

# Spring 2023 Pennsylvania Primary Mail-In Voter Analysis

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## Summary and Key Takeaways

This paper analyzes data on mail-in ballot requests, returns, and rejections for the spring 2023 Pennsylvania primary, which was held on Tuesday, May 16. At the individual level, we examine the degree to which partisanship and age affect the three outcomes. If we look at the county level, we can also see whether additional demographic variables such as race, education, poverty rates, and/or homeownership rates have any impact on the three outcomes.

Overall, we find that...

- Democrats were more likely to request mail-in ballots than were Republicans. This is true in both county-level and individual-level analyses. Individuals over the age of 65 were more likely to request mail-in ballots than were younger voters.
- Republicans were less likely to return their mail-in ballots than were Democrats. Senior citizens were more likely to return their ballots as compared to younger voters.
- Partisanship did not affect whether an individual's ballot was rejected due to voter error. Senior citizens were less likely to have their ballots rejected than were non-seniors.
- Additional demographic variables such as education, race, poverty status, and homeownership rates did not have an influence over ballot return or ballot rejection rates when looking at county-level data.

## Individual Level Analysis

When registering to vote in the Commonwealth, individuals need to provide both their partisanship and age (birthday), so we first consider the potential influence of partisanship and age by looking at the mail-in ballot request file at the individual level. In doing this, we find that Democrats were overwhelmingly more likely to request mail-in ballots. Of the 881,314 requests for mail-in ballots in the spring 2023 primary, 71.18 percent were from Democrats and 22.11 percent were from Republicans. (The remaining 6.71 percent were from individuals with a party registration other than Democrat or Republican; their requests for mail-in ballots were rejected due to the fact that Pennsylvania has a closed primary.) Age also played a significant role in who requested mail-in ballots. Individuals 65 years old and older comprise 23.00 percent of the adult population in Pennsylvania; they requested 58.80 percent of the mail-in ballots.

Looking further at just the mail-in ballots that were approved and sent to voters, we find that Republicans were slightly less likely to return their ballot than were Democrats. 23.23 percent of Republicans who were approved for a mail-in ballot did not return those ballots; this compares to 19.74 percent of Democrats. Age also influenced who returned ballots with senior citizens (those age 65 or older) being less likely to fail to return their ballots; only 14.84 percent of seniors who were approved for a mail-in ballot failed to return it; 29.23 percent of those younger than 65 failed to return their ballots.

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Finally, looking at those ballots that were rejected due to “voter issues”. Voter issues were coded as follows: 1) voter put the incorrect date on the ballot; 2) voter did not date the ballot; 3) voter did not put the ballot in the secrecy envelope; 4) voter did not sign the outside envelope; or 5) voter returned the ballot to their county after the deadline. In looking at the individual-level file, we find no effect of partisanship; 1.94% of Democratic ballots and 2.01% of Republican ballots were rejected. Age had a significant effect, however, with senior citizens being less likely (1.77 percent) than non-seniors (2.24 percent) to have their ballots rejected.

### County Level Analysis

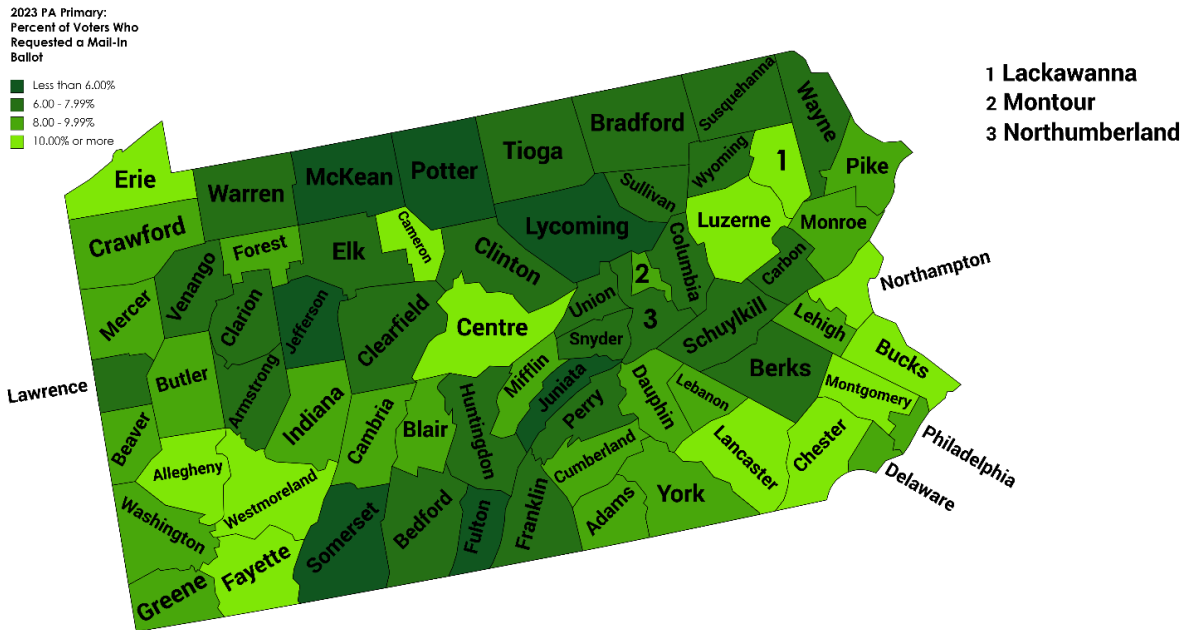


Figure 1: Percent of Voters who Requested a Mail-in Ballot, by County

Figure 1 shows the percent of registered voters in each county who requested a mail-in ballot for the spring 2023 primary. In the darkest green counties, less than six percent of voters requested a mail-in ballot, while in the lightest green counties over 10 percent of registered voters did so. Fulton county had the lowest percent of requests at 4.60 percent while Lancaster had the highest percent of requests at 17.52 percent. The overall number of requests in each county varied dramatically due to differential populations in each county. Allegheny County had the highest overall number of requests for ballots at 114,950 (followed by Philadelphia, Montgomery, Bucks and Lancaster). Forest County had the fewest number of ballots requested at 3,150. The percent of registered voters requesting a mail-in ballots is correlated with the partisanship in the county with higher percentages of voters in Democratic counties requesting ballots as compared to voters in more Republican counties. After taking the partisanship of the county into consideration, both education and age also had an impact. Voters in counties with higher levels of education (measured as the percent of the population with a bachelor’s degree or more) requested mail-in ballots at higher rates than counties with lower levels of education. Voters in older counties (as measured by the percent of the population 65 years or older) requested mail-in ballots at higher rates than voters in younger counties.

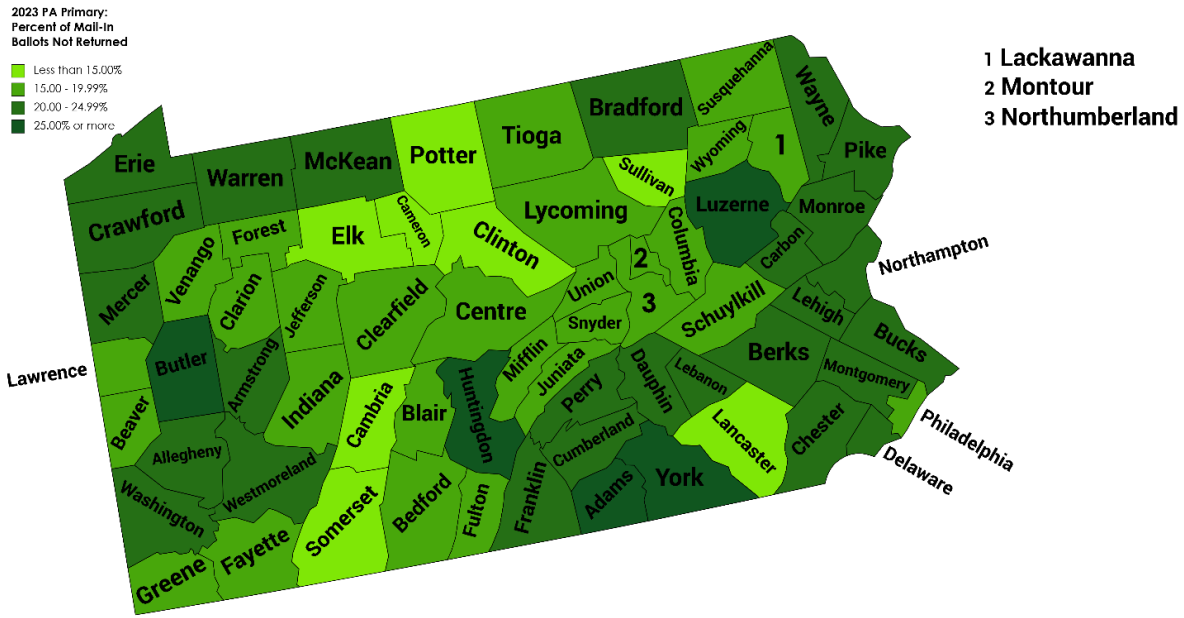


Figure 2: Percent of Mail-in Ballots Not Returned

Figure 2 shows the percent of mail-in ballots in each county that were not returned to the County for processing or counting. It is important to note that this does not mean the voter's vote was not recorded, however; a voter could have brought the mail-in ballot to the polling place, surrendered it, and voted in person. In the lightest green counties, less than 15.00 of people requesting a mail-in ballot failed to return it while in the darkest green counties a quarter (25.00 percent) or more of the ballots requested were not returned. The failure-to-return rate was lowest in Cameron County, where just 6.32 percent of requested ballots were not returned. The failure-to-return rate was highest in York County with 35.79 percent of requested ballots not returned to the County for processing. Partisanship of the county did not have any impact on ballot return rates; in counties that voted for Biden in 2020, the failure-to-return rate was 21.1 percent while in counties that voted for Trump in 2020 the failure-to-return rate was 19.3 percent. The only demographic variable that impacted mail-in ballot return rates was age; counties with higher percentages of senior citizens exhibited lower failure-to-return rates of mail-in ballots.

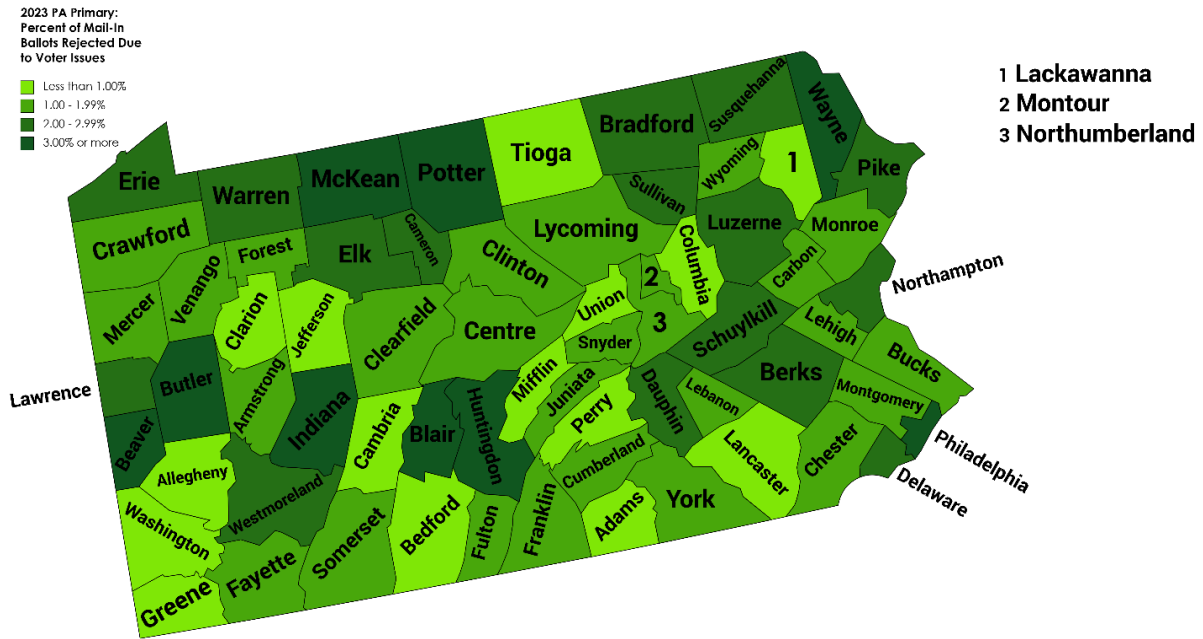


Figure 3: Percent of Mail-in Ballots Rejected Due to Voter Issues

Figure 3 shows the percent of mail-in ballots that were rejected in each county due to voter issues (using the same definition as above). Overall, ballot rejection rates were low, ranging from 0.04 percent (in Bedford County) to 4.60 percent (in Indiana County). In both Bedford and Greene Counties, just one ballot was rejected. Despite having a ballot rejection rate of 3.84 percent, Philadelphia County rejected the most total ballots at 3,713. Just two counties (Philadelphia and Montgomery) rejected more than 1,000 ballots and eight additional counties rejected over 500 ballots (Berks, Westmoreland, Chester, Luzerne, Bucks, Northampton, Delaware, and Allegheny). Neither partisanship nor any of the demographic variables examined had any association with ballot rejection rates across the counties.

### Information on Data Sources

Data on the number of mail-in ballots requested, how many mail-in ballots were returned, and how many mail-in ballots were rejected were obtained from the Pennsylvania Department of State (<https://data.pa.gov/Government-Efficiency-Citizen-Engagement/2023-Primary-Election-Mail-Ballot-Requests-Departm/ee4s-c5cp>). Data on the partisanship of registered voters are also from the Pennsylvania Department of State (<https://www.dos.pa.gov/VotingElections/OtherServicesEvents/VotingElectionStatistics/Pages/Other-Registration-Statistics-Archives.aspx>). Demographic data on race, education, poverty, age, and homeownership are from the U.S. Census American Community Study 5-year estimates (<https://data.census.gov/>). All maps were made using [mapchart.net](https://www.mapchart.net/).