

IN THE COMMONWEALTH COURT OF PENNSYLVANIA

MICHAEL SMERCONISH,
JEFFERY DOTY, RACHEL
SHANOK, ELGIN AKARSOY, &
DAVID THORNBURGH,

Petitioners

v.

COMMONWEALTH OF
PENNSYLVANIA,
DEPARTMENT OF STATE, & AL
SCHMIDT, SECRETARY OF
THE COMMONWEALTH, in his
official capacity,

Respondents

DOCKET NO. _____ M.D.
2022

PETITION FOR REVIEW IN THE NATURE OF A COMPLAINT
FOR DECLARATORY JUDGMENT

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NOTICE TO PLEAD

TO: Commonwealth of Pennsylvania, Department of State, & Al
Schmidt, Secretary of the Commonwealth, in his official capacity

You are hereby notified to file a written response to the enclosed
Petition for Review within thirty (30) days from service hereof, in
accordance with Pennsylvania Rule of Appellate Procedure
1516(b), or a judgment may be entered against you.

Dated: December 10, 2025

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NOTICE TO DEFEND

You have been sued in court. If you wish you defend against the claims set forth in the following pages, you must take action within thirty (30) days after this complaint and notice are served, in accordance with Pennsylvania Rule of Appellate Procedure 1516(b), by entering a written appearance personally or by attorney and filing in writing with the court your defenses or objections to the claims set forth against you. You are warned that if you fail to do so the case may proceed without you and a judgment may be entered against you by the court without further notice for any money claimed in the complaint or for any other claim or relief requested by the plaintiff. You may lose money or property or other rights important to you.

YOU SHOULD TAKE THIS PAPER TO YOUR LAWYER AT ONCE. IF YOU DO NOT HAVE A LAWYER, GO TO OR TELEPHONE THE OFFICE SET FORTH BELOW. THIS OFFICE CAN PROVIDE YOU WITH INFORMATION ABOUT HIRING A LAWYER.

IF YOU CANNOT AFFORD TO HIRE A LAWYER, THESE OFFICES MAY BE ABLE TO PROVIDE YOU WITH INFORMATION ABOUT AGENCIES THAT MAY OFFER LEGAL SERVICES TO ELIGIBLE PERSONS AT A REDUCED FEE OR NO FEE:

MidPenn Legal Services
213-A North Front Street
Harrisburg, PA 17101
(717) 232-0581

Dauphin County Lawyer Referral Service
213 North Front Street
Harrisburg, PA 17101
(717) 232-7536

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Introduction

1. Laws that give some voters more power than others are “the antithesis of a healthy representative democracy.” *League of Women Voters v. Commonwealth*, 178 A.3d 737, 813-14 (Pa. 2018).

2. Ending and preventing such laws has been a central concern of Pennsylvania since the 18th Century.

3. In that era, the then-dominant Proprietary Party, loyal to the British Crown, used property-ownership requirements and manipulated electoral districts to entrench its power and dilute the power of rivals who favored independence.

4. As the Revolutionary War broke out, Pennsylvanians promulgated the 1776 Constitution to establish a Commonwealth free of British control.

5. The Constitution addressed a range of issues including the reform of the electoral system.

6. In particular, Pennsylvanians enacted the first of Pennsylvania's constitutional provisions requiring free and equal elections, forever barring "the dilution of the right of the people of this Commonwealth to select representatives to govern their affairs based on considerations of the region of the state in which they lived, and the religious and political beliefs to which they adhered." *Id.* at 808-09.

7. This provision enshrined the right of Pennsylvania's citizens "to cast an equally weighted vote" and to "have an equal opportunity to translate votes into representation." *Id.* at 804, 822; *accord* Pa. Const., art. I, § 5.

8. Yet, today, Section 2812 of the Election Code prohibits Petitioners and roughly 1.4 million other Pennsylvanian voters who cannot or do not wish to register as members of a major political party and who have registered as independent voters,¹ from participating in primary elections.

9. Section 2812 artificially gives more power to voters who join major political parties than those who have registered as independent voters.

10. Section 2812's artificial entrenchment of power for voters who have joined major political parties at the expense of independent voters is exacerbated by the fact that primary elections—in which independent voters cannot participate—determine ultimate electoral outcomes in many of the Commonwealth's elections: exclusion from primary elections is the functional equivalent of losing the right to vote in those districts.

11. In addition to requiring free and equal elections, the Pennsylvania Constitution prohibits the Commonwealth from

¹ Pennsylvania does not have an official registration status of “Independent.” Petitioners and other independent voters register as “not affiliated” or “other” if they eschew party affiliation. Petitioners use the colloquial term “independent” to refer to these voters.

discriminating against Pennsylvanians in the exercise of their civil rights. Pa. Const., art. I, § 26.

12. Section 2812 discriminates against Petitioners and roughly 1.4 million independent voters by treating them differently than other voters with respect to their right to vote based on their refusal to publicly declare that they associate with a particular party and based on their political beliefs. As such, Section 2812 cannot withstand any form of constitutional means-ends analysis.

13. Under both the free and equal elections and anti-discrimination provisions of the Pennsylvania Constitution, Petitioners may not be categorically excluded from primary elections.

14. They are entitled to an equal opportunity to translate their support for candidates into nominations and representation.

15. They are entitled to equal treatment regardless of how they exercise their constitutional rights.

16. Accordingly, Petitioners ask this Court to declare Section 2812, as applied to independent voters, unconstitutional.

Jurisdiction

17. This Court has original jurisdiction pursuant to 42 Pa.C.S. § 761(a)(1), which provides it “original jurisdiction of all civil actions or proceedings . . . [a]gainst the Commonwealth government, including any officer thereof, acting in his official capacity.” 42 Pa.C.S. § 761(a)(1).

Parties

Petitioner Michael Smerconish

18. Petitioner Michael Smerconish is a resident of Villanova, Montgomery County, Pennsylvania, and a Pennsylvania independent voter.

19. He is an attorney, radio host, television presenter, political commentator, and author.

20. He hosts the Michael Smerconish program on Sirius XM’s POTUS channel and a weekly program on CNN and CNN International.

21. Mr. Smerconish is registered as an independent voter both for political and professional reasons.

22. Mr. Smerconish, who describes himself as a “Reagan/Bush guy,” changed his registration from Republican to be an independent voter because he believed that his party had “moved away from him.”

23. He fears that registration as a member of a major political party would undermine his professional credibility.

24. This concern is well-founded, as there is an expansive volume of network and viewer commentary suggesting that where a media personality is a registered member of a major political party, audiences believe that he is using his professional platform to advocate for that party.

25. Mr. Smerconish’s registration as an independent voter aligns with his political views and allows him to protect his professional credibility.

Petitioner Jeffery Doty

26. Petitioner Jeffery Doty is a resident of Hughesville, Lycoming County, Pennsylvania, and a Pennsylvania independent voter.

27. He manages a grocery store there.

28. Mr. Doty believes that neither the Democratic nor the Republican parties as institutions appropriately reflect his political views.

29. Mr. Doty also fears that if he were to register as a member of the Democratic Party, he would suffer personally and professionally among Lycoming County's overwhelmingly Republican population.

30. Mr. Doty's fear is not based on idle musing.

31. On a number of occasions, customers dissatisfied with his store policies have remarked that he "must be a Democrat."

32. This phenomenon was at its zenith when Mr. Doty observed social distancing requirements during the onset and initial stages of the global coronavirus pandemic.

33. Mr. Doty's registration as an independent voter aligns with his political views and allows him to avoid personal and professional harm in his community as well.

Petitioner Rachel Shanok

34. Petitioner Rachel Shanok is a resident of Ambler, Montgomery County, Pennsylvania, and a Pennsylvania independent voter.

35. She is employed as a physical therapist.

36. In addition to her professional employment, Ms. Shanok is an active member of Forward, a political organization committed to interjecting “new ideas and debates” into our political discourse.

37. Ms. Shanok is an independent voter for political and community reasons.

38. Ms. Shanok was formerly registered as a Democrat, but believes that neither the Democratic nor Republican parties as institutions appropriately reflect her political views.

39. Ms. Shanok also believes that party registration requirements have contributed to hyper-partisanship and undermined our political discourse, particularly at the local and municipal levels, where she feels her decision to affiliate or not affiliate with a major party may be an obstacle to serving her community, whether elected or appointed.

Petitioner Elgin Akarsoy

40. Petitioner Elgin Akarsoy is a resident of Upper Providence Township, Delaware County, Pennsylvania, and a Pennsylvania independent voter.

41. He works in technology sales and currently serves as a second-term Councilmember for the Upper Providence Township Council.

42. Mr. Akarsoy feels that neither the Democratic nor Republican parties as institutions appropriately reflect his political views.

43. Mr. Akarsoy initially registered to vote at the age of 18 as a member of the Republican Party based on familial history, but, during and after college, developed his personal political views and, in 2006, re-registered as a member of the Democratic Party.

44. After developing an interest in serving his community in local public office, he found that registration as a Democrat made it exceptionally difficult to work with Republicans and disagreed with significant ongoing decisions by the Democratic Party. Accordingly, he changed his registration to register as an independent voter.

45. Mr. Akarsoy experienced significant blowback, including a flawed petition challenge to his second candidacy in a Democratic primary on the ground that he was not a registered Democrat. *See In re*

Nomination Petition of Akarsoy, No. 2023-2232 (Ct. Com. Pl. Delaware Cnty. 2023).

46. Shortly thereafter, Mr. Akarsoy re-registered as a Democrat to avoid further consternation.

47. When Mr. Akarsoy was registered as a Democrat, partisans sent his neighbors letters advocating that he be ostracized.

48. Following the primary election, Mr. Akarsoy re-registered as an independent voter, and won re-election in the Fall of 2023.

49. Mr. Akarsoy's registration as an independent voter aligns with his political views, allows him to avoid personal and professional harm in his community, and allows him to engage in constructive dialogue with fellow citizens regardless of partisan loyalty.

50. Mr. Akarsoy believes that party registration and closed primary requirements discourage and often successfully prevent such a dynamic in favor of entrenching major political party power, and, derivatively, discourage civic participation among nonpartisans and in general.

Petitioner David Thornburgh

51. Petitioner David Thornburgh is a resident of Philadelphia, Philadelphia County, Pennsylvania, and a Pennsylvania independent voter.

52. He is the current Chair of Ballot PA Action, a statewide advocacy campaign to restore the rights of the 1.4 million Pennsylvania independent voters to vote in primary elections.

53. Prior to serving as Chair of Ballot PA Action, Mr. Thornburgh was the President and CEO of the Committee of Seventy, an independent civic group in Philadelphia, Pennsylvania, focused on government reform.

54. Previously, Mr. Thornburgh also served as Executive Director of the Economy League of Greater Philadelphia, another long-established “good government” group.

55. Mr. Thornburgh is an independent voter for political and professional reasons.

56. Like Mr. Smerconish, Mr. Thornburgh, a former registered Republican, changed his registration because he viewed his party as no longer reflecting his political views.

57. He also believed that his registration as a member of a major political party undermined his professional interest as the CEO of the Committee of Seventy and his effort in pursuing non-partisan government reform.

58. Mr. Thornburgh's registration as an independent voter aligns with his political views and protects his ability to advocate for good government.

Independent Voters Generally

59. As illustrated by Petitioners' stories, Pennsylvania independent voters have many different reasons for registering as independent voters.

60. Some citizens have ideological reasons.

61. For example, voters who register as independent are more likely to identify as "moderate," and/or to express eclectic agreement with different parties with respect to particular issues. *See generally* Joseph Cerrone, "Growing Cohort of Independent Voters Becomes Critical Segment of Electorate,"

<https://www.uniteamerica.org/articles/research-brief-growing-cohort-of->

[independent-voters-becomes-critical-segment-of-electorate](#) (last visited Jul. 7, 2025).

62. Some citizens are independent based on their assessments of political parties.

63. For example, citizens who register as independents are likely to view the major parties as focused on special interests and the perpetuation of partisan power, rather than the common good, and to view them as too partisan and too extreme.

64. Some citizens have personal reasons to be independent.

65. For example, citizens who register as independent voters may view registration with a political party as inconsistent with their religious views, or inconsistent with the value of independence and critical thinking in a democratic republic, or inconsistent with their personal or professional interests.

66. These are but a few of the many reasons why citizens decline to register as members of political parties.

67. Because of the profile of independent voters in general, primaries which include independent voters tend to have greater turnout, and tend to produce candidates and public officials who more

often work collaboratively and pragmatically across party lines and exercise independent judgment in performing their official duties. *See, e.g.,* Steven H. Haeberle, “Closed Primaries and Partisan Support in Congress,” 13 *American Politics Quarterly* 341-52 (1986); Christian R. Gros, “Reducing Legislative Polarization: Top-Two and Open Primaries are Associated with More Moderate Legislators,” 1 *Journal of Political Institutions and Political Economy*, no. 2, 267-87 (2020); Ashley Lopez, “Why some states are turning to nonpartisan primaries,” *All Things Considered*, NPR, available at <https://www.npr.org/2023/09/16/1200012618/why-some-states-are-turning-to-nonpartisan-primaries> (last visited Jun. 12, 2025); Peter T. Calcagno, “An institutional analysis of voter turnout: the role of primary type and the expressive and instrumental voting hypotheses,” 19 *Constitutional Political Economy* 94-110 (2008); Matthew J. Geras & Michael H. Crespin, “The Effect of Open and Closed Primaries on Voter Turnout,” in *ROUTLEDGE HANDBOOK OF PRIMARY ELECTIONS* (Routledge 2018).

68. Petitioners’ experiences reflect those of the large number of Americans who eschew formal identification with political parties.

69. According to a January 2025 Gallup poll, roughly 43% of voters identify as independent, as compared to the roughly 28% each who identify as Democrats and Republicans.

70. The percentage of unaffiliated voters is nominally far lower in Pennsylvania.

71. In April 2025, only 1.4 million Pennsylvania voters were registered as independent voters (roughly 15.9% of the electorate).

72. The lower percentage of unaffiliated voters in Pennsylvania suggests that the closed system forces independent voters to affiliate with a party so they can participate in primary elections and thereby have a more equal effect on ultimate electoral outcomes.

73. Even so, a large number of Pennsylvania voters do not affiliate with a political party despite the consequence that they are shut out of primary elections and have lesser ability to turn their support into representation by a given candidate. *See* Pennsylvania Department of State, Voting & Election Statistics, Voter registration statistics by county, <https://www.pa.gov/agencies/dos/resources/voting-and-elections-resources/voting-and-election-statistics.html> (last visited Jul. 9, 2025).

74. They refuse affiliation even though they pay taxes for the Commonwealth to administer and exclude them from these contests. See Committee of Seventy, “Open Primaries PA to Press for Independents’ Right to Vote,” <https://seventy.org/press-testimony/open-primaries-pa-to-press-for-independents-right-to-vote> (Apr. 29, 2019) (last visited Jul. 9, 2025).

75. Despite these impediments, independent voters remain the fastest growing voter segment in Pennsylvania politics. See Ballot PA Action, “Who’s Shut Out? Independent Voters in PA” (2023) (“Who’s Shut Out”), attached hereto as Appendix F, at 4, 11; see also The Voter Project, “2022 Report: Independent Voters,” *available at* https://assets.nationbuilder.com/openprimariespa/pages/13/attachments/original/1740671808/Independent_Voters_2022_The_Voter_Project.pdf/?1740671808 (last visited Jul. 9, 2025).

76. Independent voters tend to be younger, more racially and ethnically diverse, and more likely to have served in the armed forces. See Jeffrey M. Jones, “Millennials, Gen X Clinging to Independent Party ID,” Gallup (Aug. 2022), *available at*

<https://news.gallup.com/poll/397241/millennials-gen-clinging-independent-party.aspx> (last visited Jun. 12, 2025).

77. In Pennsylvania, roughly 64% of independent voters are between 18 and 50, compared to 53% of the population at large. Who's Shut Out? at 8; *see also* Sarah Slobin, "Understanding independents," Reuters (Apr. 2024), *available at* <https://www.reuters.com/graphics/USA-ELECTION/INDEPENDENTS/lgpdnbxjzpo/> (last visited Jun. 12, 2025).

78. A quarter of Latino voters are independent voters. Who's Shut Out? at 8.

79. Roughly 343,000 Pennsylvania veterans identify as independent voters. *See* Shiva Maniam, "U.S. veterans are generally supportive of Trump," Pew Research Center (May 26, 2017), *available at* <https://www.pewresearch.org/short-reads/2017/05/26/u-s-veterans-are-generally-supportive-of-trump/> (last visited Jun. 12, 2024) (indicating that roughly half of veterans are independent voters); Commonwealth of Pennsylvania, Department of Human Services, Mental Health and Substance Use Disorder, Veterans/Military Families, <https://www.pa.gov/en/agencies/dhs/resources/mental-health->

[substance-use-disorder/veterans-military-families.html](https://www.penn.gov/substance-use-disorder/veterans-military-families.html) (last visited Jul. 9, 2025) (identifying that there are roughly 800,000 Pennsylvania veterans).

80. None of them can support a candidate in a primary election.

Respondents

81. Respondent Commonwealth of Pennsylvania is the Commonwealth of Pennsylvania.

82. Respondent Department of State is the Commonwealth agency charged with implementing and enforcing the Election Code.

83. Respondent Al Schmidt, Secretary of the Commonwealth, is the official charged with operating the Department of State, and is sued in his official capacity only.

Statement of Facts

84. Section 2812 of the Election Code prevents Petitioners from participating in primary elections, entrenches the power of voters registered as members of major political parties, and dilutes the power of voters registered as independent voters. 25 P.S. § 2812.

85. Section 2812 provides that only registered members of a political party may cast a vote on the ballot of that party in a primary election. *Id.*

86. Section 2812 provides:

§ 2812. Qualifications of electors at primaries.

The qualifications of electors entitled to vote at primaries shall be the same as the qualifications of electors entitled to vote at elections within the election district where the primary is held, provided that no elector who is not registered and enrolled as a member of a political party, in accordance with the provisions of this act, shall be permitted to vote the ballot of such party or any other party ballot at any primary.

25 P.S. § 2812.

87. Section 2812 is part of a constellation of provisions enacted by the General Assembly to impose order on the process of candidate nominations in the early 20th century.

88. Section 2812 must be read in the context of the broader history of how political parties and, later, Pennsylvania voters, nominated candidates for public office.

89. By way of historical background, for much of Pennsylvania's early history, there were no state-run primary elections at all.

90. From the founding to the early 19th century, the population was small and the political class was limited to a narrow elite.

91. Candidate nominations were handled by public gatherings of influential citizens, factional leaders, or self-appointed committees.

92. In many cases, prospective candidates nominated themselves.

93. As the Commonwealth's population grew and political life became more organized, informal nominating practices gave way to formal party structure and formal nominations at party caucuses or conventions conducted under party rules. *Accord League of Women Voters*, 178 A.3d at 804-809 (discussing the emergence of nascent political proto-parties during the Colonial period); *see also* Peter McCaffery, "The Evolution of an Urban Political Machine: Republican Philadelphia, 1867-1933," *available at* <https://etheses.lse.ac.us/1091/1/U040902.pdf> (last visited Apr. 8, 2025).

94. Like earlier informal gatherings, these contests generally involved public votes counted by party leaders.

95. In these caucuses and conventions, delegates' individual interests, patronage, and horse-trading often carried the day.

96. This often led to hotly contested conventions and the emergence of nominees with little popular support who were doomed to fail in general elections.

97. Frustration with closely-managed conventions and a national shift toward primary elections started in Pennsylvania.

98. In 1842, Crawford County Democrats were incensed at a particularly corrupt convention in which more votes were cast than voters present to cast them.

99. They demanded and got the first direct election for a party nomination in the United States.

100. A contemporaneous editorial by a Democratic newspaper described the reform as designed to abandon party-leader dominance over democratic will:

[E]very man's vote will act directly on the result—there will be no intermediate channels through which bargain and trickery can flow to prevent the will of the people from being honestly carried out. There will be no such thing here as violating instructions—no “recruits” will be purchased to defeat the will of the majority. The people will now have the man of their choice nominated without the interference of the brawling meddlers in town, who have nothing at heart but the accomplishment of their own selfish and disorganizing ends.

Paul H. Giddens, “The Origin of the Direct Primary: The Crawford County System,” at 151, *available at* <https://journals.psu.edu/wph/article/view/3465/3296> (last visited Jul. 2, 2025).

101. Following the steps taken by the Crawford County Democrats, support for primaries waxed and waned in Pennsylvania. Even where it waxed, corruption still plagued the early system of primary elections.

102. “There was no guaranty that participation in a party caucus or primary would be confined to the members of the party immediately concerned”: the major concern, in particular was that members of one political party would “invade” another political party’s primary in an effort to cause dissent or nominate a candidate who their own party could defeat. See Charles Edward Merriam & Louise Overacker, PRIMARY ELECTIONS 5 (Chicago 1928), *available at* <https://babel.hathitrust.org/cgi/pt?id=mdp.39015030799186&seq=6> (last visited Jul. 9, 2025).

103. Such concerns led legislatures throughout the country, including Pennsylvania’s, to adopt statutes giving parties legal

mechanisms to enforce their private rules on penalty of legal sanction. *See id.* at 5-18; *see also, e.g.*, Act 181 of 1905.

104. Nevertheless, most nomination contests remained private party affairs administered by party leaders.

105. Eventually, the impulse to reform led to the adoption of secret ballots, and the wholesale government administration of primary elections.

106. This change meant that the conduct of primary elections had gone from a private matter to one of electoral governance.

107. It also meant that political parties were no longer just private associations with their own membership rules.

108. Political parties now were recognized signifiers in a legally-mandated structure for nominating and electing public officials. *See Merriam & Overacker* at 24-25 (“The party ceased to be a purely voluntary association and became a recognized part of the nominating machinery.”)

109. Stated differently, a political party was a private association yet simultaneously also a legally-recognized category in which to confine

a particular voter for purposes of a legally-mandated, state-administered primary election.

110. In the early years of state-run primary elections, some states attempted to make sure that only those truly in the private association were permitted into the legal category of a given political party.

111. For example, voters might be required to swear an oath of prior support of a party's candidates, or of a present intention to support the party's candidates in the upcoming general election.

112. Other states did not: a voter could simply register as a member of a party. *See id.* at 30-31, 71.

113. By way of illustration, in 1927, four states allowed voters to choose to vote in a party's primary on the day of the primary.

114. The rest required indicia of prior membership in the party. *Id.* at 31-32.

115. In this time period, Pennsylvania required both registration and substantive assurances of "true" membership.

116. In 1913, the General Assembly passed a law under which voters registered their affiliation with a party. *See Act 472 of 1913.*

117. However, in cities of the first, second, and third class, the voter was subject to challenge with respect to party registration.

118. If challenged, the voter was left unregistered as a member of the party unless the voter swore under oath that he had voted for a majority of the party's candidates at the previous election.

119. Elsewhere in the Commonwealth, a registry assessor was obliged to inquire into voters' preferences and affiliations personally to uncover Democrats trying to vote as Republicans, and vice-versa.

120. Over time, Pennsylvania abandoned the registry-assessment approach in favor of a pure-registration model where prior registration was the benchmark for deciding in which primary a voter would vote. *Id.*

121. In 1937, the Legislature enacted sweeping changes in the electoral system.

122. This was the first overhaul of its election system in roughly a century.

123. The 1937 overhaul established the fundamentals of the Election Code as it exists today. *See generally* Act 320 of 1937; *see also* Stephen Caruso & Kate Huangphu, "Pennsylvania's voting law is filled with obsolete provisions, troublesome conflicts,"

<https://whyy.org/articles/pennsylvania-election-code-voting-rules-outdated-mail-voting/> (Nov. 1, 2023) (last visited Jul. 8, 2025).

124. Apart from establishing the powers and duties of state and county officials in administering elections, the 1937 overhaul included provisions outlining voter qualifications, including Section 2812.

125. It included provisions such as petition-signature requirements and anti-ticket-fusion provisions intended to undermine partisans' ability to use *ad hoc* third parties to undermine their opponents' fortunes at the polls. *See generally id.*; *Working Families Party v. Commonwealth*, 209 A.3d 270 (Pa. 2019) (evaluating a challenge to the anti-ticket-fusion provisions under the Free and Equal Elections Clause).

126. Contemporaneous newspaper accounts suggest the Legislature was aiming to curb partisan manipulation of the electoral system, especially the use of “mushroom parties” (so called because they sprung up like mushrooms after a Spring rain) to siphon votes from otherwise-stronger opponents.

127. There is no indication that the General Assembly considered, much less sought to protect against any activity of, independent voters, who composed only 3% of the electorate at the time.

128. Nevertheless, Section 2812 prevents Petitioners from participating in primary elections and dilutes their ability to translate support for a given candidate into representation by that candidate.

129. By its plain language, Section 2812 prevents Petitioners from casting ballots in favor of candidates seeking to win the primary election for a major political party.

130. This is because Petitioners are independent voters, and Section 2812 operates to preclude voters from participating in any primary election of a party for which they have not registered membership.

131. Petitioners have not registered for any party and therefore may not participate in any primary election.

132. By preventing Petitioners from participating in primary elections, Section 2812 deprives Petitioners of any role in the electoral candidate nominating process for general elections.

133. In particular, Section 2812 reduces Petitioners' ability to translate their support for a given candidate into representation as compared to their Democratic and Republican counterparts.

134. If a registered Democrat wants to support any candidate, she can.

135. First, she can support a candidate who has sought the Democratic nomination for an office.

136. She can sign a nominating petition for that candidate.

137. She can vote for the candidate by selecting the candidate's name on the Democratic primary ballot.

138. Second, she can support a candidate who has sought *another* party's nomination, or *no* party's nomination, by writing the candidate's name on the primary ballot for the voter's registered party. *Accord Appeal of Magazzu*, 49 A.2d 411 (Pa. 1946).

139. This is not a hypothetical ability. In 2023, incumbent Allegheny County District Attorney Stephen Zappala lost the Democratic primary to the county's public defender, Matt Dugan. Republicans conducted a write-in campaign to nominate Zappala as the Republican candidate. Zappala obtained the Republican nomination

and defeated Dugan in the general election. *See* Julia Zenkevich & Riley Koscinski, “Zappala wins 7th term in Allegheny County District Attorney race, defeating Dugan,” <https://www.wesa.fm/politics-government/2023-11-07/allegheny-county-da-dugan-zappala> (Nov. 7, 2023) (last visited Jul. 3, 2025). Republicans thus had the ability to support a candidate of their choice in a primary election even though that candidate was a registered Democrat who sought the Democratic nomination.

140. By contrast, independent voters are denied any meaningful role in the nominating process.

141. They cannot sign a nominating petition for a candidate seeking the nomination of a political party.

142. They cannot nominate a candidate by write-in vote.

143. The only role independents can play in the nominating process is to sign the nominating paper of an “independent candidate,” which both Democrats and Republicans can also do.

144. By virtue of Section 2812, independent voters have no ability to turn their support for any candidate except an independent candidate into an actual nomination.

145. Under Section 2812, independent voters' right to vote at the primary stage is not just diluted: it is evaporated.

146. Because Section 2812 precludes independent voters from voting in primary elections, Section 2812 dilutes the electoral power of independent voters in the general election.

147. This is because, by the time an independent voter can vote in a general election, many candidates have been taken off the ballot and the universe of candidates for a particular office has been significantly narrowed.

148. Sometimes there is only one candidate on the ballot.

149. This is not uncommon in Pennsylvania, where general elections for state and local offices are often uncompetitive as between different political parties—*i.e.*, decided by margins over 5%.

150. For example, between 2000 and 2025, only 268 of the 2,964 state legislative general elections in Pennsylvania involved competitive elections (roughly 9%).

151. The remaining 2,696 elections (roughly 91%) were effectively decided in the primary election because of the dominance of a single party in that legislative district.

152. Of those 2,696 general elections, 1,161 of them were uncontested in that there was only one candidate on the ballot.

153. The other 1,535 were landslides in that a given party's candidate won by ten or more points. *See* Ballot PA Elections Report (2025), attached hereto as Appendix G.

154. Independent voters excluded from the primary round of elections had much less opportunity to translate their vote into representation as compared to their partisan counterparts.

155. While the last round of Congressional redistricting resulted in a partisan composition that reflects the overall partisan balance of Pennsylvania voters, most Congressional races in Pennsylvania are still decided in the primary election. *See, e.g.,* Cook Political Report, 2026 CPR House Race Ratings, <https://www.cookpolitical.com/ratings/house-race-ratings> (Jun. 30, 2025) (last visited Jul. 13, 2025).

156. At the local level, candidates are permitted to cross-file for positions like school director.

157. They can win both the Democratic and Republican nominations for the position.

158. That these candidates can appear on both primary ballots would suggest the intent that these races should be less subject to partisanship and party preference.

159. But independent voters (who are by definition less partisan) cannot vote in these cross-filed primary elections either.

160. By the time independent voters cast their votes in the fall, the election is frequently already over as a practical matter.

161. To place that point in context, there are approximately 4,500 local school board members in Pennsylvania.

162. Most of these school board members are elected by local voters. (A few school districts appoint their members.)

163. For all of those races, candidates can cross-file to run as both Republicans and Democrats. Independent voters are not able to vote for any of these candidates in a primary election.

164. Independent voters can only vote in the general election. But in many localities, it is a foregone conclusion who will win the general election either because one candidate has already sewn up both parties' nominations or one party's candidate will win because of the noncompetitive nature of the district.

165. Statistical analysis confirms that Section 2812 creates a disjunct of relative power between major-party and independent voters.

166. Specifically, Carnegie Mellon University Department of Mathematics Professor Wesley Pegden conducted an analysis measuring Section 2812's impact on the relative power of major-party and independent voters based on individual voter influence. A copy of Professor Pegden's report is attached hereto as Appendix H.

167. Professor Pegden analyzed both Section 2812's theoretical, structural effect on the relative power of major-party and independent voters, which he refers to as *a priori* power, and the actual influence of major-party and independent voters in actual Pennsylvania elections based on the degree to which their individual votes impact ultimate election results.

168. Professor Pegden determined that Section 2812 gives major-party voters at least 150% of the *a priori* power of independent voters in all instances in which a primary election has fewer votes than the eventual general election, which is to say, all of them.

169. And that figure increases hyperbolically the fewer primary voters there are as compared to general election voters.

170. And beyond structural advantage, Section 2812 provides major-party voters even more influence in the context of actual elections in actual election districts, except in the context of uncontested races.

171. Indeed, it can give major-party voters anywhere from multiples, to dozens, to hundreds of times more influence on ultimate electoral outcomes than independent voters.

172. Overall, the median influence across the 203 districts of a Democratic-primary eligible voter for the years 2002-2012 is 1.7 times the influence of an independent voter, and the median influence of a Republican-primary eligible voter is 1.8 times the influence of an independent voter.

173. By way of illustration, out of 203 Pennsylvania House of Representatives districts in the period from 2002-2012:

- (a) there were 50 districts in which Democratic-primary eligible voters had more than twice the influence of independent voters, and 60 districts in which Republican-primary eligible voters had more than twice the influence of unaffiliated voters, aggregating the influence in each district from 2002-2012;

- (b) there were 36 districts in which Democratic-primary eligible voters had more than 5 times the influence of independent voters, and 32 where Republican-primary-eligible voters had more than 5 times the influence of independent voters, aggregating the influence in each district from 2002-2012; and
- (c) there were 26 districts where Democratic-primary eligible voters had more than 10 times the influence of independent voters, and 18 in which Republican-primary eligible voters had more than 10 times the influence of independent voters, aggregating the influence in each district from 2002-2012.

174. In the context of races involving contested primary elections but no contested general elections, primary-eligible voters had infinitely more influence.

175. For example, in House District 197 in 2014 and 2018, Democratic-primary-eligible voters held effectively all the influence.

176. In both years, Democratic-primary-eligible voters selected the Democratic nominee in a competitive primary.

177. In 2014, Democratic-primary-eligible voters selected Leslie Acosta in a 4-way race with 2,871 votes out of 5,836, with her closet challenger receiving 1,345 votes.

178. In 2018, Democratic-primary-eligible voters selected Danilo Burgos in a 3-way race by a margin of just 80 votes.

179. There were no candidates for the Republican primary, and no independent candidates.

180. As a result, independent (and Republican) voters had no influence at all.

181. In the context of races involving contested primary elections and contested general elections, major-party-primary-eligible voters still hold more influence.

182. For example, in House District 82, in 2018, Democratic-primary-eligible voters selected Elizabeth Book as their nominee.

183. Republican-primary-eligible voters selected Johnathan Hershey in a nine-way primary by a margin of 1,468 votes.

184. Mr. Hershey prevailed in the general election by a margin of 12,148 votes.

185. As a result, Republican-primary-eligible voters in the district had roughly 50 times the influence of independent voters.

186. In fact, the only instances in which Democratic-primary-eligible voters, Republican-primary-eligible voters, and independent voters have equal influence are races in which there are uncontested primaries and uncontested general elections.

187. Thus, the only elections in which independent voters have equal electoral power is when they have no choice at all.

COUNT I
All Petitioners Against All Respondents
Declaratory Judgment that Section 2812 As Applied to
Independent Voters Violates The Free and Equal Elections
Clause of the Pennsylvania Constitution

188. Section 2812 violates Petitioners' rights under the Free and Equal Elections Clause.

189. The Free and Equal Elections Clause of the Pennsylvania Constitution provides that “[e]lections shall be free and equal; and no power, civil or military, shall at any time interfere to prevent the free exercise of the right of suffrage.” Pa. Const., art. I, § 5.

190. This language evinces “the framers’ intent that all aspects of the electoral process be kept open and unrestricted to the voters of our

Commonwealth, and, also, conducted in a manner which guarantees, to the greatest degree possible, a voter's right to equal participation in the electoral process for the selection of his or her representatives in government." *League of Women Voters*, 178 A.3d at 804.

191. These "aspects of the electoral process" include the state's administration of primary elections. *Accord Working Families Party, supra* (evaluating restrictions on nominations under the Clause).

192. "The actual and plain language of [the Clause] mandates that all voters" in those elections "have an equal opportunity to translate their votes into representation." *League of Women Voters*, 178 A.3d at 804.

193. As noted above, the Clause originated as a safeguard against the abuse of state power to entrench some voters' political dominance and to suppress dissenting voices by diluting the political power of others.

194. In *League of Women Voters*, the Court traced the history of the Clause to intense factionalism just before the Revolutionary War. *League of Women Voters*, 178 A.3d at 804-06.

195. As set forth in *League of Women Voters*, in the period before the Revolutionary War, Presbyterians and Anglicans, largely centered in Bucks, Chester, and Philadelphia Counties, organized into what they called the “Proprietary Party.” *Id.* at 805.

196. Because of restrictions on the manner of representation and the franchise, the Proprietary Party had outsized power relative to its support. *Id.* at 805-806.

197. First, the manner of representation was county-by-county. *Id.*

198. Taking advantage of this approach, the Proprietary Party-led government was loath to recognize new Western counties where the opposition to the Proprietary Party had greater support, thereby denying opposition voters anything approaching equal representation per capita. *Id.*

199. Second, only landowners could vote such that much of the working population in Philadelphia had no political power at all. *Id.*

200. That population was largely un-landed and hostile to the Proprietary Party. *Id.*

201. As tensions with Britain gave rise to the Revolutionary War, the Proprietary Party remained loyal to the Crown. *Id.* at 806.

202. The Anti-Proprietary Party, now joined by working-class Philadelphians and people from western Pennsylvania, strongly supported independence. *Id.*

203. After the Declaration of Independence, members of the Anti-Proprietary Party dominated the ensuing constitutional convention. *Id.* at 806-07.

204. In that convention, Pennsylvanians adopted reforms “intended to protect future individuals against exclusion from the legislative process by ‘persons who gained power and intended to keep it.’” *Id.* at 806 (citing John L. Gedid, “*History of the Pennsylvania Constitution*,” as appearing in Ken Gormley, ed., THE PENNSYLVANIA CONSTITUTION: A TREATISE ON RIGHTS AND LIBERTIES, 48 (2004)).

205. One of these reforms was the adoption of an early version of the Free and Equal Elections Clause. *Id.* at 806-07.

206. As our Supreme Court has explained, this Clause “established a critical ‘leveling’ protection in an effort to establish the uniform right of the people of this Commonwealth to select

representatives in government” and “sought to ensure that this right of the people would forever remain equal.” *League of Women Voters*, 178 A.3d at 807.

207. Political factions realigned after the Revolutionary period. *Id.*

208. Quakers, Episcopalians, and Germans who had not fought in the war formed the “Anti-Constitutionalists,” later called Republicans and Federalists. *Id.*

209. Along with Philadelphia commercial interests that this community largely controlled, the Anti-Constitutionalists opposed the “radicals” (also known as the “Constitutionalists”) who had rallied for the 1776 Constitution. *Id.*

210. As other aspects of the new frame of government faltered, these various groups agreed to call a new constitutional convention. *Id.* at 807-08.

211. During that convention, factions rose to the occasion by adopting reforms that preserved a simpler version of the Clause. *Id.* at 807-08.

212. Pennsylvanians preserved the “principle cherished most by the Constitutionalists—namely, popular elections in which the people’s right to elect their representatives in government would be equally available to all, and would, hereinafter, not be intentionally diminished by laws that discriminated against a voter based on his social or economic status, geography of his residence, or his religious and political beliefs.” *Id.* at 808 (citing Joseph S. Foster, “The Politics of Ideology: The Pennsylvania Constitutional Convention of 1789-1790,” 59 Pa. J. History 137-38 (Apr. 1992)).

213. Given this text and history, our Supreme Court’s “view as to what constraints Article I, Section 5 places on the legislature . . . has been consistent over the years.” *Id.* at 809.

214. As explained in Pennsylvania’s leading treatise on its Constitution:

[E]lections are free and equal within the meaning of the Constitution when they are public and open to all qualified electors alike; when every voter has the same right as every other voter; when each voter under the law has the right to cast his ballot and have it honestly counted; when the regulation of the right to exercise the franchise does not deny the franchise itself, or make it so difficult as to amount to a denial; and when no constitutional

right of the qualified elector is subverted or denied him.

THE PENNSYLVANIA CONSTITUTION at 810 (citing *Winston v. Moore*, 244 Pa. 447, 523 (Pa. 1914)).

215. In *League of Women Voters*, the Supreme Court explained further that the precept that every voter has the same right as every other voter means that the Legislature may not enact laws that dilute votes. *League of Women Voters*, 178 A.3d at 813-14.

216. In a lengthy but highly illuminating passage, the Court wrote:

It is axiomatic that a diluted vote is not an equal vote, as all voters do not have an equal opportunity to translate their votes into representation. This is the antithesis of a healthy representative democracy. Indeed, for our form of government to operate as intended, each and every Pennsylvania voter must have the same free and equal *opportunity* to select his or her representatives. [O]ur Commonwealth's commitment to neutralizing factors which unfairly impede or dilute individuals' rights to select their representatives was borne of our forebears' bitter personal experience suffering the pernicious effects resulting from previous electoral schemes that sanctioned such discrimination. Furthermore, the adoption of a broad interpretation guards against the risk of unfairly rendering votes nugatory, artificially entrenching representative power, and discouraging voters

from participating in the electoral process because they have come to believe that the power of their individual vote has been diminished to the point that it ‘does not count.’

Id.

217. Based on this analysis, the Court held that “the Clause should be given the broadest interpretation, one which governs all aspects of the electoral process, and which provides the people of this Commonwealth an equally effective power to select the representative of his or her choice, and bars the dilution of the people’s power to do so.”

Id. at 814.

218. The Court further held that the Clause must be given its broadest interpretation relative to a Legislative enactment that dilutes citizen voting power, whether the Legislature has done so intentionally or “by inadvertence.” *Id.* at 812.

219. In *League of Women Voters*, the Court considered a 2011 Congressional redistricting plan that subordinated all traditional criteria for redistricting to one party’s partisan advantage and diluted the opposing party’s voters’ votes. The Court held that the plan was not “free and equal” and hence was unconstitutional, ultimately adopting one that followed traditional redistricting criteria and avoided vote

dilution. *League of Women Voters*, 178 A.3d at 815-25; *League of Women Voters of Pennsylvania v. Commonwealth*, 181 A.3d 1083 (Pa. order filed Feb. 19, 2018).

220. Later, when the Legislature could not arrive at a new, decennial redistricting plan in 2021, the Court again adopted a remedial plan that followed traditional redistricting criteria and avoided vote dilution. *See generally Carter v. Chapman*, 270 A.3d 444 (Pa. 2022).

221. Another significant case addressing voter dilution is *Working Families Party*, where third-party voters challenged a provision banning third-party nomination of candidates also seeking major-party nominations in primary elections, a process colloquially referred to as “ticket fusion.” *Working Families Party*, 209 A.2d at 271-78.

222. There, the Court explained that this “anti-ticket-fusion” rule did not violate the Clause. The Court explained that the challengers there “had the opportunity to support and vote for their candidate of choice” regardless of whether the candidate appeared as a third party’s candidate or a major party’s candidate. “In no sense were their votes

diluted by the fact that [he] appeared on the ballot only as the candidate of the Democratic Party.” *Working Families Party*, 209 A.2d at 282.

223. Both *League of Women Voters* and *Working Families Party* illustrate that Section 2812 abridges Petitioners’ right to vote in a primary election and dilutes their votes.

224. Section 2812 violates the Free and Equal Elections Clause by excluding independent voters from meaningful participation in the electoral process and diminishing the power of their votes.

225. First, Section 2812 prevents Petitioners from participating in primary elections at all. Indeed, Section 2812 categorically restricts independent voters from voting in primary elections. This contradicts the intent of the framers of the Pennsylvania Constitution “that all aspects of the electoral process, to the greatest degree possible, be kept open and unrestricted to the voters of our Commonwealth.” *League of Women Voters*, 178 A.3d at 804.

226. Second, Section 2812 dilutes Petitioners’ ability to translate their support into nominations for the general election.

227. As detailed above, citizens who have registered with a political party have more potential choices and more power than independent voters in nominating candidates to stand in the general election. Independent voters do not have “an equal right, on par with every other citizen” to translate their support into nominations. *Id.* Indeed, they have no right whatsoever to participate in a primary election for a given candidate. In turn, by the time independent voters get to vote, most electoral races in Pennsylvania are already decided. The choice has been formally or functionally narrowed to two nominees whom independent voters never had a chance to select. In many districts, there won’t even be two candidates. As such, Section 2812 makes independent voters’ electoral power and support functionally irrelevant by denying them the opportunity to participate when electoral outcomes are most meaningfully shaped.

228. Indeed, as detailed above, Section 2812 gives major-party voters a structural advantage in the form of at least 150% *a priori* power that scales hyperbolically depending on how few voters participate in their primary, and gives major-party voters a functional

advantage of multiple, to dozens, to hundreds of times the influence of independent voters in actual Pennsylvania elections.

229. This is precisely the type of vote dilution that the Free and Equal Elections Clause forbids.

230. In withholding participation until the electoral choice is virtually empty, Section 2812 is conceptually similar to the extreme partisan gerrymandering that our Supreme Court struck down in *League of Women Voters* and sought to avoid in *Carter*, *i.e.*, the manipulation of district boundaries into districts that rendered the right to vote largely illusory.

231. Section 2812's abrogation and dilution of Petitioners' vote distinguishes the circumstances here from the third-party voters in *Working Families Party*. In that case, third-party voters challenged a provision banning third-party nomination of candidates also seeking major-party nominations in primary elections, and our Supreme Court rejected the challenge on the ground that they were able to support their preferred candidate, albeit as the Democratic nominee. *Working Families Party*, 209 A.3d at 382. Here, Petitioners and other

independent voters are entirely unable to support their preferred candidates in the electoral process.

232. For purposes of the Free and Equal Elections Clause, it does not matter that independent voters have chosen not to affiliate with a political party.

233. The Clause sets forth a broad guarantee in the Declaration of Rights that represents a frank, firm limitation on governmental power.

234. The Clause was over a century old when the General Assembly undertook to exercise sovereign authority over party primaries. *See* Merriam & Overacker, *supra*, at 8-13; Act 181 of 1905; Act 472 of 1913; Act 320 of 1937.

235. Nobody made the Commonwealth exercise control over primary elections.

236. Once the Commonwealth did so, the Commonwealth undertook a corresponding obligation to exercise that authority in a manner consistent with the Constitution.

237. Pursuant to the Free and Equal Elections Clause, this obligation included adopting an electoral framework that did not give

some voters more power and some voters less power to translate their support for candidates into electoral representation.

238. Pennsylvania now has a government-mandated system in which the government shuts certain voters out of the process for nominating the candidates of political parties, thereby entrenching the power of members of those parties at the expense of the power of independent voters.

239. It might be suggested that Petitioners have brought exclusion on themselves by choosing not to identify as members of a political party. Such an argument would ignore that the Free and Equal Elections Clause is designed to equalize voters' power regardless of their faction (or lack thereof) and regardless of their individual political viewpoints. As our Supreme Court explained in *League of Women Voters*, the Free and Equal Elections Clause prevents the “dilution of the right of the people” to select their representatives based on the “political beliefs to which they adhere[.]” *League of Women Voters*, 178 A.3d at 808-09. Attempting to justify diluting independent voters' power on the ground that they are independent disserves the language of the

Clause and the reasons Pennsylvanians enacted it in the first place. *See id.* at 804-09.

240. In sum, by excluding independent voters from the primary stage and denying them equal access to influence nominations, Section 2812 violates the Free and Equal Elections Clause.

241. It creates a two-tiered electorate, giving major-party-affiliated voters more power than independents, whose participation often comes too late to matter.

242. Section 2812 as applied to Petitioners violates the Free and Equal Elections Clause.

COUNT II
All Petitioners Against All Respondents
Declaratory Judgment that Section 2812 Violates The
Antidiscrimination Provisions of the Pennsylvania Constitution

243. Article I, Section 26 of the Pennsylvania Constitution provides that “[n]either the Commonwealth nor any political subdivision thereof shall deny to any person the enjoyment of any civil right, nor discriminate against any person in the exercise of any civil right.” Pa. Const., art. I, § 26.

244. This provision is not redundant of the federal Equal Protection Clause.

245. It establishes an independent state constitutional guarantee and requires the Commonwealth to “maintain neutrality” with respect to one’s constitutional rights. *Allegheny Reproductive Hlth. Ctr. v. Dept. of Hum. Servs.*, 309 A.3d 808, 943 (Pa. 2024).

246. If the Commonwealth has not maintained neutrality because it has “expressed a preference for” or otherwise burdened “a person’s exercise of any civil right,” the Commonwealth must justify its classification pursuant to means-ends review. *Id.*

247. The Court’s review under Article I, Section 26 applies the nomenclature of constitutional scrutiny under federal equal protection jurisprudence, but the terms have distinct meaning and applications under Pennsylvania law. In particular, where the government has violated its obligation of neutrality with respect to a “fundamental right,” the discriminatory statute must fall unless it survives the prerequisites of “strict scrutiny” in that the government must demonstrate that its discrimination is “necessary to the achievement of a compelling state interest” and “narrowly tailored to effectuate that interest.” *Id.* at 946 (citing *Commonwealth v. Bell*, 516 A.2d 1172, 1178 (Pa. 1986); *Hiller v. Fausey*, 904 A.2d 875, 885-86 (Pa. 2006)).

248. “If there are other, reasonable ways to achieve [the state’s] goals with a lesser burden on constitutionally protected activity, a State may not choose the way of greater interference. If it acts at all, it must choose ‘less drastic means.’” *Id.* (citing *Dunn v. Blumstein*, 405 U.S. 330, 342-43 (2006)).

249. If the government has violated its obligation of neutrality with respect to a non-fundamental but nevertheless important right, the government must satisfy intermediate scrutiny: *i.e.*, the discrimination must be “closely related” to an “important” government interest, and the person excluded from the right must “be permitted to challenge his exclusion on the grounds that in his particular case, denial of the right or benefit would not promote the purpose of the classification.” *Yanakos v. UPMC*, 218 A.3d 1214, 1222 (Pa. 2019).

250. If the discrimination does not implicate fundamental or important rights, the government’s discrimination must still be “reasonable rather than arbitrary” and “bear a reasonable relationship to the object of the legislation.” *Commonwealth v. Albert*, 758 A.2d 1149, 1151 (Pa. 2000). The court determines whether the distinction offered

“is founded on a real and genuine distinction rather than an artificial one.” *Id.* The Court may conceive of its own rational basis as well. *Id.*

251. Section 2812 discriminates against Petitioners in violation of Article I, Section 26 based on their exercise of multiple fundamental constitutional rights.

252. First, Section 2812 bars Petitioners from participating in primary nomination processes based on their exercise of their right to free speech in declining to publicly declare that they are members of a political party.

253. Second, Section 2812 bars Petitioners from participating in primary elections based on Petitioners’ decision to decline association with a political party.

254. Third, Section 2812 subjects Petitioners to vote dilution in general elections based on their exercise of their speech and associational rights.

255. Section 2812 effectuates this discrimination in simple terms.

256. It gives voters who publicly associate themselves with a political party the right to participate in primary elections and a greater ability to translate support into representation. By contrast, it gives

independent voters no primary vote and a lesser ability to translate support into representation.

257. Here, Petitioners are independents for a variety of reasons.

258. Some are mindful of professional or community harm if they choose the “wrong” registration.

259. For example, as noted above, Petitioner Smerconish is an independent voter in part so his journalism cannot be assailed by accusations of political favoritism.

260. Petitioner Thornburgh is an independent voter in part because registration as a member of a political party would have undermined his efforts at pursuing nonpartisan government reform.

261. Petitioner Doty is an independent voter in part because democratic registration could harm his grocery business in a predominantly Republican community.

262. Petitioner Akarsoy is an independent voter in part so that he can serve his constituents without the fraught and pretermitted dialogue that often accompanies partisan affiliation.

263. Others are independent voters because they don't fit within the category of a political party.

264. Petitioner Shanok is an active member of Forward, a political organization committed to interjecting “new ideas and new debates” into our political discourse. Ms. Shanok has been registered as a Democrat in the past but is now an independent voter in part because she believes that neither the Democratic nor Republican parties reflect her political views. She believes that corrosive partisanship is infecting our political discourse.

265. Each petitioner has reasons for exercising their judgment to decline partisan affiliation.

266. Each petitioner has been deprived of the ability to participate in crucial primary elections.

267. They have been denied an equal opportunity to translate their support for a candidate into representation.

268. They have been discriminated against regarding their right to vote based on their exercise of their rights of free speech and association.

269. Implicating fundamental rights, Section 2812 must be evaluated pursuant to the constitutional strict scrutiny framework under Article I, Section 26. *See* Pa. Const., art. I, §§ 5, 7, 8; *League of*

Women Voters, 178 A.3d at 793; *Bergdoll v. Kane*, 731 A.2d 1261, 1269 (Pa. 1999) (right to vote); *In re Nader*, 905 A.2d 450, 465 (Pa. 2006) (same); *Pap's A.M. v. City of Erie*, 812 A.2d 591 (Pa. 2002) (right to free speech); *Shelton v. Tucker*, 364 U.S. 479 (1960) (right to free association).

270. Section 2812 cannot withstand strict scrutiny.

271. Under Pennsylvania's strict scrutiny framework, Section 2812 must be struck down as applied to Petitioners and other independent voters unless it is "necessary to the achievement of a compelling state interest" and "narrowly tailored to effectuate that interest." *Allegheny Reproductive Hlth. Ctr.*, 309 A.3d at 496.

272. "If there are other, reasonable ways to achieve [the state's] goals with a lesser burden on constitutionally protected activity, a State may not choose the way of greater interference. If it acts at all, it must choose 'less drastic means.'" *Id.*

273. Section 2812 is not necessary to accomplish a compelling government interest as applied to independent voters.

274. As a starting point, the legislative record does not demonstrate the particular function that Section 2812's disenfranchisement of independent voters was designed to accomplish.

275. Contemporaneous accounts suggest that the 1937 Legislature sought primarily to prevent Democrats and Republicans from creating mushroom parties intended to confuse other parties' voters.

276. One concern of the 1937 Legislature may have been preventing one party's members from "raiding" another party's primary to throw that party into flux. *See Merriam & Overacker* at 5. However, it is apparent from the legislative record that the 1937 Legislature did not remotely consider independent voters, who comprised 3% of the electorate at the time, let alone as potential "raiders" of nomination contests.

277. If preventing counter partisans from raiding a party's primary represents a fundamental interest, that interest does not extend to, and is not compelling as to, independents, who lack the partisan incentives to which the 1937 Legislature was responding when enacting Section 2812.

278. Indeed, the U.S. Supreme Court has recognized that a state’s interest in preventing party raiding is “insubstantial,” let alone compelling, as pertains to independent voters. *Tashjian v. Republican Party of Connecticut*, 479 U.S. 208, 225 (1986); *see id.* at 219 (“[A] raid . . . by independent voters [is] . . . a curious concept only distantly related to the type of raiding which motivated the adoption of closed primary laws.”)

279. Empirically there is meager potential for disruption by an independent voter “raid,” as evidenced by the extreme rarity of this practice in states with open primaries. *See, e.g.*, John Johnson, “Crossover voting is uncommon, even in Wisconsin’s wide open primaries,” Marquette University Law School Faculty Blog, <https://law.marquette.edu/facultyblog/2023/11/crossover-voting-is-uncommoneven-in-wisconsins-wide-open-primaries/> (Nov. 22, 2023) (last visited Jul. 9, 2025).

280. Second, Section 2812 doesn’t do much to prevent a raid whether by partisans or independents. Earlier iterations might have. But as detailed above, earlier versions of Pennsylvania’s laws governing voter registration and participation in primary elections attempted to

police the voter rolls for “true” party membership. They required more to register as a member of a political party: *e.g.*, an oath of prior candidate support or examination into one’s substantive allegiances and political preferences. *See, e.g.*, Act 472 of 1913.

281. In some circumstances a voter was obliged to remain registered as a member of one party and to vote for the other one in the general election if he wished to switch registration in the next primary. *See id.* In other words, there was a substantive dimension to being a Democrat or a Republican beyond whether or not one had checked a box on a form.

282. That isn’t so anymore. The requirement of registration evinces only that one has registered. Nothing prevents a counter partisan’s desire to register as a member of the opposing party and attempt to influence that party’s primary election except perhaps his desire to participate and his true party’s primary.

283. Independent voters have no such primary and have been free to “raid” for roughly a century simply by registering. *Accord Tashjian*, 479 U.S. at 219 (explaining that “a raid on the Republican Party primary by independent voters . . . is not impeded” because “the

independent raiders need only register as Republicans and vote in the primary”).

284. A far smaller portion of Pennsylvanians identifies as independent than the national average, suggesting there may already be millions of actual independents registered as members of parties just to have some say in their representation.

285. Section 2812 perversely operates to exclude only those independents who are candid about their independence.

286. Section 2812 is not necessary to prevent party raiding as applied to independents.

287. It also doesn't prevent such raiding as applied to independents.

288. Even assuming restriction on who can vote in primary elections were necessary to prevent party raiding, Section 2812 is not narrowly tailored to achieve that goal.

289. Rather, Section 2812 is too broad in its sweep. It excludes from voting in the primaries those voters who actually identify as members of parties but who cannot or do not wish to publicly do so for non-political reasons.

290. Section 2812 is also too narrow: it does not exclude voters who identify as members of opposing parties but who are willing to register differently to conduct a raid.

291. If Section 2812 is designed to ensure that only true members of a party participate in its primaries, it excludes true members and allows in false members.

292. Furthermore, there are other methods to prevent party raiding that do not burden voters' constitutional rights. The Commonwealth could end the requirement that voters register by party, joining the 19 states in this country that do not require party identification as a condition of voting in a primary election. The Commonwealth could require voters to certify that they are voting in good faith in a primary party and not for "raiding" purposes. It could punish "raiding" more severely. It could adopt measures like top-two primaries, runoff elections, or instant-runoff ranked-choice voting, all of which curtail the ability to, and incentives to, engage in party raiding. The Commonwealth has done none of these things. In the meantime, Section 2812 violates Petitioners' rights.

293. Under Article 1, Section 26 of the Pennsylvania Constitution the Commonwealth cannot subject independent voters to disparate treatment based on their exercise of fundamental constitutional rights to allay its fears about partisans' bad faith conduct.

294. The Commonwealth cannot show that the exclusion of independent voters from primary elections is necessary to achieve a compelling interest.

295. At the same time, less burdensome options are available to address concerns about partisan interference. The Commonwealth is obliged to employ those options instead of discrimination to achieve its goals.

296. For all these reasons, under strict scrutiny analysis, Section 2812 violates Article 1, Section 26 of the Pennsylvania Constitution.

297. Section 2812 cannot withstand intermediate scrutiny or rational basis review either.

298. Intermediate scrutiny applies if the Commonwealth has violated its obligation of neutrality with respect to a non-fundamental, but important, right. In that circumstance, the Commonwealth must satisfy intermediate scrutiny—*i.e.*, the discrimination must be “closely

related” to an “important” government interest, and the person excluded from the right must “be permitted to challenge his exclusion on the grounds that in his particular case, denial of the right or benefit would not promote the purpose of the classification.” *Yanakos*, 218 A.3d at 1222.

299. If the rights at stake here are deemed only important, the burden imposed by Section 2812 still would fail this standard.

300. As a starting point, the apparent governmental interest of preventing party raiding does not justify the law’s exclusion of independent voters.

301. The provision is not closely related to those interests because it both under includes and over includes the voters who the statute ostensibly seeks to restrict.

302. Section 2812 excludes voters who are sincerely aligned with the party but cannot or will not register for other, including good, reasons.

303. It includes voters who do not support a party but register solely to influence its outcomes.

304. In this regard, the classification does not serve its purported goal in a sufficiently consistent manner.

305. The classification also fails to account for voters like Petitioners who have chosen not to affiliate with a party based on personal, political, or professional reasons.

306. The statute does not allow Petitioners to challenge their exclusion from primary elections on the ground that they are not party raiders.

307. As applied to them, the exclusion is categorical and advances no important purpose at all.

308. Section 2812 fails rational basis review as well. Under rational basis review, the statute must be “reasonable rather than arbitrary” and “bear a reasonable relationship to the object of the legislation.” *Albert*, 758 A.2d at 1151. This court determines whether the distinction offered “is founded on a real and genuine distinction rather than an artificial one.” *Id.*

309. Here, Section 2812 distinguishes between voters who register with a political party and those who do not.

310. This distinction is not real and genuine when the act of registration requires no substantive demonstration of partisan belief, when registration is compelled or deterred by professional or community pressure, and when the distinction issue actually imbues partisans with the ability to raid.

311. At best the distinction reflects an administrative preference for categories that contain and control voters.

312. It is not a legitimate basis for excluding a class of voters from a critical stage of the electoral process and thereby leaving them with a fraction of the power exercised by other voters.

313. In short, even if Section 2812 is not subject to strict scrutiny, it fails both intermediate scrutiny and rational basis review and violates Article 1 Section 26 of the Pennsylvania Constitution.

Form of Relief

314. In light of all the foregoing, Petitioners seek a declaration that Section 2812 as applied to independent voters violates the Free and Equal Elections Clause and/or Article I, Section 26 of the Pennsylvania Constitution.

315. Petitioners do not seek any further relief, such as an injunction mandating any particular alternative procedure. Petitioners recognize that there may be numerous legislative schemes that protect the rights of all voters as well as the First Amendment rights of the parties insofar as they are private associations with the right to exclude members and wish to exercise that right. *See, e.g., Washington State Grange v. Washington State Republican Party*, 552 U.S. 433 (2008) (holding that a system in which partisan primaries are abolished in favor of a single primary election with candidates identifying their partisan allegiances is constitutionally appropriate and consistent with parties' associational rights); *California Dem. Party v. Jones*, 530 U.S. 567 (2000) (holding that a system in which voters can vote in multiple parties' partisan primaries on a single day violates parties' associational rights); *Tashjian v. Republican Party of Connecticut*, 479 U.S. 208 (1986) (recognizing that a state cannot preclude parties from permitting independent voters to participate in its partisan primaries); *Democratic Party of United States v. Wisconsin ex rel La Follette*, 450 U.S. 107, 130 n.2 (1981) (recognizing that a system in which voters

choose a single partisan primary in which to participate at the polls on election day is constitutionally appropriate).

316. Of the various alternatives that may adequately protect all pertinent constitutional rights, which alternative to adopt is a question on which the Legislature should have an opportunity to legislate.

317. As such, Petitioners seek only that this Court announce the law—that Section 2812 violates the constitutional rights of Pennsylvania independent voters—and leave the appropriate remedy for another forum on another day.

PRAYER FOR RELIEF

WHEREFORE, Petitioner respectfully requests that the Court order the following relief:

- (A) A declaration that Section 2812 as applied to Petitioners and independent voters violates the Free and Equal Elections Clause of the Pennsylvania Constitution;
- (B) A declaration that Section 2812 as applied to Petitioners and independent voters violates Article I, Section 26 of the Pennsylvania Constitution; and/or
- (C) Such other relief as is just and proper.

Respectfully submitted,

Dated: December 10, 2025

By: _____

Shanin Specter, ID# 40928
Charles L. Becker, ID# 81910
Ruxandra M. Laidacker, ID# 206908
Corrie Woods, ID# 314580
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Counsel for Petitioners
Michael Smerconish, Jeffery Doty,
Rachel Shanok, Elgin Akarsoy, &
David Thornburgh

VERIFICATION

I hereby verify that the statements made in the foregoing Petition for Review In the Nature of a Complaint for Declaratory Judgment are true and correct based upon my personal knowledge or information and belief. I understand that any false statements therein are subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities).

Dated: December 10, 2025

By:  _____

Shanin Specter
Kline & Specter, PC
1525 Locust Street
Philadelphia, PA 19102
(215) 772-1000

APPENDICES

APPENDIX A – AFFIDAVIT OF MICHAEL SMERCONISH

AFFIDAVIT OF MICHAEL A. SMERCONISH

I, Michael A. Smerconish, do hereby declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the foregoing is true and correct:

1. This affidavit is based on my personal knowledge.
2. I am a resident of Villanova, Pennsylvania, in Montgomery County.
3. I have lived in Pennsylvania for all of my sixty-three years. I was born and raised in Bucks County, lived for a decade in Philadelphia, and for the last thirty-one years have resided in Montgomery County.
4. I am an attorney, radio host, television presenter, political commentator, and author.
5. In my younger years, I was politically active, working on numerous political campaigns for candidates with diverse political views running for state, local, and national office.
6. I currently host a daily radio program on SiriusXM's POTUS channel and a weekly television program on CNN and CNN International. I also publish a daily newsletter, host podcasts, and speak at events across the country.
7. I have been registered to vote in Pennsylvania since I turned 18 in the spring of 1980; I have continuously been a registered voter for forty-five years.
8. I consider voting to be a responsibility of citizenship and as far as I know, I have never missed an election for which I have been eligible to vote.
9. I turned eighteen in March of 1980 and immediately registered to vote, as a Republican, following the political identification of my parents.
10. I enthusiastically supported the Republican Party of Presidents Ronald Reagan and George H.W. Bush. I worked as an advance man for Vice President George H.W. Bush and served as an appointed Regional Administrator in the Department of Housing and Urban Development during his presidential administration.
11. I later supported George W. Bush's presidential campaigns, including serving as the master of ceremonies at his final Pennsylvania rally in the 2004 campaign, held in a Bucks County cornfield before 20,000 attendees.
12. My political views were deeply shaped by 9/11. Bucks County lost more residents that day (18) than any other Pennsylvania county. In the years after 9/11, I grew disenchanted with the failure to bring Osama bin Laden and Ayman al Zawahiri to justice. When I interviewed Senator Barack Obama during the 2008 campaign, he pledged that he would

renew the hunt for bin Laden and Zawahiri even if it meant disregarding Pakistan's sovereignty. I decided to vote for him while remaining a Republican.

13. President Obama championed a market-based healthcare plan built on private insurers offering competitive plans through exchanges, an idea that originated with a conservative think tank. Still, Republican critics derided the plan as "socialism." That rhetoric, and the party's growing departure from reasoned discourse, left me alienated. The GOP of Reagan's pragmatic conservatism had given way to something angrier and more extreme which I was uncomfortable.

14. In 2010, during a driver's license renewal, I changed my registration to "non-party affiliate," Pennsylvania's designation for an Independent voter, because neither major party represented my views or what I believed to be the best interests of the American people.

15. Today I remain one of the 43% of Americans—according to Gallup—who identify as Independent.

16. Professionally, my mission is to demonstrate that one can build audience without succumbing to polarization and while maintaining civility.

17. Being an Independent voter supports these goals. As a journalist, remaining unaffiliated helps me avoid accusations that I favor one party.

18. As a media personality, I would be boxed-in to the perception of partisanship were I to choose a party label that no longer fits. I should not have to choose between my livelihood and my registration.

19. My status as an Independent comes at a significant cost, namely that I do not have a say in determining nominees in competitive primary elections.

20. Instead, I am left to choose only among the candidates who reach the general election. These races are often uncompetitive, rendering my vote effectively meaningless.

21. Registering as a member of either the Republican or Democratic Party solely to participate in primaries would undermine my professional credibility and conflict with my sincerely held personal views.

22. Remaining registered as an Independent is the only way to align my political identity with my views and protect my professional integrity.

23. It is wrong that I must register with a political organization that does not reflect my values in order to participate in a meaningful election.

24. All Pennsylvanians should have an equal ability to vote and influence elections. Prohibiting Independents from voting in primaries disenfranchises those who do not wish to be forced into affiliation with organizations that do not reflect their values.

25. Allowing Independent voters to participate in primary elections would rectify this inequity and allow Pennsylvanians like me to cast meaningful votes without compromising their values or careers.

26. I declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the foregoing is true and correct.

A handwritten signature in black ink, appearing to be 'MVA', is written over a horizontal line.

Executed this 9th day of December, 2025, in Villanova, Montgomery County, Pennsylvania.

APPENDIX B – AFFIDAVIT OF JEFFERY DOTY

AFFIDAVIT OF JEFFERY A. DOTY

I, Jeffery A. Doty, declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the following is true and correct:

1. This affidavit is based on my personal knowledge.
2. I am a resident of Hughesville, Pennsylvania in Lycoming County.
3. I have lived in Lycoming County for most of my life, and specifically in Hughesville, Pennsylvania for a little over 25 years.
4. For nearly 30 years, I managed a well-known grocery store in the Lycoming County community.
5. My job responsibilities included interacting with our employees and customers, deescalating conflicts, and managing other aspects of our customer service efforts.
6. Lycoming County is a rural community with an overwhelmingly Republican population.
7. I have been registered to vote in this community for over 25 years.
8. I initially registered to vote as a member of the Republican Party.
9. About 10 years ago, I became an independent voter for personal and professional reasons.
10. On a personal level, I did not feel that my views, opinions, and ideas were adequately represented by either the Republican Party or the Democratic Party and I grew increasingly frustrated with each organization. I ultimately felt that neither party offered solutions to key political issues.

11. Given my frustration with each party, I did not want either the Republican Party or the Democratic Party to count me as a member of their organization or consider me to be a supporter of their policies and candidates.

12. I also felt that I would face personal backlash or retribution from Lycoming County's large Republican community if I registered as a Democrat. I am personally aware of instances in which people in Lycoming County were personally denigrated for expressing support for the Democratic Party.

13. On a professional level, I did not want to remain a member of the Republican Party or join the Democratic Party because I wanted to avoid any professional backlash in the Lycoming County community based on my affiliation.

14. This view was consistent with my employer's corporate approach to politics. We aimed to refrain from discussing politics at work or with customers. As the manager of the store, I aimed to foster an environment that was tolerant and open to all community members and that did not deter anyone from becoming a customer. Consequently, becoming an independent voter aligned with this approach.

15. My fears about the potential for backlash based on my political affiliation at work were well-founded.

16. I recall several incidents at my store where customers made politically-motivated complaints or raised political issues. I watched employees get yelled at by customers who perceived the employees were making political comments. And most notably, during the pandemic customers often argued that our store's enforcement of COVID-safety rules was a result

of what they believed to be support for the Democratic Party. Over time, these issues have only become more and more prevalent and relevant.

17. While being an independent voter aligns with my personal political views and professional goals, it comes at a great personal cost.

18. Engaging in politics by way of direct participation in meaningful elections is very important to me.

19. However, as an independent voter I am unable to meaningfully participate in elections where I live due to Lycoming County's overwhelming Republican population.

20. Often, our general elections are not competitive.

21. While numerous candidates run in the Republican primaries that I am barred from participating in, the Republican nominees in the general elections face uncompetitive challengers or no challengers at all.

22. This means that I am unable to participate in the only meaningful election, the Republican primary, and that my vote is essentially worthless by the time it is cast in the general election.

23. This is very harmful to me because participating in local politics and contributing to the future direction of the community I have lived in my whole life is very important to me.

24. It is wrong that I am forced to support a political organization that does not reflect my values, my viewpoints, or my professional goals in order to participate in a meaningful election.

25. I believe that everyone should have an equal ability to vote in and impact the election. But prohibiting independent voters from participating disenfranchises a large number of

people who do not wish to be forced to provide support, via registration, to organizations that do to reflect their values, viewpoints, or professional goals.

26. Allowing independent voters to participate in primary elections will rectify this wrong and allow Pennsylvanians, like myself, to cast meaningful votes and exercise their political rights without forced endorsement of a political organization they disagree with and without fear of personal or professional retribution.

27. I declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the foregoing is true and correct.

Executed this 8 day of December, 2025, Hughesville, Lycoming
County, Pennsylvania.



Jeffery A. Doty

APPENDIX C – AFFIDAVIT OF RACHEL SHANOK

AFFIDAVIT OF RACHEL SHANOK

I, Rachel Shanok, declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the following is true and correct:

Personal Background

1. I have lived in the Commonwealth of Pennsylvania, and specifically in and around the City of Philadelphia, since approximately 2002.
2. I currently reside in Montgomery County.
3. I am currently employed full-time as a physical therapist.
4. I received a Bachelor of Science degree in kinesiology from the University of Illinois in 1998 and a Master's in Physical Therapy from Duke University in 2000.

Voting Registration History

5. I began voting in presidential elections in approximately 2000 and initially registered with the Democratic Party.
6. At the time, I thought that all voters could vote in primary and general elections regardless of party affiliation or lack thereof.
7. Following the birth of my child in 2019, I began to devote more attention to our political system, including the operation of local politics in Pennsylvania.
8. I recognized that within our country, including Pennsylvania specifically, political power is entrenched in the two major parties, and individuals who are not affiliated with one of those parties have very low chances of winning elections.
9. As a result, I began researching how I could bring attention to these issues and work to bring about change.

10. Through that research, I learned of and decided to work with the Forward Party in 2022.

11. Within the past year or so, I unregistered with the Democratic Party. I did so primarily because it was becoming increasingly clear to me that both major political parties were engaged in practices aimed at further entrenching their own political power within the current political system rather than solving problems voters truly care about.

12. I re-registered using the “Other” option on Pennsylvania’s voter registration form and identified the Forward Party as the group I wanted to be politically affiliated with, even though the Forward Party is not an officially recognized party under the Pennsylvania Election Code.

13. Because I chose the “Other” option, I cannot participate in partisan primary elections.

The Impact of My Registration as an Independent Voter

14. I believe that diverse viewpoints, open-mindedness, and impartiality are central to a democratic system of government.

15. I do not feel that the current law in the Commonwealth of Pennsylvania, which privileges registered Republicans and Democrats through enhanced opportunity to translate their political preferences into representation by allowing them to participate in a state funded primary and then a state funded general election, is fair or treats voters equally. It also frustrates the ability of voters to elect their preferred representative by giving inordinate power to primary voting registered Republicans and Democrats.

16. As an independent voter, I am not treated equally because I am excluded from a significant (and oftentimes the only practically meaningful) part of the voting process because I do not choose to identify with a major political party.

17. Specifically, I am not permitted to participate in primary elections and so only have one opportunity (through the general election) to translate my vote into representation as compared to voters who register with a major political party, who have two opportunities (i.e. the primary and general election).

18. This necessarily results in me having less voting power than voters who register with a major political party.

19. For example, there are approximately 4,500 local school board members in Pennsylvania. Most of these school board members are elected by local voters, including in Montgomery County. For all those races, candidates can cross-file to run as both Republicans and Democrats. Independent voters are not able to vote for any of these candidates in a primary election. They can only vote in the general election when, in many localities, such as mine, it is a foregone conclusion who will win either because one candidate has already sewn up both parties' nominations or one party's candidate will win because of the noncompetitive nature of the district.

20. In fact, in the 2025 local school board elections in the district where I live, because of cross-filing, only one party was listed on the ballot in the general election.

21. This means that as a voter who can only vote in the general election, I have no effective choice because the only candidates likely to be listed on the general election ballot are listed as candidates of both parties. By comparison, partisan voters have the ability to vote for all possible candidates (because each cross filed as a Democrat and a Republican). In short, I am

likely forced to ratify the choice that partisan voters made. That is not an equal opportunity to translate my vote into representation.

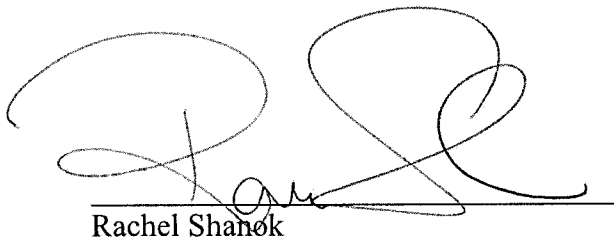
22. Indeed, because most Montgomery County elected officials are and for many years have been members of the same major political party, primary races are often determinative of the candidate who will be elected. The cross-filing phenomena only exacerbates this issue by rendering the general election meaningless as there is likely no competitive choice on the general election ballot.

23. As a result, my vote in those elections is substantially diluted as compared to my partisan counterparts who had two opportunities to translate their vote into representation (where I only had one) and the one election I can participate in is often non-competitive.

24. This is so even though as a taxpayer, I pay the same share of taxes that fund Pennsylvania elections as major party-affiliated taxpayers. Nevertheless, I am excluded from some of those elections that my taxes fund due to my decision not to affiliate with a major political party.

25. I declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the foregoing is true and correct.

Executed this 9th day of December, 2025 in Ambler, Montgomery County, Pennsylvania.



Rachel Shanok

APPENDIX D - AFFIDAVIT OF ELGIN AKARSOY

AFFIDAVIT OF ELGIN AKARSOY

I, Elgin Akarsoy, declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the following is true and correct:

Personal Background

1. I have lived in Pennsylvania my entire life.
2. I received a Bachelor of Arts degree in political science from the University of Pittsburgh in 2005.
3. I currently live in Upper Providence Township, Pennsylvania, and have lived in Delaware County since approximately 2006.
4. I am currently employed in the technology sales field.
5. I also currently serve as a Councilmember on the Upper Providence Township Council District 4.
6. This is my second term as a Councilmember, which is an elected position.

Voting Registration and Political History

7. I first registered to vote when I turned 18 and in advance of the 2000 presidential election.
8. At the time I first registered to vote, I registered with the Republican Party. I did so primarily because my parents had registered as Republicans.
9. During and following college, my personal political views developed, and I changed my voter registration from Republican to Democrat in approximately 2006 to better align with those views.
10. I became particularly interested in involvement in local politics when I purchased

my home in Upper Providence Township in 2014.

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11. At the time, I received the impression that the vast majority of the local community were closely affiliated with the Republican Party, and those who were not would be treated as outsiders.

12. In late 2014-early 2015, I submitted my name and interviewed for an open interim councilmember position on the Upper Providence Township Council.

13. During my interview, I was asked about my affiliation with the Democratic Party, and the intersection between Democratic policy positions and the Council's historically Republican viewpoints and decisions was a point of discussion.

14. The open councilmember position was awarded to member of the Republican Party who I understood had a close political affiliation with present members of the Council.

15. Through this experience, I developed the impression that local politics were controlled by a select group of people, and entry into that group is very difficult if one's views differ from the group's.

16. In 2018, I decided to run for a four-year term on the Upper Providence Township District Council. My local Democratic committee financed and supported my campaign. 17. This election was my first in-depth exposure to the Pennsylvania primary election process.

18. It showed me that there was little, if any, opportunities for voters to consider candidates other than those affiliated with the Republican or Democratic Parties. I learned that to be considered as a serious political candidate in Pennsylvania, one must be registered with either the Republican or Democratic Party.

19. I won the 2018 Council election.

20. During my first term in office, I felt that I received a lot of backlash from my community and fellow elected officials solely due to my affiliation with the Democratic Party.

21. In approximately mid-2020, I decided to change my voter registration to no affiliation.

22. I did so due to my growing frustration with the political patronage system, requirements to obtain approval from major party leaders in order to accomplish goals, and disagreement with the decisions and actions of the Democratic Party at the federal, state, and local levels.

23. Following the change in my affiliation, I was contacted by local leaders within the Democratic Party, who told me that I was not permitted to change my political affiliation. 24. Nevertheless, in advance of the 2023 election, the local Democratic committee asked if I would seek another 4-year term on the Council due the progress I was helping make in my position.

25. I agreed to run again. When I submitted my candidacy paperwork in January 2023, I was still registered as unaffiliated.

26. However, I could only participate in the primary election if I did so on either the Republican or Democratic ballot. Being a participant in the primary election was hypercritical to my chances of winning the election because my name would not appear on the general election ballot except through write-ins if I did not participate in the primary election.

27. Accordingly, I was endorsed by the local Democratic committee and was a candidate in the Democratic primary election, even though I was not a registered Democrat. 28. Before the primary election, my candidacy was challenged in a petition filed in the Delaware County

Akarsoy as a Candidate for Council of Upper Providence District 4 for the May 2023 Election,
No. 2023-002232.

29. The court denied the petition, holding that I was “permitted to remain on the ballot for the position of Upper Providence Council District 4 in the Democratic Primary.” Order dated Mar. 22, 2023 at 1.

30. In doing so, the court found that “[t]he Pennsylvania Election Code must ‘be liberally construed to protect a candidate’s right to run for office and the voters’ right to elect the candidate of their choice.’”...The purpose of the Election Code is to protect, not defeat, a citizen’s vote.” *Id.* ¶¶ 1-2.

31. It also found that “[t]here is no affirmative statutory requirement that a candidate be registered as a particular party when seeking the nomination for a position on a party ballot.” *Id.* 4.

32. As a result, my “status as a ‘no affiliation’ voter [did] not bar [me] from seeking the nomination of the position of Council Member of Upper Providence Township for the Democratic Party.” *Id.* 11.

33. Despite the court’s decision, in order to avoid “ruffling feathers,” the Democratic committee instructed me to change my voter registration back to Democrat. 34. I did so in order to avoid political ramifications.

35. In the May 2023 primary election, I was only able to vote for myself because I changed my registration to Democrat. Had I remained unaffiliated, I would have been a candidate in the Democratic primary but unable to vote for myself.

36. I won the primary election and was thus listed as a candidate in the general election.

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37. Following the primary election, I changed my voter registration back to no affiliation in advance of the general election.

38. I subsequently won the general election in the Fall of 2023.

39. This high margin of victory shows that the primary election was critical to my election, and indeed the only election that practically mattered.

The Impact of My Registration as an Independent Voter

40. I do not feel that either the Republican or the Democratic political parties adequately represent my political, social, and cultural views and beliefs.

41. Additionally, when I was registered as a member of the Democratic Party, I faced significant negative treatment from members of my community, especially those closely involved with local politics.

42. For example, anonymous letters were mailed to my neighbors criticizing me as a person (not in connection with any action I had taken as an elected official) and encouraging them to distance themselves from me.

43. The animosity I experienced simply due to my political affiliation caused me great anxiety.

44. Being registered as a voter with “no affiliation” aligns with my political, social, and cultural views and beliefs.

45. I also believe that being registered as a voter with “no affiliation” allows me to better serve my community as an elected official. My “no affiliation” voter status permits me to engage in

constructive dialogue with my fellow citizens about community issues instead of being immediately dismissed because of a political label. It also allows fellow voters to judge me

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based upon my statements and actions, rather than those of a political party, and without fear that I am beholden to a larger group with which their views may not align.

46. However, in my experience, Pennsylvania's closed primary system discourages and often prevents this dynamic between citizens and their elected officials because it is designed to entrench a two-major party duopoly whereby citizens' only meaningful choices in an election are Republican and Democratic candidates.

47. In this way, it discourages people like me from being civically engaged, and as a result, all of Pennsylvania's elections suffer from diluted candidate pools. 48. For example, I have been approached regarding running for office at the state or county level. However, the closed primary system makes doing so impractical for me as an independent.

49. Because of the closed primary system, as an independent, I would not be a candidate in the primary elections. And because those elections are often determinative of who will hold office in Pennsylvania, I would be unfairly disadvantaged as compared to my major party opponents.

50. I believe that Pennsylvania's closed primary system is designed to minimize voters' opinions and feedback, disenfranchises voters, and does not treat all voters equally because it does not allow a significant portion of those voters to participate in the only elections that practically have any meaning.

51. This is evidenced by the exceedingly low turnout in Pennsylvania's primary

elections.

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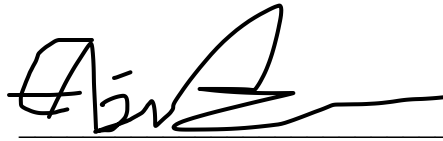
52. Nevertheless, the results of the general elections show that primary elections have a disproportionate impact on the selection of elected officials, i.e. a minority of voters are, in effect, selecting the officials who will run our government.

53. Additionally, I believe that Pennsylvania's closed primary system disenfranchises voters because it creates confusion. In my experience, for general elections, sample ballots present and polling locations are staffed with only two groups—Democrats and Republicans, making voters think that they only have two pre-selected choices. Independent voters are more likely not to vote at all when given only these pre-selected choices. Accordingly, the results of Pennsylvania elections do not accurately reflect the collective voice of all residents who would like to and are legally entitled to vote.

54. Confusion is also created by the fact that not all Pennsylvania closed primaries operate the same. For example, cross-filing is permitted for school board and judicial elections. However, it is not permitted for my position as a councilmember. In my experience, voters affiliated with a major political party do not understand that they can add the name of someone not affiliated with that party to the primary election ballot. This creates doubt in the accuracy of the primary elections, as even major-party affiliated voters may not be voting for their preferred candidate.

55. I declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the foregoing is true and correct.

Executed this 10 day of December , 2025, Upper Providence Township, Pennsylvania.

A handwritten signature in black ink, appearing to read 'Elgin Akarsoy', written over a horizontal line.

Elgin Akarsoy

APPENDIX E – AFFIDAVIT OF DAVID THORNBURGH

AFFIDAVIT OF DAVID B. THORNBURGH

I, David B. Thornburgh, declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the following is true and correct:

Personal Background

1. I am a longtime civic leader and currently serve as the Chair of Ballot PA Action, a non-profit Pennsylvania organization focusing on voters' rights, and as an Adjunct Professor in the Master of Public Policy program at Temple University.

2. I have lived in either Pittsburgh or Philadelphia, Pennsylvania for most of my life. I have lived in Philadelphia since 1985.

3. I received a Bachelor of Arts degree in political science from Haverford College in 1981 and a Master's Degree in public policy from Harvard Kennedy School in 1985.

4. From 1988 to 1994, I served as Director of the Wharton Small Business Development Center, the consulting and training arm of The Wharton School's Entrepreneurial Center.

5. From 1994 to 2006, I served as Executive Director of the Economy League of Greater Philadelphia.

6. From 2008 to 2014, I served as the Executive Director of the University of Pennsylvania's Fels Institute of Government.

7. From November 2014 to January 2022, I served as President and CEO of the Committee of Seventy, Pennsylvania's oldest and largest good government group. I served as a senior advisor to the organization from February 2022 to October 2024.

8. I have taught graduate and undergraduate courses in politics, leadership, and economic development at the University of Pennsylvania, Temple University, Drexel University and Franklin and Marshall College.

9. I have served on numerous nonprofit boards of directors and currently serve on the Board of the Pennsylvania Prison Society.

Voting Registration History

10. I first registered to vote in Pennsylvania when I turned 18 as a student at Haverford College outside of Philadelphia, in advance of the 1976 presidential election.

11. At the time I first registered to vote I registered with the Republican Party. I did so, in part, out of respect for my family's political tradition in the Republican Party. My father, Dick Thornburgh, was a longtime Republican,, and was elected and served as a Republican Governor of Pennsylvania from 1979 to 1987.

12. I remained registered as a Republican until approximately 2005. I frequently voted in Republican primary elections.

13. Over the next approximately ten years, I registered with both the Democratic Party and the Republican Party at various times. Despite the fact that my beliefs did not align with those of either major party, I did so due to the practical reality that in my adopted home of Philadelphia the Democratic party has been dominant for over 70 years, meaning that almost all general elections since the 1950's have been mere formalities; primary elections almost always determine which candidates will become elected. Accordingly, I registered with a major party in order to be able to vote in primary elections and allow my vote to have an impact.

14. In 2017, I registered as an Independent voter because I was becoming increasingly dissatisfied with the hyper-partisan politics in which the major political parties have

become engaged and the fact that the developing positions of those parties did not reflect my own.

15. Additionally, in connection with my roles on the Committee of Seventy (and eventually Ballot PA), which focuses on the nonpartisan promotion of good government, I wanted to alleviate any concerns or perceptions that I may be aligned with one political viewpoint.

16. However, because I still want to have a voice in every aspect of the voting process—one of the most important of which I believe is primary elections—I have sometimes registered temporarily as a Democratic voter for approximately two weeks each year. I do so solely to be able to vote in primary elections. Almost immediately after those elections, I have re-registered as an Independent voter and vote as such in general elections.

The Impact of My Registration as an Independent Voter

17. I do not feel that either the Republican or the Democratic political parties adequately represent my political, social, and cultural views and beliefs.

18. The Independent platform, by contrast, most closely reflects my political, social, and cultural views and beliefs, including the desire to distance myself from the highly-charged, partisan politics I feel are embodied by the major parties.

19. However, as an Independent, I am not treated equally because I am excluded from a significant (and oftentimes the only practically meaningful) part of the voting process because I do not choose to identify with a major political party.

20. While I choose to temporarily register as a Democrat each year just to vote in primary elections, that process is a burden on me which I do not believe I should have to shoulder in order to fully exercise their right to vote. These temporary registrations are public

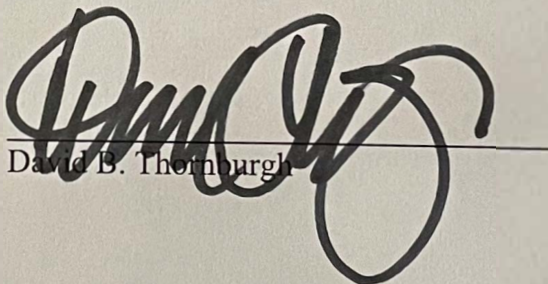
acts which subject me to partisan attack by Republicans asserting that I am “really” a Democrat. This is particularly problematic for me because as a good government leader it is important that my public reputation be non-partisan. It is a substantial burden on me that to maintain my public reputation I have to forfeit my right to participate in partisan primaries—often the only meaningful opportunity to translate my vote into representation.

21. Additionally, in order to fully exercise my right to vote, I am forced to give up my right not to associate with private organizations that do not represent my views or beliefs.

22. Based upon personal experiences, I believe that the closed primary system disenfranchises voters and in fact encourages them *not* to exercise their right to vote. Accordingly, the results of Pennsylvania elections do not accurately reflect the collective voice of all residents who would like to and are legally entitled to vote.

23. I declare under penalty of perjury under the law of the Commonwealth of Pennsylvania that the foregoing is true and correct.

Executed this 8 day of 2025, 2025 in Philadelphia, Pennsylvania.



David B. Thornburgh

**APPENDIX F – BALLOT PA ACTION: “WHO’S SHUT OUT?
INDEPENDENT VOTERS IN PA”**



REPEAL **CLOSED** PRIMARIES

Who's **Shut Out?**

Independent Voters in PA

Revised April 2023

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This white paper was written and edited by Louisa Hanson, Fellow, and David Thornburgh, Chair of Ballot PA, a campaign to repeal closed primary elections and allow PA's 1.1 million¹ independent voters² to vote in those elections.



Executive Summary

Since 1937, independent voters in Pennsylvania have been barred from voting in primary elections. We are one of only 9 states that completely excludes these voters. Over the last 86 years the number of such voters has grown substantially. Now that there are over [1.1 million](#)¹ independent voters² in Pennsylvania, it's important to learn more about those whom the law prohibits from participating. To our knowledge, this is the first comprehensive public research on independent voters in the Commonwealth.

Primary elections in Pennsylvania are incredibly important. Because of the way Pennsylvania's legislative districts are drawn and voters are distributed politically, they are often the only elections that count in legislative and local races. In 2022, for instance, almost 90% of state House and Senate elections were effectively decided in the primary, meaning there was either only one candidate in the general election or the general election was decided by 10% or more.³ The same holds true for local races in areas of the state where lopsided voter registration heavily favors one party or the other.

This analysis reveals that about [13%](#)⁴ of Pennsylvania voters are registered as independent. This is somewhat lower [than in](#) other states. But between 2012 and 2022 independent voters were the fastest-growing voter [segment](#)⁸ in the state. They [grew](#) 5% faster than Republican registrations and 23% faster than Democratic registrations.

(Note that there is no designation called "independent " on the PA voter registration form. Unless otherwise noted, independent voters are defined here as a combination of those who choose **No Affiliation** and those who write in **None** or **Independent** when they register to vote—see below for voter registration form from the Department of State website. This is the same definition used by legislation that has been drafted to end closed primaries. Also note that because of data issues, not all analyses in this white paper use the same definition of independent voters.)

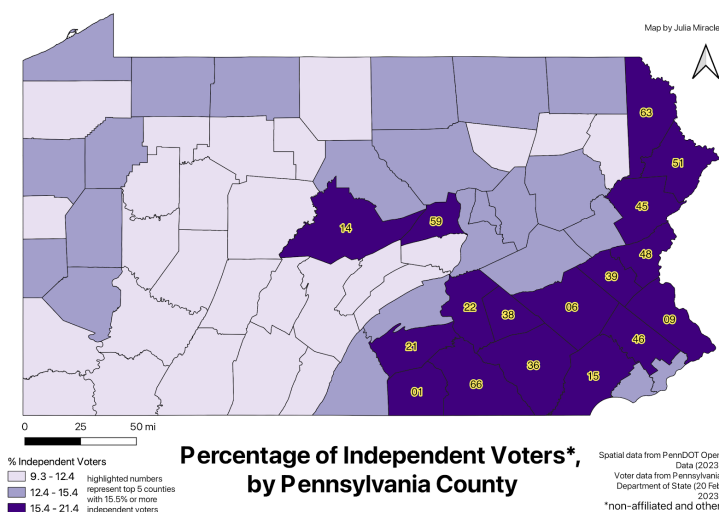
9	In which party do you wish to register?	
	<input type="checkbox"/> Democratic	<input type="checkbox"/> No affiliation
	<input type="checkbox"/> Republican	<input type="checkbox"/> Other (Please specify):
	<input type="checkbox"/> Libertarian	
	<input type="checkbox"/> Green	



Independent voters are also:

- More likely to be **veterans** (about half of all veterans nationwide identify as political independents)
- More **moderate**, although about a quarter of independent voters could be considered either liberal or conservative populists.
- More likely to be **young**—50% of PA independents are under the age of 40.
- More likely to **be voters of color**. In Pennsylvania, 27% of Asian American voters, 22% of Latino voters, and 8% of Black voters are independents. Asian American voters are more than twice as likely, Latino voters are almost twice as likely, and Black voters less likely to be independents than white voters.

Independent voters in Pennsylvania are [concentrated](#)⁹ in growing regions of the state: Central PA, Southeastern PA, the Lehigh Valley, the Poconos, Northeastern PA, and two “college towns” (State College and the Oakland area of Pittsburgh). These voters are also more concentrated in some cities—like Allentown, Reading, Lancaster, and York—that have seen rapid [growth](#)¹⁰ in Latino populations, which may reflect that Latino voters (and Asian voters) in PA are well-represented among independents.



Unaffiliated voter registration would likely grow in Pennsylvania if primary elections were opened to independent voters. Exactly how much would largely depend on how the two major parties would react to the change. We can learn only a little from other states, as most of the 41 states who find some way to include independent voters in primary elections have done so for decades.



However, **Colorado** and **North Carolina** are two states that within the last few decades that bear a resemblance to Pennsylvania and who have changed their primary systems to a system similar to that proposed here. (Maine has as well but only very recently.) In NC and NC independent registrations grew after the change was made. However, in NC and CO, this growth did not necessarily come at the expense of existing party registration, but rather was fueled by an overall [growth](#)¹² in population and voter registration caused by new voters moving to those states. Given PA's [slow growing population](#)¹³, it will likely share the experience of those two states; it's unlikely that there will be a surge in independent voters caused by voters moving to PA from other states.

Still, over time ending closed primary elections would introduce several hundred thousand new voters to the statewide primary electorate. National research suggests that those independent voters would likely participate equally in both primaries, depending on the nature of the election and the candidates fielded by the parties..



Who are Independent Voters?

Of the [8.6 million](#) voters in Pennsylvania, we estimate that about 1.1 million voters, or 13% of the voting population, are registered as **no affiliation** or who write in **none** or **independent** on their voter registration application—our working definition of independent¹⁶.

Figure 1. Party choices for voters registering in Pennsylvania, 2023.

9 In which party do you wish to register?

<input type="checkbox"/> Democratic	<input type="checkbox"/> No affiliation
<input type="checkbox"/> Republican	<input type="checkbox"/> Other (Please specify):
<input type="checkbox"/> Libertarian	_____
<input type="checkbox"/> Green	_____

This means that significantly fewer Pennsylvania voters are registered independent than in the 31 states that [require](#) voter registration by party¹⁷. In those states, an average of [29%](#)¹⁸ of voters are registered independent of a major party.

Who are these independent voters? This analysis draws on three sources:

- L2, a voter database used to map and analyze voter demographics
- Studies by Pew Research
- A November 2021 survey of a sample of 120 statewide independent voters conducted by Osage Research on behalf of Ballot PA

Taken together, these sources suggest that independent voters in PA skew younger, more male, are over-represented in some communities of color, and are politically and ideologically moderate.

Independent voters are more likely to be veterans

[Pew research](#)²⁰ from 2017 suggests that nationally 49% of veterans identify as independents (vs. 20% as Republicans and 20% as Democrats). Given that there are about 800,000 veterans in Pennsylvania, this could mean that some 400,000



Pennsylvania veterans who might register as independents are denied the right to vote in primary elections.

Independents voters tend to be younger

L2 voter data shows us that almost half (47%) of PA independents are under the age of 40, vs. 31% of all voters.

Concentration by Age of Independents (L2, 2020)	18-29	30-39	40-49	50-64	65+
Independents	24%	23%	18%	22%	14%
All Voters	15%	16%	15%	26%	28%

Independents are more likely to be voters of color

According to [research from the national Open Primaries organization](#)²⁸, nationally 40% of Asian American, 37% of Latino, 30% of African American, and 20% of Native American voters are independents. In Pennsylvania, according to L2 voter data, 27% of Asian Americans voters, 22% of Latino voters, and 8% of Black voters are independents. Asian American voters are more than twice as likely, Latino voters are almost twice as likely, and Black voters less likely to be independents than white voters.²⁹.

Again according to L2 voter data, independents in these communities are highly concentrated—50% of Latino independents live in just five counties: Philadelphia (18%), Lehigh (10%), Berks (9%), Lancaster (7%), and Northampton (6%). Asian American independents are even more concentrated – 64% live in 5 counties: Philadelphia (20%), Montgomery (15%), Allegheny (12%), Bucks (9%), and Chester (8%). Black independents are the most concentrated: 85% live in 5 counties: Philadelphia (54%), Allegheny (15%), Delaware (9%), Dauphin (4%), Montgomery (4%).



Independent voters “lean” moderate and towards both parties

[Nationally](#), 41% of voters identify as independents (which is different from **registering** as independents), 28% as Democrats, and 28% as Republicans. [Pew research](#)²⁴ shows that the majority of independents (81%) lean toward a major party—46% of independents lean Democrat while 35% lean Republican. Pennsylvania independents may lean more Republican. When the Osage survey asked Independent voters which 2022 party primary they would participate in if they could, 38% said Republican, 31% Democratic, and 31% were undecided.

[Nationally](#)²¹ and in [Pennsylvania](#)²², the clear plurality of independent voters identify as moderate. Results from the Osage survey suggest independents in PA could be more moderate and conservative than unaffiliated voters nationwide.

Ideological Self-Identification of Independents	Conservative	Moderate	Liberal
Osage (PA, 2021)	32%	52%	15%
Pew Research ²³ (Nationwide, 2019)	29%	43%	24%

Likewise, while their registration as independents suggest they are clearly less partisan than Republican or Democratic voters, most independents are likely to lean toward a political party. This should not be surprising in light of the fact that when independent voters vote in general elections they can generally only choose between Republican and Democratic candidates.

However, independents are far from a uniform voting bloc, and are often wrongly assumed to be simply indecisive voters or closet partisans. In fact, a recent analysis suggests that independent voters tend to fall into one of four subtypes: 1) moderate, 2) conservative populist, 3) liberal populist, and 4) disengaged.

The [“we need more moderates”](#) independent, around half of all independents, are put off by extreme ideologies on both sides of the aisle and desire more moderate candidates from both parties. They are independent in order to register their dissatisfaction with political parties that are increasingly drifting from the more moderate views of the



average voter, and likely could be convinced to support middle-of-the-road candidates of either party.

About a quarter of independents can be categorized as either [conservative populists or liberal populists](#). These voters have strong negative feelings towards “the other side” but focus their criticism on elites within the party with which they most align. Populist independents on both sides look at their communities and see struggling and suffering that they feel political elites are ignoring. They feel taken advantage of, whether by wealthy elites or by others receiving what they perceive as unearned handouts. Rather than moderation, they seek radical change, and view the parties as unable and unwilling to support that mission.

Finally, the remaining quarter of independents are [disengaged](#) voters who are repulsed by partisan squabbling and suspicious of political institutions. If they vote, they do so based directly on life experiences, intuition, or local concerns. They refuse to accept the ideological factions of both parties, reject forced labels, and tend to view politics as completely broken.

PA independent voters are concentrated geographically

Independent voters are more concentrated—[20 to 60% higher than the statewide average](#)²⁵—in the Lehigh Valley, the Poconos, and Chester County, and are generally more concentrated in the Southeast and South Central regions. The state House map also shows us that districts with high student populations (State College; Oakland, Pittsburgh) have concentrations of independent voters about 35% higher than the statewide average. This follows naturally from the fact that younger voters are more likely to identify as independents. Notably, most of these are places generally experiencing [population growth](#)²⁶, and have [larger Latino and Asian American](#)²⁷ populations.

Independent voters are more likely to be male

[National Pew research](#)¹⁹ finds that Independents are 56% male, 44% female, which is notably more male than either major party. In Pennsylvania, according to L2 voter data, the gender divide is consistent with national research - 53.4% male, 46% female. Independent voters are significantly more likely to be male.



Trends

Changes in Party Registration

According to the Department of State 2022 [voter registration report](#), independents were the fastest growing segment of voters in Pennsylvania over the last ten years. Those voters grew 5% faster than Republicans and 23% faster than Democrats.

PA Voter Registration by Party ³⁰	2022 Registrants	Growth since 2012	% Change since 2012
Democratic	4,032,051	-351,756	-8%
Republican	3,487,709	+300,173	+10%
Other/No Affiliation	1,322,960	+167,028	+15%
Total Registration	8,842,720	+115,445	+1%

The growth has come from a combination of first-time registrants (national Open Primaries research suggests that 50% of first-time young registrants are registering as independents) and registrants switching to independent from one party or another. Of the latter category, from 2012 to 2022, the Democratic Party has been [consistently](#) losing more registered voters than the Republican Party to the ranks of independents³¹. Over the course of ten years, Democrats have lost 226,285 registered voters to independent status, or 6% of their total voter base. In the same time period, Republicans have lost 166,439 voters to independent status, or 4.8% of their registered voters.

Why are voters registering as independents?

It's difficult to tell why Independent registration is increasing in Pennsylvania and nationwide. There appears to be no publicly-available research about Pennsylvania specifically that could shed light on that question.

We do seem to be living in an era where political parties are less popular with average voters, particularly younger ones. [A Pew study from December 2021](#)³² notes that “[o]verall, younger adults in the United States are less likely than older adults to identify with a party – and more likely to identify as independents who *lean* toward one of the two major parties. Still, even among those who identify with a party, younger Republicans are less likely than older Republicans to say the GOP represents the interests of people like them well, and younger Democrats are less likely than older Democrats to say this about the Democratic Party.”



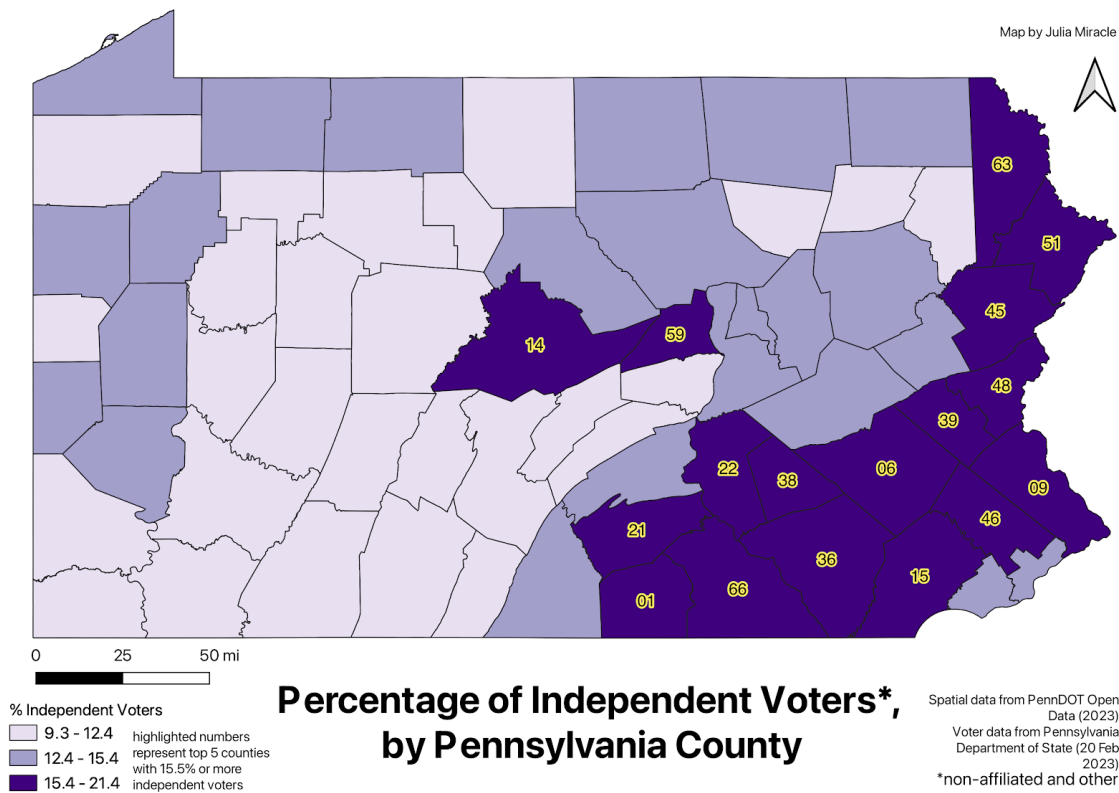
We can speculate that Pennsylvania's longtime movement from the Democratic Party to independent or third party may have to do with the gradual shift of more "traditional", rural, more conservative Democrats, particularly in Western PA, to the populist social and fiscal conservatism of today's Republican party. As the energy in the Democratic Party has increasingly come from its progressive wing, driven by an increasingly younger and more diverse voting base, many traditional Democrats may simply not support the new direction of the party.

Likewise, the more recent trend of Republicans leaving the party to register as independents could be a result of changes in the GOP, particularly in the Trump era. [Pew research](#)³³ early in the Trump Presidency suggests that he was particularly polarizing and had a lower approval rating among Independents as a whole than any of the previous three presidents. National Pew research also suggests that social issues like immigration and same-sex marriage have been key differentiating points for Republicans and independents—including Republican-leaning independents.

It stands to reason that more conservative Democrats and more liberal Republicans may feel more comfortable registering as independents when faced with the increasingly progressive policies of the left and populist conservative policies of the right. Registering as an independent may then act as a stepping stone between parties for moderate voters, or could become a permanent home outside of either party—although, until closed primaries are repealed, with the knowledge that such a choice shuts them out of primary elections in Pennsylvania and other states with closed primaries.



Concentration of independent voters by county



Top 15 Counties by percentage of independent voters (2023)³⁶

County	Region	Total Independents	% Independent
PIKE	NEPA	9,630	19%
MONROE	NEPA	23,001	18%
NORTHAMPTON	LV	44,011	18%
LEHIGH	LV	46,353	16%
CHESTER	SEPA	69,486	16%
BUCKS	SEPA	81,129	15%
UNION	CENTRAL	4,377	15%
LANCASTER	SCPA	58,772	15%
CUMBERLAND	SCPA	31,202	15%
YORK	SCPA	51,806	15%
CENTRE	CENTRAL	19,435	15%
WAYNE	NEPA	5,550	14%



BERKS	SCPA	43,876	14%
MONTGOMERY	SEPA	97,097	14%
ADAMS	SCPA	11,688	14%
DAUPHIN	SEPA	30,365	14%

Top 15 Counties by number of independent voters (2023)³⁷

County	Region	Total Independents	% Independent
ALLEGHENY	SWPA	131,718	13%
PHILADELPHIA	SEPA	126,097	11%
MONTGOMERY	SEPA	97,097	14%
BUCKS	SEPA	81,129	15%
CHESTER	SEPA	69,486	16%
LANCASTER	SCPA	58,772	15%
DELAWARE	SEPA	57,520	12%
YORK	SCPA	51,806	15%
LEHIGH	LV	46,353	16%
NORTHAMPTON	LV	44,011	18%
BERKS	SCPA	43,876	14%
CUMBERLAND	SCPA	31,202	15%
WESTMORELAND	SWPA	30,615	11%
DAUPHIN	SCPA	30,365	14%
LUZERNE	NEPA	27,106	11%

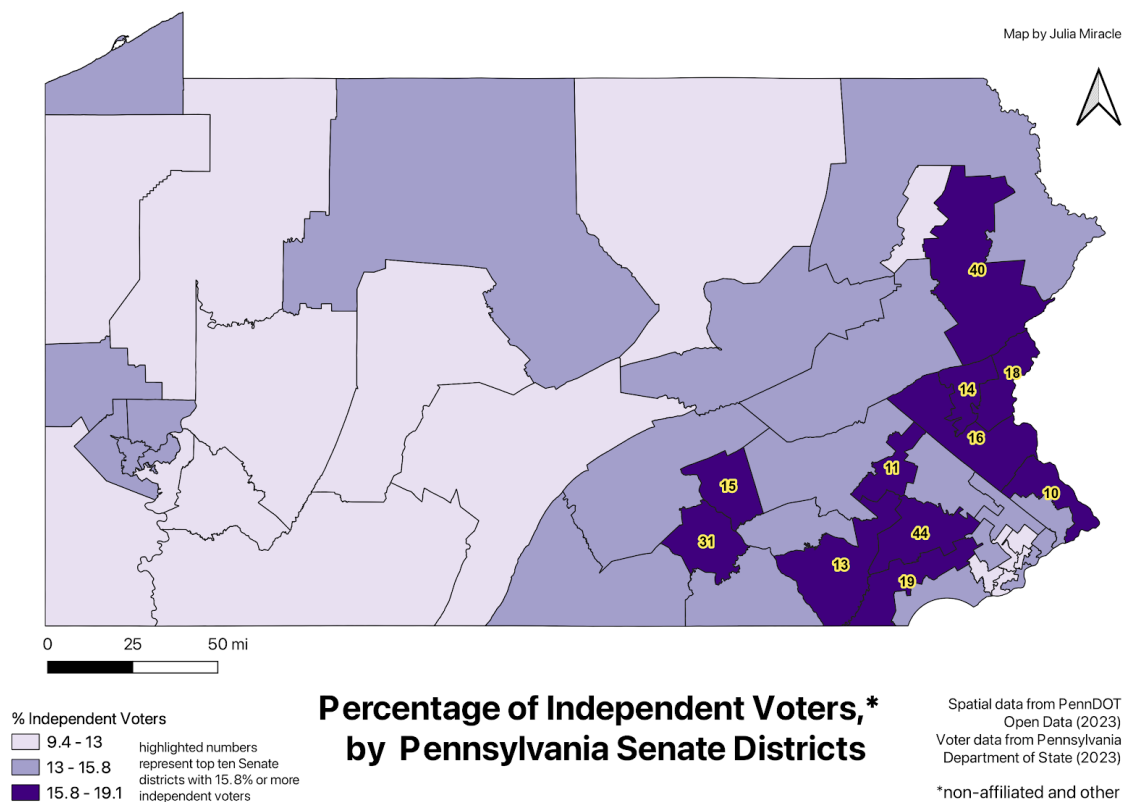
Top 15 counties³⁴ by growth in independent party registration from 2012-2023³⁵

County	Total Voters	Total Independents	Change from 2012	Percentage Increase from 2012
FOREST	3,343	381	126	49%
LUZERNE	204,559	27,106	7,822	41%
SULLIVAN	4,409	499	136	37%
NORTHUMBERLAND	58,633	8,451	2,226	36%
CARBON	44,306	6,932	1,693	32%
DAUPHIN	189,133	30,365	7,334	32%
SCHUYLKILL	88,705	11,667	2,691	30%



ADAMS	72,688	11,688	2,683	30%
PHILADELPHIA	1,072,133	126,097	32,798	30%
LEBANON	91,508	14,341	3,278	30%
CUMBERLAND	186,518	31,202	7,017	29%
BEAVER	113,916	15,651	3,347	27%
MIFFLIN	26,674	3,007	620	26%
LEHIGH	246,245	46,353	9,341	25%
POTTER	10,993	1,253	249	25%
LANCASTER	353,395	58,772	11,324	24%

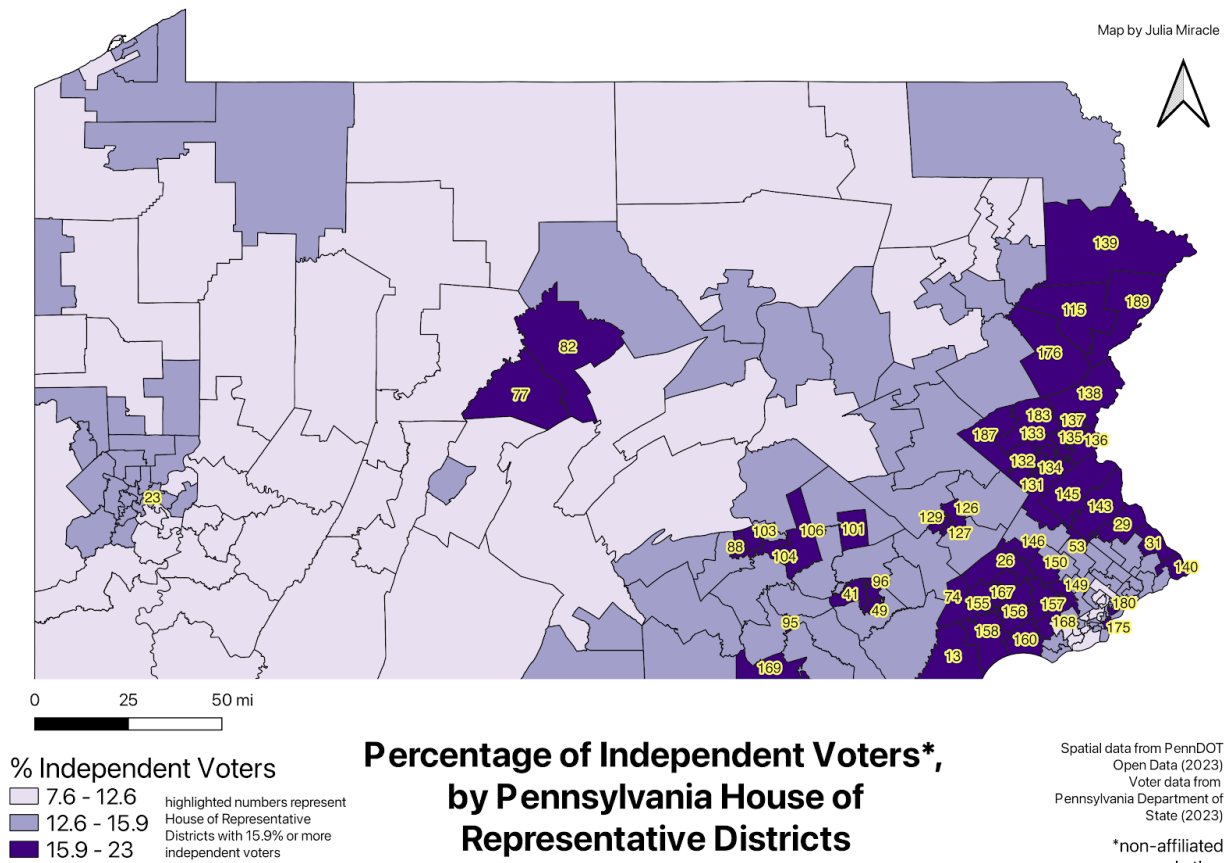
Concentration of independent voters by state Senate district



Top 10 Senate districts by percentage independent (2023)³⁸

	2022 Incumbent	Party	Independents	Ind. %	% > AVG
SD - 18	Lisa Boscola	D	37,790	20%	34%
SD - 14	Nick Miller	D	32,386	19%	28%
SD - 44	Katie Muth	D	34,111	18%	22%
SD - 10	Steven J. Santarsiero	D	37,281	18%	21%
SD - 19	Carolyn T. Comitta	D	32,462	18%	20%
SD - 40	Rosemary Brown	D	30,444	17%	16%
SD - 16	Jarrett Coleman	R	33,600	17%	16%
SD - 11	Judy Schwank	D	26,932	17%	16%
SD - 13	Scott Martin	R	27,284	17%	14%
SD - 31	Mike Regan	R	29,944	17%	14%

Concentration of independent voters by state House district



Top 20 State House Districts by percentage independent (2023)³⁹

	2022 Incumbent	Party	Independents	Ind. %	& > AVG
HD-22	Joshua Siegel	D	7,418	24%	57%
HD-95	Carol Hill-Evans	D	8,504	22%	46%
HD-50	Pam Snyder	D	8,037	22%	44%
HD-48	Timothy O'Neal	R	8,296	21%	42%
HD-51	Charity Grimm Krupa	R	8,296	21%	42%
HD-189	Tarah Probst	R	8,776	21%	40%
HD-136	Robert Freeman	D	8,781	21%	39%
HD-127	Manuel Guzman	D	6,373	21%	38%
HD-135	Steve Samuelson	D	9,568	20%	36%
HD-115	Maureen Madden	D	8,537	20%	36%
HD-134	Ryan Mackenzie	R	7,616	20%	34%
HD-176	Jack Rader	R	8,784	20%	32%
HD-31	Perry Warren	D	11,189	20%	32%
HD-139	Joseph Adams	R	9,485	20%	30%
HD-137	Joe Emrick	R	9,430	19%	30%
HD-138	Ann Flood	R	9,655	19%	29%
HD-82	Paul Takac	D	8,351	19%	27%
HD-155	Danielle Friel Otten	D	8,985	19%	27%
HD-167	Kristine Howard	D	8,858	19%	26%
HD-77	H. Scott Conklin	D	7,886	19%	25%
HD-23	Dan Frankel	D	9,898	19%	25%

Registration and voting

Given the chance, how many independent voters might vote in a primary?

In a public opinion survey conducted on behalf of Ballot PA by Osage Research in November 2021, independents showed clear enthusiasm for participating in primary elections. But how many independent voters might actually turn out to vote in a primary?



Even when given the chance, not all independent voters would vote in primary elections. How much less than 100% would depend on the election “season” (local, mid-term or Presidential) as well as other factors that come into play. This turnout will also depend on the scope of any legislation to open primaries, and whether it includes registered minor party voters (Green or Libertarian) or only registered unaffiliated voters. Furthermore, changes in the law to include independent voters would take time to take effect. (It’s worth noting that only [35%](#) of women voted in the first Presidential election immediately following the passage of the 19th Amendment that secured their right to vote. Just over one hundred years later, female voter turnout stands at [68%](#), consistently higher than male turnout.)

A reasonable estimate is that over time the repeal of closed primaries would bring about 9% more voters to the polls in any given primary. For example, in the 2022 PA primary election, a so-called “mid-term” or “gubernatorial” election year, almost [2.7 million](#)⁴⁰ voters (or about 36% of registered D’s and R’s) cast votes to determine party nominees at the top of the ticket. Using data extrapolated from other sources, we would [estimate](#) that (again not immediately but over time) opening primaries to independent voters would bring an additional 249,000 statewide independent voters to the polls in a mid-term primary, or an increase in the total electorate of 9%. Assuming these voters were split equally between the Republican and Democratic primary, this would mean an average of 614 new voters in each party primary election in each of the 203 state House districts and 2,495 additional voters for each party primary in each of the 50 state Senate districts.

Independent voters voting in primary elections would also be more likely to vote in general elections than they do now. Depending on the cycle, independent voters now vote in general elections at a [rate about 2/3](#)⁴¹ that of major party registered voters. That percentage would likely increase over time as independent voters were welcomed into the voting process through the gateway of the primary election.

Given the hotly contested nature of recent elections in Pennsylvania, higher turnout from independent voters will be crucial for both parties’ electoral success in competitive general elections. According to [CNN](#) exit polls following the 2016 and 2020 general elections, a 15-point swing of self-identified independent voters from Trump in 2016 (+7) to Biden (+8) in 2020 likely enabled Biden to win Pennsylvania. Independent voters are persuadable and electorally significant, meaning that bringing more independent voters into the general electorate has the potential to swing close elections.



Even now, Independent voters are exerting an important influence over close elections in Pennsylvania. In 2022, [Pennsylvania independents voted for Democratic gubernatorial candidate Josh Shapiro by almost a 2:1 margin \(64 to 33\)](#) and [for Democratic senatorial candidate John Fetterman by 58 to 38](#). And while exit polling doesn't offer much insight on state legislative races, it's likely that independent voters swung tight races in those chambers as well (an incumbent GOP state House member, Todd Stephens, lost in the 2022 general election by 68 votes).

Granted, because of redistricting and population sorting, there weren't that many tight legislative races: in 2022 87% were effectively decided in the primary, meaning that those races had an uncontested general election, or it was decided by more than 10 points. But that fact makes the competition for Independent voters even more interesting, given that the Democrats flipped 13 seats, and hold a majority in the state House, 102-101, for the first time in a dozen years.

What trends in voter registration have other states seen when they opened their primaries to independents?

This is a challenging question to answer, given that [41 of the 50 states](#)⁴² have long allowed some level of access to primary elections for independent voters, and that few states have changed their primary election system in the way that Pennsylvania is contemplating. Of those that have undertaken such a change, North Carolina (1987) and Colorado (2016) are the most instructive examples of states that switched to primary systems similar to that proposed for Pennsylvania.

North Carolina

North Carolina opened its primaries 36 years ago, in 1987, in response to the US Supreme Court decision in [Tashjian v. Republican Party of Connecticut](#), when it became evident to North Carolina party leaders that their laws regarding primary elections were similar to those overturned in that case.

In 1984, North Carolina party registration was 73% Democrat, 23% Republican, and 4% Unaffiliated. By 2020, 33 years after the change, the share of independent voters in NC had grown substantially, from 4% to 33%, while the share of Democratic voters had decreased from 73% to 36% and the share of Republican voters had increased from 23%



to 30%. An extensive 2020 study of independent voters in North Carolina produced by a team at UNC-Chapel Hill can be found [here](#)⁴³.

In North Carolina, party identification of voters changed as much because of in-migration to North Carolina as by changing political preferences among existing residents. In the 33 year period from 1987 to 2020 the population of NC grew significantly, and voter registration in North Carolina grew from 2.7 to 7.4 million registered voters, an increase of 174%. (By comparison, in the same thirty-year period the population of PA [grew](#) by only 9%, with an increase in registered voters of 46%)⁴⁴.

Colorado

In 2016, Colorado adopted a primary model similar to that which Pennsylvania is considering, and its experience may be instructive for Pennsylvania. According to the [Colorado Secretary of State](#), in 2010, 31% of Colorado voters (more than twice the percentage of PA voters) were registered as unaffiliated; by 2015 that had grown slightly to 35% and in 2020, four years after the law allowed unaffiliated voters to vote in primaries, to 40% of the electorate.

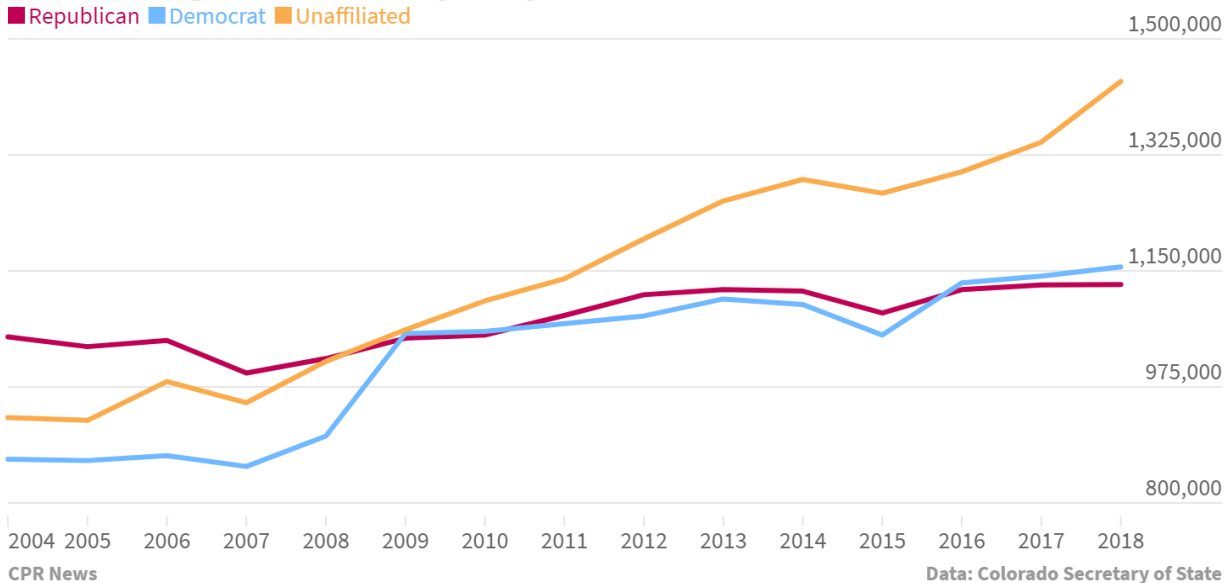
Once again, though, the denominator changed. Jeremy Gruber at the national Open Primaries group explains, and argues that Colorado is a good example of what Pennsylvania might expect:

It is a purple state with similar party breakdowns as PA that adopted the same model of primary that PA is considering...Since adopting an open primary, voter registration itself has surged which is the biggest factor in the surge of independents—**rather than leave the parties in response to an open primary it's the growth of new voters in response to a more open system** where much of the surge of independents come from.

The chart below shows the accelerated growth of independent registrations—not at the expense of the major parties—following 2016.



Colorado Registered Voters By Party



Would ending closed primaries create better incentives for bipartisan governing?

One of the difficult questions to answer about the effects of opening primaries in Pennsylvania is whether it would result in more moderate candidates. [Research in 2020 done by Christian Grose](#), Associate Professor of Political Science and Public Policy at the University of Southern California, suggests that in fact it would.

Grose examined members of Congress between 2003 and 2018 and concluded that opening primaries, or even switching to semi-closed primaries, would have a significant impact on legislators voting in a more moderate manner. This is particularly true for newly elected legislators (about 9% more moderate), who are not otherwise constrained by past votes and statements, but also holds true for incumbents (about 4% more moderate). In states with top-two primary systems, these effects were amplified even further - 6 to 18% more moderate depending on incumbency.

Conclusion

Independents account for 1.1 million of Pennsylvania's registered voters. Repealing closed primaries and giving all Pennsylvania voters a ballot for every election can enfranchise a significant portion of the electorate. Given that all voters help pay for



primaries, it seems only fair that voters should be allowed to participate. In addition, bringing these voters to primary elections would also increase voter choice and healthy competition in primary elections, where about 90% of all legislative elections are now decided. [Research](#) suggests that bringing 1.1 million less-partisan voters to primary elections could also help moderate the candidate selection process and make it more difficult for extreme candidates to clear the primary hurdle.

Independent voters are concentrated in areas experiencing population growth—the Southeast, South Central, Lehigh Valley, and Northeast—some of which also either already have higher Hispanic and Asian populations or are seeing growth in these populations. Independent registration is also notably higher in some urban areas and college towns. Independent voters are not exclusively represented by a particular race, age range, or gender, but they are younger, more male, concentrated among communities of color, and are politically and ideologically moderate than partisan voters.

We can speculate as to why the ranks of independent voters are growing based on our understanding of Pennsylvania's demographics and national political trends. This is an area that could be emphasized in future focus groups and conversations with independent voters. Collecting the stories of “why” Pennsylvanians choose to register as independent would also be insightful.

Looking at what has happened in other states that have changed their primary systems, we can project that total voter registration would grow in Pennsylvania if primary elections were to be open to independent voters. It’s difficult to say what effect or how fast this would have on Republican and Democratic registrations as much depends on how either party embraces the change.

Ending closed primary elections would almost certainly introduce several hundred thousand new voters to the statewide primary electorate, and based on survey results both parties should expect to gain equally. Doing so would likely increase voter participation in Latino communities and other communities of color – some of the [fastest growing](#)⁴⁸ and [most under-represented communities](#)⁴⁹ in Pennsylvania. It would also likely have a moderating effect on elections in Pennsylvania.



Appendix

**Table 1: Voter Registration by County as of 1/2023, Pennsylvania Department of State
Voter Registration Report**

County	Total Voters	Count of Republican Voters		Count of Democratic Voters		Count of Independent Voters	
ADAMS	72,688	41,411	57%	19,589	27%	11,688	16%
ALLEGHENY	939,521	264,239	28%	534,277	57%	131,718	13%
ARMSTRONG	42,985	24,512	60%	11,844	28%	4,187	10%
BEAVER	113,916	48,027	42%	50,238	44%	15,651	14%
BEDFORD	33,035	23,769	72%	6,178	19%	3,088	9%
BERKS	267,304	110,705	41%	112,723	42%	43,876	14%
BLAIR	78,264	47,874	61%	20,554	26%	9,836	13%
BRADFORD	37,752	24,100	64%	8,631	23%	5,021	13%
BUCKS	481,781	196,486	41%	204,166	42%	81,129	15%
BUTLER	137,353	77,651	57%	40,374	29%	19,328	14%
CAMBRIA	86,221	42,613	49%	34,247	40%	9,361	11%
CAMERON	3,004	1,812	60%	818	27%	374	12%
CARBON	44,306	21,820	49%	15,554	35%	6,932	16%
CENTRE	107,542	42,676	40%	45,431	42%	19,435	18%
CHESTER	382,322	152,506	40%	160,330	42%	69,486	16%
CLARION	23,629	14,842	63%	6,084	26%	2,703	11%
CLEARFIELD	47,399	28,749	61%	13,351	28%	5,299	11%
CLINTON	21,993	12,171	55%	6,942	32%	2,880	13%
COLUMBIA	39,251	20,510	52%	12,743	32%	5,998	15%
CRAWFORD	52,923	30,310	57%	16,089	30%	6,524	12%
CUMBERLAND	186,518	90,980	49%	64,336	34%	31,202	15%
DAUPHIN	189,133	73,490	39%	85,278	45%	30,365	14%
DELAWARE	415,311	150,544	36%	207,247	50%	57,520	12%
ELK	20,257	11,159	55%	6,751	33%	2,347	12%
ERIE	178,776	68,479	38%	84,397	47%	25,900	14%
FAYETTE	79,539	36,200	46%	35,238	44%	8,101	10%



FOREST	3,343	1,981	59%	981	29%	381	11%
FRANKLIN	99,947	61,314	61%	23,981	24%	14,652	15%
FULTON	9,144	6,662	73%	1,595	17%	887	10%
GREENE	22,099	11,017	50%	8,888	40%	2,194	10%
HUNTINGDON	28,435	18,427	65%	7,056	25%	2,952	10%
INDIANA	43,907	25,088	57%	14,043	32%	4,776	11%
JEFFERSON	28,148	18,738	67%	6,338	23%	3,072	11%
JUNIATA	13,798	9,543	69%	2,868	21%	1,387	10%
LACKAWANNA	141,607	46,370	33%	78,964	56%	16,273	11%
LANCASTER	353,395	179,587	51%	115,036	33%	58,772	15%
LAWRENCE	56,512	27,584	49%	22,118	39%	6,810	12%
LEBANON	91,508	50,471	55%	26,696	29%	14,341	16%
LEHIGH	246,245	84,541	34%	115,351	47%	46,353	16%
LUZERNE	204,559	84,249	41%	93,204	46%	27,106	11%
LYCOMING	70,025	41,858	60%	18,894	27%	9,273	13%
MCKEAN	25,119	15,568	62%	5,960	24%	3,591	14%
MERCER	72,344	35,988	50%	26,597	37%	9,759	13%
MIFFLIN	26,674	17,667	66%	6,000	22%	3,007	11%
MONROE	114,318	39,896	35%	51,421	45%	23,001	20%
MONTGOMERY	607,742	205,607	34%	305,038	50%	97,097	14%
MONTOUR	12,338	6,391	52%	4,038	33%	1,909	15%
NORTHAMPTON	225,434	81,922	36%	99,501	44%	44,011	18%
NORTHUMBERLAND	58,633	31,699	54%	18,483	32%	8,451	14%
PERRY	29,908	19,877	66%	6,261	21%	3,770	13%
PHILADELPHIA	1,072,133	120,937	11%	807,916	75%	126,097	11%
PIKE	44,698	20,777	46%	14,291	32%	9,630	22%
POTTER	10,993	7,697	70%	2,043	19%	1253	11%
SCHUYLKILL	88,705	48,981	55%	28,057	32%	11,667	13%
SNYDER	22,735	15,070	66%	4,911	22%	2,754	12%
SOMERSET	48,789	31,452	64%	12,418	25%	4,919	10%
SULLIVAN	4,409	2,692	61%	1,218	28%	499	11%



SUSQUEHANNA	26,931	16,460	61%	6,856	25%	3,615	13%
TIOGA	26,264	17,318	66%	5,500	21%	3,446	13%
UNION	26,272	13,999	53%	7,896	30%	4,377	17%
VENANGO	32,592	19,242	59%	9,038	28%	4,312	13%
WARREN	26,600	15,044	57%	7,489	28%	4,067	15%
WASHINGTON	144,560	67,900	47%	58,627	41%	18,033	12%
WAYNE	34,629	19,883	57%	9,196	27%	5,550	16%
WESTMORELAND	248,460	122,519	49%	95,326	38%	30,615	11%
WYOMING	17,627	10,607	60%	4,957	28%	2,063	12%
YORK	311,946	160,914	52%	99,226	32%	51,806	15%

Table 2: Change in Voter Registration from Major Party to Other in PA 2012-2022, Pennsylvania Department of State Voter Registration Report

	Cumulative Total Nov 2012 - Nov 2022			Party losing most voters '12-'22
COUNTY	Dem to Other	Rep to Other	% of total voters to Other	
ADAMS	1,198	1,431	3.62%	Reps
ALLEGHENY	27,106	16,473	4.64%	Dems
ARMSTRONG	770	718	3.46%	Dems
BEAVER	3,024	2,028	4.43%	Dems
BEDFORD	346	480	2.50%	Reps
BERKS	8,802	5,551	5.37%	Dems
BLAIR	1,448	1,448	3.70%	Both
BRADFORD	575	772	3.57%	Dems
BUCKS	12,347	11,588	4.97%	Dems
BUTLER	2,363	2,855	3.80%	Reps
CAMBRIA	1,937	1,181	3.62%	Dems
CAMERON	72	67	4.63%	Dems
CARBON	1,084	775	4.20%	Dems
CENTRE	2,519	2,453	4.62%	Dems
CHESTER	8,795	10,417	5.03%	Reps
CLARION	424	420	3.57%	Dems



CLEARFIELD	961	793	3.70%	Dems
CLINTON	402	347	3.41%	Dems
COLUMBIA	835	693	3.89%	Dems
CRAWFORD	999	930	3.64%	Dems
CUMBERLAND	3,723	4,639	4.48%	Reps
DAUPHIN	5,363	4,036	4.97%	Dems
DELAWARE	9,505	7,650	4.13%	Dems
ELK	378	231	3.01%	Dems
ERIE	5,003	3,518	4.77%	Dems
FAYETTE	2,102	1,028	3.94%	Dems
FOREST	63	49	3.35%	Dems
FRANKLIN	1,575	2,104	3.68%	Reps
FULTON	99	130	2.50%	Reps
GREENE	433	269	3.18%	Dems
HUNTINGDON	320	363	2.40%	Reps
INDIANA	887	790	3.82%	Dems
JEFFERSON	428	445	3.10%	Reps
JUNIATA	189	208	2.88%	Reps
LACKAWANNA	3,649	2,006	3.99%	Dems
LANCASTER	7,986	9,008	4.81%	Reps
LAWRENCE	1,181	841	3.58%	Dems
LEBANON	2,056	1,976	4.41%	Dems
LEHIGH	8,732	5,133	5.63%	Dems
LUZERNE	4,998	3,010	3.91%	Dems
LYCOMING	1,577	1,605	4.54%	Reps
MCKEAN	424	453	3.49%	Reps
MERCER	1,961	1,456	4.72%	Dems
MIFFLIN	389	393	2.93%	Reps
MONROE	3,440	2,441	5.14%	Dems
MONTGOMERY	14,740	13,690	4.68%	Dems
MONTOUR	176	151	2.65%	Dems
NORTHAMPTON	6,046	4,412	4.64%	Dems
NORTH- UMBERLAND	905	871	3.03%	Dems



PERRY	498	675	3.92%	Reps
PHILADELPHIA	38,933	9,818	4.55%	Dems
PIKE	842	949	4.01%	Reps
POTTER	172	209	3.47%	Reps
SCHUYLKILL	1,790	1,734	3.97%	Dems
SNYDER	311	381	3.04%	Reps
SOMERSET	759	691	2.97%	Dems
SULLIVAN	66	75	3.20%	Reps
SUSQUEHANNA	381	413	2.95%	Reps
TIOGA	367	496	3.29%	Reps
UNION	443	539	3.74%	Reps
VENANGO	703	668	4.21%	Dems
WARREN	564	566	4.25%	Reps
WASHINGTON	2,540	2,161	3.25%	Dems
WAYNE	592	721	3.79%	Reps
WESTMORELAND	5,604	4,575	4.10%	Dems
WYOMING	315	316	3.58%	Reps
YORK	7,070	7,126	4.55%	Reps
Totals:	226,285	166,439	4.43%	Dems

Table 3: All PA State Senate Districts by Party Registration 2023, Pennsylvania
Department of State Voter Registration Report

District Number	Incumbent	P	# of Dem voters	# of Rep voters	# of Other voters	# of Total Voters	% Dem voters	% Rep voters	% None and Other voters
SD-1	Nikil Saval	D	135684	24388	30328	190400	71%	13%	16%
SD-2	Christine Tartaglione	D	101356	18714	21505	141575	72%	13%	15%
SD-3	Sharif Street	D	141917	9399	22020	173336	82%	5%	13%
SD-4	Art Haywood	D	153156	25066	22102	200324	76%	13%	11%
SD-5	Jimmy Dillon	D	86674	42285	20686	149645	58%	28%	14%
SD-6	Frank Farry	R	82157	84154	30410	196721	42%	43%	15%
SD-7	Vincent Hughes	D	148473	19476	25233	193182	77%	10%	13%
SD-8	Anthony Williams	D	140178	19793	21923	181894	77%	11%	12%
SD-9	John Kane	D	80786	75479	29358	185623	44%	41%	16%



SD-10	Steve Santarsiero	D	94907	73862	37281	206050	46%	36%	18%
SD-11	Judy Schwank	D	76398	51544	26932	154874	49%	33%	17%
SD-12	Maria Collett	D	88088	71052	30771	189911	46%	37%	16%
SD-13	Scott Martin	R	56882	74922	27284	159088	36%	47%	17%
SD-14	Nick Miller	D	83078	53785	32386	169249	49%	32%	19%
SD-15	John DiSanto	R	81929	62468	28461	172858	47%	36%	16%
SD-16	Jarrett Coleman	R	70766	88457	33600	192823	37%	46%	17%
SD-17	Amanda Cappelletti	D	102159	50741	29450	182350	56%	28%	16%
SD-18	Lisa Boscola	D	88049	62669	37790	188508	47%	33%	20%
SD-19	Carolyn Comitta	D	79007	69477	32462	180946	44%	38%	18%
SD-20	Lisa Baker	R	67314	93222	28653	189189	36%	49%	15%
SD-21	Scott Hutchinson	R	47780	99032	22567	169379	28%	58%	13%
SD-22	Martin Flynn	D	88921	49038	19328	157287	57%	31%	12%
SD-23	Gene Yaw	R	42138	99963	22615	164716	26%	61%	14%
SD-24	Tracy Pennycuick	R	72124	80138	30274	182536	40%	44%	17%
SD-25	Cris Dush	R	57353	90301	26027	173681	33%	52%	15%
SD-26	Timothy Kearney	D	88813	68851	23978	181642	49%	38%	13%
SD-27	Linda Schlegel Culver	R	51395	92436	23467	167298	31%	55%	14%
SD-28	Kristin Phillips-Hill	R	52994	99798	29504	182296	29%	55%	16%
SD-29	David Argall	R	56554	82377	23054	161985	35%	51%	14%
SD-30	Judith Ward	R	38071	100173	18067	156311	24%	64%	12%
SD-31	Mike Regan	R	62992	82817	29944	175753	36%	47%	17%
SD-32	Patrick Stefano	R	54938	92816	16435	164189	33%	57%	10%
SD-33	Doug Mastriano	R	43570	102725	26340	172635	25%	60%	15%
SD-34	Greg Rothman	R	57177	100175	29229	186581	31%	54%	16%
SD-35	Wayne Langerholc	R	62086	83799	20463	166348	37%	50%	12%
SD-36	Ryan Aument	R	56617	96838	29827	183282	31%	53%	16%
SD-37	Devlin Robinson	R	80655	76022	28130	184807	44%	41%	15%
SD-38	Lindsey Williams	D	96406	67098	27996	191500	50%	35%	15%
SD-39	Kim Ward	R	70583	92961	22636	186180	38%	50%	12%
SD-40	Rosemary Brown	R	78471	65635	30444	174550	45%	38%	17%
SD-41	Joe Pittman	R	52263	86212	18492	156967	33%	55%	12%
SD-42	Wayne Fontana	D	115404	41143	29050	185597	62%	22%	16%
SD-43	Jay Costa	D	141378	28709	32058	202145	70%	14%	16%
SD-44	Katie Muth	D	76530	76134	34111	186775	41%	41%	18%
SD-45	James Brewster	D	100430	51267	23770	175467	57%	29%	14%



SD-46	Camera Bartolotta	R	68728	81177	20755	170660	40%	48%	12%
SD-47	Elder Vogel	R	70810	83684	25523	180017	39%	46%	14%
SD-48	Chris Gebhard	R	50063	96045	26103	172211	29%	56%	15%
SD-49	Daniel Laughlin	R	82697	65487	25081	173265	48%	38%	14%
SD-50	Michele Brooks	R	60890	88681	21729	171300	36%	52%	13%

Table 4: All PA House Districts by Party Registration 2023, Pennsylvania Department of State Voter Registration Report

District Number	Incumbent	P	# of Dem voters	# of Rep voters	# of Other voters	# of Total Voters	% Dem voters	% Rep voters	% Other voters
HD-1	Patrick Harkins	D	22,790	9,346	6,330	38,466	59%	24%	16%
HD-2	Robert Merski	D	22,625	14,509	6,114	43,248	52%	34%	14%
HD-3	Ryan Bizzarro	D	21,853	20,077	6,271	48,201	45%	42%	13%
HD-4	Jake Banta	R	15,085	21,653	6,340	43,078	35%	50%	15%
HD-5	Barry Jozwiak	R	14,312	22,703	6,172	43,187	33%	53%	14%
HD-6	Bradley Roae	R	13,675	22,714	5,315	41,704	33%	54%	13%
HD-7	Parke Wentling	R	19,764	18,393	6,105	44,262	45%	42%	14%
HD-8	Aaron Bernstine	R	13,544	27,781	5,890	47,215	29%	59%	12%
HD-9	Marla Gallo Brown	R	17,063	19,214	4,907	41,184	41%	47%	12%
HD-10	Amen Brown	D	34,177	2,348	5,874	42,399	81%	6%	14%
HD-11	Marci Mustello	R	13,224	24,261	5,810	43,295	31%	56%	13%
HD-12	Stephenie Scialabba	R	15,109	26,689	7,719	49,517	31%	54%	16%
HD-13	John Lawrence	R	16,285	19,907	7,895	44,087	37%	45%	18%
HD-14	Jim Marshall	R	17,628	20,673	6,200	44,501	40%	46%	14%
HD-15	Joshua Kail	R	17,464	22,376	5,850	45,690	38%	49%	13%
HD-16	Robert Matzie	D	22,801	14,623	6,034	43,458	52%	34%	14%
HD-17	Timothy Bonner	R	10,383	24,883	5,463	40,729	25%	61%	13%
HD-18	K.C. Tomlinson	R	20,046	16,359	6,746	43,151	46%	38%	16%
HD-19	Aerion Abney	D	32,254	5,200	7,426	44,880	72%	12%	17%
HD-20	Emily Kinkead	D	24,716	13,790	6,808	45,314	55%	30%	15%
HD-21	Sara Innamorato	D	29,373	12,861	7,561	49,795	59%	26%	15%
HD-22	Joshua Siegel	D	18,494	5,620	7,418	31,532	59%	18%	24%
HD-23	Dan Frankel	D	36,961	5,927	9,898	52,786	70%	11%	19%
HD-24	Latasha Mayes	D	39,715	3,847	7,641	51,203	78%	8%	15%
HD-25	Brandon Markosek	D	25,489	14,412	6,504	46,405	55%	31%	14%
HD-26	Paul Friel	D	19,301	18,222	8,133	45,656	42%	40%	18%
HD-27	Daniel Deasy Jr.	D	25,193	11,741	6,723	43,657	58%	27%	15%
HD-28	Rob Mercuri	R	17,814	22,328	7,594	47,736	37%	47%	16%



HD-29	Tim Brennan	D	22,798	21,246	9,900	53,944	42%	39%	18%
HD-30	Arvind Venkat	D	20,615	19,824	7,863	48,302	43%	41%	16%
HD-31	Perry Warren	D	23,954	21,453	11,189	56,596	42%	38%	20%
HD-32	Joe McAndrew	D	29,132	12,717	6,262	48,111	61%	26%	13%
HD-33	Mandy Steele	D	22,209	16,214	6,652	45,075	49%	36%	15%
HD-34	Abigail Salisbury	D	37,725	6,593	7,048	51,366	73%	13%	14%
HD-35	Matthew Gergely	D	28,765	10,074	5,836	44,675	64%	23%	13%
HD-36	Jessica Benham	D	27,451	8,958	7,251	43,660	63%	21%	17%
HD-37	Mindy Fee	R	11,869	27,041	7,047	45,957	26%	59%	15%
HD-38	Nick Pisciotto Jr.	D	25,804	13,233	5,964	45,001	57%	29%	13%
HD-39	Andrew Kuzma	R	21,055	20,264	5,839	47,158	45%	43%	12%
HD-40	Natalie Mihalek	R	20,039	24,262	7,060	51,361	39%	47%	14%
HD-41	Brett Miller	R	16,145	20,179	7,690	44,014	37%	46%	17%
HD-42	Dan Miller	D	26,671	15,773	7,865	50,309	53%	31%	16%
HD-43	Keith Greiner	R	8,823	21,934	5,918	36,675	24%	60%	16%
HD-44	Valerie Gaydos	R	20,454	20,073	7,684	48,211	42%	42%	16%
HD-45	Anita Astorino Kulik	D	26,365	14,764	6,812	47,941	55%	31%	14%
HD-46	Jason Ortitay	R	20,007	21,242	6,585	47,834	42%	44%	14%
HD-47	Joe D'Orsie	R	14,637	22,398	7,016	44,051	33%	51%	16%
HD-48	Timothy O'Neal	R	20,993	9,702	8,296	38,991	54%	25%	21%
HD-49	Ismail Smith-Wade-El	D	17,855	20,678	5,518	44,663	40%	46%	12%
HD-50	Bud Cook	R	20,482	8,619	8,037	37,138	55%	23%	22%
HD-51	Charity Grimm Krupa	R	20,993	9,702	8,296	38,991	54%	25%	21%
HD-52	Ryan Warner	R	17,855	18,734	4,402	40,991	44%	46%	11%
HD-53	Steven Malagari	D	18,734	17,556	4,302	40,592	46%	43%	11%
HD-54	Greg Scott	D	16,504	18,644	3,799	38,947	42%	48%	10%
HD-55	Jill Cooper	R	19,472	15,431	7,403	42,306	46%	36%	17%
HD-56	George Dunbar	R	21,587	9,081	5,829	36,497	59%	25%	16%
HD-57	Eric Nelson	R	18,163	22,991	6,176	47,330	38%	49%	13%
HD-58	Eric Davanzo	R	17,799	23,298	5,792	46,889	38%	50%	12%
HD-59	Leslie Baum Rossi	R	18,129	22,467	5,969	46,565	39%	48%	13%
HD-60	Abby Major	R	18,052	20,954	4,895	43,901	41%	48%	11%
HD-61	Liz Hanbidge	D	16,074	24,893	5,519	46,486	35%	54%	12%
HD-62	James Struzzi II	R	15,107	22,264	5,274	42,645	35%	52%	12%
HD-63	Donna Oberlander	R	22,334	18,324	7,696	48,354	46%	38%	16%
HD-64	R. Lee James	R	12,059	18,880	3,984	34,923	35%	54%	11%
HD-65	Kathy Rapp	R	10,231	26,377	4,636	41,244	25%	64%	11%
HD-66	Brian Smith	R	10,712	23,267	5,149	39,128	27%	59%	13%
HD-67	Martin Causer	R	8,819	25,076	5,218	39,113	23%	64%	13%



HD-68	Clint Owlett	R	8,290	26,972	5,144	40,406	21%	67%	13%
HD-69	Carl Metzgar	R	10,367	28,398	4,264	43,029	24%	66%	10%
HD-70	Matthew Bradford	D	21,275	18,959	7,865	48,099	44%	39%	16%
HD-71	James Rigby	R	14,468	21,816	4,317	40,601	36%	54%	11%
HD-72	Frank Burns	D	18,192	18,807	4,728	41,727	44%	45%	11%
HD-73	Dallas Kephart	R	11,482	21,280	3,983	36,745	31%	58%	11%
HD-74	Dan Williams	D	18,799	14,901	6,849	40,549	46%	37%	17%
HD-75	Mike Armanini	R	12,257	23,671	4,634	40,562	30%	58%	11%
HD-76	Stephanie Borowicz	R	11,246	20,965	5,545	37,756	30%	56%	15%
HD-77	H. Scott Conklin	D	19,576	14,528	7,886	41,990	47%	35%	19%
HD-78	Jesse Topper	R	7,771	30,430	3,975	42,176	18%	72%	9%
HD-79	Louis Schmitt Jr.	R	12,182	20,882	5,462	38,526	32%	54%	14%
HD-80	James Gregory	R	8,716	28,283	4,587	41,586	21%	68%	11%
HD-81	Richard Irvin	R	9,779	26,996	4,550	41,325	24%	65%	11%
HD-82	Paul Takac	D	18,795	16,674	8,351	43,820	43%	38%	19%
HD-83	Jamie Flick	R	11,411	18,314	5,153	34,878	33%	53%	15%
HD-84	Joe Hamm	R	9,362	28,500	5,069	42,931	22%	66%	12%
HD-85	David Rowe	R	10,248	25,576	5,211	41,035	25%	62%	13%
HD-86	Perry Stambaugh	R	8,572	27,046	4,834	40,452	21%	67%	12%
HD-87	Thomas Kutz	R	15,351	25,384	7,853	48,588	32%	52%	16%
HD-88	Sheryl Delozier	R	17,228	22,206	8,141	47,575	36%	47%	17%
HD-89	Rob Kauffman	R	11,820	24,388	6,389	42,597	28%	57%	15%
HD-90	Paul Schemel	R	9,092	27,066	6,451	42,609	21%	64%	15%
HD-91	Dan Moul	R	13,424	25,769	7,942	47,135	28%	55%	17%
HD-92	Dawn Keefer	R	12,087	28,329	7,137	47,553	25%	60%	15%
HD-93	Mike Jones	R	14,262	25,892	7,779	47,933	30%	54%	16%
HD-94	Wendy Flnk	R	11,933	24,080	6,737	42,750	28%	56%	16%
HD-95	Carol Hill-Evans	D	20,849	9,402	8,504	38,755	54%	24%	22%
HD-96	P. Michael Sturla	D	22,028	16,099	8,436	46,563	47%	35%	18%
HD-97	Steven Mentzer	R	14,116	24,885	7,458	46,459	30%	54%	16%
HD-98	Tom Jones	R	12,753	26,106	6,973	45,832	28%	57%	15%
HD-99	David H. Zimmerman	R	9,004	23,545	5,469	38,018	24%	62%	14%
HD-100	Bryan Cutler	R	6,169	22,263	4,826	33,258	19%	67%	15%
HD-101	John Schlegel	R	14,554	19,300	7,317	41,171	35%	47%	18%
HD-102	Russell Diamond	R	9,705	25,966	5,707	41,378	23%	63%	14%
HD-103	Patty Kim	D	23,795	13,916	7,866	45,577	52%	31%	17%
HD-104	Dave Madsen	D	21,309	9,604	6,610	37,523	57%	26%	18%
HD-105	Justin Fleming	D	22,016	13,681	6,742	42,439	52%	32%	16%



HD-106	Thomas Mehaffie	R	15,903	22,470	7,747	46,120	34%	49%	17%
HD-107	Joanne Stehr	R	12,970	23,597	5,356	41,923	31%	56%	13%
HD-108	Vacant		12,608	23,916	6,642	43,166	29%	55%	15%
HD-109	Robert Leadbeter	R	12,743	20,510	5,998	39,251	32%	52%	15%
HD-110	Tina Pickett	R	10,798	25,049	5,386	41,233	26%	61%	13%
HD-111	Jonathan Fritz	R	11,372	26,645	6,214	44,231	26%	60%	14%
HD-112	Kyle Mullins	D	25,904	13,015	4,304	43,223	60%	30%	10%
HD-113	Kyle Donahue	D	20,089	11,342	4,997	36,428	55%	31%	14%
HD-114	Bridget Malloy Kosierowski	D	22,795	14,116	4,828	41,739	55%	34%	12%
HD-115	Maureen Madden	D	20,221	13,063	8,537	41,821	48%	31%	20%
HD-116	Dane Watro	R	13,514	12,636	4,670	30,820	44%	41%	15%
HD-117	Mike Cabell	R	13,494	24,515	5,480	43,489	31%	56%	13%
HD-118	Jim Haddock	D	23,281	16,208	4,624	44,113	53%	37%	10%
HD-119	Alec Ryncavage	R	18,902	15,379	5,364	39,645	48%	39%	14%
HD-120	Aaron Kaufer	R	19,141	18,640	5,456	43,237	44%	43%	13%
HD-121	Eddie Day Pashinski	D	18,817	10,022	5,108	33,947	55%	30%	15%
HD-122	Doyle Heffley	R	15,554	21,820	6,932	44,306	35%	49%	16%
HD-123	Tim Twardzik	R	15,243	20,502	5,464	41,209	37%	50%	13%
HD-124	Jamie Barton	R	12,172	23,485	5,980	41,637	29%	56%	14%
HD-125	Joe Kerwin	R	12,963	25,499	5,934	44,396	29%	57%	13%
HD-126	Mark Rozzi	D	19,351	10,587	6,336	36,274	53%	29%	17%
HD-127	Manuel Guzman	D	18,229	6,122	6,373	30,724	59%	20%	21%
HD-128	Mark Gillen	R	15,754	21,641	7,027	44,422	35%	49%	16%
HD-129	Johanny Cepeda-Freytiz	D	19,808	11,350	6,509	37,667	53%	30%	17%
HD-130	David Maloney	R	15,142	22,727	6,816	44,685	34%	51%	15%
HD-131	Milou Mackenzie	R	17,162	22,486	8,205	47,853	36%	47%	17%
HD-132	Michael Schlossberg	D	22,356	15,307	8,570	46,233	48%	33%	19%
HD-133	Jeanne McNeill	D	22,286	12,763	7,527	42,576	52%	30%	18%
HD-134	Peter Schweyer	D	20,424	9,788	7,616	37,828	54%	26%	20%
HD-135	Steve Samuelson	D	25,751	11,552	9,568	46,871	55%	25%	20%
HD-136	Robert Freeman	D	21,279	12,129	8,781	42,189	50%	29%	21%
HD-137	Joe Emrick	R	20,545	18,553	9,430	48,528	42%	38%	19%
HD-138	Ann Flood	R	17,397	22,838	9,655	49,890	35%	46%	19%
HD-139	Joseph Adams	R	13,640	25,335	9,485	48,460	28%	52%	20%
HD-140	John Galloway	D	21,451	13,483	7,285	42,219	51%	32%	17%
HD-141	Tina Davis	D	23,878	12,646	6,993	43,517	55%	29%	16%
HD-142	Joseph Hogan	R	20,323	19,860	7,637	47,820	42%	42%	16%



HD-143	Shelby Labs	R	17,819	23,740	8,657	50,216	35%	47%	17%
HD-144	Brian Munroe	D	19,636	20,644	7,295	47,575	41%	43%	15%
HD-145	Craig Staats	R	15,413	22,244	7,739	45,396	34%	49%	17%
HD-146	Joseph Ciresi	D	20,050	15,835	7,701	43,586	46%	36%	18%
HD-147	Donna Scheuren	R	16,399	23,000	7,620	47,019	35%	49%	16%
HD-148	Mary Jo Daley	D	30,158	11,829	7,176	49,163	61%	24%	15%
HD-149	Tim Briggs	D	25,509	12,757	8,110	46,376	55%	28%	17%
HD-150	Joseph Webster	D	19,452	17,244	7,954	44,650	44%	39%	18%
HD-151	Melissa Cerrato	D	23,003	17,212	7,782	47,997	48%	36%	16%
HD-152	Nancy Guenst	D	21,506	15,007	6,646	43,159	50%	35%	15%
HD-153	Ben Sanchez	D	25,613	14,027	6,485	46,125	56%	30%	14%
HD-154	Napoleon Nelson	D	32,922	8,499	6,025	47,446	69%	18%	13%
HD-155	Danielle Friel Otten	D	19,461	18,703	8,985	47,149	41%	40%	19%
HD-156	Christopher Pielli	D	20,264	18,259	8,074	46,597	43%	39%	17%
HD-157	Melissa Shusterman	D	20,763	18,614	9,058	48,435	43%	38%	19%
HD-158	Christina Sappey	D	18,874	17,789	8,444	45,107	42%	39%	19%
HD-159	Carol Kazeem	D	24,164	12,921	5,801	42,886	56%	30%	14%
HD-160	Craig Williams	R	18,150	24,025	8,500	50,675	36%	47%	17%
HD-161	Leanne Krueger-Braneky	D	20,228	20,466	6,632	47,326	43%	43%	14%
HD-162	David Delloso	D	21,164	18,795	5,671	45,630	46%	41%	12%
HD-163	Vacant		23,323	15,435	5,777	44,535	52%	35%	13%
HD-164	Gina Curry	D	26,829	6,035	5,080	37,944	71%	16%	13%
HD-165	Jennifer O'Mara	D	22,036	20,947	6,503	49,486	45%	42%	13%
HD-166	Gregory Vitali	D	23,651	18,394	6,632	48,677	49%	38%	14%
HD-167	Kristine Howard	D	19,838	18,020	8,858	46,716	42%	39%	19%
HD-168	Lisa Borowski	D	19,764	18,932	8,109	46,805	42%	40%	17%
HD-169	Kate Klunk	R	12,157	25,703	7,827	45,687	27%	56%	17%
HD-170	Martina White	R	19,372	12,894	5,156	37,422	52%	34%	14%
HD-171	Kerry Benninghoff	R	11,205	23,949	5,330	40,484	28%	59%	13%
HD-172	Kevin Boyle	D	20,333	10,382	5,081	35,796	57%	29%	14%
HD-173	Patrick Gallagher	D	20,593	8,592	4,227	33,412	62%	26%	13%
HD-174	Ed Neilson	D	20,945	9,286	5,055	35,286	59%	26%	14%
HD-175	Mary Isaacson	D	34,602	5,967	8,518	49,087	70%	12%	17%
HD-176	Jack Rader	R	16,664	18,953	8,784	44,401	38%	43%	20%
HD-177	Joseph Hohenstein	D	25,482	8,245	5,511	39,238	65%	21%	14%
HD-178	Kristin Marcell	R	18,837	24,807	7,686	51,330	37%	48%	15%
HD-179	Jason Dawkins	D	26,518	2,777	5,021	34,316	77%	8%	15%
HD-180	Jose Giral	D	26,708	3,522	6,217	36,447	73%	10%	17%



HD-181	Malcolm Kenyatta	D	31,936	2,686	6,199	40,821	78%	7%	15%
HD-182	Benjamin Waxman	D	41,090	5,631	9,254	55,975	73%	10%	17%
HD-183	Zachary Mako	R	17,347	21,975	8,099	47,421	37%	46%	17%
HD-184	Elizabeth Fiedler	D	28,360	6,640	5,473	40,473	70%	16%	14%
HD-185	Regina Young	D	29,068	7,739	4,631	41,438	70%	19%	11%
HD-186	Jordan Harris	D	37,502	3,638	6,417	47,557	79%	8%	13%
HD-187	Ryan Mackenzie	R	17,503	21,832	8,270	47,605	37%	46%	17%
HD-188	Rick Krajewski	D	38,547	2,277	7,340	48,164	80%	5%	15%
HD-189	Tarah Probst	R	19,863	13,020	8,776	41,659	48%	31%	21%
HD-190	G. Roni Green	D	40,469	1,942	4,911	47,322	86%	4%	10%
HD-191	Joanna McClinton	D	36,203	1,889	4,244	42,336	86%	4%	10%
HD-192	Morgan Cephas	D	37,736	1,736	4,536	44,008	86%	4%	10%
HD-193	Torren Ecker	R	10,924	24,886	6,570	42,380	26%	59%	16%
HD-194	Tarik Khan	D	32,804	7,467	7,364	47,635	69%	16%	15%
HD-195	Donna Bullock	D	37,596	2,625	5,864	46,085	82%	6%	13%
HD-196	Seth Grove	R	13,298	25,110	6,805	45,213	29%	56%	15%
HD-197	Danilo Burgos	D	32,217	2,581	6,023	40,821	79%	6%	15%
HD-198	Darisha Parker	D	37,254	1,801	4,466	43,521	86%	4%	10%
HD-199	Barbara Gleim	R	16,284	22,463	7,846	46,593	35%	48%	17%
HD-200	Christopher Rabb	D	46,191	1,452	4,175	51,818	89%	3%	8%
HD-201	Stephen Kinsey	D	40,906	1,607	4,734	47,247	87%	3%	10%
HD-202	Jared Solomon	D	18,607	4,243	4,329	27,179	68%	16%	16%
HD-203	Anthony Bellmon	D	27,333	3,652	4,654	35,639	77%	10%	13%

Table 5: Historic Other Party Registration as a Percentage of PA Voters, All Counties, Pennsylvania Department of State Voter Registration Statistics

	2000	2012	2016	2022	Increase, 2000-2022
ADAMS	12%	15%	16%	16%	34%
ALLEGHENY	9%	13%	14%	14%	67%
ARMSTRONG	8%	10%	11%	12%	22%
BEAVER	9%	11%	12%	13%	53%
BEDFORD	7%	9%	10%	10%	34%
BERKS	13%	15%	15%	16%	26%
BLAIR	10%	12%	12%	12%	26%
BRADFORD	10%	13%	13%	13%	33%
BUCKS	14%	16%	16%	17%	20%
BUTLER	11%	13%	14%	14%	28%
CAMBRIA	6%	9%	10%	11%	81%



CAMERON	7%	11%	11%	13%	78%
CARBON	10%	13%	15%	16%	56%
CENTRE	17%	21%	20%	18%	6%
CHESTER	16%	17%	18%	18%	14%
CLARION	7%	10%	11%	11%	63%
CLEARFIELD	8%	11%	12%	12%	40%
CLINTON	9%	13%	13%	13%	46%
COLUMBIA	11%	15%	15%	15%	39%
CRAWFORD	8%	11%	12%	12%	54%
CUMBERLAND	12%	15%	16%	16%	39%
DAUPHIN	11%	13%	14%	15%	46%
DELAWARE	10%	12%	13%	13%	38%
ELK	9%	10%	11%	12%	29%
ERIE	9%	12%	13%	14%	61%
FAYETTE	6%	8%	9%	10%	70%
FOREST	6%	8%	9%	11%	90%
FRANKLIN	11%	14%	14%	15%	33%
FULTON	6%	10%	10%	10%	62%
GREENE	5%	8%	9%	10%	99%
HUNTINGDON	9%	10%	10%	10%	15%
INDIANA	11%	15%	14%	13%	-1%
JEFFERSON	7%	10%	11%	11%	56%
JUNIATA	7%	9%	10%	10%	44%
LACKAWANNA	6%	9%	10%	11%	92%
LANCASTER	13%	15%	16%	16%	28%
LAWRENCE	7%	10%	11%	12%	72%
LEBANON	11%	14%	14%	15%	42%
LEHIGH	13%	16%	17%	18%	45%
LUZERNE	6%	10%	11%	13%	121%
LYCOMING	9%	13%	13%	13%	47%
MCKEAN	10%	13%	14%	14%	43%
MERCER	9%	12%	13%	13%	50%
MIFFLIN	8%	10%	11%	11%	41%
MONROE	18%	20%	19%	20%	12%
MONTGOMERY	13%	15%	16%	16%	23%
MONTOUR	10%	15%	16%	16%	55%
NORTHAMPTON	14%	18%	18%	19%	39%
NORTHUMBERLAND	7%	11%	13%	14%	106%
PERRY	10%	12%	12%	13%	26%



PHILADELPHIA	7%	10%	11%	13%	91%
PIKE	17%	21%	21%	21%	27%
POTTER	7%	9%	10%	11%	63%
SCHUYLKILL	7%	10%	12%	13%	88%
SNYDER	9%	12%	13%	12%	35%
SOMERSET	6%	9%	10%	10%	68%
SULLIVAN	7%	9%	10%	11%	62%
SUSQUEHANNA	9%	12%	13%	13%	49%
TIOGA	8%	13%	13%	13%	64%
UNION	12%	17%	17%	16%	39%
VENANGO	9%	11%	12%	13%	47%
WARREN	11%	14%	15%	16%	39%
WASHINGTON	8%	11%	11%	12%	56%
WAYNE	11%	15%	16%	16%	46%
WESTMORELAND	9%	11%	12%	12%	37%
WYOMING	9%	11%	11%	12%	30%
YORK	13%	15%	16%	16%	28%



Endnotes

1. Pennsylvania Department of State (2023). Voter Registration Report. Report to the General Assembly, The Administration of Voter Registration in Pennsylvania.
2. Voter registration terminology in Pennsylvania is tricky. In this report, unless otherwise noted, the term “independent” voter refers to a registered voter who chooses “no affiliation”, “none” or “independent” when they register to vote. We estimate this total to be about 100,000 less than the 1.2 million voters DoS reports as No Affiliation and Other.
3. Pennsylvania Department of State (2020). Election Results.
4. Pennsylvania Department of State (2023). Voter Registration Report. Report to the General Assembly, The Administration of Voter Registration in Pennsylvania.
5. Pew Research Center (2020). Party Affiliation by State.
6. Pennsylvania Department of State (2023). Voter Registration Report. Report to the General Assembly, The Administration of Voter Registration in Pennsylvania.
7. Pennsylvania Department of State (2023). Voter Registration Report. Report to the General Assembly, The Administration of Voter Registration in Pennsylvania.
8. Pennsylvania Department of State (2023). Voter Registration Report. Report to the General Assembly, The Administration of Voter Registration in Pennsylvania.
9. Pennsylvania Department of State (2023). Voting and Election Statistics.
10. Kelly, C. (2022). "2022 Census: Racial and Ethnic Diversity in Pennsylvania." [Pennsylvania State Data Center](#).
11. Pew Research Center (2022). Party Affiliation Among Adults in Pennsylvania.
12. Biernacka-Lievstro, J. (2022). "A Third of States Lost Population in 2021." [Pew Research Center](#)(State Fiscal Health).
13. Biernacka-Lievstro, J. (2022). "A Third of States Lost Population in 2021." [Pew Research Center](#)(State Fiscal Health).
14. Osage Research (2021). Open Primaries in PA Polling Data, conducted on behalf of the Committee of Seventy.
15. The data used to create the charts and maps is from the Pennsylvania Department of State. The Osage survey is a 2021 survey of a random sample of 120 independent voters statewide. Pew research is based on the totals of several surveys of US adults in 2018.
16. Pennsylvania Department of State (2021). Voter Registration Report. Report to the General Assembly, The Administration of Voter Registration in Pennsylvania.
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APPENDIX G – BALLOT PA ACTION ELECTIONS REPORT

Ballot PA Elections Report July 2025

This report represents findings researched by freelance journalist Nick Field related to Pennsylvania's state legislative races over the period of 2000 to 2025. This research concerns the competitiveness of primary and general elections, as well as partisan trends in the state's legislative districts.

This paper was commissioned by Ballot PA Action.

Findings

Only 5% (472 out of 8,992) of all state legislative elections (general elections and primary elections) in Pennsylvania from 2000 to 2025 were competitive. A 54% majority of these races (4,901 out of 8,992) were uncontested, while an additional 16% saw no candidates filing at all in a primary (1,410 out of 8,992). Another 25% of elections (2,209 out of 8,992) were landslides, classified as races where a candidate won by ten or more points.

Competitive contests were a bit more likely to occur in State Senate races than State House races. For instance, only 6% (65 out of 1,003) of Senate contests were competitive while just over 5% (407 out of 7,989) of House contests were.

Primary contests were particularly unlikely to be competitive. For instance, of the 5,928 House and Senate primaries over this period, only 191 – or a bit over 3% – of these races were competitive. Instead, most primaries were either uncontested or featured no candidate filings. 3,737, or just over 63%, of primaries were uncontested while an additional 1,410, or almost 24%, featured no filings at all.

Of the 253 State Legislative Districts in the Commonwealth of Pennsylvania, only 100 of these districts (39.53%) voted for both Democratic and Republican nominees in the general elections held from 2000 to 2025. 80 districts (31.62%) only supported Republican nominees, while 73 districts (28.85%) only supported Democratic nominees.

Conclusion

The numbers are clear: the vast majority of state legislative contests in Pennsylvania are noncompetitive, and primary elections are the least likely to be competitive. In fact, most primary and general election races are not even contested, to say nothing of those primaries where no candidate bothers to file at all.

Furthermore, 6 in 10 legislative districts have remained exclusively in the hands of either the Democratic or Republican Party throughout the 21st Century so far. As a result, most races in most districts are practically decided before voters even have their say.

Links and Appendix

If you wish to examine how a specific contest was categorized, you can consult my spreadsheets on the [State House races](#) and [State Senate elections](#) through these links.

I also compiled spreadsheets for the partisan breakdown of the [State House](#) and [State Senate](#) districts as well.

The full catalog of statistics is included as an appendix below:

State Legislative Contest Statistics

1,003 Total State Senate Contests

527 Uncontested (52.54%)

290 Landslides (28.91%)

65 Competitive (6.48%)

121 No Filings (12.06%)

650 State Senate Primary Contests

438 Uncontested (67.38%)

71 Landslides (10.92%)

20 Competitive (3.08%)

121 Primaries With No Filings (18.62%)

325 General Election Senate Contests

89 Uncontested (27.38%)

195 Landslides (60%)

41 Competitive (12.62%)

28 Special Senate Contests

24 Landslides (85.71%)

4 Competitive (14.29%)

7,989 Total State House Contests

4,374 Uncontested (54.75%)

1,919 Landslides (24.02%)

407 Competitive (5.09%)

1,289 No Filings (16.13%)

5,278 State House Primary Contests

3,299 Uncontested (62.50%)

519 Landslides (9.83%)

171 Competitive (3.24%)

1,289 Primaries With No Filings (24.42%)

2,639 General Election House Contests

1,072 Uncontested (40.62%)

1,340 Landslides (50.78%)

227 Competitive (8.60%)

72 Special House Contests

3 Uncontested (4.17%)

60 Landslides (83.33%)

9 Competitive (12.50%)

8,992 Total State Senate and House Contests

4,901 Uncontested (54.50%)

2,209 Landslides (24.57%)

472 Competitive (5.25%)

1,410 No Filings (15.68%)

5,928 Total State Senate and House Primaries

3,737 Uncontested (63.04%)

590 Landslides (9.95%)

191 Competitive (3.22%)

1,410 No Filings (23.79%)

2,964 Total State Senate and House General Elections

1,161 Uncontested (39.17%)

1,535 Landslides (51.79%)

268 Competitive (9.04%)

100 Total State Senate and House Special Elections

3 Uncontested (3%)

84 Landslides (84%)

13 Competitive (13%)

State Legislative District Partisanship

50 State Senate Districts

16 Held By Both Parties (32%)

20 Held By Only Republicans (40%)

14 Held By Only Democrats (28%)

203 State House Districts

84 Held By Both Parties (41.38%)

60 Held By Only Republicans (29.56%)

59 Held By Only Democrats (29.06%)

253 Total State Legislative Districts

100 Held By Both Parties (39.53%)

80 Held By Only Republicans (31.62%)

73 Held By Only Democrats (28.85%)

APPENDIX H – REPORT OF PROFESSOR WESLEY PEGDEN

An Analysis of Voter Influence in the PA Closed Primary System

Wesley Pegden

December 9, 2025

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1 Qualifications

I am a professor in the department of Mathematical Sciences at Carnegie Mellon University, where I have been a member of the faculty since 2013. I received my Ph.D. in Mathematics from Rutgers University in 2010 under the supervision of József Beck. I am an expert on stochastic processes and probability theory, and specifically in the probabilistic analysis of political districtings^[1], developing techniques for this application in publications that appeared in *Proceedings of the National Academy of Sciences* and *Statistics and Public Policy*. My research has been funded by the National Science Foundation and the Sloan Foundation.

I testified as an expert witness in the *League of Women Voters of Pennsylvania v. Commonwealth of Pennsylvania* case in which the 2011 Congressional districting was found to be an unconstitutional partisan gerrymander, as well as in the *Common Cause v. Lewis* and *Harper v. Hall* cases in North Carolina. I previously served as a member of the bipartisan Pennsylvania Redistricting Reform Commission under appointment by the governor. I am being compensated at \$250 per hour for my work on the current case.

2 Executive Summary

I was asked to analyze the impact of the closed primary system in Pennsylvania on the power and influence of voters not affiliated with either major party. I analyzed the influence of Democratic, Republican, and Unaffiliated voters using historical election data from all PA State House and State Senate races in years 2002-2020. I was also asked to analyze school board elections in the counties where plaintiffs reside, and mayor and related executive elections for large counties and cities in the state.

I analyze the influence of a voter in a given election cycle based on the eligibility to vote just in a general election, or in both a general election and a primary election. My precise measure of voter influence is described in Section 4, but roughly speaking, it corresponds to how few votes would have to change in elections the voter was eligible to vote in to change the final outcome of the election; the fewer changes necessary, the more influential each such voter is.

I present the results of my analysis for each individual election and year I analyzed, and I also present influences of voters of the three types (Democratic-primary eligible voters, Republican-primary eligible voters, and Unaffiliated voters—eligible to vote only in the general election) aggregated over types of elections and years. Note that at the individual election level, there are many elections when no voters have any influence at all—for example, in cases where elections in the time-frame I used were never contested. Similarly, there are also cases where general elections were sometimes contested but one or both primary elections never were, and in these individual years and districts, my analysis finds the same influence to primary-eligible voters as to Unaffiliated voters. There are also districts where one primary is competitive, but the general election is essentially uncontested, and in these cases the voters in just one party have dramatically more influence via their eligibility to vote in a primary.

In aggregate, however, **I find that primary eligibility in Pennsylvania confers a dramatic increase in electoral influence, both to Democratic and Republican voters.** For example, for State House districts in the period 2002-2012^[2], out of the 203 districts:

1. there are 50 districts where Democratic-primary eligible voters had more than twice the influence of Unaffiliated voters, and 60 where Republican-primary eligible voters had more than twice the influence of Unaffiliated voters, (aggregating the influence in each district over 2002-2012);
2. there are 36 districts where Democratic-primary eligible voters had more than 5 times the influence of Unaffiliated voters, and 32 where Republican-primary eligible voters had more than 5 times the influence of Unaffiliated voters, (aggregating the influence in each district over 2002-2012);
3. there are 26 districts where Democratic-primary eligible voters had more than **10 times** the influence of Unaffiliated voters, and 18 where Republican-primary eligible voters had more than **10 times** the influence of Unaffiliated voters, (aggregating the influence in each district over 2002-2012).

^[1]M. Chikina, A. Frieze, W. Pegden. Assessing significance in a Markov Chain without mixing, in *Proceedings of the National Academy of Sciences* **114** (2017) 2860–2864; M. Chikina, A. Frieze, J. Mattingly, W. Pegden. Separating effect from significance in Markov chain tests, in *Statistics and Public Policy* **7** (2020) 101–114.

^[2]Because the State legislative redistricting happened between the 2012 and 2014 elections, this is the longest period of General Assembly election data not punctuated by redistricting

Overall, the median influence across the 203 districts of a Democratic voter in the years 2002-2012 is $1.7\times$ the influence of an Unaffiliated voter, the median influence of a Republican voter in this dataset is $1.8\times$ the influence of an Unaffiliated voter. (Note that these aggregate statistics include 50 districts in which no primary was contested in the 2002-2012 period and thus where Unaffiliated influence is exactly equal to partisan influence; excluding these 50 districts, the multipliers become $2.3\times$ and $2.6\times$, respectively.)

My full analysis in this report considers PA House and Senate election data in the periods 2002-2012 and 2014-2020, Mayor and County executive races from the cities of Philadelphia and Pittsburgh and the counties of Allegheny, Erie, Lackawanna, Lehigh and Northampton for 2015-2023, and school board races in the counties Lycoming, Montgomery, and Delaware for the years 2015, 2019, 2023^[3].

Before presenting the details of analysis of voter influence based on historical voting data in Pennsylvania, in the next section I discuss a simple model of *a priori* voter power in a primary/general election system, which evaluates how much more power a voter has in the abstract by virtue of participating in a smaller primary election before a general election, simply based on the greater chance that the voter would participate in a decisive election, even if all votes were cast completely randomly.

Note that in my report I use the term *influence* when discussing the impact a voter can have on an election outcome when measured in way that is tied to data about how close primary and general elections have been that the voter was eligible to vote in; this kind of *influence* analysis makes up the bulk of my report. I use the term *a priori power* when discussing the power a voter has by the virtue of election rules alone, without accounting for how close elections have been that the voter was eligible to vote in. I discuss this just in the next section.

3 An *a priori* Power Analysis

Before analyzing voter influence through the lens of actual historical Pennsylvania election data, in this section I discuss the *a priori* impact of primary-voting eligibility of voters on voter power to affect election results. Here *power* refers to the ability a voter has to affect an election result, and the term *a priori* power refers to the notion that we are interested in this section in understanding the power imparted by the election rules alone, rather than how the rules interact with actual voting patterns. Thus, issues like whether the primary or general elections are more likely to be competitive are ignored in this *a priori* analysis.

In particular, rather than considering how voters have actually voted in the past, the *a priori* analysis considers all possible ways voters can vote such that some election (primary or general) in the election cycle is *decisive*, in the sense that changing one vote in that election can change the *final winner* of the election cycle^[4]. The power ratio is the ratio of the number of ways votes can be cast in the election cycle that makes either the primary or general election decisive in this sense, to the number of ways votes can be cast that makes the general election decisive in this sense. In particular, if all voters voted randomly, it would be the ratio of the likelihood that one of the elections in which a primary-eligible voter is eligible to vote in is decisive, to the likelihood that a general-only election voter sees a decisive election:

$$\text{Power ratio} = \frac{\text{Probability(General Decisive)} + \text{Probability(Primary Decisive)}}{\text{Probability(General Decisive)}} \quad \text{under random voting}^{[5]}. \quad (1)$$

For simplicity I consider in this preliminary section just the case where primary and general elections are contests between exactly two candidates (primaries with more than two candidates would further increase the disparity shown by this analysis).

In Figure 1, I plot how the power ratio in this model varies with the relative size of the primary^[6]. For

^[3]I downloaded election data for the PA State House and Senate elections from the PA Department of State website. Data for the rest of the elections I considered was provided to me by Nick Field on behalf of plaintiffs attorneys.

^[4]Although for mathematical simplicity I define decisiveness with respect to 1-vote margins, the plot I show in this section would be the same if I defined it with respect to some other fixed margin, like 100 votes or 1000 votes, so long as it is small relative to the total number of votes. Note that the analysis in Section 3 is analogous to classical *a priori* power analyses like the Banzhaf power index.

^[5]Note that because the probability both are simultaneously decisive is much smaller than the probability that either one is, the joint probability can be ignored in this formula.

^[6]If votes are cast randomly in a two candidate election, the probability the election is decisive is asymptotically proportional to the inverse of the square root of the number of votes; this asymptotic formula is used in Figure 1.

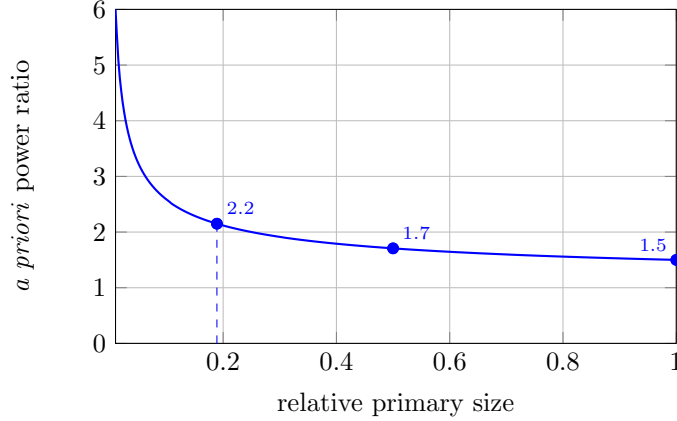


Figure 1: **The relationship between *a priori* power and relative primary size.** The ratio of the power of a primary-eligible voter to a general-only voter, as a function of the relative size of the primary election in an abstract model where votes are completely uncorrelated. The dot marked 1.7 corresponds to a relative primary size of .5 (e.g., each primary election has half the number of the total number of general election voters); in this case the power ratio is 1.7. The dashed line is at a relative primary size of .19, which is the typical ratio of the size of the larger primary in a PA House race to the size of the general election in a PA House race. At this size, the *a priori* power ratio is for a primary-eligible voter is $2.2\times$ that of a general-only-eligible voter.

example, at the righthand side of the plot, we see that if the primary election has the same number of voters as the general election, the power ratio is 1.5. This is because when the elections are the same size, the simplistic *a priori* analysis suggests the primary and general elections are equally likely to be decided by a 1 vote margin. But a primary is only decisive if it is decided by a 1 vote margin *and* that candidate wins the general election, which under a random voting model is an event of probability $\frac{1}{2}$. In particular, in this scenario when the elections have the same number of voters, Equation 1 above becomes

$$\frac{\text{Probability}(\text{General Decisive}) + \frac{1}{2}\text{Probability}(\text{General Decisive})}{\text{Probability}(\text{General Decisive})} = 1.5, \quad (2)$$

corresponding to the end of the curve shown in the plot.

Of course, primary elections in Pennsylvania typically have far fewer voters than general elections. Even with 100% voter participation, we would expect primaries to have at most half the voter participation on average as general elections, so long as there is a primary election for each of two parties in each election cycle.

For example, the typical relative primary size across the Pennsylvania House of Representative election data I use in my report is .19, and here the *a priori* power ratio is 2.2: this means that when the number of votes in the primary election is around .19 times (19% of) the general election, the power ratio for a primary voter relative to a general-only voter is around 2.2. In particular, this indicates that most of a voter's *a priori* power is coming from eligibility to participate in a primary election with respect to this model. Hypothetically, if some voters were eligible *only* to vote in the primary election in this model at this relative primary size, they would be more powerful than a voter that was eligible only to vote in the general election, in the sense that they would be more scenarios in which they could cast a decisive vote for the final overall winner.

Again, I emphasize that the results in this section ignore actual voting patterns, and instead measure the influence on voter power of the election rules alone, without accounting for how they interact with voter behavior. Conceivably, actual voting behavior could moderate or aggregate the effect we see here: if primaries were never competitive, the actual influence a voter would gain from voting in them would be minimal, while if general elections were never competitive, primary voters would hold all the cards. My main analysis, introduced in the next section, evaluates the effect of this interaction between the rules and

actual patterns of voting. In Pennsylvania, we will see the magnitude of the effect of primary-eligibility on voter influence varies from election to election and district to district, but in aggregate my analysis shows that partisan voters do see a large multiplicative increase in influence from the eligibility to vote in primary elections, that this effect benefits both Republican and Democratic voters, and that the effect occurs across the time periods and variety of election races I consider in my report.

4 A Measure of Voter Influence from Election data

In this report, I conduct an analysis of voter influence in recent elections in Pennsylvania. To do so, I do not make any assumptions about the preferences of voters based on political affiliation, but instead use a simple model which quantifies the influence a potential voter would have had in a given election based only on:

- (a) their ability to vote in either:
 - (i) just the general election,
 - (ii) the general election and the Democratic primary, or
 - (iii) the general election and the Republican primary, and
- (b) how sensitive the final outcome of the election was to changes in the elections in which the voter was able to participate.

In particular, part (b) means that the analysis I do is tied to the outcome data of the elections I am analyzing; in a world in which every primary is close and every general election is uncontested, only voters eligible to vote in primaries would have influence on elections through their votes. Conversely, in a world in which primaries are all uncontested but general elections are closely fought, voters would exercise significant electoral influence through their participation in general elections, but eligibility to vote in primaries would confer no extra electoral influence on a voter. The aim of my analysis is to determine where, in recent history, Pennsylvania elections fall between these two extremes.

To introduce the measure I use, let us first consider a simple fictitious example of a two candidate^[7] general election with no primary:

Example 1: 2-candidate general election

candidate	votes
John Carter (D)	21,100
Susan Kim (R)	21,976

The election margin in this example is 876 votes; this is the number of additional voters that would have to show up and vote for John Carter for him to potentially win, or the number of Susan Kim voters that would have to decline to vote; alternatively, half this many could switch their votes, so long as, in total, the increase in the number of votes Carter receives and the decrease in the number of votes Kim receives sums to 876.

For any person eligible to vote in this election, their potential vote was thus a $1/876$ fraction of this minimum swing required to potentially change the election outcome, and I use this fraction as a measure of their potential influence on the election. In a two-candidate election where the margin is just 1 vote, every vote is decisive, and the influence is 1.

A note on ties and the vote margin: *Note that in the example above, 876 is the number of votes that would have to change to make the election tied; in this case it is possible for Carter to win (via whatever tie-breaking mechanism is used), which motivates my use of 876 instead of 877 when calculating the influence. On the other hand, in an election where the margin is already 0, changing 1 vote would allow a candidate to win regardless of the tie-breaking mechanism, and so we assign a reciprocal vote margin of 1 in this case as well. The details of these choices are essentially irrelevant for the quantitative findings of my analysis, as*

^[7]My analysis of voter influence is based only on candidates that appear on the primary and general election ballots; I do not include write-in votes in my analysis.

differences between, e.g., $1/876$ and $1/877$ are very small compared to the sizes of effects I find in my report.

Consider now the following fictitious 3-candidate election.

Example 2: 3-candidate general election

candidate	votes
John Carter (D)	21,100
Susan Kim (R)	21,976
Jessica Lopez (I)	10,000

In this case, the actual election outcome is that Susan Kim wins. One alternative possible outcome is that John Carter wins; this requires a total of 876 vote changes (counting increases and decreases separately); the vote of a potential voter is a $1/876 \approx .0011$ fraction of that swing. The other alternative possible outcome is that Jessica Lopez wins; this requires a total of 11,976 vote changes, and a potential voter's vote is a $1/11,976 \approx .000084$ of that swing. We use the sum $1/876 + 1/11,976 \approx .0012$ of the influences as a proxy for the total influence of the voter. Note that most of the influence in this case comes from the difficulty of changing the outcome to Carter, the 2nd place finisher. Changing the outcome to Lopez requires enough votes that this 3rd possibility contributes little additional influence.

Now we consider an example with both primaries and a general election, as we will need to do to compare the influence of Unaffiliated voters vs those with major party affiliations. The basic framework for my analysis is to consider—beyond vote swings in the general election as above—vote swings in primaries leading to counterfactual general elections in which the alternate primary winner inherits the general election votes assigned to that party.

Example 3: primary and general elections

Democratic Primary	votes		candidate	votes
John Carter	4,500		John Carter (D);	21,100
Jessica Lopez	4,450		Susan Kim (R);	15,000
Republican Primary	votes			
Susan Kim;	14,902			
David Lee	13,011			
Carol Adams	6,773			

General election vote margin: 6,100

Influence via general election: $1/6100 \approx .00016$

In this example the general election margin is 6,100 votes; thus the influence of one general election vote is $1/6,100 \approx .00016$ in my model. How does the count of 6,100 votes necessary to change the general election outcome compare to the minimum number of votes that can be changed across the general election *and* the primary election a voter votes in, to change the final winner?

Consider first a voter that is eligible to vote in the Democratic primary. In this example, the primary winning margin between Carter and Lopez is only 50 votes. In a counterfactual where Lopez makes up this margin and wins the primary, and Carter's votes in the general election are assigned to Lopez, Lopez wins the general example:

Democratic Primary		Republican Primary	
	votes		votes
John Carter	4,500		
Jessica Lopez	4,500		
		candidate	votes
		Jessica Lopez (D);	21,100
		Susan Kim (R);	15,000
Republican Primary		Democratic Primary	
	votes		votes
Susan Kim;	14,902		
David Lee	13,011		
Carol Adams	6,773		

Influence via primary: $1/50 = .02$.

Next let us consider alternate Republican primary outcomes. In the following scenario, David Lee has made up the 1,891 vote margin between Lee and Susan Kim.

Democratic Primary	votes			candidate	votes
John Carter	4,500	→		John Carter (D);	21,100
Jessica Lopez	4,450			David Lee (R);	15,000
Republican Primary	votes				
Susan Kim;	14,500	→			
David Lee	14,500				
Carol Adams	6,773				

It is important to note that this model I use in which general election votes are assigned to an alternate primary winner is not intended as a prediction of alternate outcomes. Instead this is simply an analysis tool to quantify voter influence in a sufficiently simple and flexible model in a way that is tied to real data^[9]. Note

[9] We will see that in many cases my analysis finds partisan voter influence to be much greater than Unaffiliated voter influence, and these are cases in which primary elections were very close but general elections were not. Note that in these cases, my findings would be insensitive to slight differences in choices of how to assign general election votes to alternate primary winners, since these are cases in which the general election is won by a comfortable margin anyways.

that in some sense this model is conservative with respect to the additional influence assigned to primary-eligible voters, since the model assumes that the only way influence is exercised through votes in the primary is via the outcome of the primary itself; to the extent that primary voters also indirectly affect vote totals in the general election through the particular choice of which primary candidate advances, primary voters wield additional electoral influence that I am not modeling in my analysis.

For elections with multiple winners—as occurs, for example, in some school board races—I use the same methodology as described above but applied to alternative winning slates of alternative individual winners. The details of this extension are discussed in Appendix B.

5 How I report my results in tables

In Section 9, I report the complete results of my analysis in table form. As an example, here are the first rows of my Table 3, analyzing influence in PA House elections:

Table 1: Influence of 1000 voters

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
District 1	Democratic	0.18	0.84	2.2	0	0	0	0	0.11	0	0
	Republican	0.18	0	0.16	0	0	0	0	0.11	0	0
	Unaffiliated	0.18	0	0.16	0	0	0	0	0.11	0	0

This table shows the result of my voter influence analysis for the elections in this district in each of the years 2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018, and 2020. The rows for voters eligible to vote in the Democratic and Republican primaries consider the aggregate influence from the general election and the relevant primary election, while the third row (Unaffiliated) is my analysis of the influence of a voter eligible only to vote in the general election.

Note that in years 2008, 2010, 2012, 2014, 2018, and 2020, no election (primary or general) in this district was contested, and the influence for every voter type is 0. Let’s take the example of 2006: for this year, my analysis calculates an influence of .00016 for a single voter eligible to vote only in the general election (the margin in that election was 6439, and $1/6439 \approx .00016$), an influence of .00016 for a voter eligible to vote in both the general election and Republican primary (the Republican primary was uncontested in this cycle), and an influence of .0022 for a voter eligible to vote in both the general election and the Democratic primary (the Democratic primary was a three way race, with margins of 979 and 1013 between the 2nd and 3rd place finishers and the winner). To make the table more compact, reported influences in the table are for 1000 voters rather than for 1 voter (as indicated in the header), and these numbers are multiplied by 1000 before entering them in the table. There is a double line between the columns for 2012 and 2014 to serve as a reminder that the legislative districtings changed between these years.

Finally, the last row of this table is as follows:

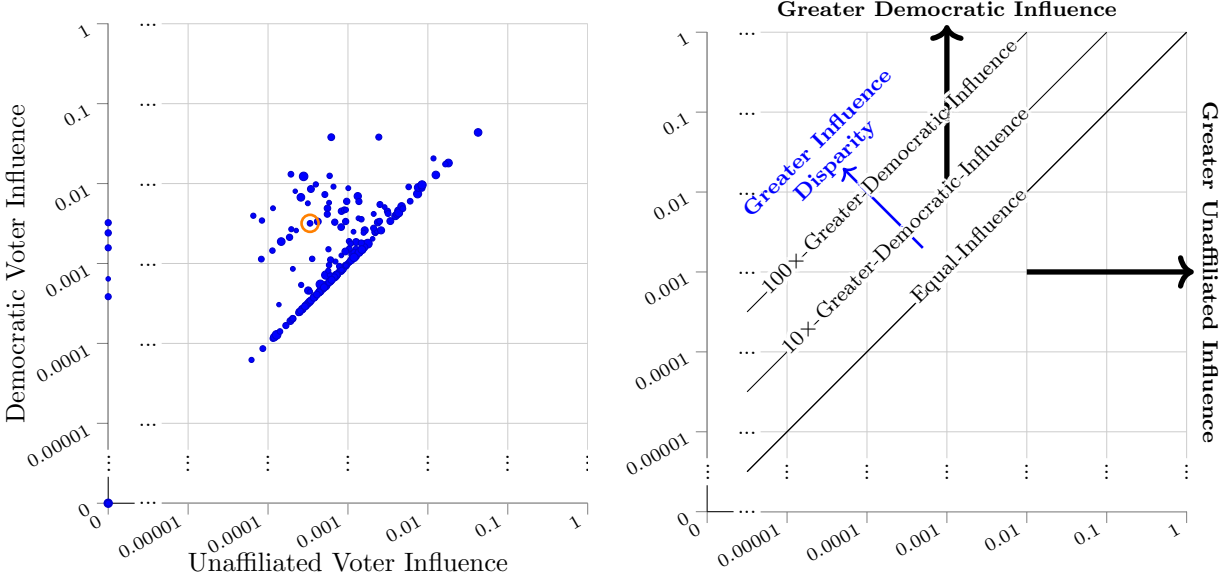
Table 2: Influence of 1000 voters

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
Average	Democratic	0.33	0.25	1.1	0.35	5.4	0.56	0.41	0.45	1.1	0.36
	Republican	0.65	0.21	0.94	0.37	0.50	0.30	0.49	0.47	6.2	0.26
	Unaffiliated	0.24	0.12	0.53	0.17	0.32	0.19	0.15	0.38	0.68	0.14

Here, for each year and each type of voter, I report the average influence of that type of voter across all elections in the table (in this case, across all 203 PA House of Representative districts).

6 How I plot my results

In this section I explain how to read the plots showing the results of my analysis. To explain my plots I will use the example of the results for Pennsylvania House of Representatives elections in the period 2002-2012. Consider the plot on the left below:

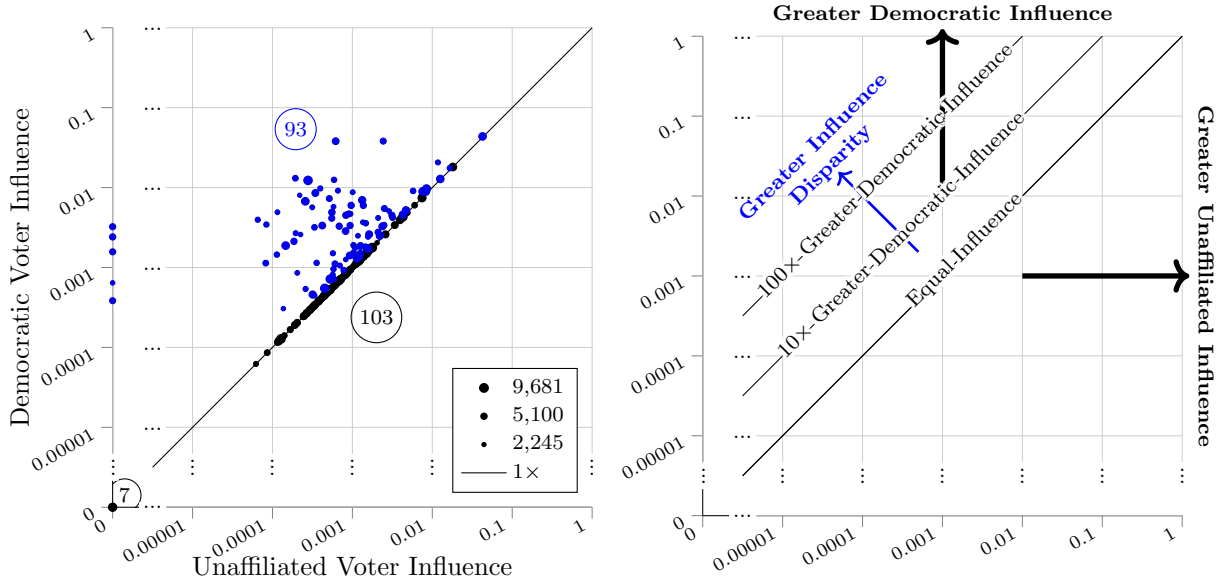


Each dot in this plot represents one district of the PA House of Representatives. The dot is plotted at an x -value corresponding to the total influence (across election years 2002-2012) of an Unaffiliated voter in that district. For example, in the case of District 1, the example used in last section, the x -value of the point would be the sum of the Unaffiliated influences, which is .00034. This is a plot of Democratic influence vs Unaffiliated influence, so the y -value of each point is the total influence (across election years) of a Democratic voter in this district. For example, for District 1, it is .0032 (nearly 10 times larger). In the plot above, I have circled the point corresponding to District 1, which is at the point (.00034,.0032). The area of each dot in this plot is proportional to the number of Unaffiliated voters in the district^[10]. To the right of the plot here I have included a guide which serves as a reminder for the role of the coordinate axes. The higher a point, the more Democratic Influence is associated with that district; the further to the right a point, the more Unaffiliated influence. The main diagonal line thus corresponds to equal influence for Democratic and Unaffiliated voters, and the further from this line a point is, the greater the disparity between the influence of a primary-eligible vs an Unaffiliated voter.

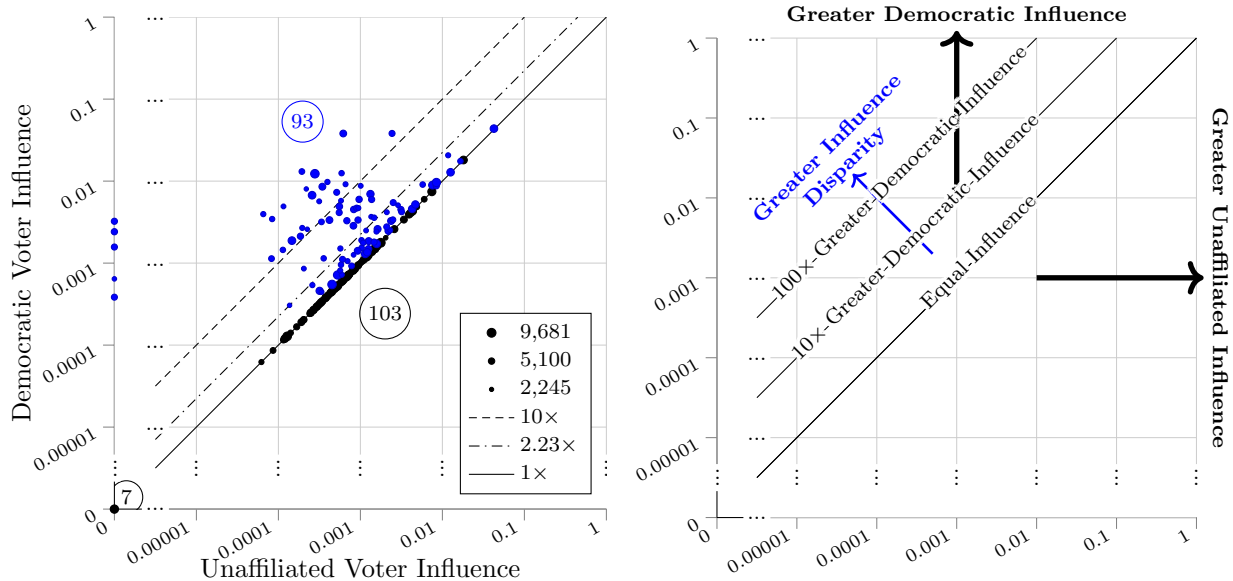
Notice that no points in the plot lie below the main diagonal of the plot. That is because the influence of a Democratic voter is always at least the influence of an Unaffiliated voter, since Democratic voters are eligible to vote in every election an Unaffiliated voter is eligible to vote in. Points exactly on this main diagonal correspond to districts in which Democratic influence is equal to Unaffiliated influence; these are points corresponding to districts for which no Democratic primary in the decade was contested in that district and thus for which Unaffiliated voters have the same influence as Democratic affiliated voters. Some of these districts are actually at the point (0,0); these are districts where neither the Democratic primary nor the general election were contested, throughout the decade. On the other hand, the further from this line a point is, the greater disparity there is between the Democratic and Unaffiliated influence calculated by analysis for the corresponding district. In the following version of the plot, I have added the diagonal line to this plot and color coded the points; they are black if they are on this line (including if they are at (0,0)). The circled black label near the point (0,0) indicates the number of districts plotted at that point; in this case there are 7. The circled black label near the line indicates the number of other districts that are on the diagonal line (but not at (0,0))—in this case there are 103. The legend refers to this as the ‘1×’ line because it is the line of districts where Democratic influence is 1×—that is, 1 times, or the same as—Unaffiliated influence. The legend also gives references for how the dot size corresponds to the number of Unaffiliated voters in a district^[11].

^[10]Proportional scaling of dots based on number of Unaffiliated registered voters is done just for plots for State House and State Senate elections. For other elections, fixed dot sizes are used. For plots for the years 2002-2012, I use 2010 registration data. For plots for the years 2014-2020, I use 2020 registration data.

^[11]The largest number here is the maximum number of Unaffiliated voters in any district, the smallest number is the minimum, and the middle number is the average. See Section A Voter Registration data used.



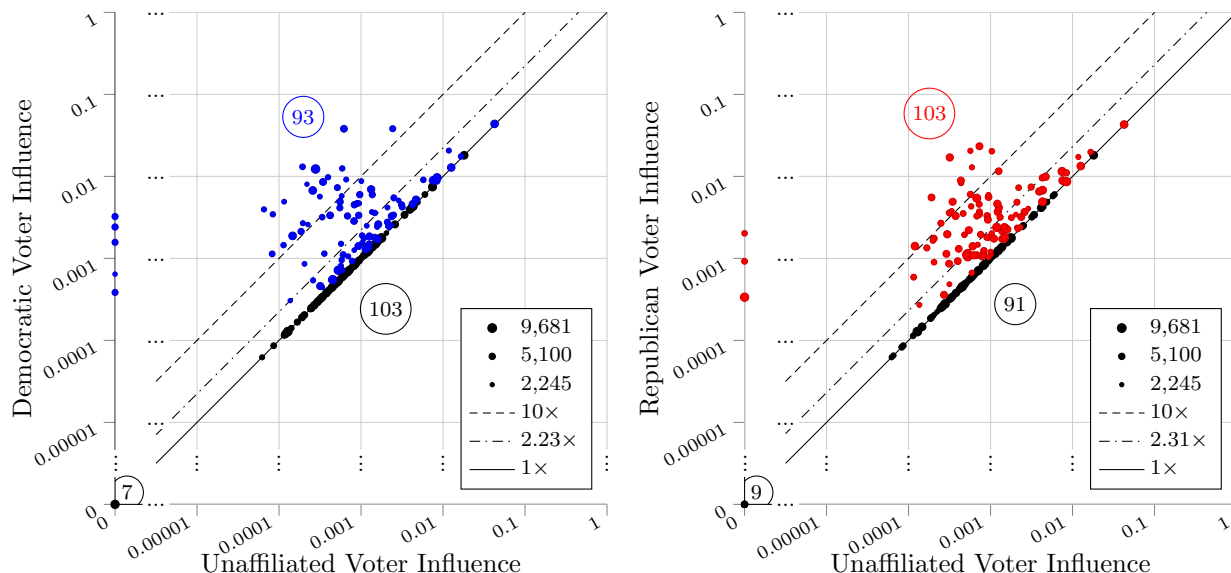
There are a further 94 (circled blue label) other points in this plot, and they are colored blue rather than black. These correspond to districts in which the Democratic voters had more influence than Unaffiliated voters, and are labeled blue. How much more influence Democratic voters had in the district corresponding to a given point can be inferred by how far above the diagonal $1\times$ line the point representing the district is; each step in the grid behind the plotted points corresponds to a factor of 10 greater influence for a Democratic voter vs an Unaffiliated voter^[12]. In particular, in the following version of the figure, I have added two more diagonal lines to the plot. The dashed black line is the line representing a factor-of-ten advantage in influence for a Democratic voter over an Unaffiliated one. Any point at or above this line corresponds to a district where my analysis finds a Democratic voter has at least ten times the influence as an Unaffiliated voter. The dash-dot line in this plot corresponds to a factor of 2.23 of advantage: any point at or above this line corresponds to a district in which a Democratic voter has at least 2.23 times the influence as an Unaffiliated voter. The value 2.23 is used in this plot because it is the line which divides the blue points into two groups; half the points are above this $2.23\times$ line, and half are below:



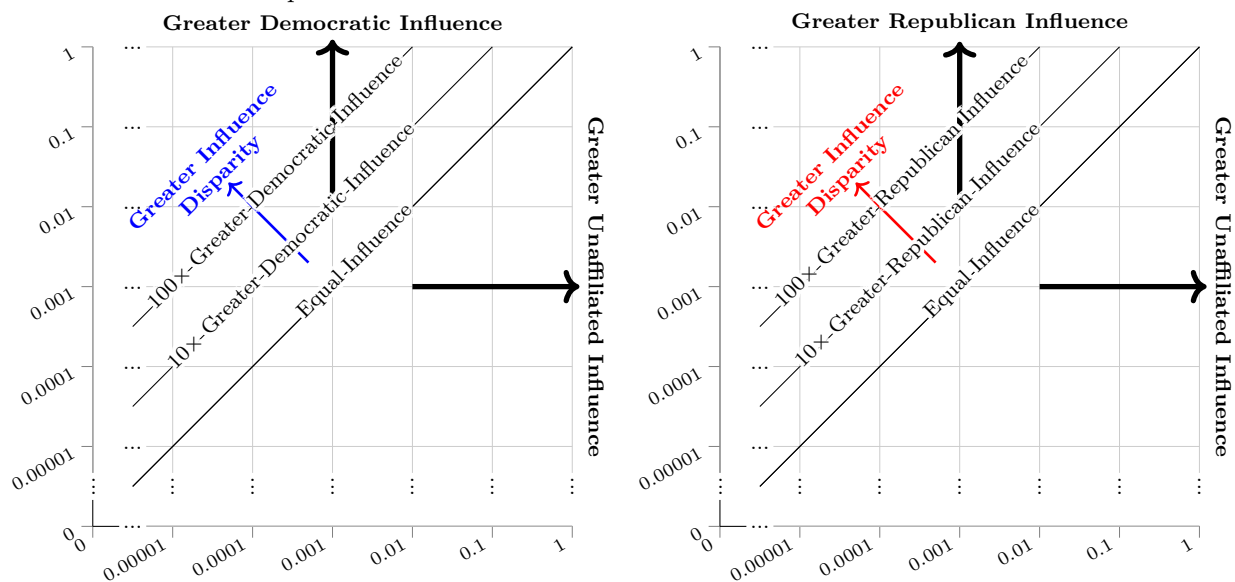
^[12]Note that the plot is using a *logarithmic scale*; each fixed step in the grid of the plot corresponds to a multiplicative change in scale rather than an additive change. For example, grid lines corresponds multiple-of-10 effects.

Note that there is also a vertical line of blue points at the far left of the plot: these correspond to districts where Unaffiliated voters had no influence at all throughout the decade considered for these districts but Democratic voters did have influence.

Finally, for each collection of elections I considered, I show two plots: one plotting *Democratic voter* influence against Unaffiliated voter influence, as in the plot above, and one plotting *Republican voter* influence against Unaffiliated voter influence. The result is a pair of plots like the two below:



The axes for the two plots are as below:



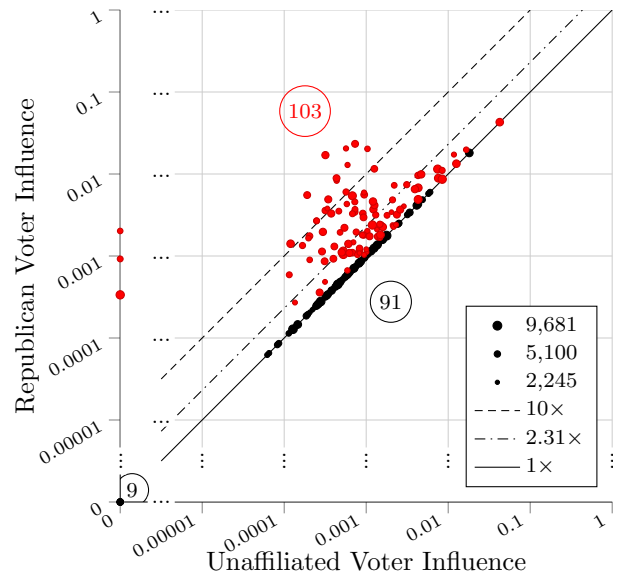
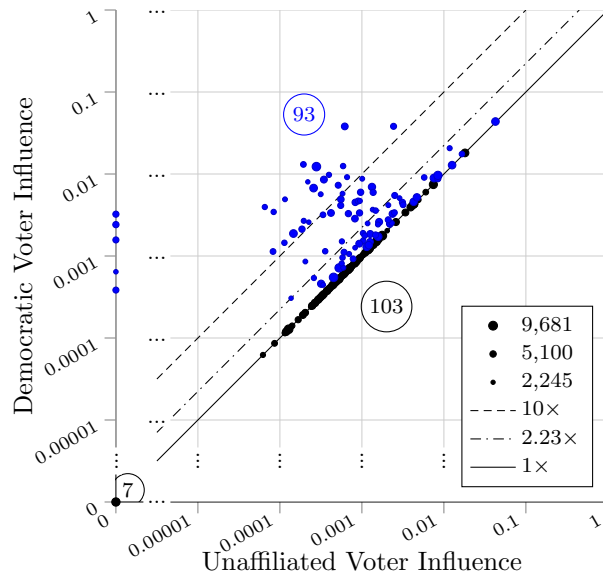
In both plots, black points are points on the line where the partisan voters in question have no advantage in influence over Unaffiliated voters because no primary elections were contested in the years considered. In the Democratic vs Unaffiliated plot, I color points blue when they are strictly above this line (Democratic voters have more influence than Unaffiliated voters), and in the Republican vs Unaffiliated plot, I color such points red.

7 Plots of the results of my analysis

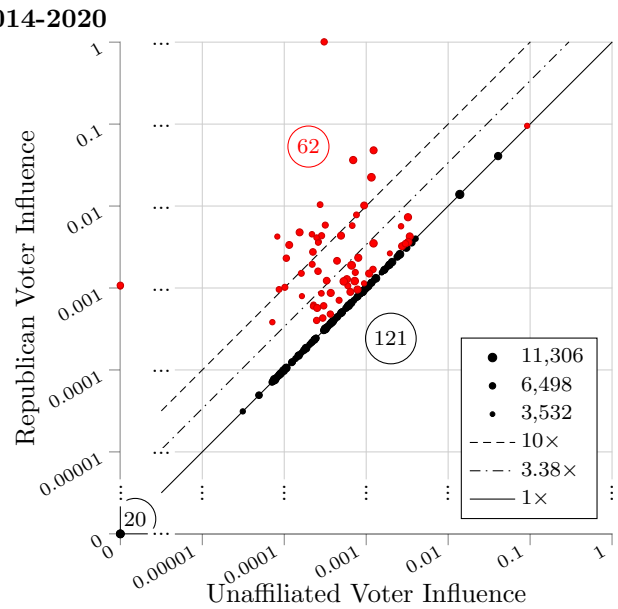
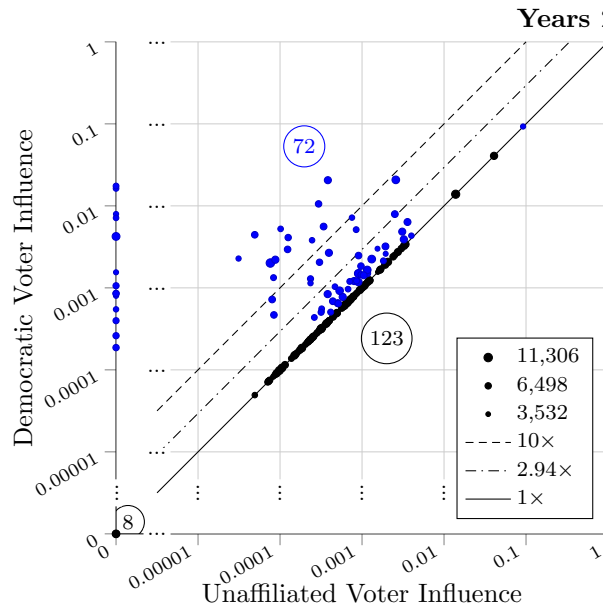
In this section I plot the results of my analysis for each collection of elections I considered.

7.1 PA House of Representatives

7.1.1 2002-2012

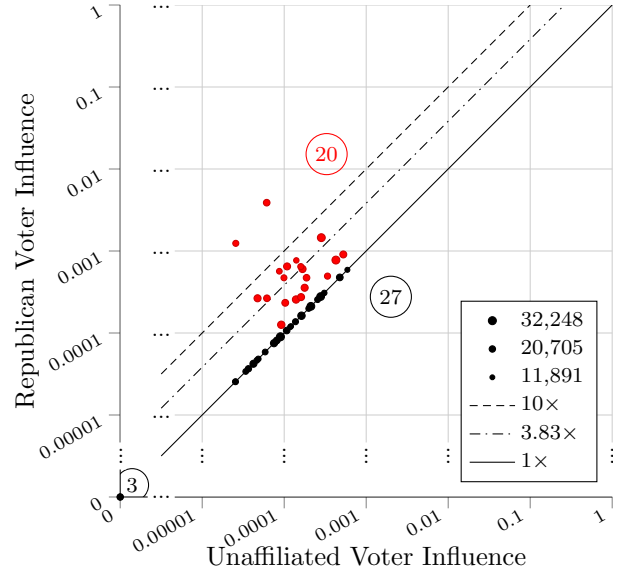
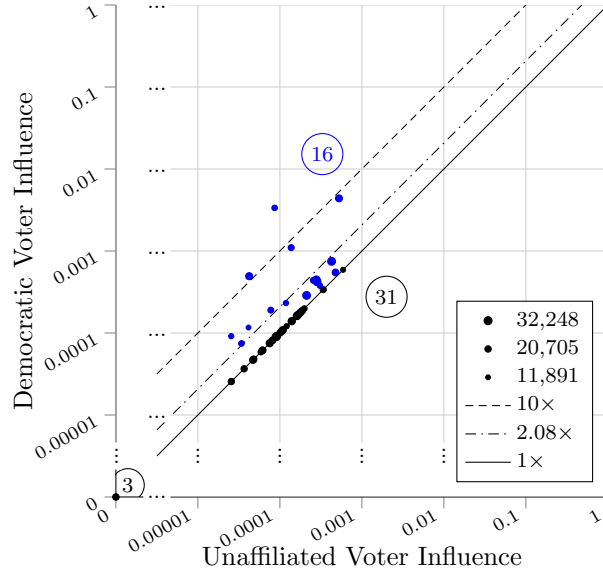


7.1.2 2014-2020

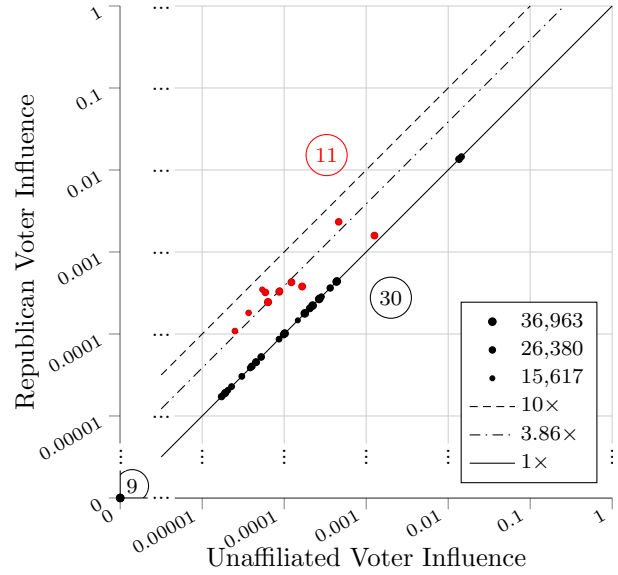
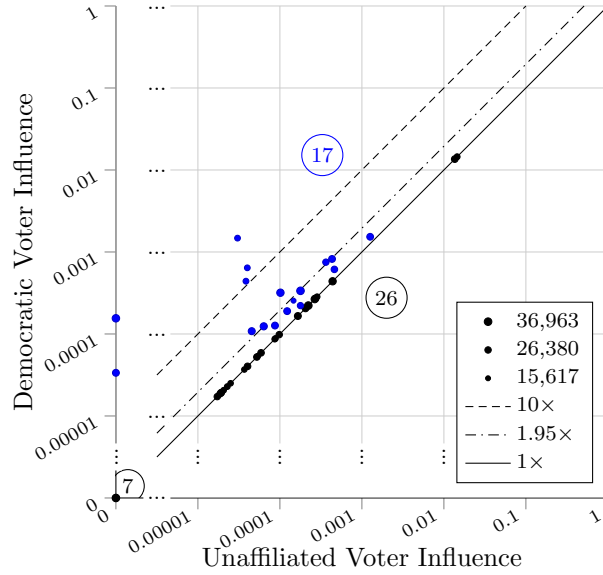


7.2 PA Senate

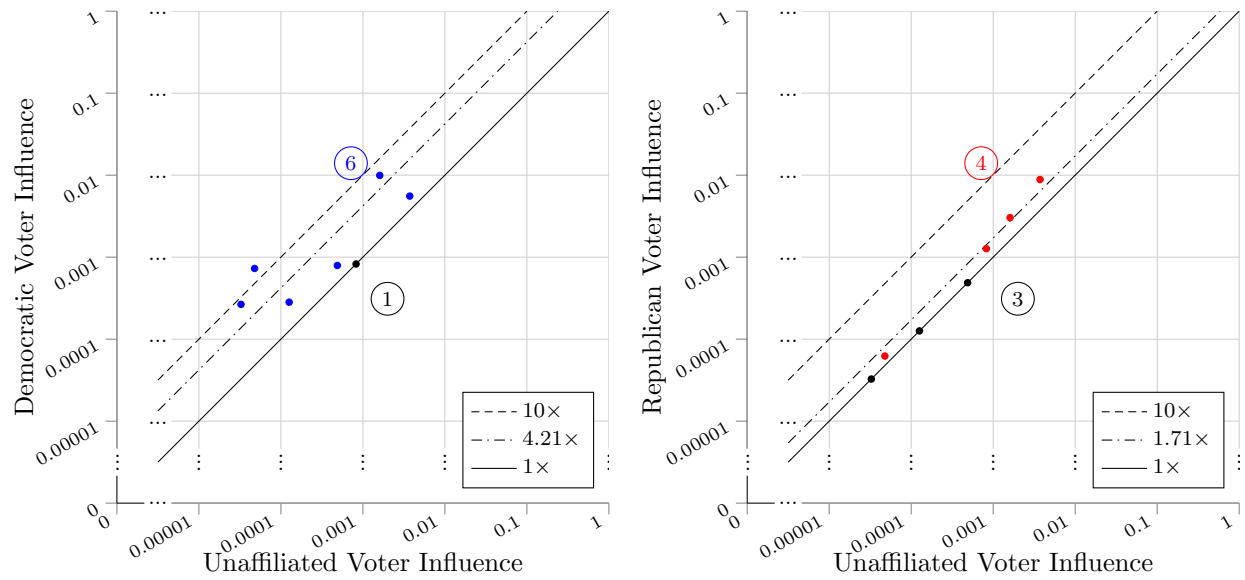
7.2.1 2002-2012



7.2.2 2014-2020

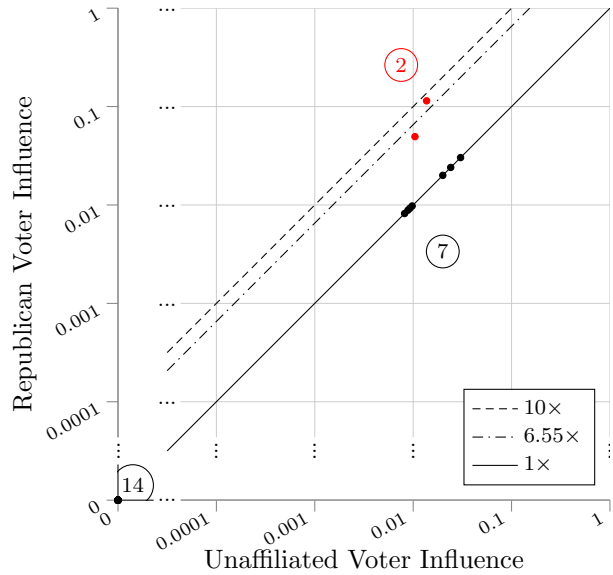
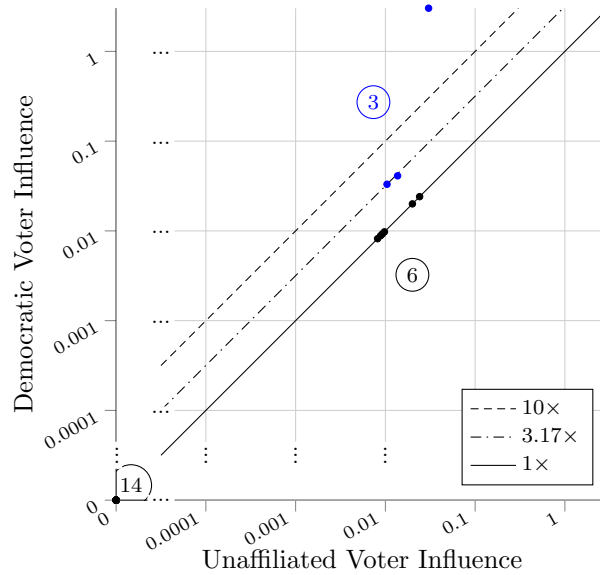


7.3 Mayoral and County executive races

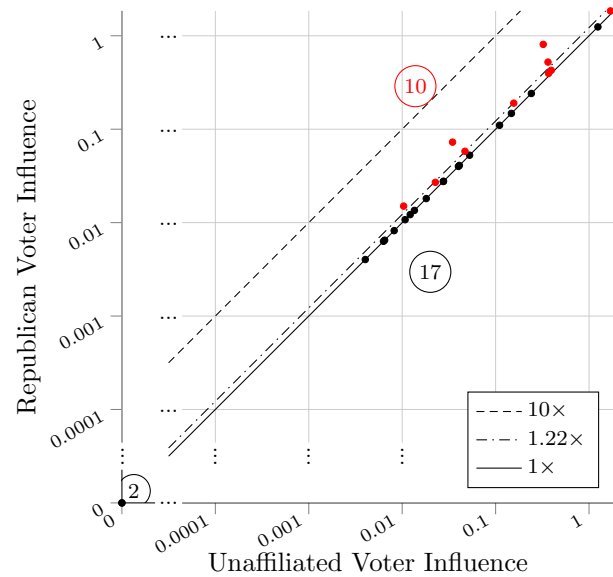
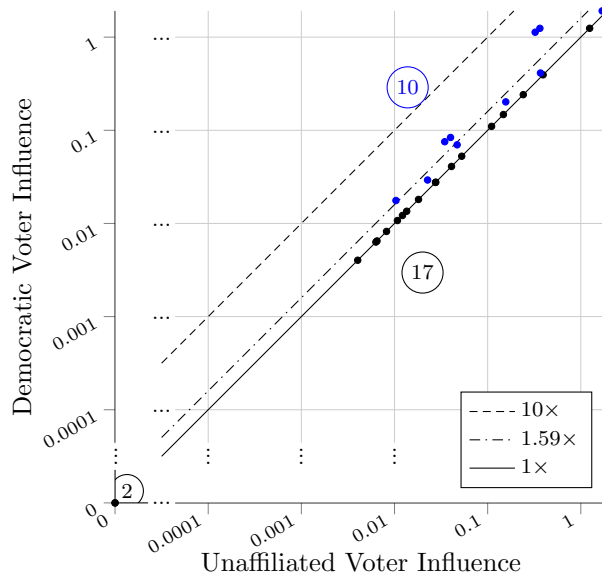


7.4 School Board Races

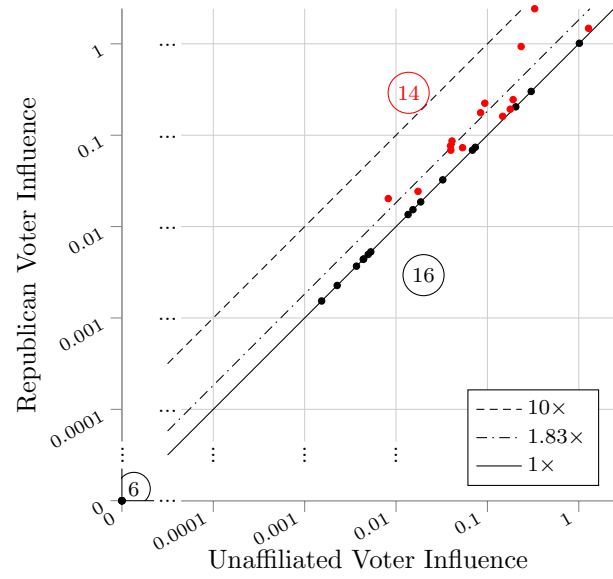
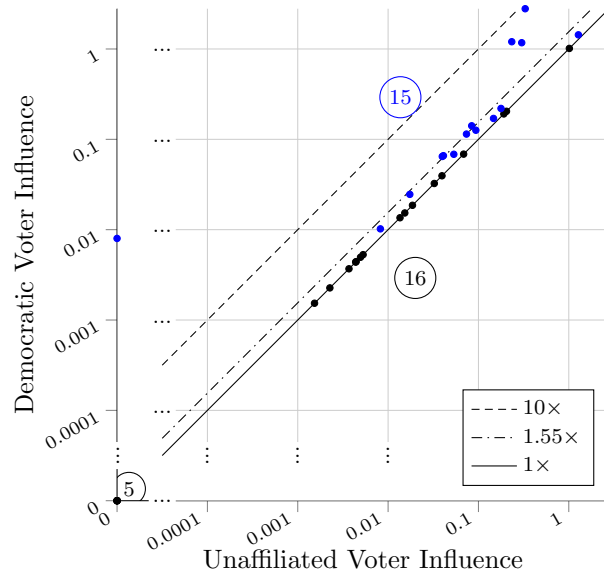
7.4.1 Lycoming County



7.4.2 Montgomery County



7.4.3 Delaware County

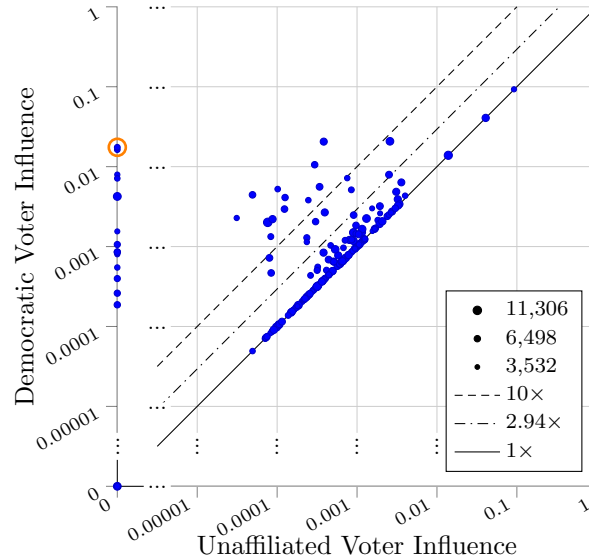


8 Results Through the Lens of Examples

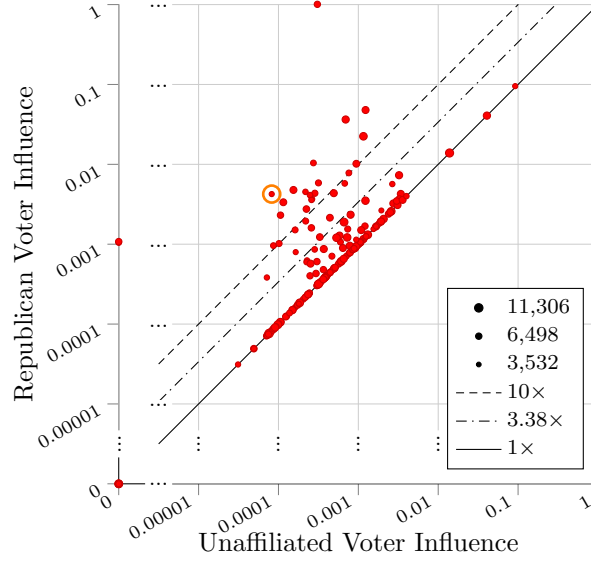
In this section I discuss some individual districts and offices that appear in my results, to contextualize the results of my analysis.

First, let us consider the example of District 36 in the period from 2002-2012. As can be seen in my results tables, my analysis assigns 0 influence to every voter type in this district throughout this 12 year period. This corresponds to the fact that no primary or general election was ever contested in this period; Democrat Harry Readshaw II held this seat unopposed throughout the period. Similarly, my analysis assigns zero influence to the three types of voters throughout this period for District 40, which was held unopposed during this period by Republican John A. Maher. Both of these districts thus appear in the corresponding plots at the dot in the bottom left corner.

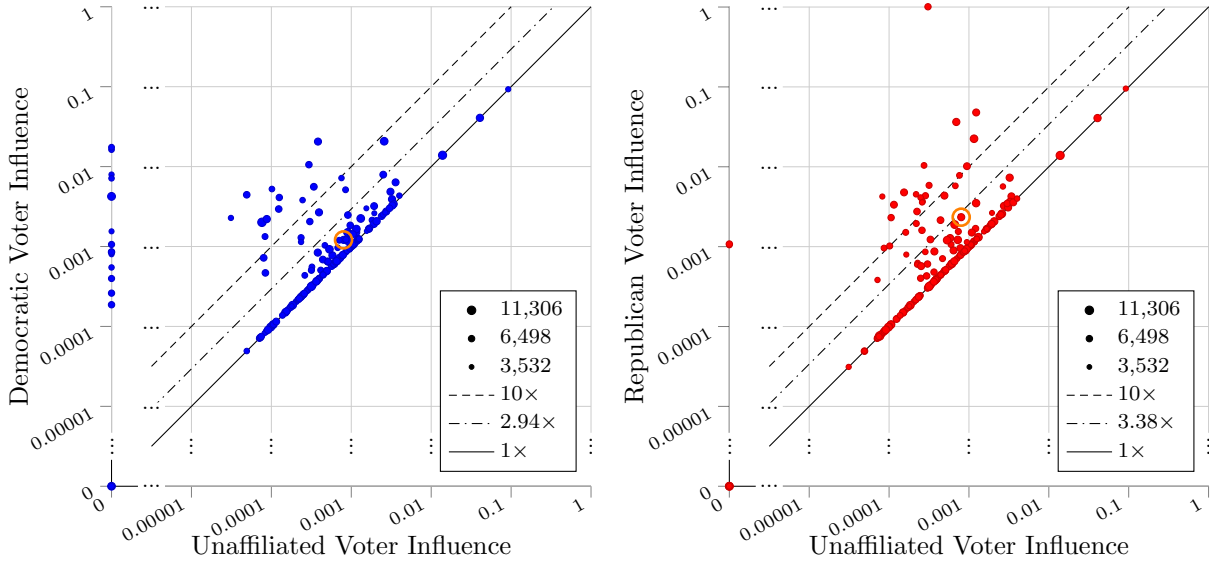
Consider now the case of District 197 in the period 2014-2020; the point corresponding to this district is circled in the plot below. My analysis of this district assigns no influence to Unaffiliated (or Republican) voters, and, aggregated over the years 2014-2020, an influence of .175 to Democratic voters. In both 2014 and 2018, there was a competitive primary to determine the Democrats nominee; Leslie Acosta won this in 2014 in a 4-way race with 2,871 votes out of 5,836; the 2nd place finisher had 1,345 votes. In 2018, Danilo Burgos won his primary in a 3-way race by a margin of just 80 votes; the three candidates' vote totals were 1,317, 1,237, and 1,013. On the other hand, in every one of these cycles, the Democrat was unopposed in the general election, giving 0 influence in my analysis to voters not eligible to vote in the Democratic primary.



Consider on the other hand District 82 in the period 2014-2020; the corresponding point is circled below. In this district, the only year in which any primary or general election was contested in the period is the year 2018. In this year, Republican Johnathan Hershey defeated Democrat Elizabeth Book 15,406 votes to 3,258 votes, a margin of 12,148 votes. This corresponds to Unaffiliated voter influence of $1/12148 \approx .0000823$. But voters eligible to vote in the Republican primary chose from nine candidates; of 7,461 total votes, 2,603 were cast for Hershey, with 1,135, 994, and 992 votes cast for his next closest challengers Junkin, Leach, and Makle. Thus the final outcome could be changed in our model to Junkin by changing just $2603 - 1135 = 1468$ votes, to Leach by changing just $2603 - 994 = 1609$ votes, etc. The Republican influence I calculate is thus increased by $1/1468 + 1/1609 + \dots$ (with an additional term in the sum for each of the remaining nine candidates) and works out to .0042, roughly 50 times the influence of an Unaffiliated voter.



Next we consider the example of District 106 in the same period 2014-2020. I have circled the point corresponding to this district in each of the plots below:



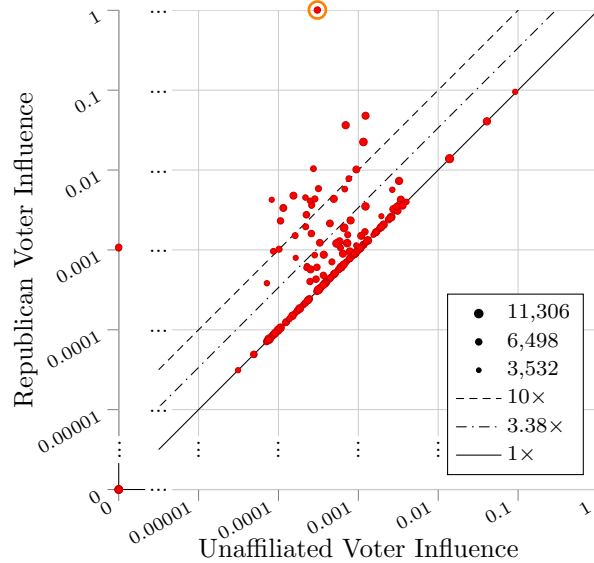
This district saw contested general elections just in the last two cycles of this period. Republican Thomas Mehaffie won both, defeating Democrat Lindsay Drew by 19,283 votes to 16,714 in 2020 (a margin of 2,569 votes), and defeating Democrat Jill Linta 14,513 votes to 12,079 votes (a margin of 2,434 votes) in 2018. Thus the total influence I assign to an Unaffiliated voter in this period comes just from these two election cycles and is equal to $1/2569 + 1/2434 \approx .0008$. On the other hand, Democratic voters were eligible to vote in a contested primary in 2018, in which Jill Linta defeated Robert Myers III by a margin of just 170 votes. Thus while an Unaffiliated voter had just one alternative candidate to the actual winner in 2018 (Jill Linta, by a margin of 2,434 votes), a voter eligible to vote in the Democratic primary had two alternative candidate (Jill Linta, by a margin of 2,434 votes in the general election, and Robert Myers III, by a margin of 2,434 votes in the general election and 170 in the primary election). Thus in 2018, the influence I assign to a Democratic voter is $1/2434 + 1/2434 \approx .0008$ ^[13]; together with the influence calculated from the 2020 general election, a Democratic voter is assigned total influence .0012 by my analysis, across the 2014-2020

^[13]Note that if using the sum-margins methodology I use in my robustness checks section, this calculation would instead be $1/2434 + 1/(2434 + 170)$, but this makes little difference and is still $\approx .0008$.

period. A Republican voter in this district was eligible to vote in contested Republican primaries in 2016 and 2020. In 2016, Thomas Mehaffie defeated Jonathan Keeler by a margin of 3,068 votes and went on win the general election unopposed, giving a Republican eligible voter an influence of $1/3068 \approx .00033$ in my model while Unaffiliated influence is 0 for this year. In 2020, when the general election margin was 2,569, the Republican primary was a three-way race in which Mehaffie received 3,976 out of a total of 8,629 votes, with margins of 1621 and 1678, respectively, to the 2nd and 3rd place finishers. This primary gives Republican voters additional influence $\frac{1}{1621} + \frac{1}{1678}$ in my analysis, giving a Republican voter total influence of $\frac{1}{2569} + \frac{1}{1621} + \frac{1}{1678} \approx .0016$ for the year 2020. We summarize these influences by voter type and year below:

		2014	2016	2018	2020	Total
District 106	Democratic	0	0	0.00082	0.00039	.0012
	Republican	0	0.00033	0.00041	0.0016	.0023
	Unaffiliated	0	0	0.00041	0.00039	.0008

Finally, to understand what the extremes on our plots really correspond to, we consider the example District 193, highlighted in the plot for 2014-2020 below:



Republicans held this seat reliably in this period; the general election was uncontested in 2020, and in 2014, 2016, and 2018, the Republican candidate won 12,889 votes to 4,534 votes (margin: 8,355), 21,306 votes to 7,345 votes (margin: 13,961), and 16,393 votes to 7,742 votes (margin: 8,651), respectively. Thus the total influence I assign to an Unaffiliated voter across this period of four elections is $\frac{1}{8355} + \frac{1}{13961} + \frac{1}{8651} \approx .0003$ (and this is the x -axis value of the highlighted point above). On the other hand, voters eligible to vote in the Republican primary saw contested primaries in both 2014 and 2018 (in both cases with winners that went on to comfortably win the general election). In fact, the Republican primary in 2018 was a four-way race in which the winner (Torren Ecker) defeated the 2nd place finisher by a single vote^[14], giving Republican voters influence $1/1 = 1$ just from this single alternative in the year 2018. Aggregating influences from the 2014 and 2018 primaries and the general election results, total Republican influence over this period is just over 1 (≈ 1.007), explaining the position of the point corresponding to this district in the plot above.

^[14]Torren Ecker, Vincent Cockley, John Wardle, and Andrew Myers received 1,784, 1,783, 1,537, and 1,404 votes, respectively.

9 Results Tables

9.1 Results for the PA House of Representatives

Table 3: Influence of 1000 voters

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
District 1	Democratic	0.18	0.84	2.2	0	0	0	0	0.11	0	0
	Republican	0.18	0	0.16	0	0	0	0	0.11	0	0
	Unaffiliated	0.18	0	0.16	0	0	0	0	0.11	0	0
District 2	Democratic	3.2	0	0	0	0	0	0	0.14	1.9	0
	Republican	0	0	0	0	0	0	0	0.29	0.32	0
	Unaffiliated	0	0	0	0	0	0	0	0.14	0.16	0
District 3	Democratic	0.095	0	7.3	0.23	0.61	0.50	0.17	0.15	0	0.12
	Republican	0.095	0	8.9	0.45	0.61	1.0	0.17	0.15	0	0.12
	Unaffiliated	0.095	0	7.0	0.23	0.61	0.50	0.17	0.15	0	0.12
District 4	Democratic	0.22	5.6	0	0.11	0.12	0	0.22	0	0	0
	Republican	0.22	5.6	0	0.11	0.12	0	0.22	0	0	0
	Unaffiliated	0.22	5.6	0	0.11	0.12	0	0.22	0	0	0
District 5	Democratic	0	0.096	0.71	0.13	0	0.37	0.21	0	0	0.076
	Republican	0	0.096	2.6	0.13	0	0.37	4.3	0	0	0.076
	Unaffiliated	0	0.096	0.71	0.13	0	0.37	0.21	0	0	0.076
District 6	Democratic	0.31	0.16	0.27	0	0	0	0.19	0.17	0	0.10
	Republican	0.31	0.16	2.6	0.59	0	0	0.19	0.42	0	0.10
	Unaffiliated	0.31	0.16	0.27	0	0	0	0.19	0.17	0	0.10
District 7	Democratic	0.38	0	0	0	0	0	0	0	0	0
	Republican	0	0	0	0	0	0	0	0	0	0
	Unaffiliated	0	0	0	0	0	0	0	0	0	0
District 8	Democratic	0.17	0	0	0	0	0	0	0.11	0.10	0.063
	Republican	1.3	0	0	0	0	0	10	0.11	0.10	0.22
	Unaffiliated	0.17	0	0	0	0	0	0	0.11	0.10	0.063
District 9	Democratic	0	0.28	0	0	0	0.26	0.20	0	0.35	0.40
	Republican	0	0	0	0	0	0.26	0.39	0	0.35	0.40
	Unaffiliated	0	0	0	0	0	0.26	0.20	0	0.35	0.40
District 10	Democratic	0	0	36	0.34	1.2	0.70	0	0.22	0.086	0.29
	Republican	0	0	0.21	0.34	1.2	0.70	0	0.69	0.086	0.29
	Unaffiliated	0	0	0.21	0.34	1.2	0.70	0	0.22	0.086	0.29
District 11	Democratic	1.6	0.52	0.16	0.10	0	0	0	0	0.090	0.072
	Republican	4.3	2.2	0.70	0.10	0	0	0	0	0.090	1.4
	Unaffiliated	1.6	0.30	0.16	0.10	0	0	0	0	0.090	0.072
District 12	Democratic	0.15	0	0	0.082	0.075	0	0.21	0.078	0.39	0.098
	Republican	0.15	0	0	0.63	0.075	0	0.21	0.45	0.19	0.42
	Unaffiliated	0.15	0	0	0.082	0.075	0	0.21	0.078	0.19	0.098
District 13	Democratic	0.29	0.20	0.56	2.4	0.43	0.46	0.24	0.14	0.47	0.16
	Republican	0.75	0.58	2.2	2.4	0.43	0.46	0.24	0.14	0.47	0.16
	Unaffiliated	0.29	0.20	0.56	2.4	0.43	0.46	0.24	0.14	0.47	0.16
District 14	Democratic	0	0	1.1	0.22	0.17	0	0	0	0.15	0.071
	Republican	0	0	20	0.22	0.17	0	0	0	0.15	0.071
	Unaffiliated	0	0	0.65	0.22	0.17	0	0	0	0.15	0.071
District 15	Democratic	2.2	0	4.9	1.5	0.38	0.16	0.14	0.25	0.17	0.069
	Republican	0.83	0	3.4	1.2	0.19	0.16	0.14	0.13	0.17	0.069
	Unaffiliated	0.83	0	3.4	1.2	0.19	0.16	0.14	0.13	0.17	0.069
District 16	Democratic	0.44	3.6	0	0.40	0	0.29	0	0	0	0.24

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Republican	0.87	0.35	0	0	0	0.58	0	0	0	0.24
	Unaffiliated	0.44	0.17	0	0	0	0.29	0	0	0	0.24
District 17	Democratic	0	0	0.92	0.13	0	0	0.35	0.088	0	0
	Republican	0	0	0.92	0.13	0	0	3.6	0.088	0	0
	Unaffiliated	0	0	0.92	0.13	0	0	0.17	0.088	0	0
District 18	Democratic	0.18	0.16	0.21	0.11	0	0	0	0	0.34	0.67
	Republican	0.18	0.16	0.21	0.11	0	0	0	0	0.34	0.67
	Unaffiliated	0.18	0.16	0.21	0.11	0	0	0	0	0.34	0.67
District 19	Democratic	1.4	0	0	0.17	0.82	0	0.13	0.41	3.2	0.40
	Republican	0	0	0	0	0	0	0.13	0	0	0
	Unaffiliated	0	0	0	0	0	0	0.13	0	0	0
District 20	Democratic	0.27	0	2.2	0.054	2.2	1.2	4.1	0.057	0.77	0.68
	Republican	0.27	0	0.23	0.054	0.34	0.065	0.28	0.057	0	0
	Unaffiliated	0.27	0	0.23	0.054	0.34	0.065	0.28	0.057	0	0
District 21	Democratic	0.18	0.055	0.96	7.4	0	0	0	0	0.38	0.084
	Republican	0.18	0.055	0	0.11	0	0	0	0	0	0.084
	Unaffiliated	0.18	0.055	0	0.11	0	0	0	0	0	0.084
District 22	Democratic	0.14	0.94	0.42	0	0	1.8	2.4	0	0	18
	Republican	0.14	0	0.42	0	0	0.12	0.38	0	0	0
	Unaffiliated	0.14	0	0.42	0	0	0.12	0.38	0	0	0
District 23	Democratic	0	0	0	0.046	0.082	0	0	0	0.049	0.049
	Republican	0	0	0	0.046	0.082	0	0	0	0.049	0.049
	Unaffiliated	0	0	0	0.046	0.082	0	0	0	0.049	0.049
District 24	Democratic	0.36	0	11	0.39	0.58	0.45	0.34	0.18	0.33	0
	Republican	0.11	0	0.085	0	0	0	0	0	0	0
	Unaffiliated	0.11	0	0.085	0	0	0	0	0	0	0
District 25	Democratic	0.13	0.089	4.8	0	0.62	0.35	0.27	0.13	0.27	0.18
	Republican	0.13	0.089	0.18	0	0.62	0.71	0.27	0.13	0.27	0.18
	Unaffiliated	0.13	0.089	0.18	0	0.62	0.35	0.27	0.13	0.27	0.18
District 26	Democratic	0.16	0	0.092	0.76	0.34	0.25	0	0	0.66	0.76
	Republican	0.16	0	0.092	0.76	1.0	0.25	0	0	0.66	0.39
	Unaffiliated	0.16	0	0.092	0.76	0.34	0.25	0	0	0.66	0.39
District 27	Democratic	0.20	0	1.6	2.2	0.13	0	0.26	0	0	0
	Republican	0.20	0	0.16	0.069	0.13	0	0	0	0	0
	Unaffiliated	0.20	0	0.16	0.069	0.13	0	0	0	0	0
District 28	Democratic	0	0.062	0.084	0.056	0.065	0	0	0.088	0.33	0.30
	Republican	0	0.062	0.084	0.056	0.065	0	0	0.088	0.33	0.79
	Unaffiliated	0	0.062	0.084	0.056	0.065	0	0	0.088	0.33	0.30
District 29	Democratic	0.31	0.13	0.32	0.29	0.14	0.17	0	0.12	0.72	0.25
	Republican	2.7	0.43	1.0	0.15	0.14	0.17	0	0.12	0.72	0.67
	Unaffiliated	0.31	0.13	0.32	0.15	0.14	0.17	0	0.12	0.72	0.25
District 30	Democratic	0.11	0	0.58	0	0	0.21	0	0	2.0	0.49
	Republican	0.11	0	3.0	0	0	0.21	0	0	0.66	0.24
	Unaffiliated	0.11	0	0.58	0	0	0.21	0	0	0.66	0.24
District 31	Democratic	0.25	0.21	2.3	0.48	6.2	0.18	0.27	13	0.15	0.12
	Republican	0.25	0.21	1.2	0.48	6.2	0.36	0.27	13	0.15	0.12
	Unaffiliated	0.25	0.21	1.2	0.48	6.2	0.18	0.27	13	0.15	0.12
District 32	Democratic	0	0	0	0.071	0	0.070	0.33	0	0.46	0.27
	Republican	0	0	0	0.071	0	0.070	0	0	0	0
	Unaffiliated	0	0	0	0.071	0	0.070	0	0	0	0
District 33	Democratic	0.20	0	2.4	1.7	0.40	0.20	1.0	0	0.38	1.1
	Republican	0.20	0	2.4	1.7	0.40	0.20	1.0	0	0.38	1.1

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Unaffiliated	0.20	0	2.4	1.7	0.40	0.20	1.0	0	0.38	1.1
District 34	Democratic	0.082	0	0.80	0	0.25	0	0	0	0.28	0.12
	Republican	0.082	0	0	0	0	0	0	0	0	0
	Unaffiliated	0.082	0	0	0	0	0	0	0	0	0
District 35	Democratic	3.4	0.059	1.4	0.056	0	0	0.17	0.15	0	0
	Republican	0	0.059	0	0.056	0	0	0.17	0.15	0	0
	Unaffiliated	0	0.059	0	0.056	0	0	0.17	0.15	0	0
District 36	Democratic	0	0	0	0	0	0	0.76	0	0	2.2
	Republican	0	0	0	0	0	0	0	0	0	0.12
	Unaffiliated	0	0	0	0	0	0	0	0	0	0.12
District 37	Democratic	0	0	0.13	0	0	0.075	0.10	0	0.087	0.062
	Republican	0	0	0.84	0	0	0.91	0.10	0.15	0.087	0.062
	Unaffiliated	0	0	0.13	0	0	0.075	0.10	0	0.087	0.062
District 38	Democratic	0.46	0.78	1.2	0.24	0	0	0	0.099	0	0.23
	Republican	0	0	0.11	0.081	0	0	0	0.099	0	0.23
	Unaffiliated	0	0	0.11	0.081	0	0	0	0.099	0	0.23
District 39	Democratic	0.30	0.15	0.44	0.59	6.6	9.4	0.25	0.084	0.32	0.11
	Republican	0.30	0.15	0	0.59	8.9	9.8	0.25	0.084	0.32	7.1
	Unaffiliated	0.30	0.15	0	0.59	6.6	8.9	0.25	0.084	0.32	0.11
District 40	Democratic	0	0	0	0	0	0	0	0.089	0.49	0.11
	Republican	0	0	0	0	0	0	0	0.089	2.0	0.11
	Unaffiliated	0	0	0	0	0	0	0	0.089	0.25	0.11
District 41	Democratic	0.15	0.10	0.075	0	0.13	0.15	0.24	0.12	0.26	0.16
	Republican	0.66	0.10	0.36	0	0.13	0.15	0.24	0.12	0.26	0.33
	Unaffiliated	0.15	0.10	0.075	0	0.13	0.15	0.24	0.12	0.26	0.16
District 42	Democratic	0.18	0	0.21	0.093	0.19	0	0	0	0	0.072
	Republican	0.18	0	0.63	0.093	0.19	0	0	0	0	0.072
	Unaffiliated	0.18	0	0.21	0.093	0.19	0	0	0	0	0.072
District 43	Democratic	0	0.072	0	0	0	0.12	0.14	0.10	0.16	0
	Republican	5.3	0.072	0	0	0	0.12	0.14	0.10	0.16	0
	Unaffiliated	0	0.072	0	0	0	0.12	0.14	0.10	0.16	0
District 44	Democratic	0	0.18	0.21	0.11	0.10	0.12	0	0	0.98	0.25
	Republican	0	0.18	0.21	0.11	0.10	0.12	0	0	47	0.71
	Unaffiliated	0	0.18	0.21	0.11	0.10	0.12	0	0	0.98	0.25
District 45	Democratic	0.37	0	0	0	0.33	0.42	0.25	0	0	0.12
	Republican	0.17	0	0	0	0.33	0.10	0.25	0	0	0.23
	Unaffiliated	0.17	0	0	0	0.33	0.10	0.25	0	0	0.12
District 46	Democratic	0.62	1.8	2.4	0.13	0.58	0	0.83	0.29	0.62	0.10
	Republican	0.62	0.60	0.59	0.13	0.58	0	0.41	0.15	0.31	0.10
	Unaffiliated	0.62	0.60	0.59	0.13	0.58	0	0.41	0.15	0.31	0.10
District 47	Democratic	0.083	0	0	0	0.094	0.28	0	0	0.14	0.096
	Republican	16	0	0.36	0	0.094	0.14	0	0	0.14	0.096
	Unaffiliated	0.083	0	0	0	0.094	0.14	0	0	0.14	0.096
District 48	Democratic	0.28	0.15	0.079	0	1.3	0	0.33	0	0.72	0.17
	Republican	0.28	0.15	0.079	0	1.9	0	0.33	0	0.36	0.17
	Unaffiliated	0.28	0.15	0.079	0	0.97	0	0.33	0	0.36	0.17
District 49	Democratic	0	0.34	1.1	0.28	0.96	0.93	0.92	0.48	91	0.13
	Republican	0	0.10	0.40	0	0.67	0.50	0.51	2.9	91	0.97
	Unaffiliated	0	0.10	0.20	0	0.67	0.50	0.51	0.48	91	0.13
District 50	Democratic	0.44	0	1.6	0.47	2.3	0.20	0	0.61	0.39	0.56
	Republican	0	0	1.9	0.47	1.2	0.40	0	0.61	0.39	0.56
	Unaffiliated	0	0	0.96	0.47	1.2	0.20	0	0.61	0.39	0.56

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
District 51	Democratic	0.75	1.2	1.7	0.32	0	0.19	0	0.65	0.47	0.094
	Republican	0.30	1.2	0.55	0.14	0	0.19	0	0.65	0.47	0.094
	Unaffiliated	0.30	1.2	0.28	0.14	0	0.19	0	0.65	0.47	0.094
District 52	Democratic	0	0.70	5.0	0	0	0	2.4	0.28	0.22	0.081
	Republican	0	0.15	0.34	0	0	0	1.1	0.14	0.22	0.081
	Unaffiliated	0	0.15	0.17	0	0	0	1.1	0.14	0.22	0.081
District 53	Democratic	0	0	0.28	0.18	0.24	0.16	0.22	0.17	2.5	0.29
	Republican	0	0	0.28	0.18	0.24	0.16	0.22	0.17	1.2	0.29
	Unaffiliated	0	0	0.28	0.18	0.24	0.16	0.22	0.17	1.2	0.29
District 54	Democratic	0	0.17	0.26	0.14	0.24	0.11	0.13	0	0.37	0
	Republican	0	0.17	0.51	0	0.24	0.11	0.13	0	5.7	0
	Unaffiliated	0	0.17	0.26	0	0.24	0.11	0.13	0	0.19	0
District 55	Democratic	0	0.099	0	0	0	0.33	0.26	0.28	0	0.70
	Republican	0	0.099	0	0	0	0.33	0.26	0.28	0	0.70
	Unaffiliated	0	0.099	0	0	0	0.33	0.26	0.28	0	0.70
District 56	Democratic	0.22	0.13	0.23	0.28	1.2	0.40	0	0	0.14	0
	Republican	0.22	0.26	0.23	0.16	1.2	0.20	0	0	0.14	0
	Unaffiliated	0.22	0.13	0.23	0.16	1.2	0.20	0	0	0.14	0
District 57	Democratic	0.81	0.18	0.13	1.9	0.20	0.13	0.14	0.11	0.15	0
	Republican	0.81	0.18	0.13	1.0	0.20	0.13	0.14	0.11	0.15	0
	Unaffiliated	0.81	0.18	0.13	1.0	0.20	0.13	0.14	0.11	0.15	0
District 58	Democratic	0	0.18	0.67	0	0.65	0	3.9	0.15	0.19	0.12
	Republican	0	0	0.15	0	0.42	0	3.5	0.15	0.19	0.12
	Unaffiliated	0	0	0.15	0	0.42	0	3.5	0.15	0.19	0.12
District 59	Democratic	0	0	0	0.17	0	0.081	0	0	0.094	0
	Republican	0	0	1.2	1.4	0	0.081	0	0	0.094	0
	Unaffiliated	0	0	0	0.17	0	0.081	0	0	0.094	0
District 60	Democratic	0	0.56	0.13	0	0.13	0.13	0	0.049	0	0
	Republican	0	3.9	0.13	0	0.13	0.13	0	0.049	0	0
	Unaffiliated	0	0.19	0.13	0	0.13	0.13	0	0.049	0	0
District 61	Democratic	0.17	0.16	0.41	0.24	0.22	0.18	0.21	0.21	0.40	0.12
	Republican	0.17	0.16	0.41	0.24	0.22	0.18	0.21	0.21	0.40	0.12
	Unaffiliated	0.17	0.16	0.41	0.24	0.22	0.18	0.21	0.21	0.40	0.12
District 62	Democratic	0.43	0.29	0.22	0	0	0	0.20	0.096	0.58	0.093
	Republican	0.43	0.29	0.22	0	0	0	0.20	0.096	5.4	0.093
	Unaffiliated	0.43	0.29	0.22	0	0	0	0.20	0.096	0.29	0.093
District 63	Democratic	0	0.052	0.26	0.32	0.084	0	0	0.076	0.10	0
	Republican	0	0.052	0.26	12	0.084	0	0	0.076	0.10	0
	Unaffiliated	0	0.052	0.26	0.19	0.084	0	0	0.076	0.10	0
District 64	Democratic	0.17	0	0.17	0.057	0.089	0	0	0.21	0.14	0.057
	Republican	0.17	0	0.17	0.057	0.089	1.5	0	0.21	0.14	0.057
	Unaffiliated	0.17	0	0.17	0.057	0.089	0	0	0.21	0.14	0.057
District 65	Democratic	0.57	0.15	0	0	0	0	0.21	0.096	0	0
	Republican	1.4	2.6	0.39	0.20	0	0	0.21	0.096	0	0
	Unaffiliated	0.57	0.15	0	0	0	0	0.21	0.096	0	0
District 66	Democratic	0.13	0	0.45	0.12	0.23	0	0.14	0	0.079	0
	Republican	0.50	0	2.3	0.38	0.23	2.6	3.9	0	0.079	0.51
	Unaffiliated	0.13	0	0.45	0.12	0.23	0	0.14	0	0.079	0
District 67	Democratic	0	0	0	0	0	0	0	0	0.087	0
	Republican	2.0	0	0	0	0	0	0	0	0.087	0
	Unaffiliated	0	0	0	0	0	0	0	0	0.087	0
District 68	Democratic	0	0	0	0	0	0	0.095	0	0.089	0.044

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Republican	0	0	0	0	0	0	0.095	0	0.48	0.044
	Unaffiliated	0	0	0	0	0	0	0.095	0	0.089	0.044
District 69	Democratic	0.13	0.094	0	0.22	0	0	0	0	0.071	0
	Republican	0.13	0.094	0	3.6	0	0	0	0	0.071	0
	Unaffiliated	0.13	0.094	0	0.11	0	0	0	0	0.071	0
District 70	Democratic	0.56	0.34	9.8	1.1	0.90	0.11	0	0.11	0.11	0.084
	Republican	0.32	0.34	11	1.1	0.90	0.11	0	0.11	0.11	0.084
	Unaffiliated	0.32	0.34	9.8	1.1	0.90	0.11	0	0.11	0.11	0.084
District 71	Democratic	0.37	0.084	0.087	14	5.3	0.37	1.4	0.20	1.0	0
	Republican	0.37	0.084	0.087	11	5.3	0.37	2.1	0.20	3.4	0
	Unaffiliated	0.37	0.084	0.087	5.5	5.3	0.37	1.4	0.20	1.0	0
District 72	Democratic	0.13	0.31	0.090	4.2	0	0	0.64	0.48	0.91	0.58
	Republican	0.13	0.066	0.18	0.66	0	0	0.44	0.23	0.91	1.1
	Unaffiliated	0.13	0.066	0.090	0.66	0	0	0.22	0.23	0.91	0.58
District 73	Democratic	0.26	0.43	0.12	0	0.26	0.18	0	0.090	0	0
	Republican	0.26	0	0.12	0	0.52	0.18	0	0.090	0	0
	Unaffiliated	0.26	0	0.12	0	0.26	0.18	0	0.090	0	0
District 74	Democratic	0.16	0.30	0.21	0.16	1.5	0.21	1.7	1.4	4.7	0.10
	Republican	0.16	0.18	0.21	0.16	1.5	0.21	0.86	1.4	0.18	0.10
	Unaffiliated	0.16	0.091	0.21	0.16	1.5	0.21	0.86	1.4	0.18	0.10
District 75	Democratic	0	0	0.92	0.73	0.13	0	0.12	0.076	0	0.057
	Republican	0	0	0.23	0.73	0.13	0	0.12	0.076	0	3.9
	Unaffiliated	0	0	0.23	0.73	0.13	0	0.12	0.076	0	0.057
District 76	Democratic	0.18	0.12	0	0.11	0.41	0	0	0.92	0.64	0.11
	Republican	0.18	0.12	0	0.11	0.41	0	0	0.92	0.64	0.11
	Unaffiliated	0.18	0.12	0	0.11	0.41	0	0	0.92	0.64	0.11
District 77	Democratic	0.099	0.26	0.27	0.075	0.38	0.10	0.17	0	0	0.15
	Republican	0.099	0.26	1.1	0.075	0.77	0.10	0.17	0	0	0.15
	Unaffiliated	0.099	0.26	0.27	0.075	0.38	0.10	0.17	0	0	0.15
District 78	Democratic	0.10	0	0.14	0	0	0	0	0	0.072	0
	Republican	0.10	0	0.14	0	0	0	0.31	0	0.072	0
	Unaffiliated	0.10	0	0.14	0	0	0	0	0	0.072	0
District 79	Democratic	0	0.11	0	0	0	0.46	0	0	0	0.086
	Republican	0	0.11	0	0	0	5.9	0	0.36	0.52	0.086
	Unaffiliated	0	0.11	0	0	0	0.46	0	0	0	0.086
District 80	Democratic	0.086	0	0	0	0	0	0.17	0	0.085	0
	Republican	0.086	0	0	0	0	0	1.1	0	2.4	0
	Unaffiliated	0.086	0	0	0	0	0	0.17	0	0.085	0
District 81	Democratic	0	0	0.20	0	0	0	0.65	0.12	0.21	0.078
	Republican	0.32	0	1.3	0	0	0	0.65	0.12	0.21	0.078
	Unaffiliated	0	0	0.20	0	0	0	0.65	0.12	0.21	0.078
District 82	Democratic	0.49	0	0.32	0	0	0	0	0	0.082	0
	Republican	16	0.34	2.1	0	0.29	1.3	0	0	4.2	0
	Unaffiliated	0.24	0	0.32	0	0	0	0	0	0.082	0
District 83	Democratic	0	0	0.30	0.93	1.3	0.25	0.63	0	0.16	0.10
	Republican	0	0	1.2	0.80	2.6	0.25	0.63	0	0.16	0.10
	Unaffiliated	0	0	0.30	0.27	1.3	0.25	0.63	0	0.16	0.10
District 84	Democratic	0	0	0.20	0	0	0	0.097	0	0.075	0.053
	Republican	0	0	0.90	0	0	0	0.097	0	0.075	0.42
	Unaffiliated	0	0	0.20	0	0	0	0.097	0	0.075	0.053
District 85	Democratic	0.096	0	0.16	0.10	0.24	0.077	0.17	0	0.13	0.090
	Republican	0.096	0	1.1	0.10	1.9	0.077	0.17	0	0.13	0.090

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Unaffiliated	0.096	0	0.16	0.10	0.24	0.077	0.17	0	0.13	0.090
District 86	Democratic	0	0	0	0	0	0	0	0	0.10	0
	Republican	0	0.47	0	0.20	0.25	0	0.46	0	0.10	0.46
	Unaffiliated	0	0	0	0	0	0	0	0	0.10	0
District 87	Democratic	0.081	0.14	0.12	0.079	0.086	0	0	0.11	0.23	0.58
	Republican	0.081	0.43	0.43	0.079	0.086	0	0.46	0.32	0.23	0.19
	Unaffiliated	0.081	0.14	0.12	0.079	0.086	0	0	0.11	0.23	0.19
District 88	Democratic	0.088	0.072	0.16	0.11	0	0	0	0.11	0.22	0.17
	Republican	0.088	0.072	0.16	8.4	0.16	0	0	0.11	0.22	0.17
	Unaffiliated	0.088	0.072	0.16	0.11	0	0	0	0.11	0.22	0.17
District 89	Democratic	2.1	0.18	0.13	0	0.075	0.16	0	0.075	0	0
	Republican	2.1	1.3	0.13	0	0.075	0.16	0	0.075	0	0
	Unaffiliated	2.1	0.18	0.13	0	0.075	0.16	0	0.075	0	0
District 90	Democratic	0	0	0.58	0	0	0	0.11	0	0	0
	Republican	0	0	0.58	0	0	0	2.3	0	0	0
	Unaffiliated	0	0	0.58	0	0	0	0.11	0	0	0
District 91	Democratic	0.13	0.078	1.1	0	0.12	0	0	0.10	0.15	0
	Republican	0.13	0.078	2.6	0	0.12	0	0	0.10	0.47	0
	Unaffiliated	0.13	0.078	0.60	0	0.12	0	0	0.10	0.15	0
District 92	Democratic	0.10	0.067	0.11	0	0	0.072	0	0.071	0.092	0.061
	Republican	0.10	0.067	2.3	0	0	2.4	0	2.0	0.73	0.061
	Unaffiliated	0.10	0.067	0.11	0	0	0.072	0	0.071	0.092	0.061
District 93	Democratic	0	0.049	0	0.075	0.094	0.078	0	0	0.12	0
	Republican	0	0.049	0	0.075	1.1	0.73	3.0	0	0.33	0
	Unaffiliated	0	0.049	0	0.075	0.094	0.078	0	0	0.12	0
District 94	Democratic	0	0	0.11	0.072	0.11	0	0.13	0	0.13	0
	Republican	0	0	0.11	0.072	0.11	0.85	1.5	0	0.13	0
	Unaffiliated	0	0	0.11	0.072	0.11	0	0.13	0	0.13	0
District 95	Democratic	0	0	0.47	0.084	0	0.075	0	0.20	0	0.16
	Republican	0	0	0.93	0.084	0	0.075	0	0.20	0	0.16
	Unaffiliated	0	0	0.47	0.084	0	0.075	0	0.20	0	0.16
District 96	Democratic	0.47	0.15	0.32	0	0.37	0.19	0	0.091	0	0
	Republican	0.47	0.15	0.64	0	0.37	0.19	0	0.091	0	0
	Unaffiliated	0.47	0.15	0.32	0	0.37	0.19	0	0.091	0	0
District 97	Democratic	0.070	0.044	0.17	0	0.090	0	0.15	0.10	0.23	0.17
	Republican	1.5	0.044	1.6	0	0.090	0	0.15	0.10	0.23	0.17
	Unaffiliated	0.070	0.044	0.17	0	0.090	0	0.15	0.10	0.23	0.17
District 98	Democratic	0.31	0	0	0.096	0	0	0.36	0	0.20	0.089
	Republican	1.2	0	0	0.096	0	0	0.22	0	0.20	0.089
	Unaffiliated	0.31	0	0	0.096	0	0	0.22	0	0.20	0.089
District 99	Democratic	0.13	0	0.13	0	0	0	0.17	0.085	0.12	0.074
	Republican	0.13	0	0.13	0	0	0	0.17	0.085	0.12	0.074
	Unaffiliated	0.13	0	0.13	0	0	0	0.17	0.085	0.12	0.074
District 100	Democratic	0.25	0	0	0	0	0	0	0.089	0.12	0
	Republican	1.8	0	0.92	0	0	0	0	0.089	0.12	0
	Unaffiliated	0.25	0	0	0	0	0	0	0.089	0.12	0
District 101	Democratic	0.37	0.076	0.086	0	0.20	0	0.14	0.10	0.14	0.11
	Republican	22	0.47	0.39	0.62	0.20	0	1.1	3.0	0.14	0.11
	Unaffiliated	0.37	0.076	0.086	0	0.20	0	0.14	0.10	0.14	0.11
District 102	Democratic	0.17	0.054	0.088	0	0	0	0.57	0.088	0	0.075
	Republican	0.17	0.054	1.6	0.57	0.42	0.75	0.57	0.90	0	0.075
	Unaffiliated	0.17	0.054	0.088	0	0	0	0.57	0.088	0	0.075

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
District 103	Democratic	0.45	0	0.17	5.7	2.5	29	0.32	0.16	0.080	0.16
	Republican	0.45	0	0.17	0	0	0	0	0	0.080	0
	Unaffiliated	0.45	0	0.17	0	0	0	0	0	0.080	0
District 104	Democratic	0.21	0	0.34	0.17	3.2	0.38	0.39	0.20	0.40	0.23
	Republican	0.21	0	5.1	0.17	3.2	0.98	0.39	0.49	0.40	0.41
	Unaffiliated	0.21	0	0.34	0.17	3.2	0.38	0.39	0.20	0.40	0.23
District 105	Democratic	0	0.045	0.11	0	0	0.095	0.12	0	2.0	0.66
	Republican	0	0.045	0.11	0	0	0.095	0.12	0	2.5	0.66
	Unaffiliated	0	0.045	0.11	0	0	0.095	0.12	0	2.0	0.66
District 106	Democratic	0	0.18	0	0.13	0.12	0.12	0	0	0.82	0.39
	Republican	0	1.8	0	0.13	0.12	0.12	0	0.33	0.41	1.6
	Unaffiliated	0	0.18	0	0.13	0.12	0.12	0	0	0.41	0.39
District 107	Democratic	0.32	0.20	0	0	0.71	0.67	0.13	0.18	0.14	0.055
	Republican	0.65	0.20	0	0	0.83	0.33	0.13	0.092	0.14	0.055
	Unaffiliated	0.32	0.20	0	0	0.18	0.33	0.13	0.092	0.14	0.055
District 108	Democratic	0.090	0	0.19	0.078	0.11	0	0	0.073	0	0
	Republican	0.090	0	0.19	0.078	3.2	0	0	0.073	0	0
	Unaffiliated	0.090	0	0.19	0.078	0.11	0	0	0.073	0	0
District 109	Democratic	0.11	0.26	0.69	0.33	0.26	0.94	0	0.19	0.15	0.14
	Republican	0.11	0.26	0.35	0.17	0.26	0.47	0	0.19	0.15	0.14
	Unaffiliated	0.11	0.26	0.35	0.17	0.26	0.47	0	0.19	0.15	0.14
District 110	Democratic	0	0	0.12	0	0	0	0	0	0.11	0.048
	Republican	0	0	0.59	0	0	0	0	0	0.11	0.048
	Unaffiliated	0	0	0.12	0	0	0	0	0	0.11	0.048
District 111	Democratic	0	0.052	0.079	0.055	0.17	0.095	0.12	0	0.10	0
	Republican	0	0.052	0.079	0.055	0.17	0.095	0.12	1.7	0.10	0
	Unaffiliated	0	0.052	0.079	0.055	0.17	0.095	0.12	0	0.10	0
District 112	Democratic	0	0	1.4	0	2.2	3.7	1.4	4.0	1.7	0.10
	Republican	0	0	0	0	0.42	0.089	0	0.55	0.10	0.10
	Unaffiliated	0	0	0	0	0.42	0.089	0	0.55	0.10	0.10
District 113	Democratic	0	0	3.7	0.73	0.17	4.1	0.33	0.097	0	0.091
	Republican	0	0	0.21	0.73	0.17	0	0.13	0.097	0	0.091
	Unaffiliated	0	0	0.11	0.73	0.17	0	0.13	0.097	0	0.091
District 114	Democratic	0.23	0.082	0	0	0.74	0	0.15	0.091	0	0.35
	Republican	0.23	0.082	0	0	1.2	0	0.15	0.091	0	0.35
	Unaffiliated	0.23	0.082	0	0	0.39	0	0.15	0.091	0	0.35
District 115	Democratic	0	0	0	0.11	0.18	9.5	1.7	1.8	0.26	0.13
	Republican	0	0	0	0	0.18	0.22	5.8	1.1	0.26	0.13
	Unaffiliated	0	0	0	0	0.18	0.22	1.7	1.1	0.26	0.13
District 116	Democratic	0	0.18	0.096	0	0.58	0.13	0	0.10	0	0.085
	Republican	0	0.18	0.096	0	0.58	0.13	0	0.10	0	0.085
	Unaffiliated	0	0.18	0.096	0	0.58	0.13	0	0.10	0	0.085
District 117	Democratic	0	0.11	0.15	0.088	0.081	0	0.13	0.087	0.070	0
	Republican	0.51	0.11	6.6	0.98	0.081	0	0.70	0.087	0.070	0
	Unaffiliated	0	0.11	0.15	0.088	0.081	0	0.13	0.087	0.070	0
District 118	Democratic	0	0.23	2.1	0.14	0.30	0.13	0	0	0	0.40
	Republican	0	0.23	0.47	0	0.30	0.13	0	0	0	0.40
	Unaffiliated	0	0.23	0.16	0	0.30	0.13	0	0	0	0.40
District 119	Democratic	0.17	0	0.096	0	2.0	0.21	0.31	0.33	0.81	0.68
	Republican	0	0	0.096	0	0.86	0.21	0	0.33	0.81	0.68
	Unaffiliated	0	0	0.096	0	0.86	0.21	0	0.33	0.81	0.68
District 120	Democratic	0.19	0	0.10	0	0.39	0.32	0.98	0.10	0	0.12

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Republican	0.19	0	0.30	0	0.39	0.32	0.49	0.10	0	0.12
	Unaffiliated	0.19	0	0.10	0	0.39	0.32	0.49	0.10	0	0.12
District 121	Democratic	0	0.18	5.4	0	0.18	0	0.28	0.093	0.41	0
	Republican	0	0.18	0.22	0	0.18	0	0.28	0.093	0.41	0
	Unaffiliated	0	0.18	0.22	0	0.18	0	0.28	0.093	0.41	0
District 122	Democratic	0	0	0.73	0.13	2.1	0.43	0.21	0.24	0.14	0
	Republican	0	0	0.35	0.13	1.1	0.22	0.21	0.24	0.14	0
	Unaffiliated	0	0	0.17	0.13	0.41	0.22	0.21	0.24	0.14	0
District 123	Democratic	1.6	0.088	0.16	0	0.19	0	0	0	0	0.16
	Republican	3.0	0.088	0.16	0	0.19	0	0	0	0	0.80
	Unaffiliated	1.6	0.088	0.16	0	0.19	0	0	0	0	0.16
District 124	Democratic	0.11	0.084	0.19	0.090	0.22	0.070	0	0	0	0.071
	Republican	0.11	0.084	0.19	0.38	0.22	0.98	0	0	0	0.071
	Unaffiliated	0.11	0.084	0.19	0.090	0.22	0.070	0	0	0	0.071
District 125	Democratic	0.12	0	0.70	0.32	0.57	0.093	0	0	0	0
	Republican	0.12	0	1.4	0.63	0.89	0.093	0	0	0	1.0
	Unaffiliated	0.12	0	0.70	0.32	0.57	0.093	0	0	0	0
District 126	Democratic	0.21	0.055	2.7	0	0.26	1.3	0	0	0	0.10
	Republican	0.21	0.055	0.62	0	0.26	0.10	0	0	0	0.10
	Unaffiliated	0.21	0.055	0.21	0	0.26	0.10	0	0	0	0.10
District 127	Democratic	0.23	0.083	0	0	0	0	0	0	6.4	4.2
	Republican	0.23	0.083	0	0	0	0	0	0	0.16	0.27
	Unaffiliated	0.23	0.083	0	0	0	0	0	0	0.16	0.13
District 128	Democratic	0.16	0	0.43	0.68	0.14	0	0	0	0.17	0
	Republican	0.16	0	0.43	0.68	0.46	0	0	0	0.17	0
	Unaffiliated	0.16	0	0.43	0.68	0.14	0	0	0	0.17	0
District 129	Democratic	0.13	0.11	0.53	0	0	0.18	0	0	0.38	0.19
	Republican	0.13	0.11	5.2	0	0	0.18	0	0	0.38	0.19
	Unaffiliated	0.13	0.11	0.53	0	0	0.18	0	0	0.38	0.19
District 130	Democratic	0.15	0.11	0.30	0.24	0.30	0.12	0.23	0	0	0.098
	Republican	0.15	0.11	0.61	0.73	2.0	0.12	1.1	0	0	0.098
	Unaffiliated	0.15	0.11	0.30	0.24	0.30	0.12	0.23	0	0	0.098
District 131	Democratic	0.25	0.14	0.83	0	0.38	2.3	0.23	0.11	0.60	0.28
	Republican	0.25	0.14	0.83	0	3.0	2.3	0.23	0.31	1.1	1.8
	Unaffiliated	0.25	0.14	0.83	0	0.38	2.3	0.23	0.11	0.60	0.28
District 132	Democratic	0	0.11	0.14	0.077	0	0	0	0.12	0	0.11
	Republican	0	0.11	0.14	0.077	0	0	0	0.12	0	0.11
	Unaffiliated	0	0.11	0.14	0.077	0	0	0	0.12	0	0.11
District 133	Democratic	0.23	0.20	6.0	0.067	0.32	0.16	0.72	0.30	0	0.15
	Republican	0.23	0.20	0.35	0.067	0.32	0.16	0.72	0.30	0	0.15
	Unaffiliated	0.23	0.20	0.35	0.067	0.32	0.16	0.72	0.30	0	0.15
District 134	Democratic	0.19	0.053	0.19	0	0.10	0.14	0	0	0.24	0.13
	Republican	4.7	0.053	0.19	0	0.10	0.36	0	0	0.74	0.13
	Unaffiliated	0.19	0.053	0.19	0	0.10	0.14	0	0	0.24	0.13
District 135	Democratic	0.21	0.13	0	0	0	0.096	0	0	0	0.11
	Republican	0.21	0.13	0	0	0	0.096	0	0	0	0.11
	Unaffiliated	0.21	0.13	0	0	0	0.096	0	0	0	0.11
District 136	Democratic	0	0.14	0	0.088	0.23	0	0	0	0	0
	Republican	0	0.14	0	0.088	0.23	0	0	0	0	0
	Unaffiliated	0	0.14	0	0.088	0.23	0	0	0	0	0
District 137	Democratic	0	0.20	0	0	0.38	0.14	0	0.11	0.41	0.10
	Republican	0	0.20	0	0	0.71	0.14	0	0.11	0.41	0.10

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Unaffiliated	0	0.20	0	0	0.19	0.14	0	0.11	0.41	0.10
District 138	Democratic	0	0	0	0	0	0.12	0.16	0.048	0.26	0.19
	Republican	0	0	0	0	1.3	0.12	0.16	0.048	0.26	1.4
	Unaffiliated	0	0	0	0	0	0.12	0.16	0.048	0.26	0.19
District 139	Democratic	0	0	0	0	0	0	0	0	0.11	0.076
	Republican	0	0	0.34	0	0	0	0	0	0.11	0.076
	Unaffiliated	0	0	0	0	0	0	0	0	0.11	0.076
District 140	Democratic	0	0	3.1	0	0.21	0.086	0	0	0	0.15
	Republican	0	0	0.13	0	0.21	0.086	0	0	0	0.15
	Unaffiliated	0	0	0.13	0	0.21	0.086	0	0	0	0.15
District 141	Democratic	0.13	0.089	0.10	0	4.1	0.091	0.17	0.12	0.19	0.13
	Republican	0.13	0.089	0.10	0	7.0	0.091	0.17	0.12	0.19	0.13
	Unaffiliated	0.13	0.089	0.10	0	2.7	0.091	0.17	0.12	0.19	0.13
District 142	Democratic	0.27	0.19	1.7	0.93	0.16	0	0.29	0	0.25	0.11
	Republican	0.27	0.19	1.7	0.93	0.16	0	0.15	0	0.25	0.11
	Unaffiliated	0.27	0.19	0.83	0.93	0.16	0	0.15	0	0.25	0.11
District 143	Democratic	0.28	0.29	0.64	0.20	0.19	0.12	0	0.096	20	0.75
	Republican	0.28	0.14	0.64	0.20	0.19	0.12	0	0.096	1.7	0.75
	Unaffiliated	0.28	0.14	0.64	0.20	0.19	0.12	0	0.096	1.7	0.75
District 144	Democratic	0.088	0.098	0.20	0.097	0	0	0	0	1.7	0.22
	Republican	0.088	0.098	0.20	0.097	0	0	0	0	1.7	0.22
	Unaffiliated	0.088	0.098	0.20	0.097	0	0	0	0	1.7	0.22
District 145	Democratic	0.23	0.11	0.26	0.30	0.27	0.11	0.89	0.19	0.28	0.14
	Republican	0.23	0.11	0.26	0.15	0.27	0.11	0.30	0.19	0.28	0.14
	Unaffiliated	0.23	0.11	0.26	0.15	0.27	0.11	0.30	0.19	0.28	0.14
District 146	Democratic	0.41	1.0	0.34	0.48	0.41	4.8	1.4	1.5	0.36	0.20
	Republican	1.6	3.8	0.34	0.48	0.41	4.8	2.2	1.5	0.36	0.20
	Unaffiliated	0.41	1.0	0.34	0.48	0.41	4.8	1.4	1.5	0.36	0.20
District 147	Democratic	0	0	0.41	0.12	0.14	0.14	0	0.12	0.27	0.25
	Republican	0	0	0.41	0.12	0.14	0.14	0	0.12	0.27	0.51
	Unaffiliated	0	0	0.41	0.12	0.14	0.14	0	0.12	0.27	0.25
District 148	Democratic	1.9	2.2	0.10	0.082	0.15	0.16	0.18	0.095	0	0.055
	Republican	1.6	2.2	0.10	0.082	0.15	0.16	0.18	0.095	0	0.055
	Unaffiliated	1.6	2.2	0.10	0.082	0.15	0.16	0.18	0.095	0	0.055
District 149	Democratic	0.85	0.13	0.12	0.13	0.17	0.10	0	0.089	0	0.061
	Republican	1.6	0.13	0.24	0.13	0.17	0.10	0	0.089	0	0.061
	Unaffiliated	0.85	0.13	0.12	0.13	0.17	0.10	0	0.089	0	0.061
District 150	Democratic	16	0.32	1.1	0.24	0.22	0.38	0.19	0.71	0.30	0.30
	Republican	16	0.32	1.1	0.24	0.22	0.38	0.19	0.37	0.30	0.30
	Unaffiliated	16	0.32	1.1	0.24	0.22	0.38	0.19	0.37	0.30	0.30
District 151	Democratic	0.20	0.21	0.47	2.4	0.70	0.17	0	0.14	1.1	0.40
	Republican	0.20	0.21	0.47	2.4	0.70	0.17	0	0.14	1.1	0.40
	Unaffiliated	0.20	0.21	0.47	2.4	0.70	0.17	0	0.14	1.1	0.40
District 152	Democratic	0	0.26	1.2	0.16	0.13	0.12	0	0.11	0.34	0.34
	Republican	0	1.1	2.6	0.16	0.13	0.12	0	0.11	0.34	0.34
	Unaffiliated	0	0.26	0.59	0.16	0.13	0.12	0	0.11	0.34	0.34
District 153	Democratic	0.13	0.37	0.074	0	0.10	0.15	0	0.083	0.11	0.047
	Republican	0.13	0.37	0.074	0	0.10	0.15	0	0.083	0.11	0.047
	Unaffiliated	0.13	0.37	0.074	0	0.10	0.15	0	0.083	0.11	0.047
District 154	Democratic	0	0.059	0.066	0	0.089	0.057	0.089	0.052	0.049	1.1
	Republican	0	0.059	0.066	0	0.18	0.057	0.089	0.052	0.049	0.046
	Unaffiliated	0	0.059	0.066	0	0.089	0.057	0.089	0.052	0.049	0.046

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
District 155	Democratic	0	0	0	0	0.15	0.38	0.23	0.17	0.71	0.39
	Republican	0	0	0	0	0.15	1.0	0.23	0.17	0.32	0.19
	Unaffiliated	0	0	0	0	0.15	0.38	0.23	0.17	0.32	0.19
District 156	Democratic	0.18	0.35	36	0.44	4.7	2.3	0.25	40	0.24	0.24
	Republican	0.18	0.35	36	0.44	5.1	1.1	0.25	40	0.24	0.24
	Unaffiliated	0.18	0.35	36	0.44	4.7	1.1	0.25	40	0.24	0.24
District 157	Democratic	0.14	0.052	0.27	1.5	1.1	1.3	0.47	0.25	0.24	0.099
	Republican	0.14	0.052	0.27	1.5	1.6	1.3	0.47	0.25	0.24	0.099
	Unaffiliated	0.14	0.052	0.27	1.5	1.1	1.3	0.47	0.25	0.24	0.099
District 158	Democratic	0.12	0.11	0.15	0	0.15	0.18	0.31	0.49	0.50	2.0
	Republican	0.12	0.11	0.15	0	0.15	0.18	0.31	0.49	0.87	2.0
	Unaffiliated	0.12	0.11	0.15	0	0.15	0.18	0.31	0.49	0.50	2.0
District 159	Democratic	0.92	0.12	0.22	0.069	1.0	0.076	0.19	0.081	0.11	0.66
	Republican	0.92	0.12	0.22	0.069	0.16	0.076	0.19	0.081	0.11	0.094
	Unaffiliated	0.92	0.12	0.22	0.069	0.16	0.076	0.19	0.081	0.11	0.094
District 160	Democratic	0	0.093	0.13	0	0.15	0	0.19	0.059	2.4	2.2
	Republican	0	0.093	0.13	0	0.15	0	0.19	0.059	1.2	1.6
	Unaffiliated	0	0.093	0.13	0	0.15	0	0.19	0.059	1.2	1.6
District 161	Democratic	0.82	0	1.2	0.26	0.55	0.54	0.36	1.7	0.18	0.18
	Republican	0.82	0	1.2	0.26	0.55	0.54	0.36	1.7	0.18	0.18
	Unaffiliated	0.82	0	1.2	0.26	0.55	0.54	0.36	1.7	0.18	0.18
District 162	Democratic	0.19	0.19	0.21	0.24	0.20	0	0	0.12	1.3	0.34
	Republican	0.19	0.19	0.21	0.24	0.20	0	0	0.12	1.3	0.34
	Unaffiliated	0.19	0.19	0.21	0.24	0.20	0	0	0.12	1.3	0.34
District 163	Democratic	0.14	0.16	0.31	0.38	0.37	2.9	0.65	0.35	0.51	0.13
	Republican	0.14	0.16	0.31	0.19	0.37	2.0	0.65	0.35	0.51	0.13
	Unaffiliated	0.14	0.16	0.31	0.19	0.37	2.0	0.65	0.35	0.51	0.13
District 164	Democratic	0.16	0.36	0.38	0	0.73	0.12	2.3	1.4	0.071	0
	Republican	0.16	0.36	0.38	0	0.73	0.12	0.11	0.067	0.071	0
	Unaffiliated	0.16	0.36	0.38	0	0.73	0.12	0.11	0.067	0.071	0
District 165	Democratic	0.12	0.11	0.27	0.13	0	0.12	0.14	0.23	1.9	0.77
	Republican	0.12	0.11	0.27	0.13	0	0.12	0.14	0.23	2.3	0.77
	Unaffiliated	0.12	0.11	0.27	0.13	0	0.12	0.14	0.23	1.9	0.77
District 166	Democratic	0.15	0.14	0.11	0.076	0.24	0.11	0.17	0.087	0.067	0.52
	Republican	0.15	0.14	0.11	0.076	0.24	0.11	0.17	0.087	0.067	0.059
	Unaffiliated	0.15	0.14	0.11	0.076	0.24	0.11	0.17	0.087	0.067	0.059
District 167	Democratic	0	0	8.3	0.22	0.26	0.17	0.20	0.20	1.1	0.71
	Republican	0	0	7.6	0.22	0.26	0.81	0.20	0.20	0.71	0.20
	Unaffiliated	0	0	6.9	0.22	0.26	0.17	0.20	0.20	0.71	0.20
District 168	Democratic	0.13	0	0.21	0.13	0.16	0.18	0	0.22	4.4	1.7
	Republican	0.13	0	0.21	0.13	0.16	0.18	0	0.22	2.2	1.1
	Unaffiliated	0.13	0	0.21	0.13	0.16	0.18	0	0.22	2.2	1.1
District 169	Democratic	0	0	0	0	0	0.14	0	0.057	0.097	0
	Republican	0	0	0	0	0	0.27	4.6	0.057	0.097	0
	Unaffiliated	0	0	0	0	0	0.14	0	0.057	0.097	0
District 170	Democratic	0.17	0.24	0.60	0.20	0.22	0	0	0.96	0.32	0.16
	Republican	0.17	0.24	0.60	0.20	0.22	0	0	0.48	0.32	0.16
	Unaffiliated	0.17	0.24	0.60	0.20	0.22	0	0	0.48	0.32	0.16
District 171	Democratic	0.14	0.11	0	0.20	0	0.11	0	0.079	0.19	0.11
	Republican	0.14	0.11	0	0.098	0	0.11	0	0.079	0.19	0.11
	Unaffiliated	0.14	0.11	0	0.098	0	0.11	0	0.079	0.19	0.11
District 172	Democratic	0.074	0.068	0.19	0.23	2.2	0.94	0.23	0.16	0	0.17

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Republican	0.074	0.068	0.19	0.11	1.5	0.11	0	0.16	0	0.17
	Unaffiliated	0.074	0.068	0.19	0.11	0.79	0.11	0	0.16	0	0.17
District 173	Democratic	0.11	0.076	0.13	0.074	0	0	1.1	0	0	0
	Republican	0.11	0.076	0.13	0.074	0	0	0.24	0	0	0
	Unaffiliated	0.11	0.076	0.13	0.074	0	0	0.24	0	0	0
District 174	Democratic	0.10	0.082	0.085	0	0	0	0	0	0	0
	Republican	0.10	0.082	0.085	0	0	0	0	0	0	0
	Unaffiliated	0.10	0.082	0.085	0	0	0	0	0	0	0
District 175	Democratic	0.23	0.81	5.3	0	0.39	0	2.0	0.69	0	1.6
	Republican	0	0.066	0.088	0	0.10	0	0	0	0	0
	Unaffiliated	0	0.066	0.088	0	0.10	0	0	0	0	0
District 176	Democratic	0.27	0.29	0.30	0	0	0.38	0.36	0	0.99	0.30
	Republican	0.27	0.29	0.30	0	0	0.38	22	0	0.50	0.30
	Unaffiliated	0.27	0.29	0.30	0	0	0.38	0.36	0	0.50	0.30
District 177	Democratic	0.11	0	0.20	0.23	0	0.34	0	0.38	4.6	0.19
	Republican	0.11	0	0.20	0.23	0	0.34	0	0.38	0.28	0.19
	Unaffiliated	0.11	0	0.20	0.23	0	0.34	0	0.38	0.28	0.19
District 178	Democratic	0.42	0.17	0.20	0.21	0.10	0	0	0.12	1.7	0.21
	Republican	0.42	0.17	0.84	0.21	0.10	0	0	0.12	1.7	0.21
	Unaffiliated	0.42	0.17	0.20	0.21	0.10	0	0	0.12	1.7	0.21
District 179	Democratic	0.28	8.1	0.12	0.49	0.11	0	16	0	0.69	0
	Republican	0.28	0.078	0.12	0.061	0.11	0	0	0	0	0
	Unaffiliated	0.28	0.078	0.12	0.061	0.11	0	0	0	0	0
District 180	Democratic	0.33	0.077	1.4	1.0	7.2	2.4	0.86	0	0	0
	Republican	0.33	0.15	0.12	0.059	0	0	0	0	0	0
	Unaffiliated	0.33	0.077	0.12	0.059	0	0	0	0	0	0
District 181	Democratic	0	0.35	0.53	0	0.69	0	1.0	0.33	3.1	0
	Republican	0	0	0	0	0	0	0	0	0.049	0
	Unaffiliated	0	0	0	0	0	0	0	0	0.049	0
District 182	Democratic	0.64	2.3	4.3	0.33	0.50	4.3	0	1.6	0.040	0.39
	Republican	0.10	0.056	0.074	0.049	0	0	0	0	0.040	0.037
	Unaffiliated	0.10	0.056	0.074	0.049	0	0	0	0	0.040	0.037
District 183	Democratic	0.16	0	0.29	0.054	0.092	0	0.31	0.21	0.30	0.12
	Republican	0.16	0	0.29	0.054	0.092	0	3.2	6.0	0.86	0.12
	Unaffiliated	0.16	0	0.29	0.054	0.092	0	0.31	0.21	0.30	0.12
District 184	Democratic	0	0.55	0.090	0.39	0.12	0	0	0	1.2	0.083
	Republican	0	0.072	0.090	0.073	0.12	0	0	0	0	0.083
	Unaffiliated	0	0.072	0.090	0.073	0.12	0	0	0	0	0.083
District 185	Democratic	0.12	0.070	0.099	0.058	0.092	0	0	0	0	0.55
	Republican	0.12	0.070	0.099	0.058	0.092	0	0	0	0	0
	Unaffiliated	0.12	0.070	0.099	0.058	0.092	0	0	0	0	0
District 186	Democratic	0.33	0.049	0	0.20	0.47	0.40	0	0	0	0
	Republican	0	0.049	0	0	0.065	0	0	0	0	0
	Unaffiliated	0	0.049	0	0	0.065	0	0	0	0	0
District 187	Democratic	0.17	0	3.6	1.1	0.12	0.25	0	0	0.20	0.11
	Republican	0.17	0	8.2	1.3	0.12	0.13	0	0	0.20	0.11
	Unaffiliated	0.17	0	3.6	0.70	0.12	0.13	0	0	0.20	0.11
District 188	Democratic	0	0	0.59	0	0	1.3	0.52	0	0.86	0.83
	Republican	0	0	0.099	0	0	0.047	0.088	0	0	0
	Unaffiliated	0	0	0.099	0	0	0.047	0.088	0	0	0
District 189	Democratic	0	0	0.75	0.12	0.57	0.33	0.30	0.15	0.57	0.17
	Republican	0	0	0.75	0.12	0.57	0.33	0.30	0.15	0.28	0.17

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Unaffiliated	0	0	0.75	0.12	0.57	0.33	0.30	0.15	0.28	0.17
District 190	Democratic	2.8	1.3	0.066	0.037	2.2	1.6	0.70	1.8	0.61	2.2
	Republican	0.073	0.043	0.066	0.037	0	0	0.064	0	0	0.038
	Unaffiliated	0.073	0.043	0.066	0.037	0	0	0.064	0	0	0.038
District 191	Democratic	0	0	0	0	0	0	0	0	0	0
	Republican	0	0	0	0	0	0	0	0	0	0
	Unaffiliated	0	0	0	0	0	0	0	0	0	0
District 192	Democratic	0	0.19	0	0	0.25	0.20	0	0.80	0	0
	Republican	0	0	0	0	0	0	0	0	0	0
	Unaffiliated	0	0	0	0	0	0	0	0	0	0
District 193	Democratic	0.15	0.053	0.22	0.11	0.10	0.089	0.12	0.072	0.12	0
	Republican	0.15	0.55	0.76	1.8	0.10	0.089	0.91	0.072	1007	0
	Unaffiliated	0.15	0.053	0.22	0.11	0.10	0.089	0.12	0.072	0.12	0
District 194	Democratic	0.094	0	0.082	0.062	4.2	0.44	2.3	0.22	0.10	0.089
	Republican	0.094	0	0.082	0.062	0.25	0.070	0.13	0.074	0.10	0.089
	Unaffiliated	0.094	0	0.082	0.062	0.25	0.070	0.13	0.074	0.10	0.089
District 195	Democratic	0.45	0	0	0.043	0.60	1.0	0	0.19	0	0
	Republican	0	0	0	0.043	0.14	0	0	0	0	0
	Unaffiliated	0	0	0	0.043	0.14	0	0	0	0	0
District 196	Democratic	0.098	0.050	0.10	0	0.15	0	0	0	0	0
	Republican	0.098	0.050	0.10	0	0.46	0.22	1.1	0	0	0
	Unaffiliated	0.098	0.050	0.10	0	0.15	0	0	0	0	0
District 197	Democratic	0	0.043	0	0	0	3.4	1.7	0	16	0
	Republican	0	0.043	0	0	0	0.041	0	0	0	0
	Unaffiliated	0	0.043	0	0	0	0.041	0	0	0	0
District 198	Democratic	0	1.9	0.58	0.41	0	1.1	0.24	0	0.42	7.3
	Republican	0	0	0.065	0	0	0	0	0	0	0
	Unaffiliated	0	0	0.065	0	0	0	0	0	0	0
District 199	Democratic	0.34	0.47	0.42	0.12	0.14	0	0.19	0.12	0.28	0.11
	Republican	0.34	0.92	2.4	0.12	7.7	0	0.19	0.12	36	0.11
	Unaffiliated	0.34	0.23	0.42	0.12	0.14	0	0.19	0.12	0.28	0.11
District 200	Democratic	0.062	0	0	0	0	0	0	0.86	1.4	0
	Republican	0.062	0	0	0	0	0	0	0.031	0	0
	Unaffiliated	0.062	0	0	0	0	0	0	0.031	0	0
District 201	Democratic	0.069	0	0.064	0.038	0.82	1.6	1.5	0	0	0
	Republican	0.069	0	0.064	0.038	0.054	0	0	0	0	0
	Unaffiliated	0.069	0	0.064	0.038	0.054	0	0	0	0	0
District 202	Democratic	0.13	0.073	0	0	0	0.65	6.3	0.80	0	0
	Republican	0.13	0.073	0	0	0	0	0	0	0	0
	Unaffiliated	0.13	0.073	0	0	0	0	0	0	0	0
District 203	Democratic	0.082	0	0	0	0.055	0.17	0	0	0	0
	Republican	0.082	0	0	0	0.055	0	0	0	0	0
	Unaffiliated	0.082	0	0	0	0.055	0	0	0	0	0
Average	Democratic	0.33	0.25	1.1	0.35	0.49	0.56	0.41	0.45	1.1	0.36
	Republican	0.65	0.21	0.94	0.37	0.50	0.30	0.49	0.47	6.2	0.26
	Unaffiliated	0.24	0.12	0.53	0.17	0.32	0.19	0.15	0.38	0.68	0.14

9.2 Results for the PA Senate

Table 4: Influence of 1000 voters

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
District 1	Democratic		0.13		0.35		0.013		0.041		0.11
	Republican		0.015		0.014		0.013		0		0
	Unaffiliated		0.015		0.014		0.013		0		0
District 2	Democratic	0.059		0.028		0.034		0.44		0	
	Republican	0.059		0.028		0.034		0.039		0	
	Unaffiliated	0.059		0.028		0.034		0.039		0	
District 3	Democratic		0.080		0.012		0		0		0
	Republican		0.014		0.012		0		0		0
	Unaffiliated		0.014		0.012		0		0		0
District 4	Democratic	0.018		0.016		0.041		0.63		0.011	
	Republican	0.018		0.016		0		0.029		0.011	
	Unaffiliated	0.018		0.016		0		0.029		0.011	
District 5	Democratic		0.031		0.023		0.025		1.5		0
	Republican		0.031		0.023		0.025		0.030		0
	Unaffiliated		0.031		0.023		0.025		0.030		0
District 6	Democratic	0.24		0.16		0.14		0.058		14	
	Republican	0.24		0.16		0.071		0.058		14	
	Unaffiliated	0.24		0.16		0.071		0.058		14	
District 7	Democratic		0.014		0.012		0		0		0
	Republican		0.014		0.012		0		0		0
	Unaffiliated		0.014		0.012		0		0		0
District 8	Democratic	0.029		0		0.019		0		0	
	Republican	0.029		0		0.019		0		0	
	Unaffiliated	0.029		0		0.019		0		0	
District 9	Democratic		0.044		0.046		0.070		0.27		0.56
	Republican		0.044		0.046		0.18		0.27		0.17
	Unaffiliated		0.044		0.046		0.070		0.27		0.17
District 10	Democratic	0.054		0.64		0.051		0.068		0.15	
	Republican	0.054		0.67		0.051		0.068		0.15	
	Unaffiliated	0.054		0.32		0.051		0.068		0.15	
District 11	Democratic		0.024		0.022		0.035		0		0.052
	Republican		0.024		0.022		0.035		0		0.052
	Unaffiliated		0.024		0.022		0.035		0		0.052
District 12	Democratic	0.035		0.068		0.036		0.047		0.16	
	Republican	0.035		0.18		0.036		0.047		0.16	
	Unaffiliated	0.035		0.068		0.036		0.047		0.16	
District 13	Democratic		0.029		0.062		0.076		0.055		0.13
	Republican		0.029		0.50		0.076		0.36		0.067
	Unaffiliated		0.029		0.062		0.076		0.055		0.067
District 14	Democratic	0		0		0.23		0		0	
	Republican	0		0		0.12		0		0	
	Unaffiliated	0		0		0.12		0		0	
District 15	Democratic		0.039		0.31		4.0		0.32		0.30
	Republican		0.039		0.21		0.66		2.1		0.22
	Unaffiliated		0.039		0.21		0.28		0.24		0.22
District 16	Democratic	0.053		0.33		0.058		0.068		0.37	
	Republican	0.053		0.17		0.058		0.068		0.37	

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Unaffiliated	0.053		0.17		0.058		0.068		0.37	
District 17	Democratic		0.028		0.034		0.030		0.026		0.082
	Republican		0.028		0.068		0.030		0.026		0.020
	Unaffiliated		0.028		0.034		0.030		0.026		0.020
District 18	Democratic	0.067		0.032		0.063		0		0	
	Republican	0.067		0.032		0.063		0		0	
	Unaffiliated	0.067		0.032		0.063		0		0	
District 19	Democratic		0		0.044		0.046		0.058		0.26
	Republican		0		0.044		0.046		0.058		0.043
	Unaffiliated		0		0.044		0.046		0.058		0.043
District 20	Democratic	0.041		0.068		0		0		0.019	
	Republican	0.041		0.61		0		0		0.019	
	Unaffiliated	0.041		0.068		0		0		0.019	
District 21	Democratic		0.043		0.016		0		0		0.017
	Republican		0.043		0.016		0		0		0.017
	Unaffiliated		0.043		0.016		0		0		0.017
District 22	Democratic	0.036		0		3.3		0.041		0.046	
	Republican	0.036		0		0.050		0.041		0.046	
	Unaffiliated	0.036		0		0.050		0.041		0.046	
District 23	Democratic		0.021		0.051		0.027		0		0.018
	Republican		0.021		0.34		0.11		0		0.018
	Unaffiliated		0.021		0.051		0.027		0		0.018
District 24	Democratic	0.28		0.090		0.056		0.072		0.20	
	Republican	1.3		0.090		0.056		0.072		0.20	
	Unaffiliated	0.14		0.090		0.056		0.072		0.20	
District 25	Democratic		0.015		0.031		0		0.020		0.017
	Republican		0.015		0.031		0		0.020		0.16
	Unaffiliated		0.015		0.031		0		0.020		0.017
District 26	Democratic	0.045		0.23		0.063		0.27		0.48	
	Republican	0.045		0.39		0.063		0.27		0.096	
	Unaffiliated	0.045		0.23		0.063		0.27		0.096	
District 27	Democratic		0.026		0		0		0		0.019
	Republican		1.2		0		0		0		0.019
	Unaffiliated		0.026		0		0		0		0.019
District 28	Democratic	0		0.055		0.020		0.048		0.079	
	Republican	0		0.055		0.020		0.14		0.19	
	Unaffiliated	0		0.055		0.020		0.048		0.040	
District 29	Democratic		0.031		0.048		0.080		0		0
	Republican		0.031		0.048		0.57		0		0
	Unaffiliated		0.031		0.048		0.080		0		0
District 30	Democratic	0.033		0.054		0		0		0.025	
	Republican	0.033		0.53		0		0		0.11	
	Unaffiliated	0.033		0.054		0		0		0.025	
District 31	Democratic		0.029		0.018		0		0.033		0.091
	Republican		0.029		0.018		0.22		0.21		0.030
	Unaffiliated		0.029		0.018		0		0.033		0.030
District 32	Democratic	0		0.041		0.075		0.22		0.038	
	Republican	0		0.041		0		0.11		0.038	

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Unaffiliated	0		0.041		0		0.11		0.038	
District 33	Democratic		0.017		0.023		0.021		0		0.019
	Republican		0.017		3.8		0.021		0		0.019
	Unaffiliated		0.017		0.023		0.021		0		0.019
District 34	Democratic	0.019		0.13		0.033		0		0.098	
	Republican	0.019		0.30		0.033		0		0.098	
	Unaffiliated	0.019		0.13		0.033		0		0.098	
District 35	Democratic		0		0.032		0.56		0.037		0.017
	Republican		0		0.032		0.56		0.33		0.017
	Unaffiliated		0		0.032		0.56		0.037		0.017
District 36	Democratic	0.020		0.041		0		0.030		0.029	
	Republican	0.020		0.24		0		0.29		0.029	
	Unaffiliated	0.020		0.041		0		0.030		0.029	
District 37	Democratic		0.022		0.023		0.14		0.031		0.13
	Republican		0.022		0.023		0.43		0.031		0.35
	Unaffiliated		0.022		0.023		0.14		0.031		0.13
District 38	Democratic	0.17		0.022		0		0		1.5	
	Republican	0.056		0.022		0		0		1.6	
	Unaffiliated	0.056		0.022		0		0		1.3	
District 39	Democratic		0.19		0.18		0.013		0		0.021
	Republican		0.19		0.11		0.013		0		0.021
	Unaffiliated		0.19		0.11		0.013		0		0.021
District 40	Democratic	0.030		0.016		0.062		0.24		0.099	
	Republican	0.030		0.016		0.062		0.079		0.099	
	Unaffiliated	0.030		0.016		0.062		0.079		0.099	
District 41	Democratic		0		0		0		0.036		0.017
	Republican		0		0		0		0.036		0.017
	Unaffiliated		0		0		0		0.036		0.017
District 42	Democratic	0.037		0		0		0		0	
	Republican	0.037		0		0		0		0	
	Unaffiliated	0.037		0		0		0		0	
District 43	Democratic		0		0		0		0		0.034
	Republican		0		0		0		0		0
	Unaffiliated		0		0		0		0		0
District 44	Democratic	0.15		0.091		0.045		0.055		0.21	
	Republican	0.076		0.091		0.045		0.055		0.21	
	Unaffiliated	0.076		0.091		0.045		0.055		0.21	
District 45	Democratic		0		0		0		0		14
	Republican		0		0		0		0		14
	Unaffiliated		0		0		0		0		14
District 46	Democratic	0		0		0.20		0.22		0.060	
	Republican	0		0		0.20		0.22		0.060	
	Unaffiliated	0		0		0.20		0.22		0.060	
District 47	Democratic		0		0.070		0.070		0		0.023
	Republican		0		0.70		0.070		0		0.023
	Unaffiliated		0		0.070		0.070		0		0.023
District 48	Democratic	0.034		0.044		0.025		0		0.040	
	Republican	0.034		0.17		0.025		0		0.040	

Election	Party	2002	2004	2006	2008	2010	2012	2014	2016	2018	2020
	Unaffiliated	0.034		0.044		0.025		0		0.040	
District 49	Democratic		0.031		0.057		1.0		0.13		0.087
	Republican		0.031		0.057		0.049		0.13		0.044
	Unaffiliated		0.031		0.057		0.049		0.13		0.044
District 50	Democratic	0.050		0.37		0.022		0.051		0.038	
	Republican	0.050		0.18		0.022		0.30		0.038	
	Unaffiliated	0.050		0.18		0.022		0.051		0.038	
Average	Democratic	0.060	0.033	0.10	0.059	0.18	0.25	0.10	0.10	0.69	0.66
	Republican	0.094	0.075	0.16	0.25	0.041	0.12	0.076	0.14	0.68	0.63
	Unaffiliated	0.047	0.026	0.074	0.038	0.041	0.061	0.051	0.039	0.66	0.62

9.3 Results for Mayoral and County executive races

Table 5: Influence of 1000 voters

Election	Party	2015	2017	2019	2021	2023	2025
Allegheny County Executive	Democratic	0.010		0.010		0.26	
	Republican	0.010		0.010		0.11	
	Unaffiliated	0.010		0.010		0.11	
Erie County Executive	Democratic		3.4		1.3		0.83
	Republican		7.8		0.94		0.052
	Unaffiliated		3.3		0.39		0.052
Lackawanna County Commissioners	Democratic	1.8		5.9		2.3	
	Republican	0.53		1.7		0.81	
	Unaffiliated	0.32		0.97		0.32	
Lehigh County Executive	Democratic		0.39		0.38		0.050
	Republican		0.79		0.38		0.10
	Unaffiliated		0.39		0.38		0.050
Northampton County Executive	Democratic		0.31		0.12		0.36
	Republican		0.31		0.12		0.059
	Unaffiliated		0.31		0.12		0.059
Philadelphia Mayoral	Democratic	0.068		0.026		0.17	
	Republican	0.021		0.0056		0.0064	
	Unaffiliated	0.021		0.0056		0.0064	
Pittsburgh Mayoral	Democratic		0.095		0.32		0.32
	Republican		0		0.033		0.029
	Unaffiliated		0		0.033		0.014
Average	Democratic	0.62	1.1	2.0	0.53	0.91	0.39
	Republican	0.19	2.2	0.57	0.37	0.31	0.060
	Unaffiliated	0.12	1.0	0.33	0.23	0.14	0.044

9.4 Results for school board races in selected counties

9.4.1 Lycoming County

Table 6: Influence of one voter

Election	Party	2015	2019	2023
Canton	Democratic		0	0
	Republican		0	0
	Unaffiliated		0	0
East Lycoming 1	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
East Lycoming 2	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
East Lycoming 3	Democratic	0	0	0.0098
	Republican	0	0	0.0098
	Unaffiliated	0	0	0.0098
Jersey Shore 1	Democratic	0	0	0.024
	Republican	0	0	0.024
	Unaffiliated	0	0	0.024
Jersey Shore 2	Democratic	0.021	0.021	0
	Republican	0.057	0.057	0
	Unaffiliated	0.0068	0.0068	0
Jersey Shore 3	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Loyalsock	Democratic	0.0041	0.0041	0
	Republican	0.0041	0.0041	0
	Unaffiliated	0.0041	0.0041	0
Montgomery 1	Democratic			0
	Republican			0
	Unaffiliated			0
Montgomery 2	Democratic			0
	Republican			0
	Unaffiliated			0
Montgomery 3	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Montoursville 1	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Montoursville 2	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Montoursville 3	Democratic	0	0	0.0088
	Republican	0	0	0.0088
	Unaffiliated	0	0	0.0088
Muncy Boro	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Muncy Creek	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Muncy Township	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0

Election	Party	2015	2019	2023
S Williamsport 1	Democratic	0.010	0.010	0
	Republican	0.010	0.010	0
	Unaffiliated	0.010	0.010	0
S Williamsport 2	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
S Williamsport 3	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Southern Tioga 1	Democratic	0	0	0.0093
	Republican	0	0	0.0093
	Unaffiliated	0	0	0.0093
Wellsboro	Democratic	1.5	1.5	0.030
	Republican	0	0	0.030
	Unaffiliated	0	0	0.030
Williamsport	Democratic	0	0	0.033
	Republican	0	0	0.049
	Unaffiliated	0	0	0.010
Average	Democratic	0.077	0.070	0.029
	Republican	0.0036	0.0032	0.029
	Unaffiliated	0.0010	0.00095	0.028

9.4.2 Montgomery County

Table 7: Influence of one voter

Election	Party	2015	2019	2023
Abington	Democratic	0.0010	0.011	0.017
	Republican	0.0010	0.0092	0.017
	Unaffiliated	0.0010	0.0049	0.017
Boyertown Region 2	Democratic	0.028	0.013	0.069
	Republican	0.028	0.013	0.069
	Unaffiliated	0.028	0.013	0.069
Boyertown Region 3	Democratic	0	0.0043	0.048
	Republican	0	0.0043	0.048
	Unaffiliated	0	0.0043	0.048
Bryn Athyn	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Cheltenham	Democratic	0.050	0.033	0.00068
	Republican	0.023	0.016	0.00068
	Unaffiliated	0.023	0.016	0.00068
Colonial	Democratic	0.014	0.062	0
	Republican	0.014	0.059	0
	Unaffiliated	0.014	0.021	0
Hatboro-Horsham	Democratic	0.059	0.13	0.056
	Republican	0.059	0.13	0.056
	Unaffiliated	0.059	0.13	0.056
Jenkintown	Democratic	0.041	0	0
	Republican	0.041	0	0
	Unaffiliated	0.041	0	0
Lower Merion	Democratic	0.013	0.012	0.0025
	Republican	0.013	0.012	0.0025
	Unaffiliated	0.013	0.012	0.0025
Lower Moreland	Democratic	0.011	0.36	0.88
	Republican	0.011	0.36	0.88
	Unaffiliated	0.011	0.36	0.88
Methacton	Democratic	1.0	0.16	0.083
	Republican	0.28	0.16	0.083
	Unaffiliated	0.13	0.16	0.083
Norristown	Democratic	0.0017	0.0033	0.0015
	Republican	0.0017	0.0033	0.0015
	Unaffiliated	0.0017	0.0033	0.0015
North Penn	Democratic	0.31	0.082	0.020
	Republican	0.31	0.066	0.020
	Unaffiliated	0.31	0.039	0.020
Perkiomen Valley	Democratic	0.0044	0.089	0.11
	Republican	0.0044	0.077	0.11
	Unaffiliated	0.0044	0.044	0.11
Pottsgrove	Democratic	0	0	0.0063
	Republican	0	0	0.0063
	Unaffiliated	0	0	0.0063
Pottstown	Democratic	0.0057	0.012	0
	Republican	0.0057	0.0093	0
	Unaffiliated	0.0057	0.0047	0
Souderton	Democratic	0	0.017	0.13
	Republican	0	0.017	0.13
	Unaffiliated	0	0.017	0.13
Spring-Ford Region 1	Democratic	0	0.0072	0.0035
	Republican	0	0.0072	0.0035

Election	Party	2015	2019	2023
	Unaffiliated	0	0.0072	0.0035
Spring-Ford Region 2	Democratic	0	0.014	0.014
	Republican	0	0.014	0.014
	Unaffiliated	0	0.014	0.014
Spring-Ford Region 3	Democratic	0.010	0	0.0021
	Republican	0.010	0	0.0021
	Unaffiliated	0.010	0	0.0021
Springfield	Democratic	0.012	0.0014	0.0047
	Republican	0.012	0.0014	0.0047
	Unaffiliated	0.012	0.0014	0.0047
Upper Dublin	Democratic	0.95	0.15	0.032
	Republican	0.63	0.15	0.032
	Unaffiliated	0.14	0.15	0.032
Upper Merion At-Large	Democratic	0.0017	0.0024	0
	Republican	0.0017	0.0024	0
	Unaffiliated	0.0017	0.0024	0
Upper Merion Region 1	Democratic	0.0070	0.0012	0
	Republican	0.0070	0.0012	0
	Unaffiliated	0.0070	0.0012	0
Upper Merion Region 2	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Upper Merion Region 3	Democratic	0.012	0.0012	0
	Republican	0.012	0.0012	0
	Unaffiliated	0.012	0.0012	0
Upper Moreland	Democratic	0.014	0.027	0.028
	Republican	0.0072	0.022	0.028
	Unaffiliated	0.0072	0.011	0.028
Upper Perkiomen	Democratic	0	0.29	1.6
	Republican	0	0.23	1.6
	Unaffiliated	0	0.078	1.6
Wissahickon	Democratic	0.31	0.049	0.034
	Republican	0.31	0.082	0.034
	Unaffiliated	0.31	0.049	0.034
Average	Democratic	0.099	0.053	0.11
	Republican	0.062	0.049	0.11
	Unaffiliated	0.039	0.039	0.11

9.4.3 Delaware County

Table 8: Influence of one voter

Election	Party	2015	2019	2023
Chester Upland	Democratic	0.074	0	0.041
	Republican	0.074	0	0
	Unaffiliated	0.074	0	0
Chichester Region 1	Democratic	0.0023	0.0030	0
	Republican	0.0023	0.0030	0
	Unaffiliated	0.0023	0.0030	0
Chichester Region 2	Democratic	0.044	0.022	0
	Republican	0.065	0.022	0
	Unaffiliated	0.019	0.022	0
Chichester Region 3	Democratic	0	0.0087	0.056
	Republican	0	0.0087	0.060
	Unaffiliated	0	0.0087	0.031
Garnet Valley	Democratic	0.0024	0.066	0

Election	Party	2015	2019	2023
Haverford	Republican	0.0024	0.066	0
	Unaffiliated	0.0024	0.066	0
	Democratic	0.13	0.00038	0.045
Interboro Region 1	Republican	0.13	0.00038	0.035
	Unaffiliated	0.13	0.00038	0.021
	Democratic	0.012	0.021	0
Interboro Region 2	Republican	0.012	0.021	0
	Unaffiliated	0.012	0.021	0
	Democratic	0.0072	0.0081	0
Interboro Region 3	Republican	0.0072	0.0081	0
	Unaffiliated	0.0072	0.0081	0
	Democratic	0.030	0.038	0
Interboro Region 5	Republican	0.035	0.038	0
	Unaffiliated	0.015	0.038	0
	Democratic	0.025	0.014	0
Interboro Region 6	Republican	0.062	0.014	0
	Unaffiliated	0.025	0.014	0
	Democratic	0.014	0.010	0
Interboro Region 9	Republican	0.014	0.010	0
	Unaffiliated	0.0072	0.010	0
	Democratic		0	
Marple Newtown	Republican		0	
	Unaffiliated		0	
	Democratic	0.046	0.044	0.10
Penn Delco	Republican	0.10	0.044	0.10
	Unaffiliated	0.046	0.044	0.10
	Democratic	0.00096	0.14	0.0012
Radnor	Republican	0.00096	0.17	0.0012
	Unaffiliated	0.00096	0.082	0.0012
	Democratic	2.7	0.051	0.021
Ridley	Republican	2.3	0.051	0.021
	Unaffiliated	0.26	0.051	0.021
	Democratic	0.047	0.079	0
Rose Tree Media	Republican	0.047	0.18	0
	Unaffiliated	0.047	0.046	0
	Democratic	0.00059	0.15	0.053
Southeast Delco	Republican	0.00059	0.15	0.053
	Unaffiliated	0.00059	0.15	0.053
	Democratic	1.2	0	0.00052
Springfield Region 4	Republican	0.30	0	0.00052
	Unaffiliated	0.30	0	0.00052
	Democratic	0	0	0
Springfield Region 5	Republican	0	0	0
	Unaffiliated	0	0	0
	Democratic	0.0091	0.0095	0
Springfield Region 6	Republican	0.0091	0.0095	0
	Unaffiliated	0.0091	0.0095	0
	Democratic	0	0.0037	0
Springfield Region 7	Republican	0	0.0037	0
	Unaffiliated	0	0.0037	0
	Democratic	0	0.0022	0.0027
Springfield Region 9	Republican	0	0.0022	0.0027
	Unaffiliated	0	0.0022	0.0027
	Democratic	1	0.0046	0.0098
Unionville Region C	Republican	1	0.0046	0.0098
	Unaffiliated	1	0.0046	0.0098
	Democratic	0.22	0.18	1.0

Election	Party	2015	2019	2023
	Republican	0.26	0.18	1.0
	Unaffiliated	0.062	0.18	1.0
Upper Darby	Democratic	1.1	0.054	0.068
	Republican	0.85	0.054	0.034
	Unaffiliated	0.15	0.054	0.034
Wallingford Swarthmore Region 1	Democratic	0.0023	0	0
	Republican	0.0023	0	0
	Unaffiliated	0.0023	0	0
Wallingford Swarthmore Region 2	Democratic	0.20	0.016	0
	Republican	0.18	0.0088	0
	Unaffiliated	0.17	0.0088	0
Wallingford Swarthmore Region 3	Democratic	0.0044	0	0
	Republican	0.0044	0	0
	Unaffiliated	0.0044	0	0
West Chester Region 3	Democratic	0.0040	0.0016	0.0046
	Republican	0.014	0.0016	0.0046
	Unaffiliated	0.0020	0.0016	0.0046
William Penn Region 1	Democratic	0.0086	0.0049	0
	Republican	0.0086	0.0049	0
	Unaffiliated	0.0086	0.0049	0
William Penn Region 2	Democratic	0		
	Republican	0		
	Unaffiliated	0		
William Penn Region 3	Democratic	0	0	0
	Republican	0	0	0
	Unaffiliated	0	0	0
William Penn Region 5	Democratic	0.0044	0	0
	Republican	0.0044	0	0
	Unaffiliated	0.0044	0	0
William Penn Region 6	Democratic		0	
	Republican		0	
	Unaffiliated		0	
William Penn Region 7	Democratic	0.0015	0	0
	Republican	0.0015	0	0
	Unaffiliated	0.0015	0	0
William Penn Region 8	Democratic	0	0.0080	0
	Republican	0	0	0
	Unaffiliated	0	0	0
Average	Democratic	0.22	0.028	0.043
	Republican	0.15	0.031	0.040
	Unaffiliated	0.069	0.025	0.039

Appendices

A Voter Registration Tables

Voter registration data was taken from <https://www.pa.gov/agencies/dos/resources/voting-and-elections-resources/voting-and-election-statistics/election-data#accordion-9f6b1feab5-item-bcc0930d38> and aggregated by House and Senate districtings to produce the tables below^[15]. Recall that here, as elsewhere, my *Unaffiliated* category includes all voters not affiliated with a major party—that is, not eligible to vote in a major party primary. In numbers this is not a significant distinction from being unaffiliated with any organized political party. For example, in 2010, less than 0.4% of voters not affiliated with either major party were affiliated with the Libertarian party, the largest minor party.

A.1 2010 Voter Registration by State House District

Table 9: Registered voters by district

District	Democratic	Republican	Unaffiliated	Total
1	24,287	6,966	4,006	35,259
2	25,184	11,165	4,754	41,103
3	21,534	18,230	4,697	44,461
4	18,208	15,424	4,035	37,667
5	17,086	16,566	4,672	38,324
6	15,506	18,860	4,320	38,686
7	25,361	12,167	4,575	42,103
8	14,096	20,962	4,715	39,773
9	22,475	13,030	3,336	38,841
10	19,586	15,281	4,561	39,428
11	16,192	16,876	4,055	37,123
12	14,839	25,756	5,864	46,459
13	18,004	21,562	7,514	47,080
14	21,862	11,154	3,835	36,851
15	23,202	13,319	3,858	40,379
16	25,108	11,835	4,527	41,470
17	15,382	19,817	4,424	39,623
18	19,940	16,017	5,092	41,049
19	31,833	4,296	4,928	41,057
20	29,318	7,823	5,037	42,178
21	28,169	9,375	5,929	43,473
22	28,027	9,578	4,918	42,523
23	33,873	7,212	9,254	50,339

^[15]There is slight variation in the data available from the PA Department of State; the tables available at <https://www.pa.gov/content/dam/copapwp-pagov/en/dos/resources/voting-and-elections/voting-and-election-statistics/voter-registration-statistics/2010%20General%20Stats.pdf> and <https://www.pa.gov/content/dam/copapwp-pagov/en/dos/resources/voting-and-elections/voting-and-election-statistics/voter-registration-statistics/2020%20Election%20VR%20Stats%20%20FINAL%20REVIEWED.pdf> vary slightly from the totals here, but agree within 0.002%

District	Democratic	Republican	Unaffiliated	Total
24	36,264	3,807	4,083	44,154
25	23,257	14,282	4,719	42,258
26	18,660	19,265	6,678	44,603
27	26,637	8,938	4,633	40,208
28	18,289	24,254	6,624	49,167
29	19,257	21,964	6,792	48,013
30	22,575	18,896	5,219	46,690
31	18,555	19,484	8,563	46,602
32	27,885	10,303	3,911	42,099
33	22,713	13,223	4,296	40,232
34	29,605	8,647	4,186	42,438
35	29,200	7,335	2,920	39,455
36	27,849	8,303	4,797	40,949
37	9,115	24,863	5,379	39,357
38	28,052	8,986	3,210	40,248
39	25,511	12,197	3,789	41,497
40	18,368	23,813	5,341	47,522
41	16,283	24,096	6,696	47,075
42	23,111	18,300	5,541	46,952
43	12,202	24,141	5,875	42,218
44	24,175	20,203	6,207	50,585
45	29,406	12,313	4,537	46,256
46	25,550	14,669	4,524	44,743
47	17,459	22,275	6,489	46,223
48	27,757	15,569	4,952	48,278
49	27,645	9,595	3,752	40,992
50	27,133	9,052	2,783	38,968
51	25,178	10,610	2,993	38,781
52	24,130	9,423	2,975	36,528
53	15,971	18,985	7,267	42,223
54	21,712	14,039	4,128	39,879
55	20,391	12,385	3,786	36,562
56	21,584	15,468	3,903	40,955
57	20,577	14,384	4,253	39,214
58	24,299	11,056	3,370	38,725
59	19,486	17,613	4,202	41,301
60	15,159	17,145	3,665	35,969
61	20,557	21,740	7,486	49,783
62	18,601	15,034	5,422	39,057
63	13,736	17,423	3,366	34,525
64	13,867	18,535	3,994	36,396
65	15,326	17,866	4,484	37,676
66	12,887	18,008	3,196	34,091

District	Democratic	Republican	Unaffiliated	Total
67	11,366	20,895	3,863	36,124
68	10,806	21,873	4,220	36,899
69	13,712	20,870	2,930	37,512
70	20,518	19,450	7,140	47,108
71	20,813	11,695	3,194	35,702
72	23,009	13,215	3,130	39,354
73	21,292	10,003	2,713	34,008
74	16,370	14,903	3,250	34,523
75	17,361	14,931	3,788	36,080
76	15,093	14,929	3,699	33,721
77	21,143	16,441	8,568	46,152
78	13,841	23,631	3,548	41,020
79	15,935	17,938	4,833	38,706
80	12,371	25,929	4,244	42,544
81	12,473	21,439	3,847	37,759
82	12,106	20,614	3,362	36,082
83	14,706	16,724	4,546	35,976
84	11,352	19,444	3,912	34,708
85	10,381	18,257	4,507	33,145
86	10,612	22,723	4,319	37,654
87	16,613	25,253	6,775	48,641
88	14,245	22,537	5,911	42,693
89	14,928	22,104	6,235	43,267
90	11,923	24,578	5,615	42,116
91	13,966	20,130	5,837	39,933
92	13,246	25,382	6,242	44,870
93	15,857	23,729	6,617	46,203
94	13,299	21,405	5,963	40,667
95	22,085	10,762	6,375	39,222
96	23,981	10,223	7,554	41,758
97	14,174	25,552	6,405	46,131
98	12,880	22,006	5,699	40,585
99	7,405	21,286	4,555	33,246
100	7,303	20,963	4,296	32,562
101	15,675	20,525	5,928	42,128
102	12,375	24,180	5,153	41,708
103	31,057	8,719	5,731	45,507
104	17,748	21,006	5,141	43,895
105	19,192	24,957	6,481	50,630
106	16,151	21,922	6,117	44,190
107	18,591	14,059	3,708	36,358
108	12,055	19,844	4,243	36,142
109	17,476	16,205	6,083	39,764

District	Democratic	Republican	Unaffiliated	Total
110	12,622	21,367	4,354	38,343
111	12,414	19,351	4,001	35,766
112	27,291	10,310	4,442	42,043
113	25,568	9,570	2,912	38,050
114	25,585	14,682	3,150	43,417
115	26,828	11,784	3,429	42,041
116	18,189	12,335	3,499	34,023
117	14,749	18,139	3,558	36,446
118	23,953	12,237	5,562	41,752
119	21,515	10,045	2,802	34,362
120	20,119	13,183	3,068	36,370
121	22,074	6,677	2,902	31,653
122	19,392	14,191	4,883	38,466
123	17,242	12,189	2,624	32,055
124	15,668	20,442	4,776	40,886
125	14,699	19,403	4,213	38,315
126	24,647	10,373	5,157	40,177
127	26,012	5,850	5,292	37,154
128	18,705	20,836	6,189	45,730
129	16,766	19,685	5,654	42,105
130	18,446	19,236	6,521	44,203
131	20,727	14,886	6,708	42,321
132	25,609	8,694	6,919	41,222
133	23,176	8,913	6,639	38,728
134	21,554	22,406	7,981	51,941
135	24,862	11,522	6,344	42,728
136	22,348	12,142	7,328	41,818
137	21,760	18,677	8,551	48,988
138	19,810	18,334	7,150	45,294
139	17,333	23,683	8,629	49,645
140	25,768	9,344	5,752	40,864
141	21,860	10,113	4,737	36,710
142	19,975	16,811	6,014	42,800
143	16,379	21,729	7,447	45,555
144	16,923	21,851	6,688	45,462
145	15,598	19,110	7,171	41,879
146	20,326	18,479	8,193	46,998
147	15,301	21,658	7,591	44,550
148	24,701	18,968	6,866	50,535
149	24,969	16,715	8,177	49,861
150	19,670	19,217	7,425	46,312
151	19,696	19,760	6,925	46,381
152	18,703	18,851	6,064	43,618

District	Democratic	Republican	Unaffiliated	Total
153	24,102	17,451	5,985	47,538
154	30,988	12,638	6,005	49,631
155	17,372	22,357	8,425	48,154
156	17,841	19,757	7,191	44,789
157	19,572	20,248	7,849	47,669
158	16,890	20,580	7,830	45,300
159	21,755	14,039	3,163	38,957
160	15,617	29,370	6,762	51,749
161	18,504	22,985	5,908	47,397
162	16,193	19,866	3,761	39,820
163	17,458	19,010	4,314	40,782
164	20,084	14,398	3,974	38,456
165	13,977	22,649	4,764	41,390
166	19,664	20,556	5,631	45,851
167	17,636	22,086	7,580	47,302
168	16,721	24,385	5,977	47,083
169	22,245	12,800	3,019	38,064
170	22,001	12,572	3,518	38,091
171	19,669	19,814	9,003	48,486
172	21,740	15,446	2,808	39,994
173	24,751	6,886	2,600	34,237
174	27,074	6,546	3,509	37,129
175	35,779	7,536	7,303	50,618
176	22,259	12,915	7,993	43,167
177	25,743	10,034	3,195	38,972
178	17,523	21,634	6,095	45,252
179	31,741	3,557	3,128	38,426
180	33,982	3,551	3,632	41,165
181	43,140	3,332	4,646	51,118
182	37,534	6,563	9,068	53,165
183	20,934	15,692	6,279	42,905
184	31,241	5,307	3,688	40,236
185	31,158	6,027	2,597	39,782
186	37,282	3,181	3,690	44,153
187	17,224	18,818	6,822	42,864
188	34,265	3,053	7,363	44,681
189	22,677	18,105	9,681	50,463
190	39,804	1,689	2,412	43,905
191	34,751	1,999	2,245	38,995
192	36,287	1,923	2,546	40,756
193	12,686	21,382	5,312	39,380
194	27,569	8,893	5,309	41,771
195	38,549	3,421	4,956	46,926

District	Democratic	Republican	Unaffiliated	Total
196	15,455	21,924	5,707	43,086
197	40,555	2,528	3,540	46,623
198	37,346	2,319	3,395	43,060
199	14,058	19,390	5,510	38,958
200	37,680	3,525	3,267	44,472
201	36,208	1,506	2,497	40,211
202	29,322	4,612	2,880	36,814
203	34,474	2,387	2,448	39,309
Total	4,311,143	3,131,979	1,035,236	8,478,358

A.2 2020 Voter Registration by State House District

Table 10: Registered voters by district

District	Democratic	Republican	Unaffiliated	Total
1	24,158	8,387	5,884	38,429
2	24,603	13,149	6,510	44,262
3	23,881	20,833	7,074	51,788
4	16,687	20,418	6,019	43,124
5	14,244	21,268	6,061	41,573
6	15,606	23,005	5,700	44,311
7	20,632	15,894	5,587	42,113
8	10,753	23,930	5,222	39,905
9	17,512	16,545	4,376	38,433
10	15,880	17,197	5,632	38,709
11	13,505	22,619	5,570	41,694
12	16,167	30,911	8,153	55,231
13	16,218	20,526	7,736	44,480
14	16,707	21,694	5,778	44,179
15	16,954	20,691	5,244	42,889
16	23,099	14,276	5,763	43,138
17	13,445	21,840	5,291	40,576
18	20,357	16,138	6,481	42,976
19	32,137	4,705	6,479	43,321
20	29,771	10,948	7,244	47,963
21	28,871	11,674	6,894	47,439
22	22,964	6,039	7,938	36,941
23	35,429	6,296	10,013	51,738
24	40,292	3,424	6,568	50,284
25	24,442	13,597	5,917	43,956
26	17,253	21,025	7,741	46,019
27	27,978	9,585	6,233	43,796
28	20,193	24,096	8,967	53,256
29	20,105	22,719	7,870	50,694
30	22,312	21,440	6,936	50,688
31	23,644	19,648	10,547	53,839
32	29,618	12,658	6,049	48,325
33	21,077	14,484	5,750	41,311
34	32,174	8,168	5,982	46,324
35	26,586	8,843	4,872	40,301
36	27,585	10,177	6,866	44,628
37	10,065	26,342	6,335	42,742
38	25,775	14,811	5,884	46,470
39	19,850	19,748	5,300	44,898

District	Democratic	Republican	Unaffiliated	Total
40	20,386	25,423	7,222	53,031
41	17,453	24,035	8,004	49,492
42	25,868	13,773	7,103	46,744
43	13,096	22,822	6,964	42,882
44	21,615	21,551	7,812	50,978
45	26,590	14,649	6,370	47,609
46	22,715	21,735	6,810	51,260
47	15,480	22,725	7,170	45,375
48	21,737	19,546	6,136	47,419
49	19,621	14,574	4,250	38,445
50	17,726	14,869	3,532	36,127
51	17,358	17,535	3,958	38,851
52	17,449	18,105	3,872	39,426
53	18,673	18,163	7,479	44,315
54	17,649	22,053	5,820	45,522
55	15,835	18,589	5,073	39,497
56	18,017	22,928	5,473	46,418
57	18,047	20,636	5,462	44,145
58	19,471	17,782	4,725	41,978
59	15,262	24,461	5,063	44,786
60	13,115	23,946	4,839	41,900
61	22,454	19,164	7,866	49,484
62	14,036	18,543	5,041	37,620
63	9,915	22,482	4,043	36,440
64	10,630	21,644	4,696	36,970
65	13,149	23,948	6,404	43,501
66	10,993	26,590	4,774	42,357
67	9,505	24,820	5,088	39,413
68	8,476	25,069	4,963	38,508
69	10,876	26,860	3,975	41,711
70	22,548	12,411	6,186	41,145
71	18,152	17,773	4,570	40,495
72	16,207	18,794	3,920	38,921
73	13,444	20,106	4,064	37,614
74	22,881	13,461	7,351	43,693
75	13,682	23,488	4,924	42,094
76	11,813	19,994	4,562	36,369
77	21,449	12,647	10,230	44,326
78	8,912	29,633	4,493	43,038
79	12,659	20,114	5,305	38,078
80	9,396	28,385	4,636	42,417
81	13,007	24,730	5,163	42,900
82	9,024	24,370	4,211	37,605

District	Democratic	Republican	Unaffiliated	Total
83	12,990	19,019	5,559	37,568
84	8,728	26,027	4,809	39,564
85	10,910	23,042	5,942	39,894
86	10,087	25,680	5,841	41,608
87	19,886	26,449	9,110	55,445
88	17,413	23,242	7,839	48,494
89	12,333	24,428	6,347	43,108
90	10,005	27,310	6,460	43,775
91	13,670	25,405	7,830	46,905
92	12,026	28,199	6,862	47,087
93	14,323	25,922	7,518	47,763
94	12,316	23,904	6,626	42,846
95	22,392	10,345	7,916	40,653
96	25,141	8,019	8,625	41,785
97	17,655	25,863	8,248	51,766
98	13,135	22,898	6,744	42,777
99	8,109	22,740	5,586	36,435
100	8,416	21,684	5,456	35,556
101	16,349	23,260	7,814	47,423
102	10,689	25,165	5,809	41,663
103	29,813	6,956	7,141	43,910
104	19,017	22,059	6,434	47,510
105	20,793	23,332	7,812	51,937
106	18,656	20,832	8,031	47,519
107	15,504	19,856	5,704	41,064
108	10,901	23,157	5,735	39,793
109	12,899	18,727	5,748	37,374
110	9,899	23,068	4,915	37,882
111	11,033	23,027	5,653	39,713
112	28,657	10,675	4,693	44,025
113	25,224	11,173	4,908	41,305
114	25,063	16,972	4,787	46,822
115	22,422	11,359	8,177	41,958
116	16,241	19,075	5,666	40,982
117	13,568	23,735	5,022	42,325
118	24,161	17,035	4,958	46,154
119	20,380	16,158	5,526	42,064
120	21,832	17,580	5,398	44,810
121	22,544	11,886	5,702	40,132
122	16,764	21,039	7,036	44,839
123	13,720	14,719	4,144	32,583
124	12,426	22,808	5,511	40,745
125	10,795	24,034	4,970	39,799

District	Democratic	Republican	Unaffiliated	Total
126	23,462	10,312	6,769	40,543
127	21,881	4,736	6,629	33,246
128	17,093	22,307	7,033	46,433
129	17,060	21,936	6,765	45,761
130	16,167	21,896	7,085	45,148
131	19,196	22,684	8,751	50,631
132	23,445	9,273	7,511	40,229
133	22,620	12,250	7,267	42,137
134	18,902	21,513	7,923	48,338
135	26,459	11,150	9,561	47,170
136	23,486	13,370	9,386	46,242
137	19,259	20,302	9,614	49,175
138	20,638	22,580	9,593	52,811
139	14,152	25,152	9,429	48,733
140	24,676	12,631	7,130	44,437
141	22,813	13,016	6,865	42,694
142	21,455	22,500	7,469	51,424
143	20,044	23,349	9,287	52,680
144	18,467	22,560	8,176	49,203
145	16,609	22,039	8,018	46,666
146	19,158	17,855	7,719	44,732
147	16,692	22,328	7,680	46,700
148	29,754	16,034	7,835	53,623
149	27,476	14,475	8,411	50,362
150	18,874	18,434	7,595	44,903
151	20,835	18,369	7,542	46,746
152	22,210	18,199	7,236	47,645
153	28,836	14,374	6,775	49,985
154	32,910	9,100	5,963	47,973
155	21,325	21,802	9,827	52,954
156	19,733	20,843	8,354	48,930
157	21,589	17,538	9,098	48,225
158	18,164	19,332	8,420	45,916
159	25,319	11,216	5,033	41,568
160	18,278	23,519	7,973	49,770
161	21,336	22,577	6,897	50,810
162	19,907	20,712	5,417	46,036
163	22,346	18,779	5,952	47,077
164	29,316	5,835	4,805	39,956
165	19,176	24,120	6,797	50,093
166	27,305	15,575	8,082	50,962
167	21,403	20,706	9,397	51,506
168	21,119	24,785	7,703	53,607

District	Democratic	Republican	Unaffiliated	Total
169	12,685	26,812	7,698	47,195
170	21,404	13,313	5,755	40,472
171	17,827	24,306	7,470	49,603
172	22,725	11,072	5,180	38,977
173	23,742	9,880	4,516	38,138
174	23,765	10,261	5,399	39,425
175	39,431	7,368	9,717	56,516
176	18,338	17,670	9,169	45,177
177	24,577	10,983	5,399	40,959
178	20,720	24,032	8,653	53,405
179	31,624	3,048	5,079	39,751
180	27,893	3,239	5,592	36,724
181	41,181	2,956	6,888	51,025
182	45,692	7,610	11,306	64,608
183	18,407	19,933	7,427	45,767
184	30,464	7,046	5,575	43,085
185	34,307	6,657	4,630	45,594
186	42,736	4,365	6,916	54,017
187	17,322	21,667	8,195	47,184
188	41,226	2,744	8,247	52,217
189	19,324	16,523	9,035	44,882
190	43,035	1,873	5,021	49,929
191	37,712	1,898	3,994	43,604
192	41,050	1,781	4,142	46,973
193	11,345	25,715	6,343	43,403
194	34,010	9,355	7,991	51,356
195	43,047	3,231	6,443	52,721
196	13,618	24,851	6,592	45,061
197	36,244	2,502	5,348	44,094
198	41,274	1,798	4,316	47,388
199	16,991	23,694	8,218	48,903
200	45,548	2,160	4,350	52,058
201	39,876	1,561	4,041	45,478
202	26,296	4,542	4,855	35,693
203	38,708	2,007	4,041	44,756
Total	4,228,874	3,543,053	1,318,993	9,090,920

A.3 2010 Voter Registration by State Senate District

Table 11: Registered voters by district

District	Democratic	Republican	Unaffiliated	Total
1	146,501	26,321	25,073	197,895
2	124,437	24,942	13,611	162,990
3	145,827	17,934	13,691	177,452
4	141,113	28,403	16,440	185,956
5	98,151	42,666	13,033	153,850
6	85,962	65,037	22,677	173,676
7	139,084	23,130	17,697	179,911
8	130,230	26,339	15,662	172,231
9	73,569	89,758	24,931	188,258
10	76,516	78,582	31,407	186,505
11	87,117	51,257	22,937	161,311
12	78,458	85,063	27,070	190,591
13	66,089	81,042	25,741	172,872
14	89,762	40,448	13,737	143,947
15	86,177	77,283	24,563	188,023
16	91,892	64,983	30,116	186,991
17	92,463	67,724	27,371	187,558
18	89,148	51,599	27,843	168,590
19	74,944	87,149	32,248	194,341
20	70,716	81,941	24,700	177,357
21	60,440	70,446	16,847	147,733
22	114,261	46,242	15,802	176,305
23	51,420	80,000	18,028	149,448
24	76,610	76,779	31,235	184,624
25	56,995	75,706	15,934	148,635
26	68,641	88,506	19,075	176,222
27	60,556	73,582	18,479	152,617
28	69,428	80,575	25,606	175,609
29	67,846	69,272	18,843	155,961
30	54,868	88,289	16,425	159,582
31	59,755	93,238	25,316	178,309
32	87,633	48,342	11,891	147,866
33	52,781	89,281	22,084	164,146
34	64,667	77,822	25,149	167,638
35	80,174	49,324	12,655	142,153
36	43,083	93,383	22,345	158,811
37	89,092	77,134	21,833	188,059
38	116,135	30,286	17,549	163,970
39	81,685	54,880	15,114	151,679

District	Democratic	Republican	Unaffiliated	Total
40	75,983	83,570	22,216	181,769
41	63,035	68,561	16,464	148,060
42	109,116	35,962	20,185	165,263
43	119,676	31,879	20,825	172,380
44	77,244	82,342	30,414	190,000
45	102,090	39,681	14,155	155,926
46	103,250	50,748	15,818	169,816
47	91,853	46,903	14,781	153,537
48	60,914	93,361	23,462	177,737
49	90,916	52,303	18,361	161,580
50	72,840	71,981	17,797	162,618
Total	4,311,143	3,131,979	1,035,236	8,478,358

A.4 2020 Voter Registration by State Senate District

Table 12: Registered voters by district

District	Democratic	Republican	Unaffiliated	Total
1	164,596	32,066	35,938	232,600
2	116,360	23,810	21,652	161,822
3	145,667	10,537	19,848	176,052
4	156,432	26,362	21,200	203,994
5	94,398	42,973	21,352	158,723
6	87,286	72,821	28,762	188,869
7	146,649	24,326	24,460	195,435
8	149,518	17,135	21,257	187,910
9	85,033	85,344	29,954	200,331
10	85,886	83,451	36,963	206,300
11	79,267	55,788	26,931	161,986
12	81,726	78,143	29,501	189,370
13	66,144	79,552	29,863	175,559
14	88,077	64,713	24,524	177,314
15	77,832	79,759	27,327	184,918
16	88,192	65,402	34,326	187,920
17	108,958	59,782	31,482	200,222
18	97,443	59,386	36,547	193,376
19	85,586	73,106	35,025	193,717
20	58,265	90,246	26,872	175,383
21	56,484	102,360	26,207	185,051
22	102,538	55,633	21,075	179,246
23	42,139	89,805	21,128	153,072
24	69,311	79,087	30,173	178,571
25	43,785	94,040	19,399	157,224
26	90,608	82,342	25,977	198,927
27	49,478	84,559	21,998	156,035
28	64,849	91,252	30,286	186,387
29	56,152	84,320	22,050	162,522
30	39,701	100,339	19,899	159,939
31	68,901	104,474	32,923	206,298
32	65,656	75,613	15,617	156,886
33	50,808	104,191	29,007	184,006
34	60,340	77,804	26,378	164,522
35	56,498	84,166	16,502	157,166
36	49,188	101,781	27,768	178,737
37	96,980	89,561	30,697	217,238
38	96,027	75,677	29,399	201,103
39	67,344	83,470	20,440	171,254

District	Democratic	Republican	Unaffiliated	Total
40	80,385	77,080	36,943	194,408
41	51,230	88,739	19,579	159,548
42	127,744	38,893	28,088	194,725
43	139,447	31,425	30,397	201,269
44	78,240	85,118	34,216	197,574
45	99,778	54,235	22,477	176,490
46	81,999	74,756	21,089	177,844
47	71,486	74,413	21,457	167,356
48	60,950	90,133	27,726	178,809
49	89,694	62,814	25,270	177,778
50	57,819	80,271	21,044	159,134
Total	4,228,874	3,543,053	1,318,993	9,090,920

B Technical details of analysis approach

When extending my analysis framework to elections in which multiple winners advance from each election stage, I count vote margins necessary to change the final winning slate of the overall election, as measured from the perspective of a voter participating in just the general election, vs voters participating in both the general election and one of the primaries.

For each alternate winning slate in the primary, I consider it in my analysis only if it would result in the same number of overall general election candidates as occurred in the actual election. In particular, I do not consider alternative slates where a candidate that actually won the primary and then dropped out before the general election is replaced with another candidate. Note that this makes our analysis conservative with respect to how much more influence primary-eligible voters have, as it undercounts the influence of primaries.

For each alternative winning slate I consider, I consider a simulated general election in which this alternative slate of candidates receives the general election votes cast for the actual slate of winning primary candidates. I distribute the votes to the alternative slate as follows: any member of the alternative slate that was also a member of the actual winning slate gets their actual number of winning general election votes. After that, replacement candidates inherit the vote totals of the displaced candidates; the replacement candidate with the most primary votes inherits the general votes of the displaced candidate with the most general votes, and so on. Note that this generalizes the simple single-winner framework, in which an alternative primary winner simply inherits the general election votes cast for that party in the general election.

With this simulation framework, for each alternative slate of all candidates (from either primary) there are two numbers, A , and B , where to make the alternative slate win this simulated election, we need to increase/decrease vote counts by a total of A in the primary election and by a total of B in the general election. The influence of a primary-eligible voter with respect to this slate is $1/\max(A,B)$, and the voter’s total influence is the sum of this over all alternative slates. For an alternative slate of candidates that appeared in the actual general election, there is some number B such that we need to increase/decrease vote counts by a total of B in the general election for that slate to win. A general-only eligible voter has influence $1/B$ with respect to this slate, and their total influence is the sum of this over all alternative slates composed of candidates that actually appeared in the general election.

C Robustness checks

In this section, I re-analyze the same four large datasets (PA House and PA senate in 2002-2012 and 2014-2020) used in my main analysis, but with variations in my methodology to check how sensitive the results of my analysis are to the particular

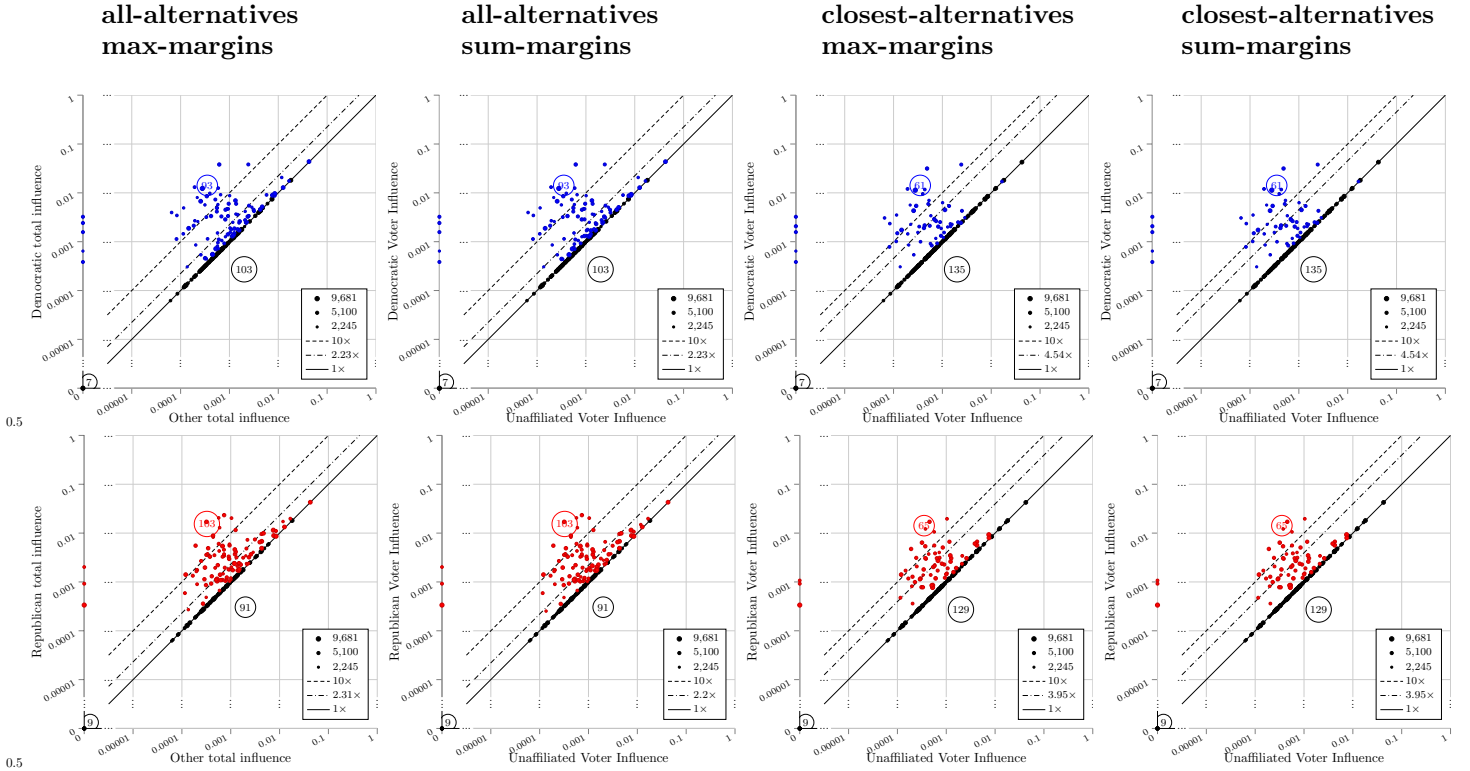
choices I made in constructing my analysis.

In particular, I consider the following two changes to my analysis model:

- (a) **Adding margins instead of taking the max:** In my main analysis, if electing an alternative candidate (or slate) X requires changing a votes in the primary and b votes in the general election, changing at most $\max(a, b)$ votes in each of the primary and general election suffices to elect X and I assign a primary eligible voter influence $1/\max(a, b)$ for this candidate. In this section, we call this first approach the *max-margins* approach. For the alternative *sum-margins* approach I instead use the sum of a and b , and assign the primary-eligible voter influence $1/(a + b)$ for this candidate.
- (b) **Considering influence via closest alternative winner (or slate) rather than all alternatives:** In my main analysis, I compute the influence of a voter by adding the influences I calculate for the voter for each alternative candidate. In this section, we call this first approach the *all-alternatives* approach. For the alternative *closest-alternative* approach, I consider the influence of the voter to just be the influence I calculate for them for the single winning candidate (or slate) that requires the fewest changes to win—that is, the single winning candidate (or slate) through which they have the greatest influence.

Below I show the aggregated results for each of datasets I used in this report, across these four different ways of doing the analysis. Note that the left-most column in each case is just the results of my main analysis. We see remarkable consistency across the three alternate analyses.

C.1 House 2002-2012



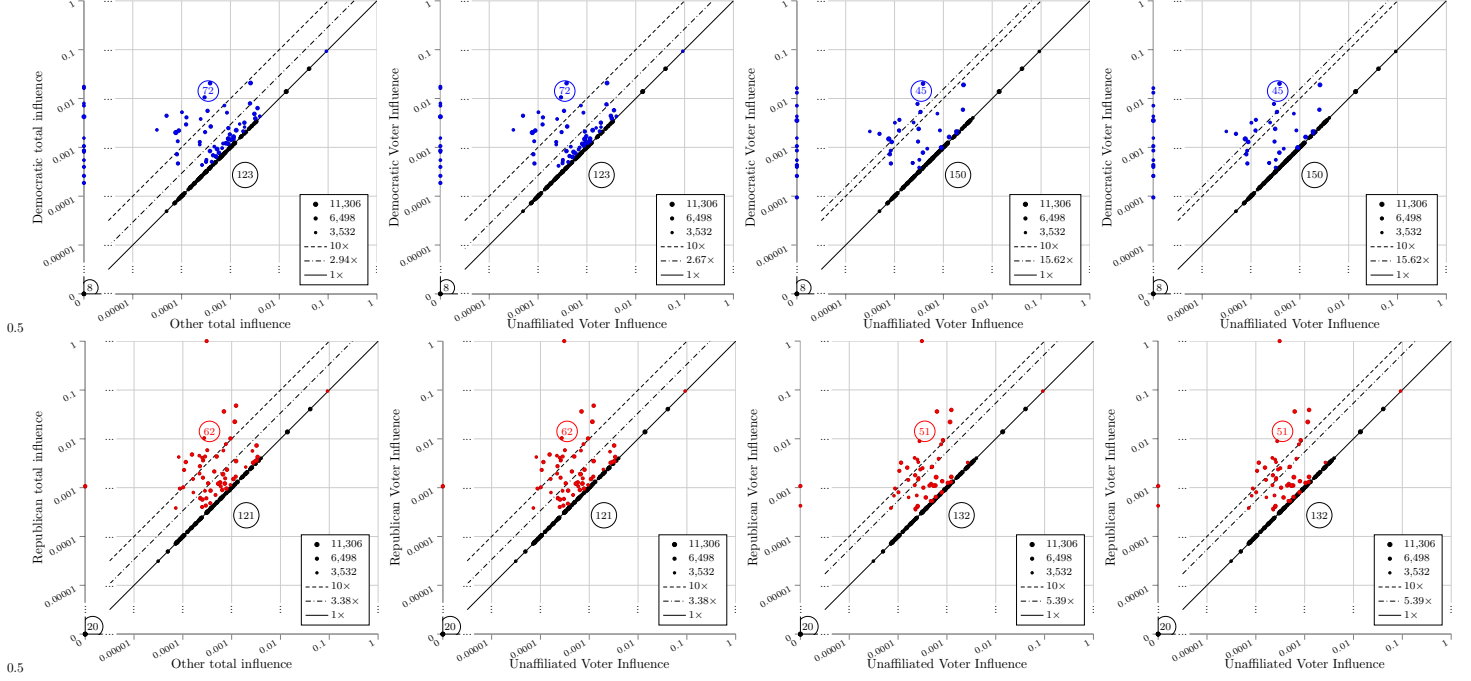
C.2 House 2014-2020

all-alternatives
max-margins

all-alternatives
sum-margins

closest-alternatives
max-margins

closest-alternatives
sum-margins



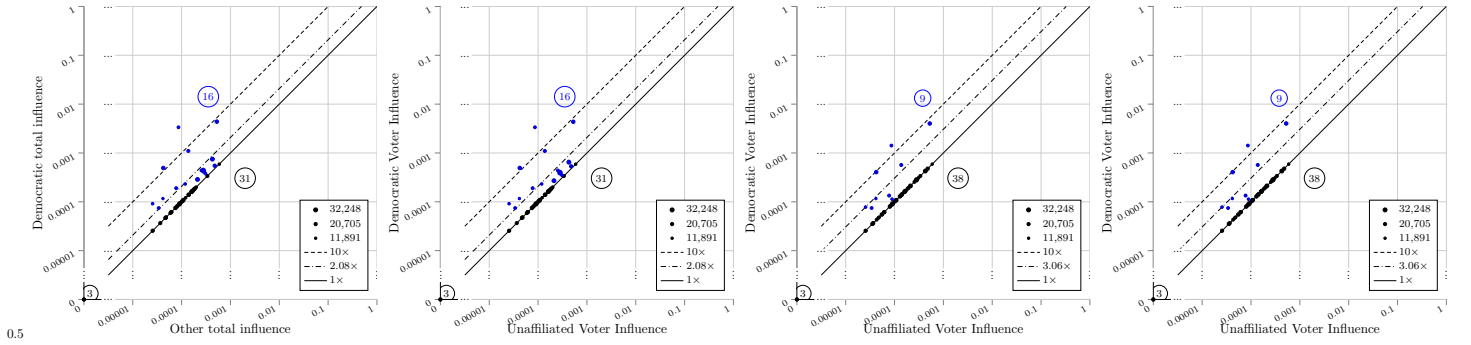
C.3 Senate 2002-2012

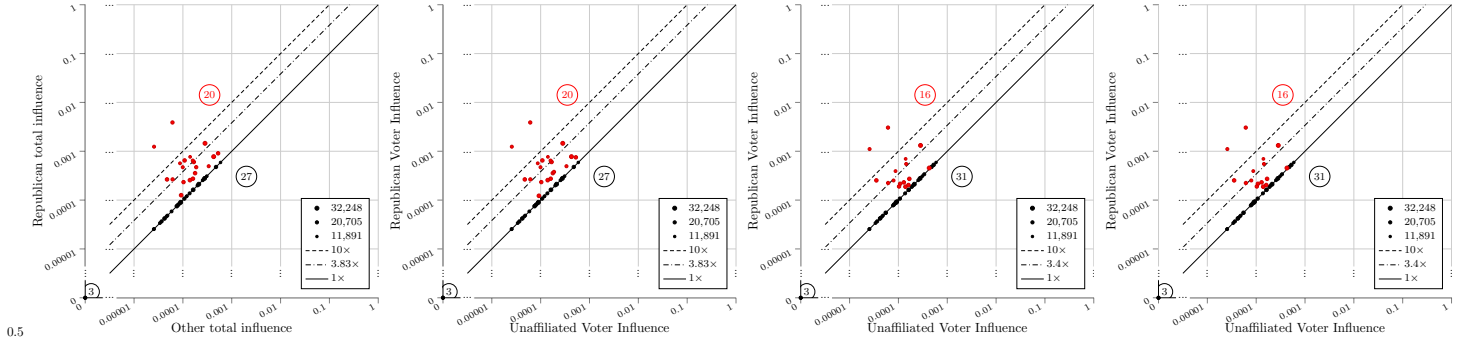
all-alternatives
max-margins

all-alternatives
sum-margins

closest-alternatives
max-margins

closest-alternatives
sum-margins





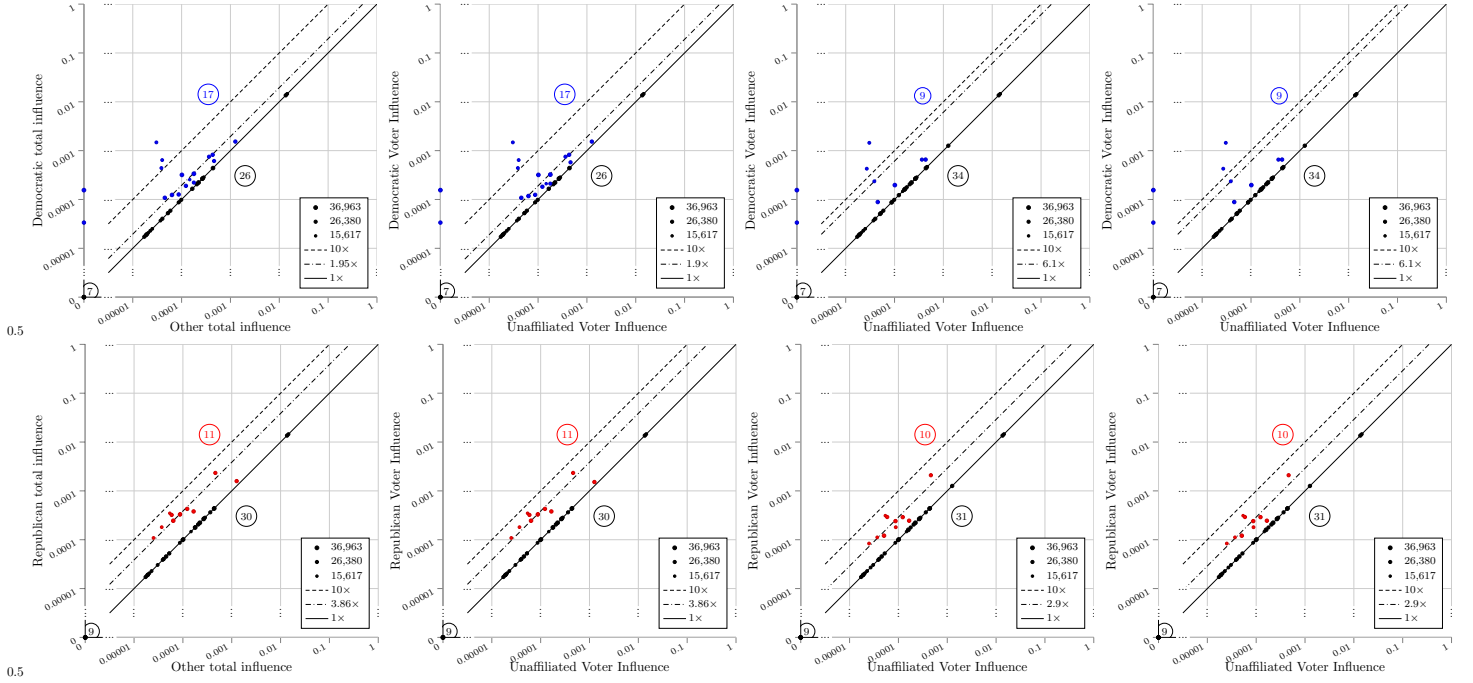
C.4 Senate 2014-2020

all-alternatives
max-margins

all-alternatives
sum-margins

closest-alternatives
max-margins

closest-alternatives
sum-margins



**CERTIFICATE OF COMPLIANCE WITH PUBLIC ACCESS
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I hereby certify that this filing complies with the provisions of the Case Records Public Access Policy of the Unified Judicial System of Pennsylvania requiring treatment of confidential documents and information differently than nonconfidential documents and information.

Dated: December 10, 2025

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CERTIFICATE OF SERVICE

I hereby certify that on this day a true and correct copy of the foregoing document was served on the following:

Carolyn DeLaurentis, Esq.,
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Dated: December 10, 2025

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