

Wisconsin Election Analysis

August 6, 2020

Authors: John Curiel and Angelo Dagonel

Table of Contents

Introduction	2
Summary of Findings	2
Context	3
Analysis of 2020 Primary	5
Turnout	5
Vote Mode	
6	
By County: 2016 vs. 2020 Vote Mode	6
Election Day Voting	7
Mail Voting	9
Early Voting	10
By Age: 2016 vs. 2020 Vote Mode	12
By Race: 2016 vs. 2020 Vote Mode	12
First Time Voters	13
First-time Voters by County	
Uncounted Mail Ballots	13
Unreturned Ballots	13
Rejected Ballots	17

Access to Polling Places	20
Voter Participation	24
Voter Registration	27
Conclusion	32
Appendix	34

Introduction

Wisconsin’s 2020 presidential preference primary was held on April 7, just as COVID-19 led to the economic and social shuttering of the U.S. On that date, Wisconsin had reported only 2,578 cases of COVID-19. The governor enacted an emergency order on March 12th, around the same time as an initial bump in the number of new COVID-19 cases. Despite attempts to delay the primary, the U.S. Supreme Court rejected the attempt, leading to the first U.S. primary and spring election that had to face the full complexities of holding an election amidst a pandemic. The complications caused by COVID-19 led to caution on the part of voters and election officials concerned about catching the virus. One effect of this concern is that 15% of polling places shuttered.

This report addresses the following key questions:

- How did Wisconsin voters respond to the onset of COVID-19 (turnout and vote mode) in their presidential preference primary?
- How did Wisconsin voting behavior differ by race, age, and first-time voter status?
- How did in-person voting access vary by race, age and population density?
- Were the mail ballots submitted by different demographic groups accepted for counting at different rates?

Summary of Findings

- COVID-19 complications led to the closure of 15% of planned polling places.
 - Poll closures disproportionately affected high population density and non-white areas.
- Overall turnout was lower in the 2020 presidential primary as compared with the 2016 primary.

- Republican turnout declined near uniformly across the state relative to 2016.
- Democratic turnout varied by county, with the largest increases in the counties of Ozaukee, Washington and Waukesha.
- Vote-by-mail became the most common mode of voting in 2020's presidential primary, replacing Election Day voting as the most common mode in the 2016 primary
 - Voting by mail comprised 59% of all votes cast.
 - Early voting comprised 13% of all votes cast.
 - Majorities of all voters by race cast ballots by mail or early voting
 - 73.1% of White voters cast their ballots early or absentee
 - Nonwhite racial group voters varied the most in voting mode preference, with non-Election Day voting ranging from 52.7% to 63.6%
- Of the voters who requested mail ballots, 90.4% returned them, compared to 94.5% in 2016
- Overall, 3.2% of voters who attempted to vote by mail in the 2020 Wisconsin primary failed to have their ballots counted.
 - Black voters had the highest rate of uncounted ballots of all racial groups (4.1%)
 - First time voters had uncounted ballot rates that exceeded rates for voters with prior voting experience (3.8% compared to 2.9%)
- Net voter registrations are slightly behind the pace set in 2016. The main reason for this is a dramatic decrease in net registrations among younger voters, age 18 to 24.

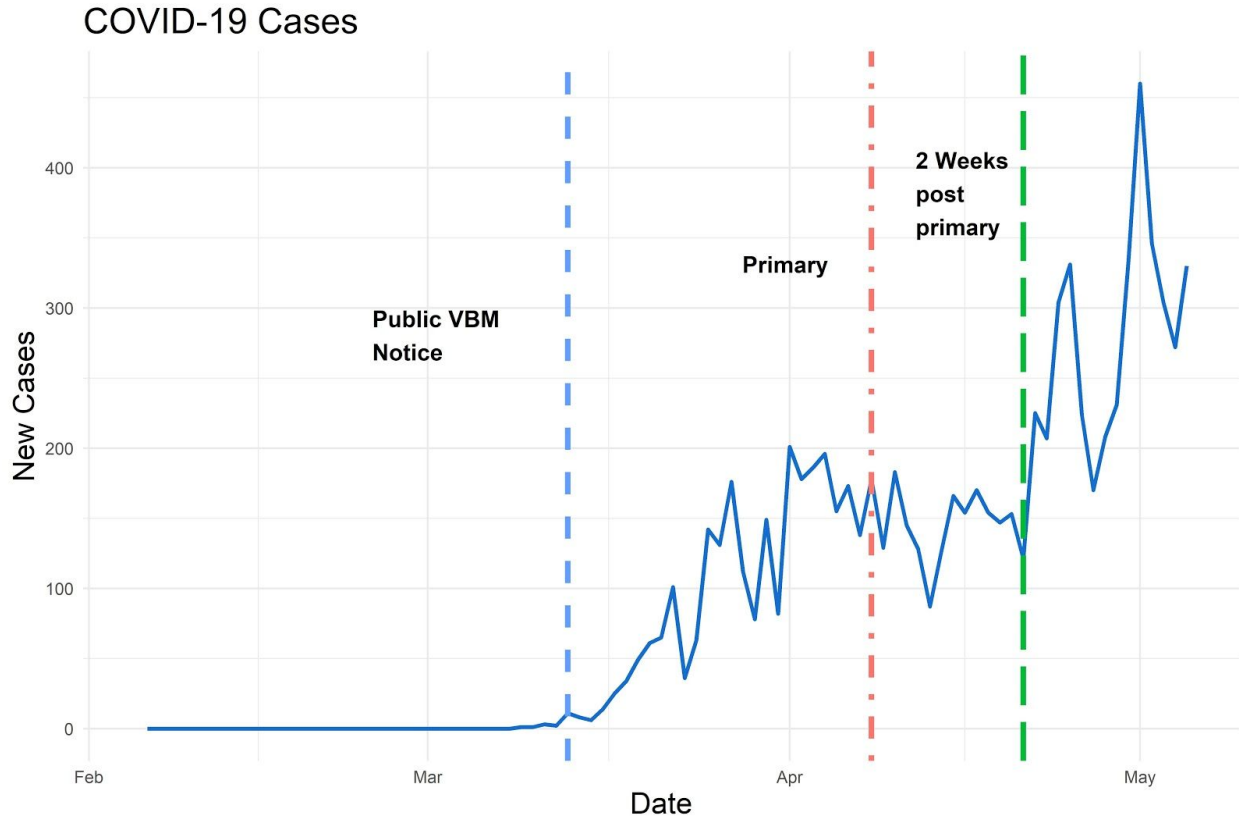
Context

Unlike the states before it, Wisconsin started to experience a rise in new COVID-19 cases immediately preceding its primary. As seen in the plot below, two weeks before the primary there were between 100 and 200 new cases per day within the state. The spike in new cases two weeks after the primary suggests the warranted concern over the pandemic and desire by the state to prevent the

spread of the pandemic.¹ The Wisconsin Elections Commission followed the advice of the governor and state health officials and encouraged voters to vote by mail, a little under a month before the primary.

In addition to the presidential preference primary, the state also held the spring election for a number of nonpartisan races, including the highly competitive Supreme Court justice election for one of the seats, between incumbent conservative Daniel Kelly and challenger liberal Jill Karofsky.

¹ However, a series of public health studies devoted to the question of whether the primary led to a surge in COVID cases has cast doubt on whether voting was a cause of the rise in new cases. See Paradis, et al, “Public Health Efforts to Mitigate COVID-19 Transmission During the April 7, 2020, Election--City of Milwaukee, Wisconsin, March 13 -- May 5, 2020, *Morbidity and Mortality Weekly Report*, <https://www.cdc.gov/mmwr/volumes/69/wr/pdfs/mm6930a4-H.pdf>. Also see Andrew C. Berry, Madhuri S. Mulekar, and Bruce B. Berry, “Wisconsin April 2020 Election Not Associated with Increase in COVID-19 Infection Rates,” *medRxiv*, <https://doi.org/10.1101/2020.04.23.20074575>; Kathry Leung, et al., “No Detectable Surge in SARS-CoV-2 Transmission due to the April 7, 2020 Wisconsin Election,” *medRxiv*, <https://doi.org/10.1101/2020.04.24.20078345>. But see Chad D. Cotti, et al, “The Relationship between In-Person Voting, Consolidated Polling Locations, and Absentee Voting on COVID-19: Evidence from the Wisconsin Primary,” available at SSRN: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3597233.



I. Analysis of 2020 Primary

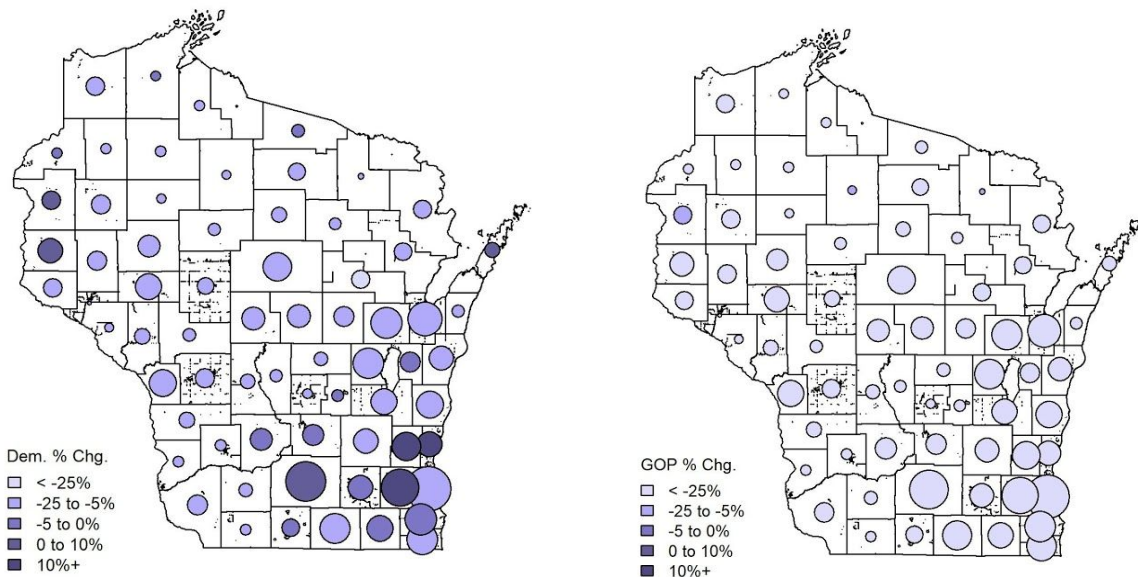
A. Turnout

Over 1.5 million voters turned out for the 2020 presidential preference primary and spring election, compared to over 2.1 million in 2016. Both parties experienced a decline in turnout, although Republicans saw the greater drop. Democratic turnout declined from a little over one million to just over 900 thousand; Republican turnout dropped from 1.1 million to 630 thousand. Although the Democratic presidential nomination was less competitive by the date of the Wisconsin primary, the Republican presidential primary was uncontested altogether. The Supreme Court election was competitive, but it proved unable to draw out high Republican turnout.

Change in Turnout by County, 2016 to 2020.

Democratic Primary

Republican Primary



In analyzing the mapped results by county and party, stark geographical differences arise between the parties. Turnout for Republicans decreased more or less uniformly across the state, with no county experiencing an increase in turnout. Republican participation declined the least in Iron and Polk counties, and experienced the greatest drops in the southern half of the state. Although Democratic turnout declined overall, it increased in the counties surrounding Milwaukee, including Washington, Waukesha and Ozaukee counties, in addition to Dane County (Madison) and the counties of the exurbs of the Twin Cities.

B. Vote Mode

Voters in Wisconsin can cast ballots by three modes: in-person on Election Day, in-person before Election Day, and absentee/by mail. Wisconsin's in-person early voting falls under the state's absentee ballot statute, with records of early voters included in the absentee ballot file. In prior elections, most "early" voters cast ballots in person before Election Day. In the primary, most early voters voted by mail.

In the 2020 primary, 59% of voters cast ballots by mail, compared to only 3.6% in 2016. Early voting comprised only 6.4% in 2016, and nearly doubled to 12% for the 2020 primary. Election Day

voting in turn saw a great drop in placement, as only 29% of primary voters cast ballots on Election Day, down from 90% in 2020.

Vote by Mode in 2016 and 2020				
Year	Absentee	Early	Polls	Vote count
2016	3.6%	6.4%	90.0%	2,131,109
2020	59%	12%	29%	1,555,263

By County: 2016 vs. 2020 Vote Mode

Wisconsin as a state sees a marked divide between the northern and southern halves of the state, leading to regional patterns that might diverge substantially from other parts of the state. The most notable divergence arises between the Milwaukee metropolitan area and surrounding counties, compared to the rural and sparsely populated north. These regional patterns bear direct relevance on voting mode, given that higher concentrations of voters directly increase the risk of spreading COVID-19, in addition to the fact that more polling places tended to close in urban and non-white areas. Therefore, we proceed to breakdown the voting mode results by county.²

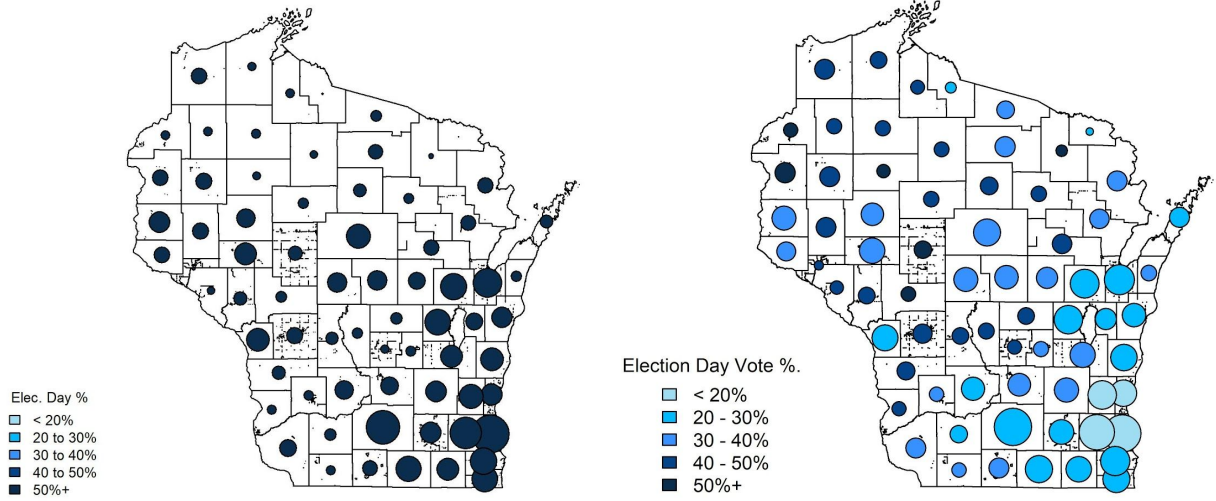
Election Day Voting

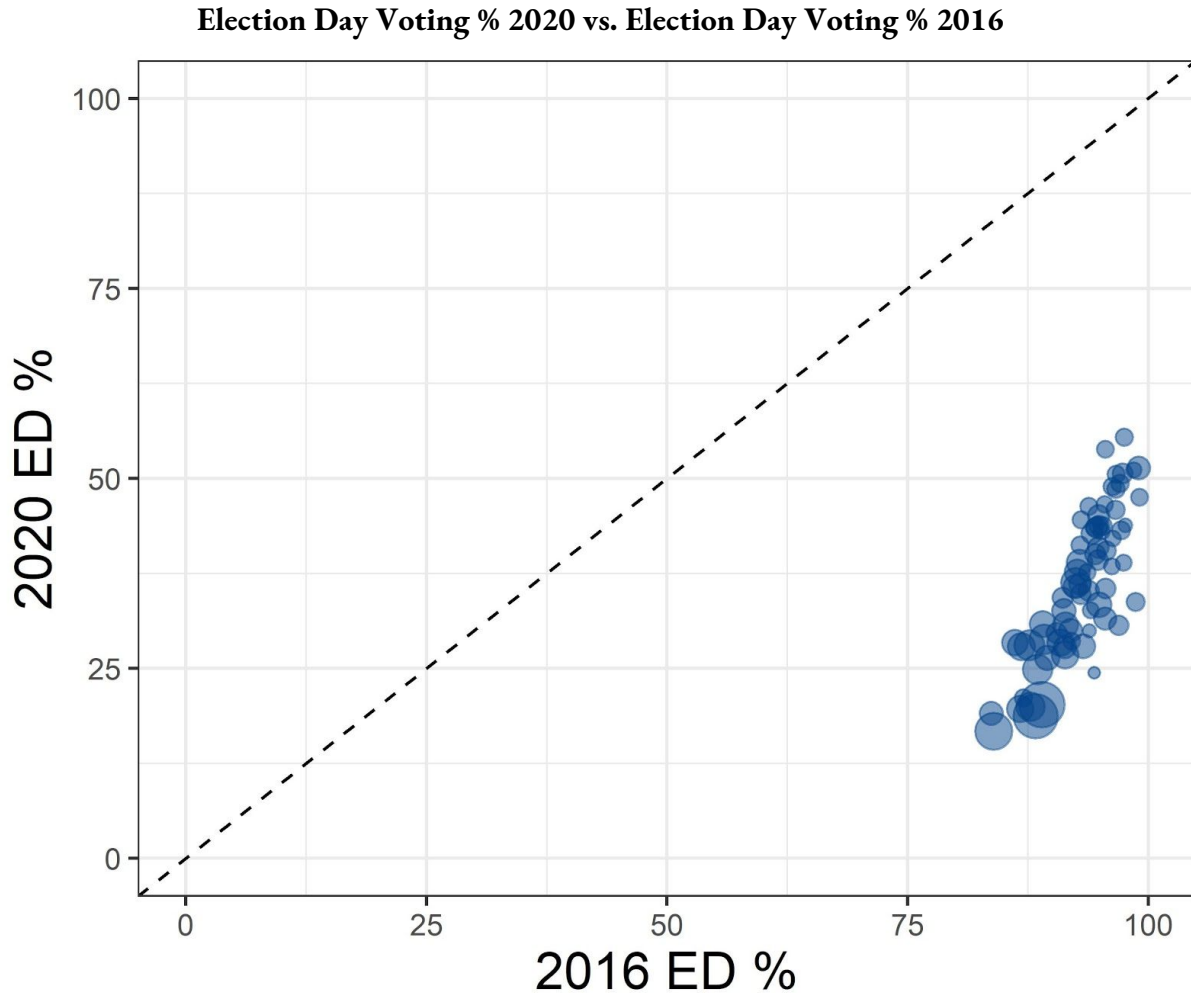
As previously mentioned, Election Day in person voting dropped substantially from previous years. Every county in 2016 saw Election Day voting as the most common voting mode. Absentee voting displaced it as the most common voting mode across the state and most counties. Although Election Day voting dropped in almost every county, municipality, and ward within the state, it remained more common in the northwest of the state.

2016: Election Day Vote %

2020: Election Day Vote %

² The state of Wisconsin operates elections at the municipality level, of which there are over 1,900. For the purpose of clarity of mapping and visualizing the results, we map by county.





In the south and southwestern parts of the state, up to the northern peninsula, no county saw more than 40% of voters cast a ballot on Election Day. Because this is the region of the state with the bulk of the population, this regional trend drove the statewide trend, as well. The only part of the state where Election Day voting exceeded 40% was limited to the smaller counties in the northwestern part of the state. The county with the lowest fraction of Election-Day voters was Waukesha, at 16%; the high was Burnett County, with 55%. The lowest rates of Election Day voting occurred in Milwaukee County and those immediately adjacent to it.

Overall, there is a positive correlation between Election Day voting in 2020 and 2016 at 0.81. However, analyzing the scatterplot by county reveals a consistent intercept drop, where the smallest

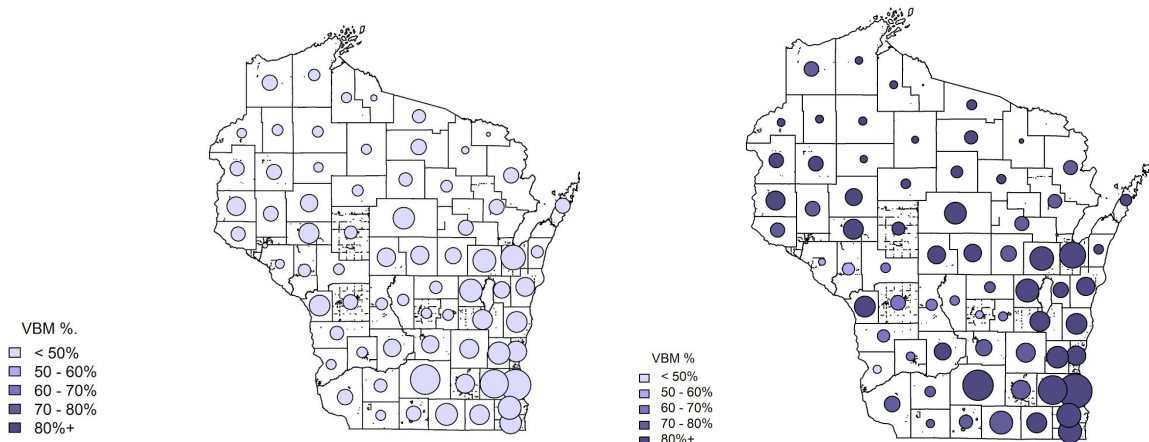
declines in Election Day voting amounted to 50 percentage points. Overall, the rank ordering of counties in their preferences for Election Day voting are similar across 2020 and 2016.

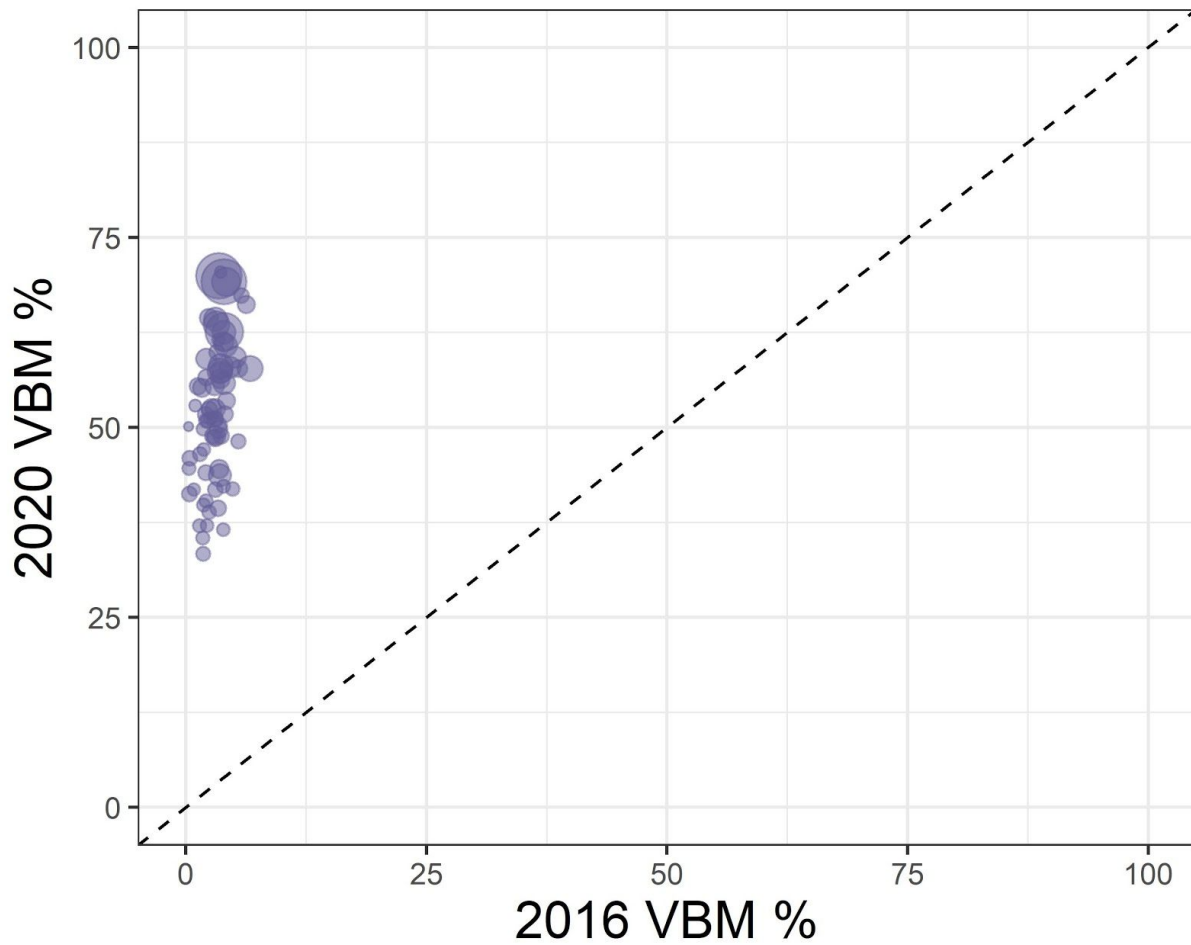
Mail Voting

The primary contributor to the decrease in Election Day voting was a dramatic statewide rise in mail voting. The county-to-county patterns are exactly the opposite of Election-Day patterns: Mail voting in 2020 predominated in the southeast and south-central part of the state. It was much less prominent in the smaller northern counties. There is a positive correlation of 0.46 between county VBM rate for the 2016 and 2020 primaries, though it is such that there is a high degree of clustering at around 60% VBM usage. The only outliers are Crawford and Menominee counties.

2016: Mail Vote %

2020: Mail Vote %

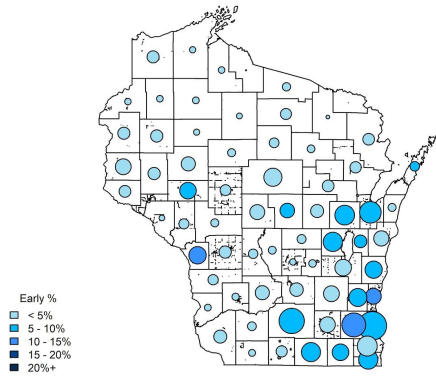




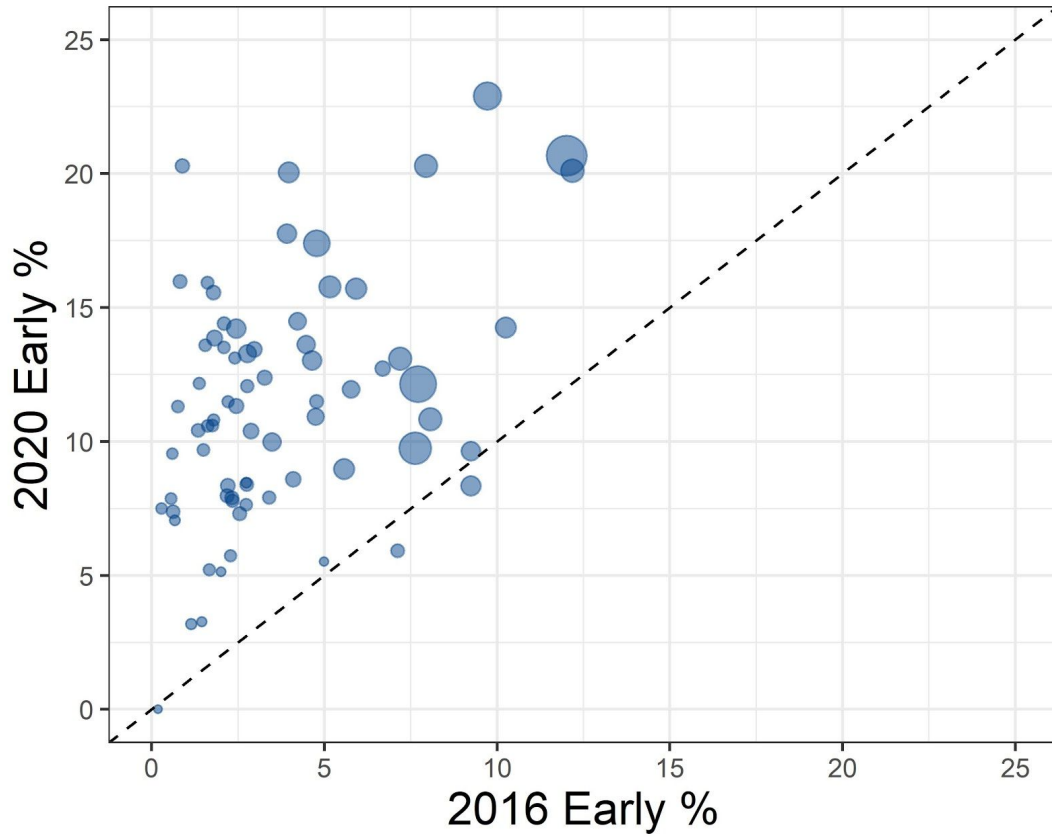
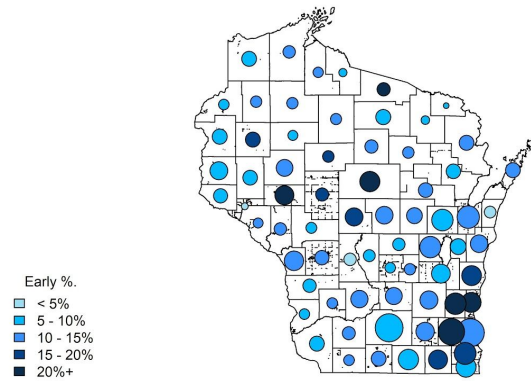
Early Voting

Early voting also rose across Wisconsin, from 6.4% in 2016 to approximately 12% in 2020. Unlike voting by mail, the rate of early voting was less geographically concentrated, with many of the northern counties exceeding rates of 10%. Additionally, the rate varies from 0% in rural Kewaunee county, to a high of 20.6% in Washington county. Within the Milwaukee metropolitan area, in-person early voting was more prominent in the outer suburbs of Milwaukee than in the county of Milwaukee. The correlation between early voting rates by county reaches approximately 0.4, where the outliers are Kewaunee and Washington counties.

2016: Early Voting %



2020: Early Voting %



By Age: 2016 vs. 2020 Vote Mode

Across all age groups,³ early/absentee voting rose substantially. It rose across all age groups. However, early/absentee voting rose 7-fold among those 18-29, and only 4-fold among those 60+ years old. Relative to the 2016 presidential preference primary and spring election, jumps in absentee voting ranged from 59 to 67 percentage points.

Voting Mode by Age: 2016 v. 2020						
Age	Absentee/Early		Election Day		Vote count	
	2016	2020	2016	2020	2016	2020
18-29	9%	68%	91%	32%	107,489	67,833
30-44	5%	72%	95%	28%	352,396	248,586
45-59	6%	67%	94%	33%	544,286	392,776
60+	16%	78%	84%	22%	1,016,266	700,561

By Race: 2016 vs. 2020 Vote Mode

An analysis of voting mode by race reveals substantially increased absentee voting by all groups. For the purposes of racial analyses, we employed Bayesian Improved Surname Geocoding (BISG) imputation. BISG relies upon matches voters with Census geographies via geocoded residential addresses and the voter's last name to estimate the voter's race. This method, originally developed for use in public health research, has recently been extended to the study of voting.⁴ Voting absentee increased substantially across racial groups, though some substantial differences exist. Absentee voting was the most common voting mode for all groups except Hispanic voters, for whom Election Day was the most common mode. Additionally, only a bare majority of Black voters cast ballots by mail, and only a plurality of Asian voters cast their ballots by mail. These rates stand in contrast to 2016, where mail ballot rates ranged from 3.08% and 3.65%. Early voting stayed relatively the same for Hispanic and Asian voters, whereas they approximately doubled for White, Black and Other voters.

³ The Wisconsin voter file does not include age or birthdate of the voter. Therefore, we relied on data from the data-list firm Catalist to conduct analysis related to age and voting in the primary. The Catalist dataset does not distinguish between in-person and mail early voters. Catalist LLC. "Catalist | QTool | Workspace." <https://qtool.catalist.us/>. Accessed 7/11/2020.

⁴ For the original description of this method, see Marc N. Elliott, et al, "Using the Census Bureau's Surname List to Improve Estimates of Race/Ethnicity and Associated Disparities," *Health Services and Outcomes Research Methodology* 98, no. 2(2009): 69–83. The approach has been extended to political science by Kosuke Imai and Kabir Khanna, "Improving Ecological Inference by Predicting Individual Ethnicity from Voter Registration Records," *Political Analysis* (2016): 263 -- 72.

Voting Mode by Race: 2016 v 2020						
Race	2016			2020		
	Absentee	Early	Election Day	Absentee	Early	Election Day
White	3.59%	6.51%	89.90%	60.04%	13.08%	26.88%
Black	3.65%	5.67%	90.68%	50.25%	11.65%	38.10%
Hispanic	3.08%	5.77%	91.15%	45.04%	7.66%	47.29%
Asian	3.49%	7.63%	88.88%	48.42%	7.91%	43.67%
Other	3.53%	6.01%	90.46%	53.45%	10.16%	36.38%

C. First Time Voters

Overall, first-time voters⁵ represented 4.31% of the 2020 presidential primary and spring election vote. First-time voters were less likely to vote by mail (65%) than experienced voters (73%).

D. Uncounted Mail Ballots

Wisconsin experienced a dramatic increase in voting by mail, surging from 76,125 (11% of ballots cast) in 2016 to 921,534 (59%) in 2020. Wisconsin received mail-ballot requests from 1,247,845 unique voters. These requests resulted in the return of 1,110,674 ballots to be counted, or a return rate of 90.4%, compared to 94.5% in 2016.

A higher percentage of mail ballots arrived after the deadline in 2020 (6.2% of all returned ballots, or 68,656 total) than in 2016 (5.0%, or 10,711).

Unreturned Ballots

One of the prominent issues surrounding the Wisconsin primary was the return of absentee ballots. Because of the barriers present to receiving ballots (due to ID requirements) and returning them (due to signature requirements), an important question that arose was how successful would Wisconsin voters be in navigating these barriers to vote by mail.

⁵ Voters were coded as first time if there is no record of them voting in any election between 2020 and 2006 in the voter history file.

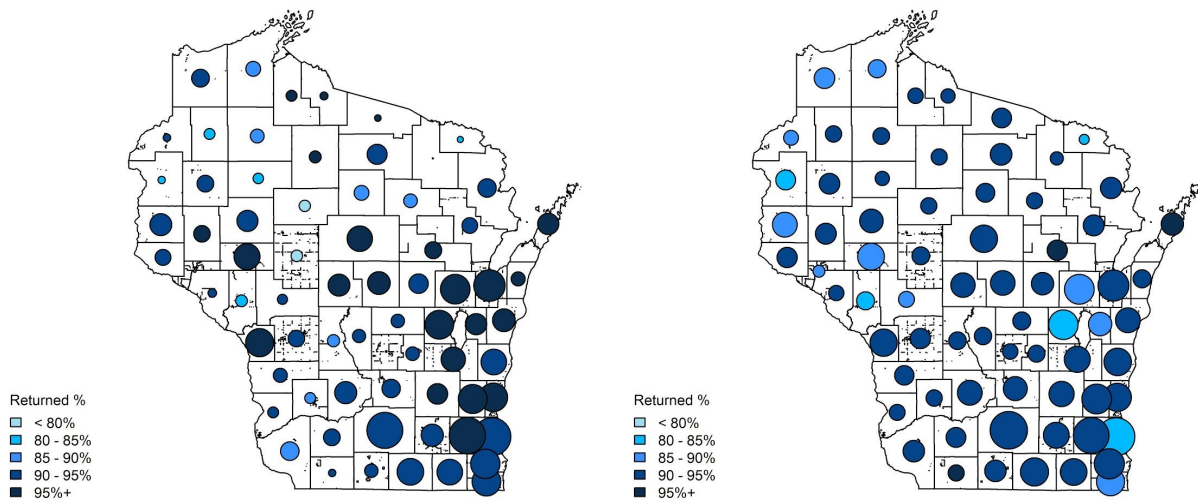
One indicator of this success is the percentage of requests that resulted in a returned mail ballot. Overall, 90.4% of ballots that were mailed to Wisconsin voters were returned for counting. The return rate is a drop of approximately 4.1 percentage points compared to the 2016 primary.

Return rates were above 90% in most of the state, with a few exceptions. Menominee County had the lowest rate of return, at 70% of the 47 ballots requested. Ballot return rates tended to be lower in the most populous portion of the state, in the southeast, and higher in the more rural parts of the state. Compared to 2016, there is a drop in return rates across the state, though most notable in the southeast.

Return Rates by County

2016

2020

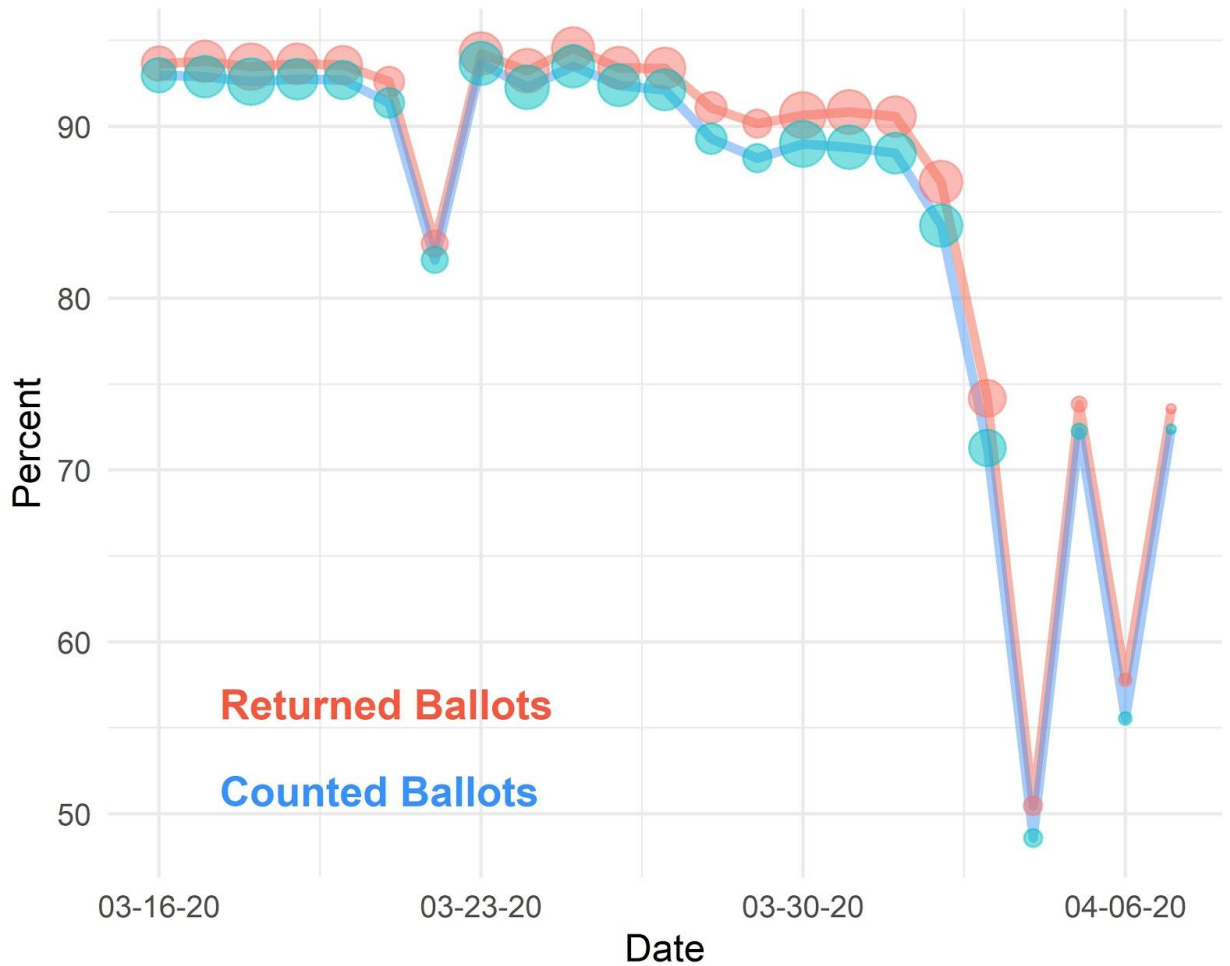




As the accompanying graph shows, however, the return rate was not constant across time. Up until the end of March, the ballot return rate hovered around 90%. (The exception is the time period from March 22 at 10:42 PM to March 23 at 1:31 AM, which has been attributed to a computer maintenance error that accidentally categorized 2,693 ballots for the City of Milwaukee as sent, even though they never were, leading to requests unfulfilled, and thus never returned.⁶) However, as the primary approached, the return rate began to decline, until it plummeted to nearly 50% the Friday before Election Day.

⁶ See, Megan Wolfe. 2020. April 7, 2020 Absentee Voting Report. Wisconsin Elections Commission, 19-20. URL: <https://elections.wi.gov/node/6908>. (accessed May 23, 2020).

Of the voters who did not see their mail ballots returned, approximately 61% then ended up voting in person.⁷



In both 2016 and 2020, non-white voters as a whole were less likely to return ballots than white voters. The non-return rate among all voters nearly doubled 2016 (5.5%) to 2020 (9.6%). Among white voters, 8.8% failed to return their ballot in 2020, up from 5.2% in 2016. Among Black

⁷ Of the voters affected by the server issue, “52.5% voted in the election either on a replacement absentee ballot or at the polls on Election Day.” See, *Ibid.*, 20

voters, the non-return rate rose to 17.0% in 2020, up from 9.1% in 2016. However, Asian and Hispanic voters saw the greatest jump in non-returned ballots.

Uncounted Ballots by Race and Year		
<u>Race</u>	<u>2016</u>	<u>2020</u>
White	5.23% (10,585)	8.82% (94,607)
Black	9.07% (1,083)	16.96% (10,232)
Hispanic	6.40 (606)	14.07% (7,836)
Asian	5.30% (326)	13.33% (4,473)
Other	5.80% (284)	10.86% (2,809)
Total	5.49% (12,884)	9.61% (119,957)

Over 96% of voters who returned a mail ballot had voted before. Of these, 9.2% failed to return their mail ballot. Among the 4% voting for the first time, 20.7% failed to return a ballot.

Ballot Return Rates by Voter Experience		
<u>Voting experience</u>	<u>Returned</u>	<u>Not-returned</u>
First-time voter	79.28% (38,445)	20.72% (10,045)
Previous voter	90.84% (1,089,443)	9.16% (109,912)

Rejected ballots

A total of 20,699 returned ballots were rejected for counting. Leaving aside the ballots that arrived too late to be counted, were mailed after Election Day, or contained no postmark, 13,614 were rejected because of the reason “certification insufficient.” Insufficient certification covers a large number of deficiencies, ranging from the lack of voter or witness signatures, to the lack of a date on the certificate itself.⁸ Unfortunately, because of the breadth of reasons covered by certification

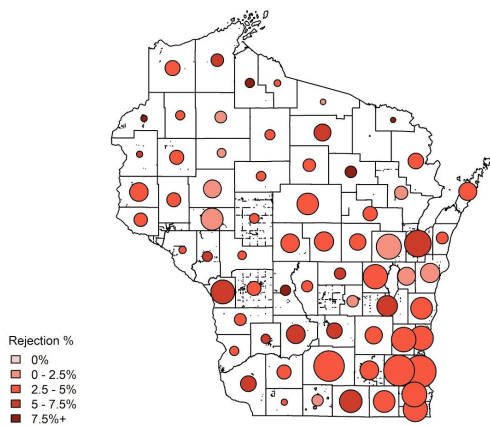
⁸ For a discussion of this issue, including an image of the certification, see Tom Scheck, Geoff Hing, and Dee J. Hall, “How Wisconsin’s 23,000 rejected absentee ballots in spring could spell trouble for the November election,” *Green Bay Press Gazette* 29 July 2020, <https://www.greenbaypressgazette.com/story/news/2020/07/29/wisconsin-election-rejected-absentee-ballots-could-spell-trouble-november/5529702002/>.

insufficiency, we cannot analyze reasons for rejection at the level of detail we would like. Nonetheless we can examine the topic of ballot rejection generally.

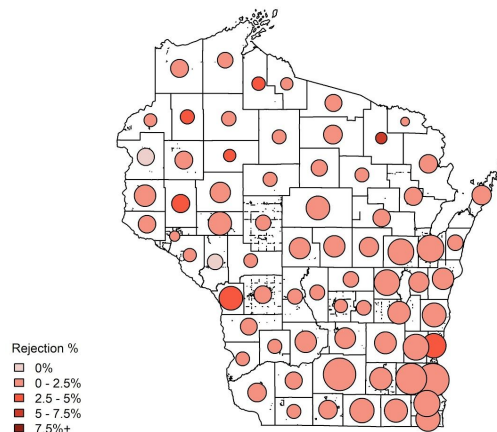
Rejection rates were below 1% in most counties. With the exception of tiny Forest County, which had the highest rejection rate in the state (6.0% of 1,313 ballots returned on time), rejection rates tended to be highest in the larger counties. The other notable exception was Dane County, the second-largest county in the states, with a rejection rate of only 0.72%. Relative to 2016, the rejection rate decreased near uniformly across the state. Local election boards rejected 3.9% of all mail ballots in 2016, relative to 1.7% in 2020. Therefore, compared to 2016, although mail voters had a more difficult time getting their ballots in on time in 2020, once those ballots arrived, they were more likely to be counted.

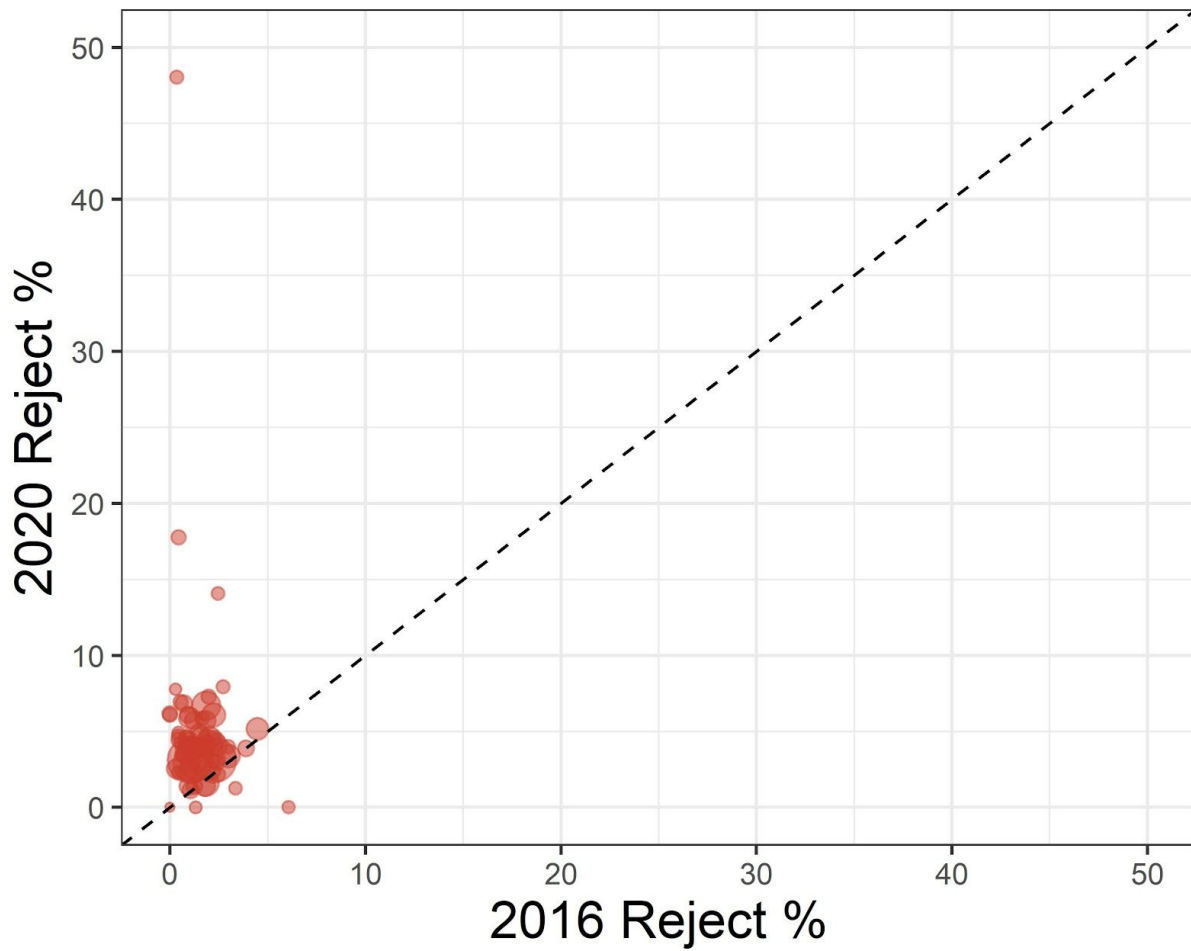
Rejection Rates by County

2016



2020





The rejection rate of ballots declined for every racial group, except for Black voters. White, Hispanic, Asian and other voters all saw rejection rates decline by over a percentage point. In contrast, the rejection rate for Black voters actually increased by half a percentage point.

Rejected Ballots by Race and Year		
Race	2016	2020
White	3.91% (7,491)	1.63% (15,901)
Black	2.97% (322)	3.48% (1,746)
Hispanic	3.78% (335)	2.43% (1,163)
Asian	3.71% (216)	2.45% (713)
Other	4.40% (203)	2.05% (475)
Total	3.86% (8,568)	1.7% (19,998)

In addition to racial disparities, there were disparities based on prior experience. First-time voters saw their mail ballots rejected at a 2.6% rate, compared to 1.7% for experienced voters.

Ballot Rejection Rates by Voter Experience		
Voting experience	Accepted	Rejected
First-time voter	97.36% (37,429)	2.64% (1,016)
Previous voter	98.26% (1,070,461)	1.74% (18,982)

E. Access to Polling Places

One of the major stories to arise from the Wisconsin primary was the difficulty keeping polling places open for Election Day voting. In a pre-election survey of local election jurisdiction, 111 municipalities reported they had a “critical” shortage of poll workers (defined as they couldn’t open at least one polling place) and another 126 said they had a “serious” shortage” (defined as the jurisdiction is unable to staff all desired polling locations).⁹ The most visible polling place closings occurred in Milwaukee, where only five polling places opened on Election Day, compared to an initially planned

⁹ These statistics are taken from a memo from Meagan Wolfe, the executive director of the Wisconsin Elections Board, to the Board for a March 31, 2020 meeting. See <https://elections.wi.gov/sites/elections.wi.gov/files/2020-03/Complete%20Packet%2031.pdf>. A useful pre-election analysis of polling places closures is Henry Redman, “Wisconsin’s Closed Polls,” *Wisconsin Examiner*, April 6, 2020, <https://wisconsinexaminer.com/2020/04/06/wisconsins-closed-polls/>.

180.¹⁰ Even the municipalities that were able to keep polling places open often did so only because of the assistance of the National Guard, which provided poll workers to many sites throughout the state.

The Wisconsin Elections Commission released a list of 2,495 planned polling places on February 2, 2020, based on reports from the municipalities.¹¹ An updated list released April 4 revealed 387 polling locations closed, or about 15% of the planned total.¹²

However, the closed polling locations were not uniformly distributed. Only 61 of the state's 1,911 municipalities experienced polling closures. Among these, 175, or approximately 45% of all polling place closures, took place in the City of Milwaukee. The next five municipalities with the highest number of poll closures were Madison (29/92), Green Bay (28/30), West Allis (13/20), Waukesha (12/13), and Kenosha (11/20).

The figure of planned *versus* opened polling places in Milwaukee County demonstrates the severity of the closures in that city. Whereas most wards¹³ had been planned to have their own polling place, or to vote in the neighboring ward, the revised plan provided only five polling places for the whole city. Suburban Milwaukee County also saw a reduction in polling places (28 closed, out of 80 originally planned), although most remained open.

¹⁰ Interestingly enough, neither Milwaukee City nor Green Bay, two cities that had the most severe poll closings, reported being in “critical” condition in the Elections Board survey.

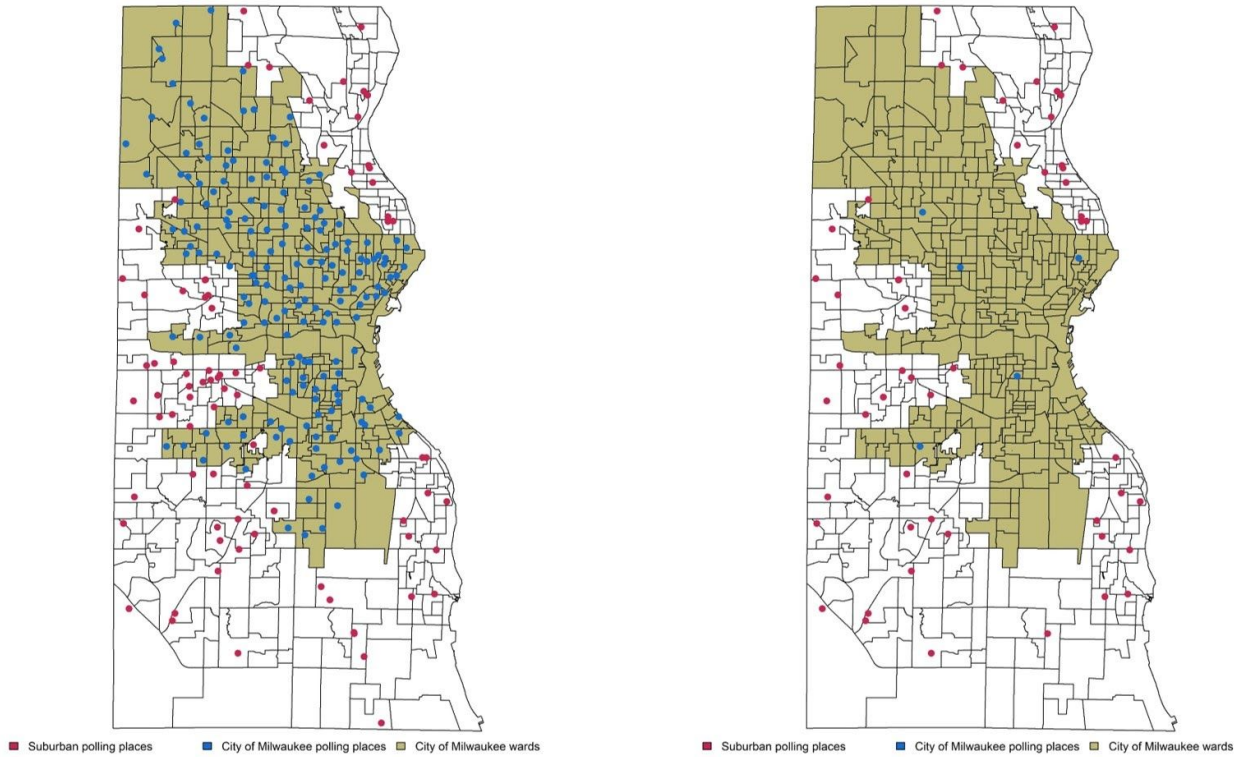
¹¹ “Spring 2020 Election and Presidential Preference Primary.” Wisconsin Elections Commission. <https://elections.wi.gov/node/6524> (accessed May 19, 2020).

¹² Ibid.

¹³ Wisconsin uses the term “ward” to refer to election units that in most other states are termed “precincts.”

Scheduled Polling Places 2020 Spring Election

Opened Polling Places 2020 Spring Election



Looking at the state as a whole, we see the trends in Milwaukee generalized to the rest of the state. The polling places that closed tended to be in urban areas. As we also show, even when we control for population density of the ward where the polling place was originally located, polling places were more likely to be closed in minority neighborhoods.

An analysis of the results by population density reveals a disparity in polling place closing. The median population per square mile for closed polling places was approximately 727, compared to 17 for opened polling places. Only 1% of polling places with population densities below the median closed, compared to 31% of polling places with population densities above the median.

Percentage of Polling Places that Did Not Open, by Population Density		
Population density (pop/mi²)	Pct. closed	Number of polling places
Minimum - 1st quartile (0 - 3.9)	0.3% (2)	625
1st quartile - Median (3.9 - 51.8)	1.4% (9)	623
Median - 3rd quartile (51.8 - 313.7)	13.5% (94)	624
3rd quartile - Maximum (313.7 - 12,687.2)	46.9% (292)	623

In addition, most polls that ended up opening as planned were in predominantly White neighborhoods.. The median population of polling places opened was 4% White. On the other hand, the median non-white population for polling places that ended up closing was 21%. Only 30 polling places (out of 1,248) located where the non-white population was below the median were closed. In contrast, 298 polling places closed (out of 623) in precincts in the upper quartile of non-white population.

Percentage of Polling Places that Did Not Open, by Percentage of Non-White Voting Population		
Non-white voting population	Pct. closed	Number of polling places
Minimum - 1st quartile (0 - 2.8%)	1.6% (10)	625
1st quartile - Median (2.8 - 5.0%)	3.2% (20)	623
Median - 3rd quartile (5.0 - 11.0%)	9.5% (59)	624
3rd quartile - Maximum (11.0 - 99.5%)	47.8% (298)	623

We conducted multivariate logistic regression analysis that explored the relationship between poll closings and race, density, and partisan simultaneously. The results of that analysis show an independent influence of each of these factors, all of which were statistically significant. That analysis is reported in the appendix of this report.

F. Voter Participation

Wisconsin offers the first real case of barriers to participation given the ensuing election administration challenges amidst a pandemic. Therefore, estimating the direct impact of how the pandemic affected participation is of great importance. To do so, we calculated the proportions that individual voters participated in the county that was most affected by the COVID virus, Milwaukee.

Overall, 42.7% of Milwaukee County's active registered voters participated in the Wisconsin presidential primary. Broken down by race, we estimate that these participation rates were 50.6% for White voters and 32.1% for non-white voters.

As discussed above, in-person voting in Milwaukee was consolidated at the last minute down to five polling places. Furthermore, the polling places that were closed tended to be in non-white communities. Finally, non-white participation was significantly below that of White participation. Combining these observations, we examined whether the closing of polling places contributed to these racial participation disparities.

Addressing this issue is computationally intense. Rather than explore this topic using all the data, we focused on a random sample of 121,096 Milwaukee County voters, 20% of all active and registered Milwaukee voters present in the voter file. Using Geographic Information Systems (GIS) software, we calculated the change in distance from each voter's originally assigned polling place to their newly assigned one. We find that among voters, the average polling place shifted 2.4 miles, or a median of 1.2.

Based on this technique, we estimate that the average voter was moved 2.4 miles (median = 1.2 miles) away from his or her regular polling place. Of the voters in our sample, 28.3% did not have their polling place close, and approximately half voted in the primary. For those whose polling places did close, 36.6% ended up voting in the primary. However, there is a slight upward trend in participation as the distance between planned and opened polling places increases.

The rate at which these two groups chose Election Day as their preferred voting mode are nearly identical, 18.6% for those with no polling place closures, and 18.7% for those with polling place closures.

Furthermore the racial disparity in turnout among these voters was substantial -- 42.6% for Whites and 26.1% for non-whites. For the remaining voters who experienced a poll closing, distance to the closest open polling place had a strong effect on whether the voter turned out. The fall-off in participation was steeper for non-white voters than for White voters.

To be clear about our findings of racial disparities: Elsewhere in this report, we find that the likelihood a polling place would be closed rose dramatically as the non-white composition of that polling place increased. If turnout disparities between White and non-whites were solely due to poll closings, then racial differences in participation would go away once we controlled for factors such as poll closures or distance to the polls.

Even after controlling for distance to the polls, non-white voters turned out at a lower rate than Whites. Even non-white voters who did not see their polling places closed turned out at significantly lower rates than Whites. Thus, while polling place closures do have a role in explaining lower non-white turnout in the Wisconsin primary, it is not the only effect, and is unlikely be the strongest effect.

Participation Given Distance and Race in Milwaukee County			
Distance Change Rank	White	Non-white	Total
0 - First Quartile. (No change)	52.9% (26,181)	39.6% (8,115)	49.7% (34,296)
First Quartile - Median (0 - 1.18 mi)	42.9% (11,051)	23.0% (15,248)	31.3% (26,299)
Median - Third Quartile (1.18 - 4.82 mi)	42.9% (15,989)	27.8% (14,238)	35.8% (30,227)
Third Quartile - Maximum (4.82 - 7.87 mi)	48.7% (18,464)	31.6% (11,810)	42.2% (30,274)

One of the anomalies in the table above is that the relationship between the probability of voting and the distance to the polling place in Milwaukee County is curvilinear. The highest participation rates were among those whose polling place was unchanged. The second-highest

participation rates were among those whose polling places moved the furthest away. What explains this pattern?

The explanation appears to be that people whose polling place was moved the furthest away were among the most likely to vote early, either in person or by mail. Thus, at least for this election, the major suppressive effect of closing polling places appears to have been among voters left with a middling distance between themselves and the new polling place. For these voters, the new polling place was too far to travel to on Election Day, but not far enough to request an absentee ballot or go to vote early in person.

The participation rates for the sample are such that the sharpest decline arises from those whose polls closed and are between the first and second quartile in distance changes. For Whites, the drop in participation is 10 percentage points, and for non-whites it is 16.6 percentage points. Following this first category, the participation rate starts to steadily increase for increased distances. As seen in participation by mode given polling place distance, this is due to the shift to voting by mail.

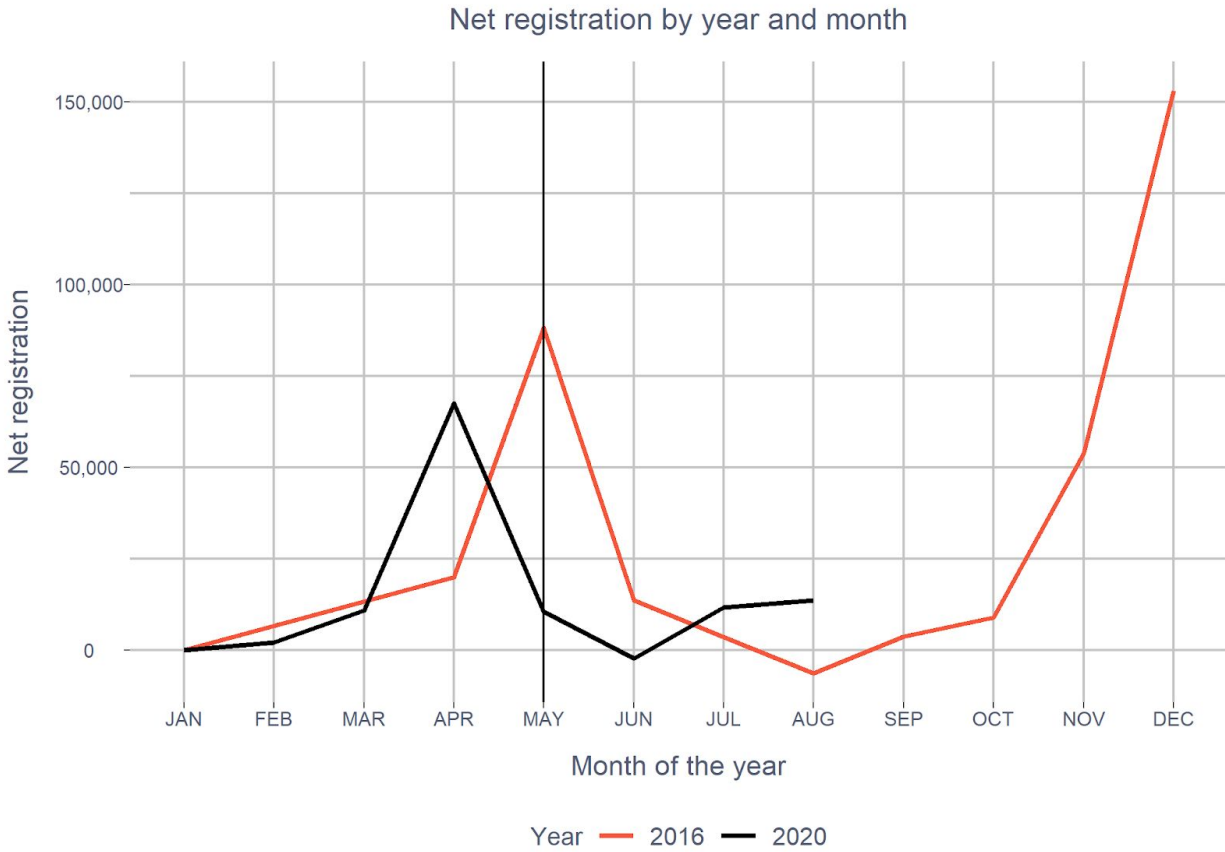
Participation by Mode Given Distance and Race in Milwaukee County						
Distance Change Rank	White		Non-white		Total	
	Absentee/early	Election Day	Absentee/early	Election Day	Absentee/early	Election Day
0 - First Quartile. (No change)	43.6% (11,404)	9.3% (2,438)	30.4% (2,472)	9.1% (741)	40.5% (13,876)	9.3% (3,179)
First Quartile - Median (0 - 1.18 mi)	35.9% (3,962)	7.0% (766)	16.4% (2,501)	6.6% (1,008)	24.6% (6,463)	6.8% (1,774)
Median - Third Quartile (1.18 - 4.82 mi)	35.7% (5,705)	7.2% (1,155)	21.6% (3,061)	6.2% (887)	29.0% (8,766)	6.8% (2,042)
Third Quartile - Maximum (4.82 - 7.87 mi)	41.3% (7,637)	7.5% (1,383)	25.2% (2,980)	6.4% (762)	35.1% (10,617)	7.1% (2,145)

For Milwaukee voters regardless of race, there was a drop in both Election Day and non-Election Day voting for those affected by changed polling place location within the first quartile. However, the drop was far more substantial among non-white voters. Where non-Election Day participation drops approximately eight percentage points for White voters, it nearly halves for non-white voters. Voting in person on Election Day effectively flatlined for both White and non-white voters, though the rate at which it recovered was lower for non-whites than Whites as moved via mail and early voting.

II. Voter Registration

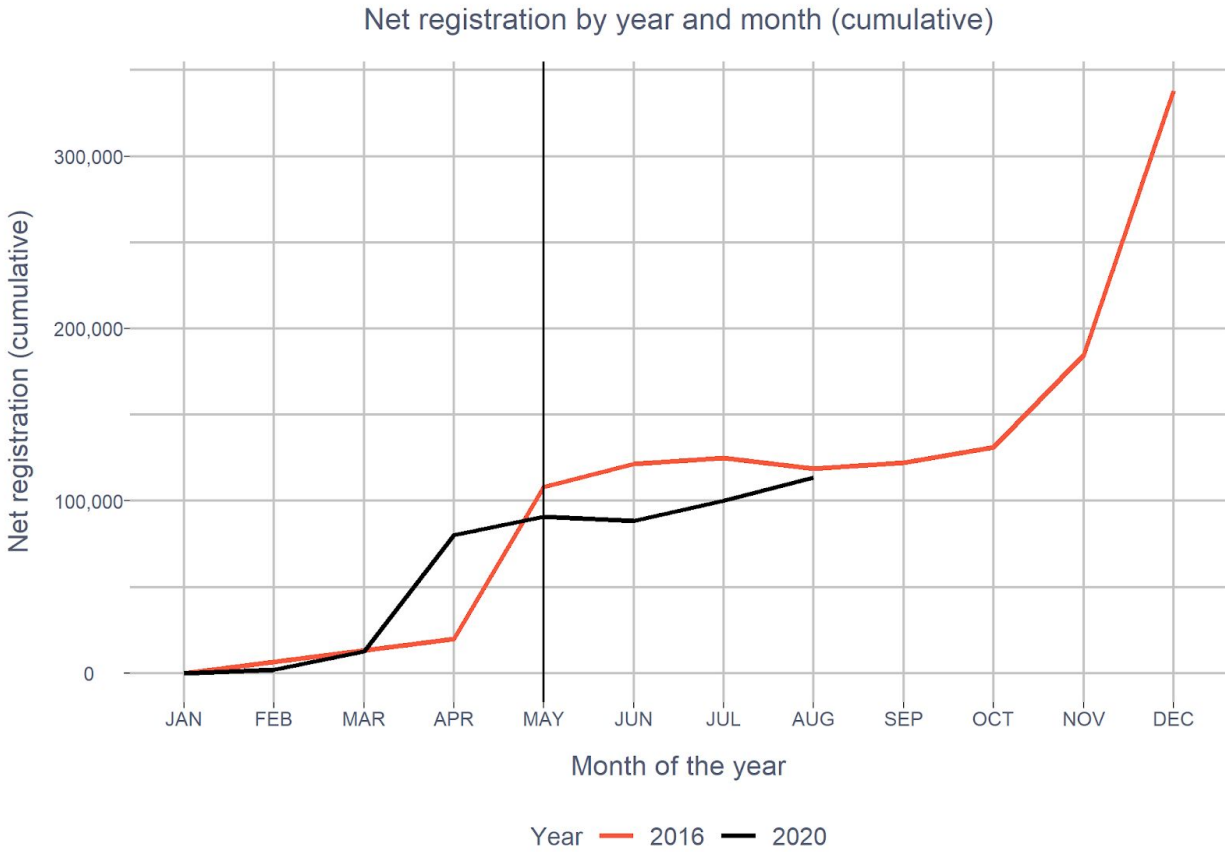
The analysis in this section focuses on reports¹⁴ from the Wisconsin Elections Commission about the number of monthly net voter registrations in 2016 and 2020. Because the reports do not separately account for new registrations and voters removed from the registration lists, this analysis only approximates new registration patterns in 2016 and 2020. One issue that interferes with a clean comparison between 2016 and 2020 is that since 2016, Wisconsin has instituted online voter registration, which has apparently smoothed out registration rates, but also shifted some registration activity away from Election Day. Because of the shifting registration landscape in Wisconsin, rather than comparing registration rates right up to the eve of the primary, as has been done in other reports in this series, we draw the first comparison at May 1 of the two years.

¹⁴ Voter Registration Statistics, Wisconsin Elections Commission.
<https://elections.wi.gov/publications/statistics/registration> (accessed July 23, 2020)



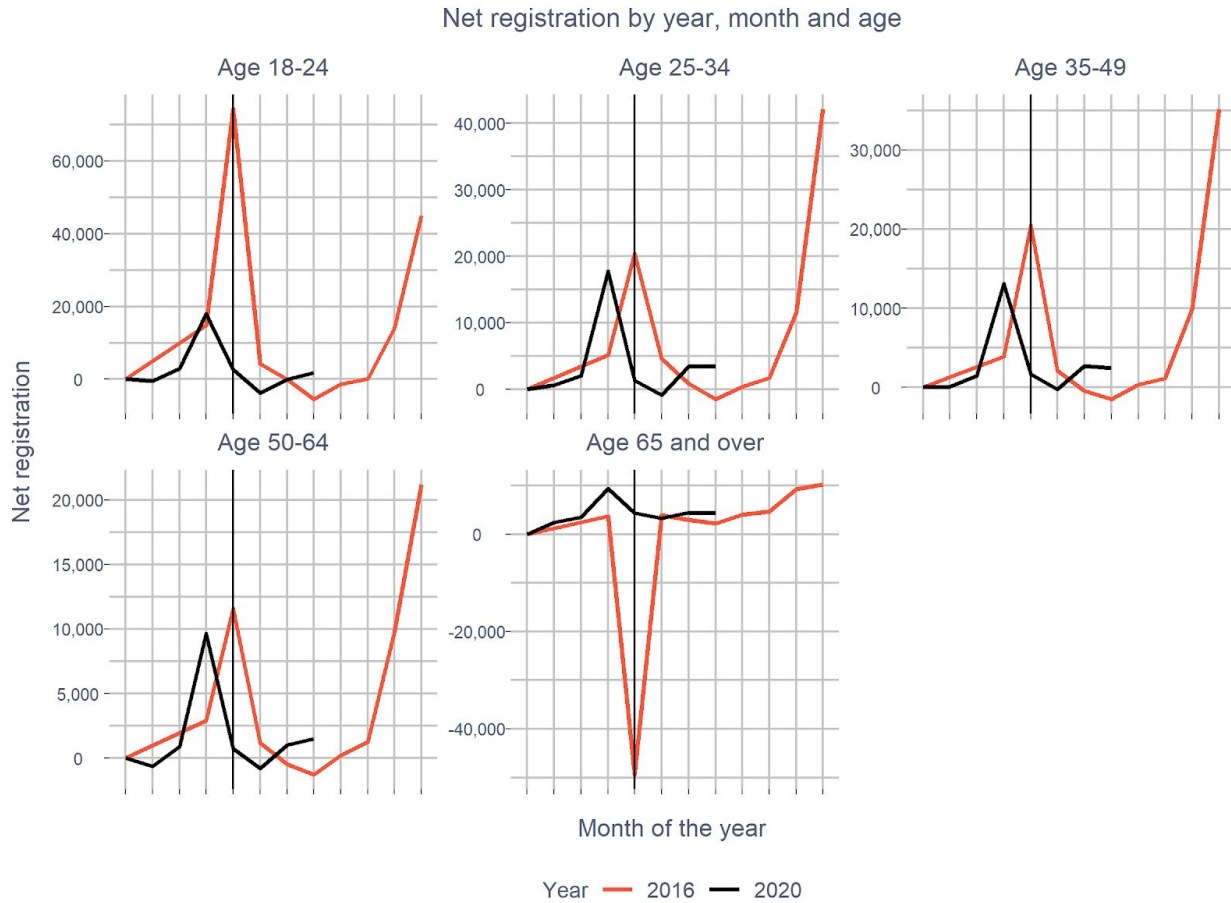
Compared to 2016, net voter registrations have suffered a modest decline for the year 2020, despite initial gains. Net registrations from the new year until May 1 were 15% less in 2020 (90,787) than in 2016 (107,893).

As of the beginning of August, total registrations in 2020 (3,420,587) slightly lags behind August 2016 (3,492,577) by 71,990 voters. Additionally, the number of net registrations is slightly lower in 2020 than in 2016, when extending the time span to early August. As of the beginning of August 2020, there had been a net increase of 113,681 in the number of voters throughout the year. This compares to a net increase of 118,716 at the same time in 2016.

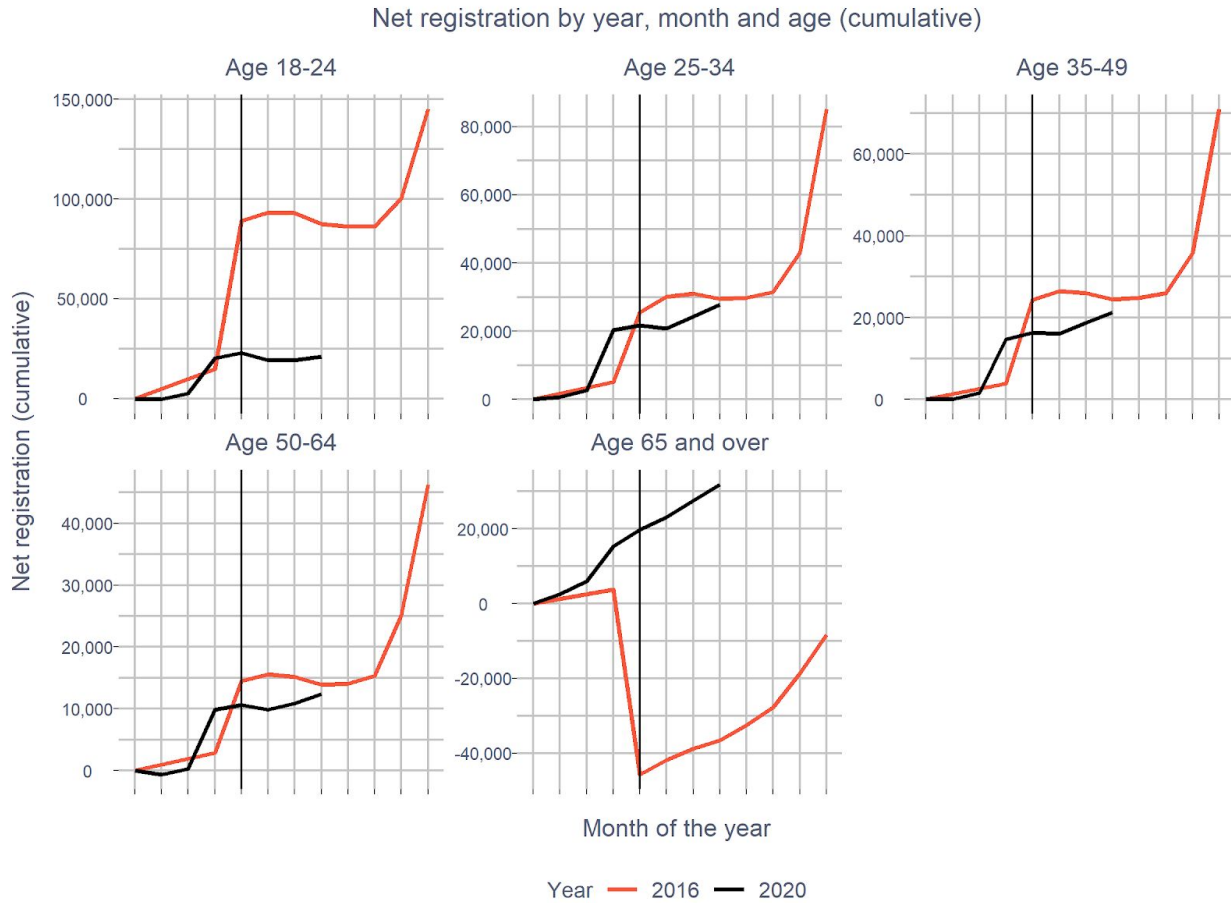


Although the Wisconsin Elections Commission does not release voter registration statistics by most demographic groups, it does report registrations by age group. Net voter registration declined for all age groups under 65 from the new year until May 1st. Voters aged 18-24 had the largest decline, registering 74% fewer voters in 2020 (22,930) than in 2016 (89,017). Total registration of voters aged 65 and over¹⁵ is slightly higher in 2020 (909,930) than in 2016 (809,499).

¹⁵ Net registration for voters aged 65 and over is difficult to compare with 2016 because of the large negative value in 2016 (-45,706), compared to 19,725 net registrations for this age group in 2020. The large negative number in 2016 is undoubtedly due to removing deceased and moved voters from the list.



Net registration in 2020 continues to lag behind registrations in 2016 when we expand the time frame from May to August, except for those 65 and above. Voters aged 18 to 24 lag behind the most, registering 317% less voters by August 2020 (20,939) than by August 2016 (87,512). Compared to 2016, net cumulative registrations by August 2020 are lagging by approximately 2,000 voters for those aged between 25 and 64. (Drawing conclusions about the oldest age group is difficult, given the large reduction in registrations in 2016, due to list-maintenance activities.)



In approximating the race of those registering before and after the primary compared to 2016 and 2020, results are largely similar. It is possible to conduct a direct approximate comparison from the start of the year to June 5 for both 2020 and 2016.¹⁶ We then split the analysis into the periods before and after the primary. In 2016, approximately 77% of all new registrants were white between the start of the year and the primary, compared to 81 percent after the primary. During 2020, 82 percent of all new registrants were White from the start of the year to the primary, compared to 81 percent afterwards. Therefore, it does appear that new registrants before the 2020 primary were less likely to be non-white than in 2016. This racial disparity seems to have disappeared in registrations that occurred after the primary.

¹⁶ The voter file appears to not contain all of the records from 2016 following removal, making a direct comparison impossible between the two years. Therefore, the analysis proceeds with the assumption that the removal of voters is uncorrelated with race.

Conclusion

Wisconsin's experience with the COVID-19 pandemic offers insight into the complications that arise with electoral participation given initial unpreparedness. It is unclear the extent to which the Wisconsin experience generalizes to other states, though it is certainly the case that the challenges and efforts the Wisconsin Elections Commission made to cope with the pandemic arose in other latter primary states.

Prior to the pandemic, Wisconsin voters primarily cast ballots in person. Only 3.6% of the votes in the 2016 primary were cast by mail, and this rate of usage was consistent across demographic groups. Despite its history, the state, in combination with voters, managed to push voting by mail rates up to the point that it was the majority voting mode, approximately 59% of all ballots cast. These shifts to vote by mail arose across all demographic groups and regions of the state, although some more so than others. Although there are undoubtedly many institutional and individual level reasons for the shift to vote by mail, it should be noted that the state of Wisconsin realized early on the necessity to shift to a voting by mail dominant election and made the appropriate announcement to voters approximately a month prior to the primary day.

Despite centralized attempts by the state to shift to vote by mail, Wisconsin also exemplifies the forced nature of the choice in the inability to open in person polling locations. Local election officials bore the brunt of the responsibility to equip polling locations with safety measures against the pandemic. In turn, volunteers staffed the polling locations. Local circumstances led to great disparities in where polling places actually opened, with 15% of all planned polling locations failing to open. These polling closures largely affected the areas most susceptible to the initial spread of COVID-19, urban areas with a high population density. Additionally, even controlling for population density, polling closures overwhelmingly affected wards with higher non-white populations. Initial evidence suggests that registered voters affected by polling closures saw a decrease in participation.

Comparing vote-by-mail statistics from 2016 to 2020, the biggest increase in "lost votes" arose with unreturned ballots as opposed to rejections. Whereas mail ballot rejections remained largely constant from 2016 to 2020, the rate of unreturned ballots increased by 4.4 percentage points. Further, these unreturned ballots largely arose due to arriving after the deadline. Additionally, unreturned ballots disproportionately affected non-white voters, especially Black voters.

Ultimately, the electoral participation and primary process in Wisconsin could have been much worse. While turnout declined, the state successfully shifted to absentee ballots on short notice,

even after a failed attempt to postpone the primary due to a ruling by the United States Supreme Court. However, it is also the case that racial disparities arose in access to polling places. Black voters suffered the brunt of these complications, with the greatest reduction in access to in person polling places, greatest complications in returning mail ballots, and greatest rates of rejections. Although it is unclear the exact reasons behind these trends, the disparate ability in localities to handle COVID-19 complications undoubtedly played a factor.

In predicting how the general election might play out for Wisconsin, the state has had several months to solve issues related to the continuing pandemic as opposed to a little over a month for the primary. The state has already sent out nearly 200,000 postcards to instruct eligible unregistered voters on how to register and vote by mail,¹⁷ in addition to 2.7 million mailers to already registered voters.¹⁸ The state additionally initiated a \$4.1 million block grant program to distribute to local election officials. However, should a spike in COVID-19 cases arise, it is unclear if there will be a sufficient number of poll workers willing to risk their health to aid in person voting. Wisconsin already suffered a 900 person poll worker shortage several days before the August 11th Fall partisan primary.¹⁹ Given that even optimistic projections of COVID-19 rates predict a spike in COVID-19 cases in the Fall to exceed that of the Spring,²⁰ there is a distinct possibility for complications in returning mail ballots, certifications, access to polling places and tabulation of mail ballots to arise. Therefore, one can expect mail balloting to be the most common voting mode this November given the actions and lessons learned by the Wisconsin Elections Commission. Whether the complications that arise are similar to or exceed those of the April 7th primary depends entirely on how quickly election officials and voters can adjust to the new reality of voting amidst a pandemic.

¹⁷ “State of Wisconsin Mails Postcards to Eligible but Unregistered Residents,” Wisconsin Elections Commission, June 25, 2020 <https://elections.wi.gov/node/6940> (accessed July 31, 2020)

¹⁸ “WEC Prepares for Fall Elections by Approving Block Grants to Municipalities and Mailing to Voters - COVID-19,” Wisconsin Elections Commission, May 29, 2020, <https://elections.wi.gov/node/6917> (accessed July 30, 2020)

¹⁹ “Wisconsin Still Needs Poll Workers!,” Wisconsin Elections Commission, August 4, 2020 <https://elections.wi.gov/node/7000> (accessed August 6, 2020)

²⁰ Len Strazewski, “Harvard epidemiologist: Beware COVID-19’s second wave this fall,” *American Medical Association News letter*, May 8, 2020 <https://www.ama-assn.org/delivering-care/public-health/harvard-epidemiologist-beware-covid-19-s-second-wave-fall> (accessed August 6, 2020)

Appendix

Table A: Spatial Autoregressive Probit Model of Wisconsin Poll Closures		
<u>Variable</u>	<u>Coefficient</u>	<u>Standard Error</u>
Log(pop per sqkm)	0.22***	(0.05)
Non-white %	0.01***	(0.0001)
Democratic Gov. Vote %	0.06***	(0.02)
Democratic Gov. Vote % ²	-0.00050***	(0.00001)
Intercept	-12.67**	(5.50)
Spatial Error	0.17***	(0.06)
Fixed Effects by Municipality	Yes	
AIC	1103.49	
Total McFadden R ²	0.64	
Within Effects McFadden R ²	0.13	
N	2,495	
Note	Note: *p<0.1; **p<0.05; ***p<0.01	