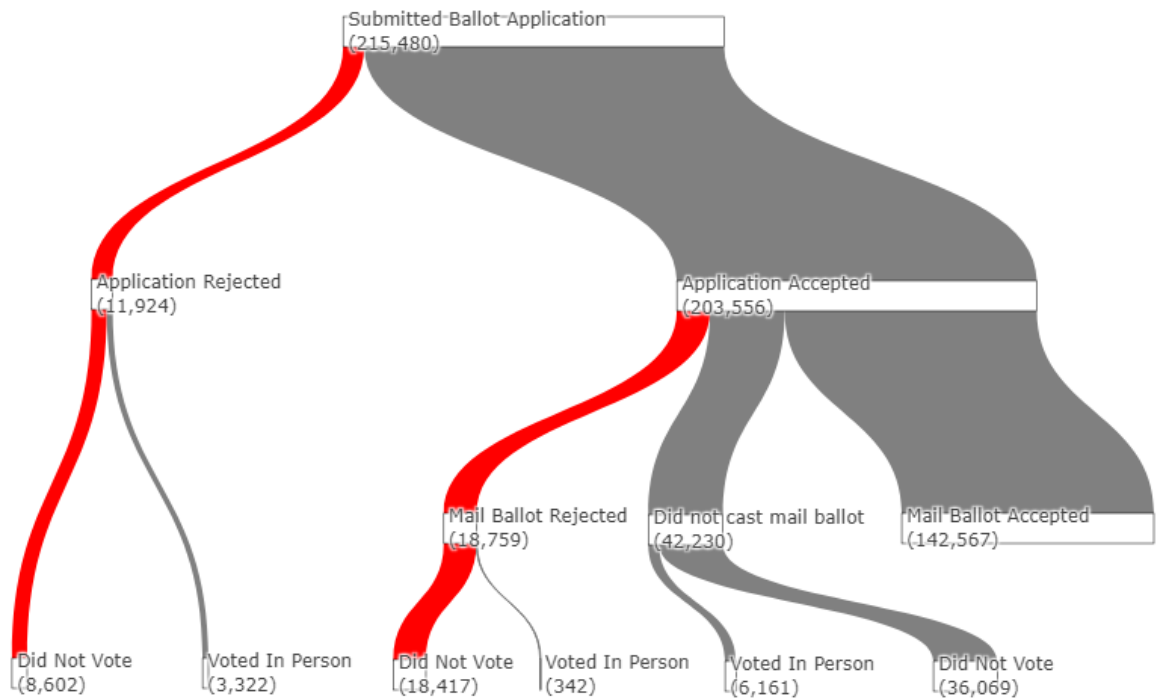
5.1 Who Had Their Application or Ballot Rejected in the Primary?

In Figure 1 we plot the different paths travelled by the roughly 215,000 Texans who requested a mail ballot for the 2022 primary election.¹⁰ To be sure, most voters did not have trouble voting; some two-thirds of voters who began the process eventually cast a mail ballot that count. But what happened to the other 70 thousand voters? While about half of them received a mail ballot that they did not cast, the rest—30,000 voters, or 1 out of 7 voters who started the process—had either their application or ballot rejected. Roughly 90% of these individuals did not find another way to participate. (We stress that this understates the “costs” imposed by SB1 on these voters. The voters who managed to participate after a rejection revealed their preference for mail voting (presumably because it was less costly)

¹⁰As discussed above, some counties failed to provide data on application and ballot rejections. Those counties are excluded from, this section. See the SM for more detailed discussion.

over other forms of voting by requesting an absentee ballot. Thus, while still able to vote, these votes entailed a larger cost than they would have absent SB1.) To be sure, some of the individuals whose applications were rejected would not have cast a ballot; about 20% of individuals who successfully requested an absentee ballot did not cast it. Nevertheless, these figures represent an extremely high level of disenfranchisement.

Figure 1: Distribution of Attempted Mail Voters in 2022 Primary



We begin with simple plots of the application (Figure 2) and ballot (Figure 3) rejection rates by race. While Figure 1 shows *all* rejections in the primary, we are here interested in rejections that are attributable to SB1 specifically. Figure 2 includes all individuals who requested an absentee ballot as the denominator, while Figure 3 includes only the individuals who cast a mail ballot after successfully requesting one. By way of reminder, we calculate the numerator and denominator by summing the predicted probability that each voter in each group is of that particular race.

These figures make immediately clear that voters of color saw their applications and, especially, their ballots rejected at substantially higher rates than white voters: while ap-

proximately 60% of absentee ballots were *cast* by white voters, fewer than half of those *rejected* came from white voters. It's worth reiterating that this pool of individuals who actually cast a mail ballot was already disproportionately white, due to the racial disparities in application rejections. That said, white voters also saw extraordinarily high ballot rejection rates, with nearly 1 in 10 ballots cast by a white voter discarded for an SB1-related reason.

Figure 2: SB1-Related Application Rejections, 2022 Primary

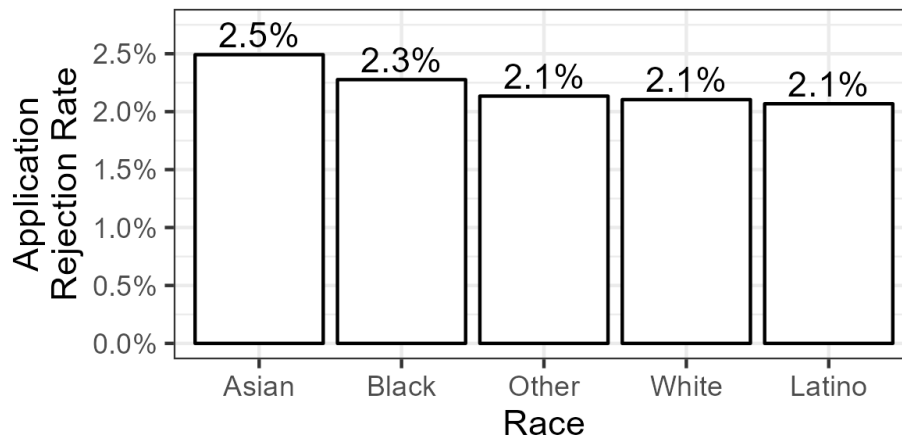
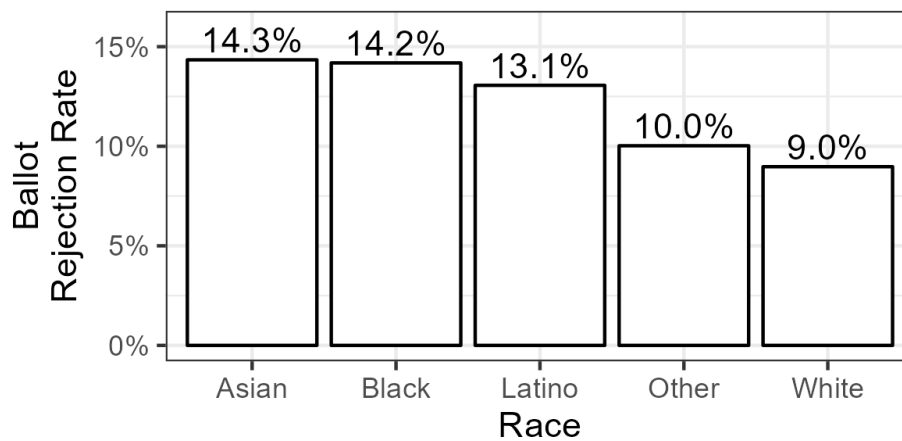


Figure 3: SB1-Related Ballot Rejections, 2022 Primary



While these figures provide strong preliminary support for Hypothesis 1 (that applications and ballots from nonwhite voters were rejected at higher rates), they do not account for other factors at play. Do to so, we estimate a series of logistic regressions. Table 2

presents the results of these regressions. We separately estimate models testing what predicts SB1- and non-SB1-related reasons for the rejections. Table 2 makes a number of things immediately clear. First and foremost, racial and ethnic minorities were more likely to have their applications and ballots rejected, net of other covariates (including county fixed-effects). The same was *not* true when it came to non-SB1-related rejections: although racial and ethnic minorities were more likely than white voters to have their applications rejected under pre-existing rules, the disparities were not as large. Moreover, racial and ethnic minorities' ballots were not rejected at higher rates for non-SB1-related reasons than white voters'. Net of other covariates, nonwhite voters were 41% more likely than white voters to have their application rejected, and were 56% more likely to have their ballot rejected (see the SM for overall white–nonwhite regressions). This provides strong support for Hypothesis 1: racial and ethnic minorities who voted absentee were disproportionately disenfranchised due to SB1 at both the application and ballot stage.

Table 2 also uncovers other interesting correlates of rejection rates. Unsurprisingly, voters who had participated in previous primaries were less likely to have their ballots or applications rejected. Men had their ballots and applications rejected less frequently than women, and older voters had higher rejection rates. While Democrats had lower *application* rejection rates, their ballots were not rejected for SB-1 related reasons at different rates than Republicans.

5.2 Downstream Disenfranchisement: The Effects on the General

In the past section we demonstrated that SB1 disproportionately disenfranchised voters of color during the 2022 federal primary. But did the effects end there? Or did the experience of being disenfranchised in the primary election influence participation that fall? We turn to this question now.

As discussed in the methodology section above, our primary empirical approach leverages a difference-in-differences design. Once again, we split our analysis between individuals

Table 2: Rejection Rates, 2022 Primary

	Application Rejections		Ballot Rejections	
	SB1	Non-SB1	SB1	Non-SB1
Black	2.410*** (0.565)	2.264** (0.568)	1.869*** (0.067)	1.047 (0.225)
Latino	1.976*** (0.260)	1.563** (0.255)	1.649*** (0.083)	1.151 (0.125)
Asian	2.447*** (0.424)	1.455* (0.244)	1.658*** (0.132)	2.181*** (0.398)
Other Race	1.105 (0.273)	1.304 (0.286)	1.268 (0.158)	0.739 (0.351)
Age	1.027*** (0.004)	0.988*** (0.002)	1.042*** (0.002)	1.009 (0.009)
Male	0.886*** (0.022)	0.877*** (0.019)	0.900*** (0.014)	0.924 (0.066)
Democrat	0.275** (0.109)	0.379* (0.144)	0.917 (0.159)	0.709*** (0.035)
Past Primary Turnout	0.866*** (0.016)	0.770*** (0.014)	0.921*** (0.012)	0.874*** (0.017)
County Fixed Effects	✓	✓	✓	✓
Num.Obs.	198428	188330	150425	146106
R2	0.081	0.093	0.091	0.289
R2 Adj.	0.076	0.088	0.089	0.278

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Coefficients exponentiated.

“White” is reference category for race. “Democrat” is reference for party.

Past primary turnout is the number of midterm primaries a voter

participated in between 2010 and 2018. County fixed effects included.

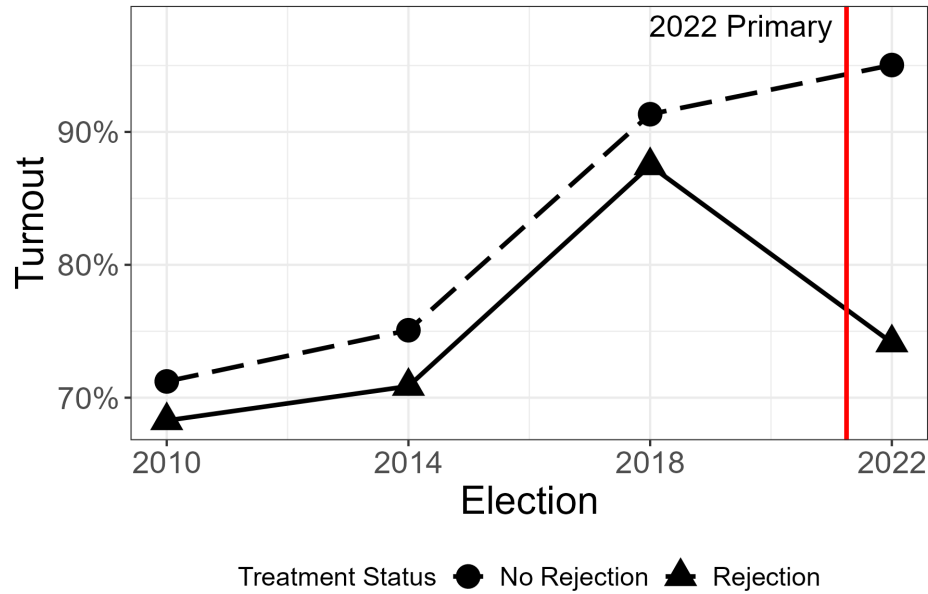
Standard errors clustered by county.

whose applications were rejected, and those whose ballots were rejected. The different rejections will operate differently in the general election. In a sense, the individuals whose *applications* were rejected receive two “treatments:” mechanical (they did not successfully submit an annual application form in the primary, and were thus not automatically mailed a ballot for the general) and de facto (by trying and failing to vote, their internal and external efficacy may ebb). The individuals whose *ballots* were rejected, on the other hand, were exposed only to the de facto disenfranchisement; because they successfully submitted a request form in the spring, they would have received a mail ballot automatically in the fall.¹¹

We begin by plotting the turnout in midterm general elections of individuals who submitted mail ballot applications for the primary, broken out by whether the application was rejected for an SB1-related reason in the primary in Figure 4. Figure 4 presents the turnout in each year among the individuals who tried to request an absentee ballot in 2022; some of the secular rise in turnout is probably attributable to some individuals moving into the state, and others’ turnout propensivity increasing. The figure makes clear that, although turnout among these two groups moved largely in parallel in the 2010, 2014, and 2018 midterms, the same was not true in 2022: while turnout among the group whose applications were accepted (or rejected for non-SB1 reasons) *increased* from 2018 to 2022, it declined dramatically for those whose application was rejected.

¹¹The absentee request form does allow voters to request an absentee ballot for just a single election. Unfortunately, the administrative data on which we rely does not indicate whether a voter requested an absentee ballot for only the primary, or all of 2022. We assume that the rate at which individuals requested annual versus primary-only absentee ballots was comparable regardless of whether a voter’s ballot was eventually rejected.

Figure 4: Midterm Election Turnout by 2022 Primary Application Status



We move now to the time series plot of the individuals who successfully requested a ballot, and then cast it, asking whether turnout in the general differed (relative to historical rates) for those whose ballot was rejected. We expect to see a smaller impact on turnout here: even those individuals whose ballot was rejected in the primary presumably received a mail ballot in the general. Figure 5 presents the turnout in each general midterm election for the past 12 years among individuals who cast an absentee ballot in the 2022 primary.

Figure 5: Midterm Election Turnout by 2022 Primary Ballot Status

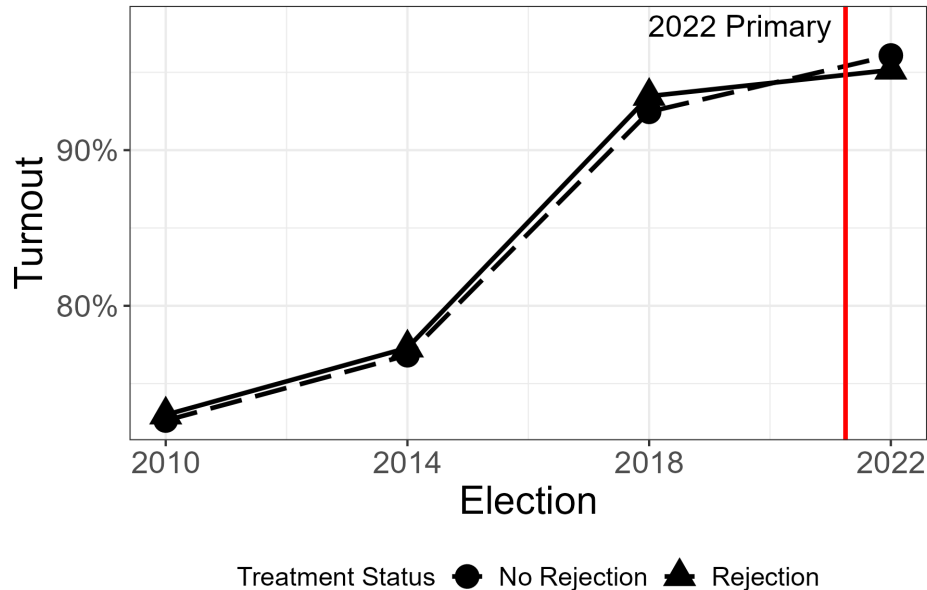


Figure 5 indicates that, prior to 2022, the individuals whose ballots were and were not rejected for an SB1-related reason turned out at very comparable rates in general midterm elections. The same was generally true for 2022, but while our “treated” group historically had slightly *higher* turnout rates than the control voters in the pre-2022 period, this relationship flipped in 2022. In other words, there is some visual evidence of a small de facto downstream effect here.

To formally test whether an application or ballot rejection reduced turnout to a statistically-significant degree, we model a two-way fixed effects model, which includes fixed effects for each voter and year. The results of these models are presented in Table 3. Model 1 presents the causal effect of an application rejection on general election turnout (and includes all voters who submitted an application request form), while Model 2 presents the same for the ballot rejections (and is limited to the individuals who actually cast a ballot). We estimate that an application rejection reduced general election turnout by 17 percentage points, while having a ballot rejected reduced turnout by 1.5 points—an extremely high number in its own right, especially when we consider that the individuals requesting and

Table 3: Effect of a Primary Rejection on General Turnout

	Applications	Ballots
Treated \times 2022	-0.172*** (0.007)	-0.015*** (0.003)
Voter Fixed Effects	✓	✓
Year Fixed Effects	✓	✓
Num.Obs.	861920	645304
R2	0.471	0.465
R2 Adj.	0.294	0.287

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Treatment status in the base period accounted for by the individual-level fixed effects.

Standard errors clustered by individual.

casting mail ballots in midterm primary elections are probably high-efficacy, high-information voters (e.g., ?). That we uncover a meaningful de facto disenfranchising effect even among these voters is troubling.¹²

It is important to note that these “downstream disenfranchisement” numbers would not show up in any statistics related to the 2022 general election. Only a very small share of the individuals who had an application rejected in the primary had an application rejected in the general (1.2%); the same was true of those whose ballot was rejected in the primary (0.17%). In other words, an examination of just the general alone would miss these enormous turnout effects. Studying the disenfranchising effect of a policy in a single election, therefore, misses all the individuals who were formally disenfranchised in an earlier contest and later remained outside the electorate.

The decision of whether or not to vote is not the only impact the experience in the primary had. It also shifted *how* individuals voted. In Figure 6, we show that individuals who had their application rejected in the primary but voted in the general were considerably more likely to do so in-person than in previous general elections. This may be because they were nervous about having their application or ballot rejected again, and simply decided not

¹²As we show in the SI, application and ballot rejections reduced turnout for both white (ie, $p(\text{White}) > 50\%$) and non-white voters alike.

to even try. Figure 7 shows a similar, if muted, effect among those whose ballot was rejected in the primary. This group is perhaps of particular interest: these individuals received a mail ballot but nevertheless shifted to in-person voting. While their in-person rates were 10 points *below* the control group in 2018, they were 5 points *more* likely to vote in person in 2022—a roughly 15 point swing in their propensity to vote in person relative to the controls, with whom they moved largely in parallel between 2010 and 2018.

Figure 6: General Election Behavior by 2022 Primary Application Status

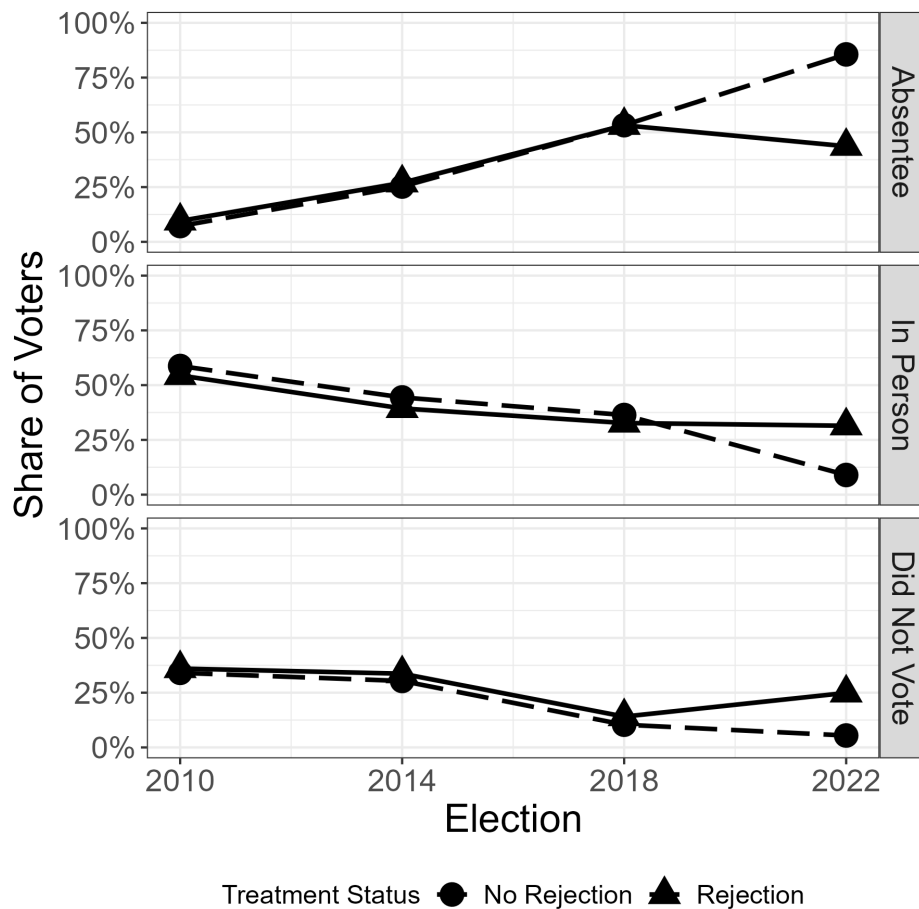
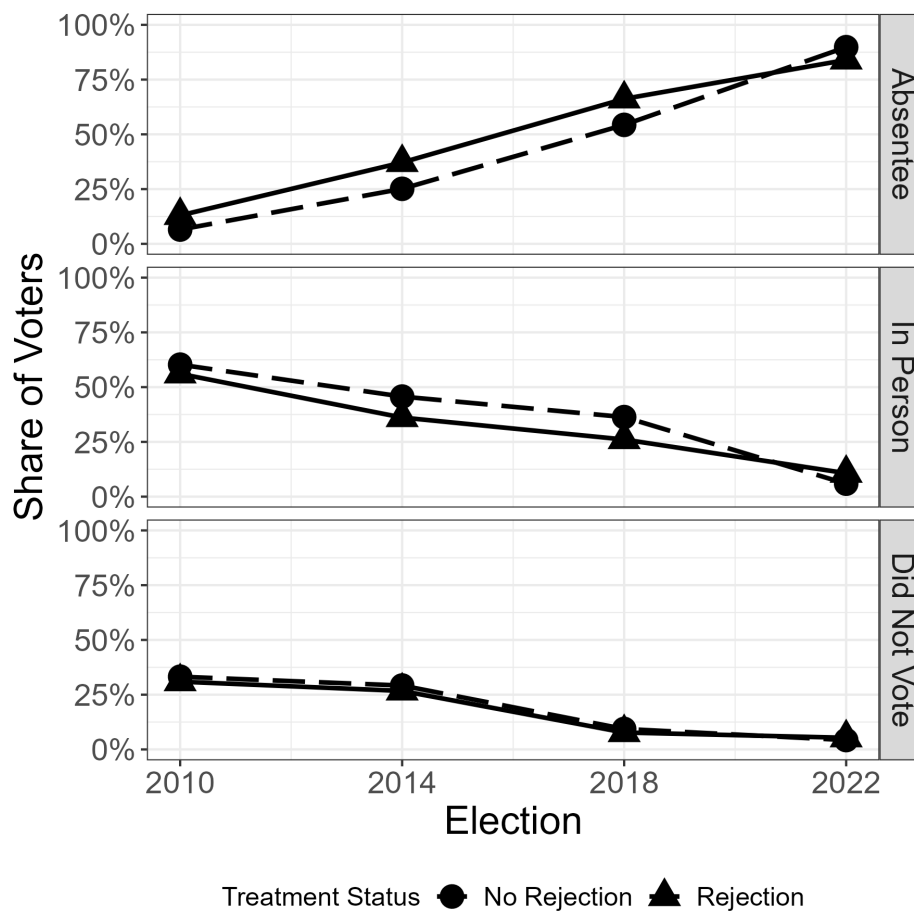


Figure 7: General Election Behavior by 2022 Primary Ballot Status



6 Discussion

On August 17, 2023, federal district court judge Xavier Rodriguez struck down the portion of SB 1 requiring officials to reject applications and ballots when the identification number provided by the voter did not match the registration form.¹³ He argued that the law violated the Materiality Provision of Section 101 of the 1964 Civil Rights Act; a mismatch between numbers is immaterial to their actual eligibility to vote. The State of Texas appealed this decision and in December of 2023 the U.S. Fifth Circuit granted cert, staying Rodriguez's decision pending their full consideration of the ruling.¹⁴ As of early 2024, the requirement for the identification numbers on ballots and applications to match the registration database

¹³*La Unión del Pueblo Entero et al. v Abbott et al.* (5:21-CV-0844-XR (2023))

¹⁴*La Unión del Pueblo Entero et al. v Abbott et al.* (USDC No. 5:21-CV-844 (2023))

remains in effect.

The preliminary results from this paper make clear that SB1 substantially increased the rate at which applications to vote by mail, and mail ballots themselves, were rejected in the 2022 primary elections in Texas. More than 30,000 Texans who began the process of trying to cast a ballot were prevented from doing so. More than 10% of all mail ballots cast in the primary were rejected due to this provision, a rejection rate that is virtually unheard of. As we show, there were extremely large racial disparities in the rejection rates of these ballots and applications; Asian, Black, and Latino voters were all almost 50% more likely to have their ballots rejected than white voters. This discrepancy was only *magnified* once we controlled for other relevant characteristics like age, gender, and party.

As notable as the disenfranchising effect in the primary was, the rejections in the primary election were not contained to March of that year. Instead, as we show, rejections in the primary election had large effects on whether and how voters participated in November's general election. Most alarming was the effect of an application rejection on voters' future participation: the application rejection caused a 17 point decline in their aggregate participation that fall. It bears repeating that primary voters in non-presidential primary elections are generally high propensity voters with long histories of participation (more than 85% of them, for instance, voted in the 2018 midterms). Those who did vote in November were far more likely to do so in-person than by mail.

We also argue that a *ballot* rejection reduced turnout by 1.5 points. While this magnitude is smaller, it is in some ways more striking. Individuals who had their application rejected were more likely to learn about their rejection, because the mail ballot they anticipated never showed up. It is possible, however, that individuals whose *ballots* were rejected never learned about the rejection (we will test this possibility in our survey), in which case it could not impact their general election behavior. Secondly, the individuals who cast a mail ballot that was rejected in the primary had, by definition, a mail ballot application accepted. Because these are generally annual applications, these voters would have received

mail ballots for the general election. That their turnout should decline even upon receipt of a mail ballot provides strong evidence that some level of alienation from the political process occurred when their ballot was rejected in March. Like individuals whose applications were rejected, voters whose ballots were rejected but did participate in the general switched to in-person options at marked rates.

Scholars are right to focus on the contemporary effects of restrictive voting laws. Understanding how and who these policies disenfranchise in a *de jure* sense is important for mounting legal challenges against them under Section 2 of the Voting, and expanding access to electoral democracy. But we also urge researchers to consider the “downstream disenfranchisement” of these policies. As we show here, the impact of a disenfranchisement can have a long tail, and can reduce future political participation through. As scholars continue to engage with these questions of great public and academic import, we must broaden our empirical approaches to ensure we capture *all* the ways in which restrictive voting policies can reduce participation in American elections.

References

- Alvarez, R Michael, Thad E Hall and Betsy Sinclair. 2008. “Whose Absentee Votes are Returned and Counted: The Variety and Use of Absentee Ballots in California.” *Electoral Studies* 27(4):673–683.
- Amlani, Sharif and Samuel Collitt. 2022. “The Impact of Vote-By-Mail Policy on Turnout and Vote Share in the 2020 Election.” *Election Law Journal: Rules, Politics, and Policy* .
- Barber, Michael and John B Holbein. 2020. “The participatory and partisan impacts of mandatory vote-by-mail.” *Science Advances* 6(35):eabc7685.
- Baringer, Anna, Michael C Herron and Daniel A Smith. 2020. “Voting by mail and ballot rejection: Lessons from Florida for elections in the age of the coronavirus.” *Election Law Journal: Rules, Politics, and Policy* 19(3):289–320.
- Bergman, Elizabeth and Philip A Yates. 2011. “Changing election methods: How does mandated vote-by-mail affect individual registrants?” *Election Law Journal* 10(2):115–127.
- Berinsky, Adam J, Nancy Burns and Michael W Traugott. 2001. “Who votes by mail?: A dynamic model of the individual-level consequences of voting-by-mail systems.” *Public opinion quarterly* 65(2):178–197.
- Berlinski, Nicolas, Margaret Doyle, Andrew M Guess, Gabrielle Levy, Benjamin Lyons, Jacob M Montgomery, Brendan Nyhan and Jason Reifler. 2023. “The effects of unsubstantiated claims of voter fraud on confidence in elections.” *Journal of Experimental Political Science* 10(1):34–49.
- Bonica, Adam, Jacob M Grumbach, Charlotte Hill and Hakeem Jefferson. 2021. “All-mail Voting in Colorado Increases Turnout and Reduces Turnout Inequality.” *Electoral Studies* 72:102363.

- Burden, Barry C, David T Canon, Kenneth R Mayer and Donald P Moynihan. 2014. "Election Laws, Mobilization, and Turnout: The Unanticipated Consequences of Election Reform." *American Journal of Political Science* 58(1):95–109.
- Calvillo, Dustin P, Abraham M Rutchick and Ryan JB Garcia. 2021. "Individual differences in belief in fake news about election fraud after the 2020 US election." *Behavioral Sciences* 11(12):175.
- Clinton, Joshua D, John Lapinski, Sarah Lentz and Stephen Pettigrew. 2022. "Trumped by Trump? Public support for mail voting in response to the COVID-19 pandemic." *Election Law Journal: Rules, Politics, and Policy* 21(1):19–33.
- Cottrell, David, Michael C Herron and Daniel A Smith. 2021. "Vote-by-mail ballot rejection and experience with mail-in voting." *American Politics Research* 49(6):577–590.
- Downs, Anthony. 1957. "An Economic Theory of Democracy."
- Elul, Gabrielle, Sean Freeder and Jacob M Grumbach. 2017. "The effect of mandatory mail ballot elections in California." *Election Law Journal: Rules, Politics, and Policy* 16(3):397–415.
- Enders, Adam M, Joseph E Uscinski, Casey A Klofstad, Kamal Premaratne, Michelle I Seelig, Stefan Wuchty, Manohar N Murthi and John R Funchion. 2021. "The 2020 presidential election and beliefs about fraud: Continuity or change?" *Electoral studies* 72:102366.
- Fraga, Bernard L and Michael G Miller. 2022. "Who Does Voter ID Keep from Voting?" *The Journal of Politics* (2):1091–1105.
- Gerber, Alan S, Gregory A Huber and Seth J Hill. 2013. "Identifying the effect of all-mail elections on turnout: Staggered reform in the evergreen state." *Political Science research and methods* 1(1):91–116.

- Graham, Matthew H and Omer Yair. 2023. “Expressive Responding and Belief in 2020 Election Fraud.” *Political Behavior* pp. 1–26.
- Gronke, Paul. 2012. “Early Voting: The Quiet Revolution in American Elections”. In *Law and Election Politics: The Rules of the game*, ed. Matthew Justin Streb. Routledge.
- Gronke, Paul and Peter Miller. 2012. “Voting by mail and turnout in Oregon: Revisiting Southwell and Burchett.” *American Politics Research* 40(6):976–997.
- Hassell, Hans JG. 2017. “Teaching voters new tricks: The effect of partisan absentee vote-by-mail get-out-the-vote efforts.” *Research & Politics* 4(1):2053168017694806.
- Huseman, Jessica. 2021. “The Texas Election Bill Contains a New Obstacle to Voting that Almost No One is Talking About.” *Votebeat Texas* .
URL: <https://texas.votebeat.org/2021/7/26/22627685/texas-election-bill-voter-id-number-matching-problem>
- Imai, Kosuke and Kabir Khanna. 2016. “Improving Ecological Inference by Predicting Individual Ethnicity from Voter Registration Records.” *Political Analysis* 24(2):263–272.
- Karp, Jeffrey A and Susan A Banducci. 2000. “Going postal: How all-mail elections influence turnout.” *Political Behavior* 22:223–239.
- Kousser, Thad and Megan Mullin. 2007. “Does voting by mail increase participation? Using matching to analyze a natural experiment.” *Political Analysis* 15(4):428–445.
- Kuhlmann, Robynn and Daniel C Lewis. 2022. “Making the Vote (In) Accessible: Election Administration Laws and Turnout Among People with Disabilities.” *Politics, Groups, and Identities* pp. 1–17.
- Larocca, Roger and John S Klemanski. 2011. “US state election reform and turnout in presidential elections.” *State Politics & Policy Quarterly* 11(1):76–101.

Lopez, Ashley. 2022. “How Texas Officials and Voting Groups Are Trying to Limit Mail Ballot Rejections.” *NPR* .

URL: <https://www.npr.org/2022/05/24/1100796467/texas-primary-texas-runoff-mail-ballot-rejections>

McDonald, Michael P, Juliana K Mucci, Enrijeta Shino and Daniel A Smith. 2023. “Mail Voting and Voter Turnout.” *Election Law Journal: Rules, Politics, and Policy* .

McGhee, Eric, Jennifer Paluch and Mindy Romero. 2022. “Vote-by-mail policy and the 2020 presidential election.” *Research & Politics* 9(2):20531680221089197.

Menger, Andrew and Robert M Stein. 2020. “Choosing the less convenient way to vote: An anomaly in vote by mail elections.” *Political Research Quarterly* 73(1):196–207.

Miller, Peter and Sierra Powell. 2016. “Overcoming voting obstacles: The use of convenience voting by voters with disabilities.” *American Politics Research* 44(1):28–55.

Mitchell, Amy, Mark Jurkowitz, J. Baxter Oliphant and Elisa Shearer. 2020. “Legitimacy of voting by mail politicized, leaving Americans divided.” *Pew Research Center* pp. 1–26.

URL: <https://www.pewresearch.org/journalism/2020/09/16/legitimacy-of-voting-by-mail-politicized-leaving-americans-divided/>

Richey, Sean. 2008. “Voting by mail: Turnout and institutional reform in Oregon.” *Social Science Quarterly* 89(4):902–915.

Roth, Jonathan, Pedro H. C. Sant’Anna, Alyssa Bilinski and John Poe. 2023. “What’s Trending in Difference-in-Differences? A Synthesis of the Recent Econometrics Literature.” *Journal of Econometrics* 235(2):2218–2244.

Shino, Enrijeta, Mara Suttman-Lea and Daniel A Smith. 2022. “Determinants of rejected mail ballots in georgia’s 2018 general election.” *Political Research Quarterly* 75(1):231–243.

- Southwell, Priscilla and Justin Burchett. 2000b. “Does changing the rules change the players? The effect of all-mail elections on the composition of the electorate.” *Social science quarterly* pp. 837–845.
- Southwell, Priscilla L. 2010. “Voting Behavior in Vote-by-Mail Elections.” *Analyses of Social Issues and Public Policy* 10(1):106–115.
- Southwell, Priscilla L and Justin Burchett. 1997. “Survey of vote-by-mail senate election in the state of Oregon.” *PS: Political Science & Politics* 30(1):53–57.
- Southwell, Priscilla L and Justin I Burchett. 2000a. “The effect of all-mail elections on voter turnout.” *American Politics Quarterly* 28(1):72–79.
- Thompson, Daniel M, Jennifer A Wu, Jesse Yoder and Andrew B Hall. 2020. “Universal vote-by-mail has no impact on partisan turnout or vote share.” *Proceedings of the National Academy of Sciences* 117(25):14052–14056.
- Ura, Alexa. 2022. “Hundreds of mail-in ballots are being returned to Texas voters because they don’t comply with new voting law.” *The Texas Tribune* .
URL: <https://www.texastribune.org/2022/02/10/texas-mail-voting-rejections/>
- Yoder, Jesse, Cassandra Handan-Nader, A Wu Jennifer et al. 2021. “How Did Absentee Voting Affect the 2020 US Election?” *Science Advances* 7(52):eabk1755.