

# **Iowa Voting Series, Paper 7: An Examination of Iowa Voter Distribution in Elections Since 1982**

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## **Abstract**

This is the seventh paper in a series examining aspects of voting in Iowa. In the second through fifth papers in this series I examined Iowa's turnout statistics in midterm and presidential elections since 1982 in various combinations of party, sex, and age group. For the most part, these papers only examined the turnout percentages within each group or subgroup. In the sixth paper I changed focus and examined turnout in terms of absentee and early voting. In doing so I looked at the data in terms of turnout percentages for the subgroups, but also in terms of the distributions of subgroups among the voters for a particular election. Looking at voter distributions provided additional information regarding absentee voting, so in this paper I am returning to the prior analyses for an examination of the group and subgroup distributions. The results show that Republicans had a larger proportion of the voters in 12 of the 19 elections examined. Women were consistently more numerous in all 19 elections. Among the five indicated age groups, the 18-24 and 25-34 groups had the smallest proportions. For the three older groups (35-49, -50-64, and 65 & Over) the pattern was more complex, but driven largely by underlying changes in voter registration numbers. Results for combinations of sex, age group, and party are also examined.

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## **Updates**

Unlike most academic papers I plan to update the data for this paper as elections occur. Data updates might lead to changes in the text as well. Below is a list of the updates as they occurred.

- May 2014: Initial release
- May 2015: Update to include 2014 election data
- April 2017: Addition of 2016 election data; extension of data back to 1982 with significant changes to the text; format changes for most figures
- May 2019: Update to include 2018 election data and related changes to text

# Iowa Voting Series, Paper 7: An Examination of Iowa Voter Distribution in Elections Since 1982

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In the second through fifth papers in this series<sup>1</sup> I examined Iowa's turnout statistics in midterm and presidential elections since 1982 in various combinations of party, sex, and age group.<sup>2</sup> For the most part, these papers only examined the turnout percentages within each group or subgroup. In the sixth paper I changed focus and examined turnout in terms of absentee and early voting. In doing so I looked at the data in terms of turnout percentages for the subgroups, but also in terms of the distributions of subgroups among the voters for a particular election. Looking at voter distributions provided additional information regarding absentee voting, so in this paper I am returning to the prior analyses for an examination of the group and subgroup distributions. As with the prior papers in this series my focus will be on the statistics involved rather than theorizing about the reasons for particular distributions. Nevertheless, the goal of this paper, like the others in the series, is to examine aspects of voting in Iowa with an eye to future elections and to provide some background and context to discussions about Iowa voters.

## Data

As with prior papers, data for this examination were gathered from the Election Results & Statistics page of the Iowa Secretary of State's website.<sup>3</sup> This page provides links to election results for a variety of primary and general election contests in Iowa, including

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<sup>1</sup> The most recent versions of all papers in the series are currently available at <http://www.profhagle.com/papers/iowa-voting-series>. (This and other links were valid as of the date this paper was posted.) Although I make references to prior papers in the series, I would like each to stand on its own. Thus, some explanatory material will be repeated from one paper to the next to provide background or context.

<sup>2</sup> When I refer to turnout in "presidential elections" or "midterm elections" it is a shorthand way of referring to turnout in that year in general, not for a particular contest. Certainly some who vote in a particular election do not do so for every contest. As noted below, the data considered here are from statewide turnout statistics not from any particular contest except when a particular race is used as an example.

<sup>3</sup> Election results and statistics from 2000 to the present can be found at <http://sos.iowa.gov/elections/results/index.html>. Results for earlier elections can be found at <https://sos.iowa.gov/elections/results/archive.html>.

those for presidential and midterm elections. The statistics examined here are obtained from the Statewide Statistical Reports links.<sup>4</sup> The data in these reports is broken out by party, sex, and age group.

As in some prior papers, before proceeding I need to make an additional comment about the data for this paper. The information contained in the Statewide Statistical Reports links is not entirely complete with respect to party identification. The reports contain divisions for Democrat, Republican, and No Party voters,<sup>5</sup> but do not include an “Other” category as they do for the registration statistics. In addition, the 2002 Report did not contain a category for the Green Party, which was official for that election, but did for the Libertarian Party for the 2018 election. Although this was not a problem for the 2000 through 2006 elections, for 2008 and beyond it means that the grand total of registrants and voters in any particular age group cannot be achieved by simply adding the Democrats, Republicans, and No Party voters in that group. In the first paper in this series I simply added registrants in the Other category to No Party registrants. I cannot do that for this paper, however, as I have neither an exact count of such Other registrants on election day nor an indication of how many voted. Nevertheless, although this number varies from about one hundred to a few thousand registrants or voters depending on the category or election, that number is small, relatively speaking, and I will only focus on the three main political affiliations for this paper.

## Iowa Registered Voters and Past Findings

The focus of this paper is on the distribution of Iowa voters for general elections since 1982. This means I will examine the proportion of voters belonging to various categories based on political party, sex, and age group. There are, of course, two factors that determine the voter distribution for a particular election: registration and turnout. In examining the proportion of voters for a set of categories we must keep in mind the underlying voter registration numbers and turnout percentages for those categories. Although I examined registration numbers and turnout percentages in prior papers, in examining distributions here I will make frequent references to findings from those prior papers.

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<sup>4</sup> For example, the turnout statistics for the 2000 presidential election can be found at <http://sos.iowa.gov/elections/pdf/2000StateWithLinnDemo.pdf>. On February 8, 2017, an article in the *Des Moines Register* indicated that 5,842 absentee ballots in Dallas County went unreported. The article seems to indicate that the missing ballots did not affect turnout statistics, only vote totals in the various races. As I write this it is unclear if the Secretary of State will be able to adjust the information in the Statewide Statistical Reports based on the missing ballots, but I will update the data used here if it changes.

<sup>5</sup> “No Party” is what Iowa calls its independents. It seems a little odd to refer to unaffiliated No Party voters as a party. In earlier versions of some papers in the series I referred to the party registration choices as “categories.” That proved somewhat cumbersome, so as I update this and later papers in the series to include the 2014 election data I will use “party” to include No Party voters.

For present purposes I begin by repeating Figures 1a and 1b from the second paper in the series.<sup>6</sup> These figures show the number of registered Iowa voters and the turnout percentages in general elections from 1982 to 2018. This period covers nine presidential elections and 10 midterm elections. The height of the bars in Figure 1a represents the total number of active registered voters. Except for slight declines in the late 1980s when Iowa was losing population, and a few more for midterm elections after adjustments of the voter rolls (2002, 2014, and 2018), the number of registered voters in Iowa has slowly increased in the last 36 years.<sup>7</sup> Figure 1b shows that the turnout percentage for the elections has been relatively steady, particularly after 1994, though there was a clear difference between presidential and midterm years. The turnout in presidential elections has varied between 71.16% (2016) and 86.01% (1992). Although the turnout for midterm elections has also varied within a similar range of about 15 points (a low of 52.71% in 2006 and a high of 67.48% in 1982), that range is substantially below the range for presidential elections. The average turnout in presidential years was 75.49%, but only 58.55% in midterm years. Those who follow politics are well aware of the much lower turnout for midterm elections, but it is worth knowing just how substantial the difference is. This is particularly true in a state that is fairly evenly balanced between the two major parties. More specifically, knowing who turns out, especially in midterm elections, can aid parties and candidates in their get out the vote (GOTV) efforts.

The second paper then examined turnout differences by political party. Figure 2 is also a repeat from the second paper showing the voter registration differences between Democrats, Republicans, and No Party voters (what Iowa calls independents). With the exception of a period in the late 1980s when Democrats had a distinct advantage and a surge for Democrats in 2008, registration for the two major parties has been fairly even. No Party registrants, who started the period between the two major parties, had the smallest number of registrants for a time, but then experienced a surge in registrations between 1994 and 2000 so that since 1996 they have had more registrants than either Democrats or Republicans. In terms of turnout, the findings were, in brief, that Republicans were consistently a few percentage points higher than Democrats for both midterm and presidential elections. In addition, turnout for both major parties was several points lower in midterm elections. In contrast, turnout for No Party voters was much lower than either Democrats or Republicans, particularly in midterm elections.

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<sup>6</sup> It is a bit inconvenient for readers, but to make the figures larger I will put them at the end of the paper rather than within the text.

<sup>7</sup> See the first paper in the series for more details. Interestingly, although 2012 was also a post-census adjustment year, the registration losses earlier in the year were made up by the time of the general election in November. As I mentioned in the fourth paper, this is an example of the difference in resources for get out the vote efforts in midterm (2002) versus presidential (2012) election years can make a difference.

The third paper examined registration and turnout differences by sex and party and found that women outnumbered men as registered voters in all 19 elections examined. By party, there were clearly more women than men registered as Democrat or No Party for the entire period. The sex difference for Republican registrations was much smaller, with women ahead through 2002 and men taking a lead in 2004 and beyond. As for turnout, women had a higher turnout percentage than men in all nine presidential elections regardless of party. For midterm elections the turnout percentages of men and women were much closer and were mixed to varying degrees among the three parties.

In the fourth paper I looked at registration and turnout statistics for the five age groups for which turnout statistics are reported (18-24, 25-34, 35-49, 50-64, and 65 & Over) along with party differences. The data confirmed conventional wisdom that older registrants were more likely to vote. In addition, the differences in turnout between presidential and midterm election years were reduced as voters aged. For the most part, party differences shown in prior papers were evident across age groups. More specifically, No Party voters had consistently lower turnout than Democrats or Republicans, and Republican turnout was usually a bit higher than that of Democrats.

In the fifth paper I examined registration and turnout statistics for subgroups based on age group, sex, and party. Some trends from prior papers persisted in the subgroups. Republican men and women tended to have the highest turnout percentages regardless of age group, but were closely followed by men and women Democrats. Men and women No Party voters were clearly below the turnout percentages of voters of either party. A general pattern of women having higher turnout percentages in presidential elections and men in midterm elections was fairly persistent across age groups and parties.

As I mentioned in the third paper, it is worth noting that there are different ways of calculating turnout percentage. Some use as the baseline the voting age population. Others use the number of those who are eligible to vote (i.e., not counting those who have lost their voting rights). For present purposes I use the number registered to vote. How many Iowans are not registered, regardless of eligibility, is a separate matter.<sup>8</sup> I am also not considering how Iowa compares to other states in terms of turnout.

With the above as a brief summary of the prior papers we can now turn to examining the distribution of voters for the 19 elections.

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<sup>8</sup> Clearly the turnout efforts of campaigns focus on registering people to vote as well as getting them to cast a ballot. Nevertheless, those already registered are likely to be more interested in the political process and therefore more likely to vote, on average, than those who are not yet registered. Identifying and registering those who are eligible is an additional process that requires treatment separate from the focus of this paper.

## Iowa Voter Distribution by Party

Figure 3 shows the proportion of voters (as a percentage) from the three political parties for the 19 elections in the period examined. In looking at this and the following figures remember that because they are based on distributions within a set of voters, if all the groups increase their number of voters proportionally the lines will not be affected. If, however, one group increases the number of its voters and another group does not, then the first group's percentage (and line) will rise and the other's will fall. With that in mind we see from Figure 3 that the lines for Republicans and No Party voters are nearly mirror images of each other for the entire period. The proportions for Republican and No Party voters were close in presidential years, but much further apart in midterm years. This is as we would expect given that although the turnout percentages for all three parties decreased in midterm years, the drop was smaller for Republicans and much larger for No Party voters. Thus, fewer No Party voters means Republicans made up a larger proportion of the total voters.

Only No Party voters ever made up less than 25% of the distribution, as they did from every midterm election from 1990 to 2002. With one presidential year exception in 1988, those four midterms were also the only years that any of the parties had more than 40%. Democrats broke the 40% barrier in 1990 and Republicans did so in 1994, 1998 and 2002. The election of 2010 nearly fit this pattern as No Party voters made up only 25.02% of the votes while Republicans were 39.76%. Republicans came even closer in 2014 when they were at 39.84%, but No Party voters were at 26.88%. Despite their larger registration numbers, No Party voters only had a higher proportion than either of the other two parties in 2000 and 2004 when they were more numerous than Democrats (but still fewer than Republicans). Democrats only had larger proportions than Republicans in the 1982 through 1992 and 2008 elections.

From Figure 3 of the second paper we saw that the turnout percentage for Democrats was usually a few percentage points below that of Republicans except for 1994, 2010, and 2014 where the gaps were a bit larger. As such, it is a bit unexpected that the line for Democrats does not more closely resemble that of Republicans. The basic up and down for midterm and presidential years does not begin to appear regularly until 1996 and then seems to fade after 2006 when Democrats actually increased their share of the votes in 2008.

There were two periods when the proportion for Democrats decreased for several elections in a row. The first occurred following the Democrats' high for the period in 1990 when they were 40.63% of the voters. Over the next 10 years the proportion of Democrats decreased in every election except 1998 until it hit a low for the period of 31.53% for 2000. Although there were slight declines in registrations for Democrats during this period, the main reasons for the decline were the larger increases in the

registrations of Republicans and especially for No Party voters during this same period as shown in Figure 2.

The second time the proportion of Democrats declined over several successive elections occurred after their relative peak of 37.18% in 2008 through the 2016 election. In this instance, voter registration for Democrats surged dramatically prior to the 2008 election. So much so, that their proportion in that presidential year actually increased over the 2006 midterm despite the increased turnout of No Party voters. Over the next several elections, however, the number of registered Democrats steadily declined until just before the 2016 Iowa Caucuses.<sup>9</sup> At the same time the registrations for Republicans and No Party voters increased. As a result, the proportion of Democrats in the elections from 2010 to 2016 decreased each time. That decline was halted for 2018. In prior papers we saw that Democrats' turnout in 2018 was larger than usual. Although midterm turnout was better for all three parties in 2018, Democrats' turnout was particularly good which resulted in an increased proportion of the voters.

## **Iowa Voter Distribution by Sex**

Figure 4 shows the voter distribution by sex. From the third paper in the series we learned that there have consistently been more women registered to vote in Iowa than men. Over the 19 elections the difference averages 105,741 with an average of total voters a little over 1.8 million. The turnout percentages for men and women have been very close to each other, though women tend to have slightly higher turnout percentages in presidential elections and men slightly higher in midterms. Thus, it is not surprising that the lines in Figure 4 are so flat, with not too much variation between midterm and presidential elections, though the pattern is a bit more pronounced for the 2010 and 2014 elections. In fact, with the exceptions of 2010 and 2014, the percentages for men and women varied by no more than 1.07% over the other 17 elections.

## **Iowa Voter Distribution by Sex and Party**

Figure 5 shows the proportion of the six subgroups formed by examining the data in terms of both sex and party. We can see in these six lines aspects of the individual figures for party and sex. Once again the patterns for men and women Republicans and No party voters have a closer, mirror image pattern. Excepting the two periods when the proportion of Democrats was declining, men and women Democrats have a pattern similar to Republicans, though with smaller changes between presidential and midterm years. We can also see that women had a higher proportion than the men in their party for all 19 elections for Democrats and No Party voters. The same was true for Republican women through 2004. Although there were more Republican men registered to vote than Republican women for the first time in 2006, the slightly higher

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<sup>9</sup> See the first paper in the series for more details, in particular Figure 3.

turnout of Republican women that year allowed them to still have a larger proportion of the voters. Republican men continued to expand their numbers over Republican women such that in 2008 and beyond they had a slightly higher proportion than the women of their party.

The intra-party lines are closest for Republicans. Over the 19 elections the difference was never more than 2.53% and as little as 0.06%. The intra-party lines for No Party voters most closely reflect prior findings of women having higher turnout percentages than men in presidential years and lower in midterms. Although men No Party voters had slightly higher turnout percentages in midterm years, the larger number of registered No Party women was sufficient to yield a higher proportion of them in these elections. The turnout percentages of men No Party voters increased dramatically in presidential years, but that of women increased even more resulting in an even larger gap. The intra-party lines for Democrats show the widest gap of any of the three parties. The gap is so large that for 2000, 2004, 2012, and 2016 women Democrats were the largest proportion of the voters while their male counterparts the smallest. Even though the gap between men and women Democrats was large, it was nearly as consistent as that of Republicans – meaning that there was little variation in the gap between midterm and presidential elections.

In terms of individual subgroups, women Democrats had the highest proportion of the voters in 13 of the 19 elections. It was only in 1994, 1998, 2002, and 2014 where men and women Republicans had a higher proportion, in 1996 when Republican women were higher, and in 2010 when men Republicans were higher. Conversely, men Democrats had the smallest proportion in four of the five presidential years beginning in 2000, but exceeded men and women No Party voters in all five of the corresponding midterm years. No Party women had a higher proportion than men and women Republicans in three of the five presidential years from 2000, the exceptions being 2012 and 2016. No Party men had the lowest proportion in 15 of the 19 elections. They only had a larger proportion than Democrat men in 2000, 2004, 2012, and 2016.

## **Iowa Voter Distribution by Age Group**

Figure 6 shows the distribution of voters in the five age groups. As noted in previous papers, we must keep in mind that the age ranges for the groups are not equal. The 18-24 and 25-34 groups cover a smaller range of years and thus have a smaller number of registered voters. In addition, these two age groups have the lowest turnout percentages.<sup>10</sup> Thus, it is no surprise that the 18-24 group had the smallest proportions of voters with the 25-34 group only a few percentage points higher. Notice for the 18-24 group that their percentage in seven of the 10 midterm elections was below 5%.

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<sup>10</sup> See the fourth paper in the series for more details on age group registration numbers (Figure 2) and turnout percentages (Figure 5).

Although turnout improves in presidential years, this group only rose above 10% in 1984, 2004, and 2008. The 25-34 group had more registered voters and higher turnout percentages than the 18-24 group, so it is not surprising that its proportions averaged 6.76% above that of the younger group.

The overall pattern of the two youngest groups shows slightly lower proportions in midterm years. This pattern would have been consistent for the entire period were it not for the presidential election of 1988 when the proportion of 18-24 voters was actually below their proportions in both 1986 and 1990. The 25-34 group also had a lower proportion in 1988 than 1986, but their proportion in 1990 fell even lower. This is the opposite of the pattern for the two oldest groups, 50-64 and 65 & Over. The pattern for the oldest two groups shows higher proportions in midterms and slightly lower ones in presidential years. This is explained by the greater variation in the turnout of the two youngest groups in midterm versus presidential elections. The sharp drop in turnout percentages for the youngest groups means that their proportions of the overall distribution decline in midterm years. Although there were slight decreases in the turnout percentages for the oldest two groups as well, they were fairly small, which left these two groups with higher proportions of the total voters in midterm years. Thus, the pattern of the lines for the two oldest groups is the reverse of that for the two youngest groups.

Between the two oldest groups, the 50-64 group had a higher proportion in nine of the last 10 elections and 11 of the 19 overall. In fact, after the 2000 election the gap expands in nearly every succeeding election through 2012, growing from 1.09% in 2000 to 6.17% in 2012. This increase in proportions for the 50-64 group is largely explained by an increase in registration numbers during the period. In 2000, the 50-64 group had 11,278 more registered voters than the 65 & Over group. By 2012 that difference had grown to 123,556. On the other hand, for 2014 that difference had decreased to 105,999, which explains the steeper than usual increase in the proportion of 65 & Over voters for that midterm.

The line for the 35-49 group is the most unusual of the five in that it does not show as clear a variation between midterm and presidential years as any of the other four age groups. In addition, the proportions for this group had the most variation during the period. The 35-49 group began the period with the highest proportion, 25.33%, which increased to a peak of 32.55% for 1994. In every election after that the proportion of voters in the 35-49 group decreased until there was a slight increase in 2016. After having the highest proportion of voters for the first 12 of the 19 elections, the voters in the 35-49 group had only the third highest proportion for the last five elections.

Changes in the registration numbers largely explain the unusual pattern for the 35-49 group. In Figure 2 of the fourth paper in the series we saw that the 35-49 group experienced the largest gain in registered voters between 1982 and about 1996. Given

the increase in registered voters and strong turnout percentages (see Figure 5 of the fourth paper in the series), it was no surprise that the proportion of voters in the 35-49 group increased during this time. After about 1996 the number of voters registered in the 35-49 group leveled off and even declined a bit. At the same time, the number of registered voters in the 50-64 group dramatically increased. The number of voters in the 65 & Over group also increased. Given the higher turnout percentages of voters in the two older groups, it is also no surprise that the proportion of voters in the 35-49 group decreased over the last 20 years.

## **Iowa Voter Distribution by Age Group and Party**

Figure 7 is divided into five parts, one for each of the age groups. Each part shows the distribution of voters of the three parties for those in that age group. A difference here from prior figures is that the combined proportions only represent the total of voters in that age group, not for voters as a whole. Thus, for example, in Figure 7a the three percentages for the 2000 election sum to 7.37%, which is the proportion of 18-24 voters from the 2000 election as shown in Figure 6 (with an allowance for rounding error).

There are three additional points worth noting before proceeding to the data. First, the vertical scale for each of the five parts is the same to make comparisons among age groups a bit easier. Second, given that I am dividing the voters into 15 subgroups in this figure (three parties and five age groups) we can expect that individual subgroup percentages will be relatively small. Third, in examining the turnout proportions of the age groups it will be useful to keep in mind the registration numbers for these groups as shown in Figures 3a to 3e of the fourth paper in the series.

Turning to Figure 7a we see that the proportion of voters in the 18-24 age group was quite small for Democrats and Republicans. The percentages for voters in both major parties were below 2% in every midterm except 1982 and for Democrats in 2018. Democrats and Republicans in this group rose above 2% in six of the nine presidential elections, but only Democrats in 2008 were ever higher than 3%. In contrast, No Party voters were slightly above or very close to 2% in six midterms and were above 4% in five presidential elections (with a high of 5.31% for 2004).

That No Party voters had the highest proportion for this age group in 17 of the 19 elections is not surprising. Although No Party voters in this group had greater variability in their turnout percentages than Democrats or Republicans, their registration numbers were always greater for this age group and increased dramatically following a surge between 1994 and 2004. Recall from Figure 3a of the fourth paper in the series that beginning in 2000 the number of No Party registrants was larger than the sum of Democrats plus Republicans in seven of the 10 elections. Thus, even with their lower turnout percentages, particularly in midterm years, No Party voters still had the largest proportion for this age group in all but two elections (1990 and 1994).

Figure 7b shows that the proportions for voters in the 25-34 group were a bit larger than those for the 18-24 group, though the overall pattern is similar. As with the younger group, although No Party voters have had lower turnout percentages, their higher registration numbers produced higher proportions, particularly in presidential years. As with No Party voters in the 18-24 group, there was a surge in registrations for this group after 1994. By the 2000 election this resulted in a clear separation of the No Party line from those of the two major parties.

Figure 7c shows the proportions for the 35-49 age group. The first thing to notice is that all three lines generally follow the pattern we saw for the 35-49 group in Figure 6. All three lines increase from their starting point through the early 1990s, but then begin a general downward trend. The patterns for Republicans and No Party voters are generally mirror images of each other, consistent with what we saw in Figure 3, but here the lines are mixed with No Party voters having a larger proportion in eight of the nine presidential elections while Republicans had the higher proportion in all 10 midterms.<sup>11</sup> No Party registrants did not dominate this age group as they did with the younger two groups (see Figure 3c of the fourth paper in the series), but after a surge beginning in the mid-1990s they had a higher proportion of voters than Democrats in nine of the 10 elections from 2000 on (all but 2002). Although Democrats had a larger proportion than Republicans in the first six elections of the period, Republicans had a larger proportion than Democrats in the last 13 elections. This is not surprising given that the registration advantage Democrats held for this age group at the start of the period vanished by 1994 and the generally higher turnout percentage of Republicans produced larger proportions for them in the elections following.

In Figure 7d we see some differences from the general party pattern from Figure 3. For the 50-64 age group Democrats and Republicans show a very similar pattern of increased proportions in midterm elections and lower in presidential elections. In addition, the lines are mixed throughout the period. Democrats had the larger proportions for the 1982 through 1992 elections, then Republicans had larger proportions in 1994 through 2002. Democrats had the higher proportion again in 2004 through 2008, but Republicans took the lead again in 2010 through 2018. In large part, these changes reflect the voter registration changes shown in Figure 3d of the fourth paper in the series.

Unlike Figure 3, the pattern for No Party voters in Figure 7d does not closely mirror that of Republicans. The variation between midterm and presidential elections was often very slight, producing a much smoother line. In addition, the proportion for No Party voters was decreased from the 35-49 group and was less than that of either

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<sup>11</sup> You cannot tell from the figure, but the Republicans' proportion was 0.002% higher than No Party voters in 2018.

Democrats or Republicans for all 19 elections, though the differences were relatively small in the second half of the period. It is for this age group that the registration numbers of the three parties are the closest to each other. Thus, it was the lower turnout percentages of No Party voters that caused their proportions to be smaller. In addition, and somewhat counter-intuitively, it is the variations in turnout between midterm and presidential years among the No Party voters that created the changes in the proportions for Democrats and Republicans.

Figure 7e shows the proportions for the 65 & Over group. The patterns here are similar to those of Figure 7d. The patterns for Democrats and Republicans are even more similar than for the 50-64 group. One difference is that we do not see a general upward trend of the lines as the number of registrants in this age group was relatively stable over the period. The proportions of No Party voters were below those of the 50-64 group and were even below that of 18-24 No Party voters for 1982, 1984, 2004, and 2008. A large part of the reason for the drop was that there were far fewer No Party voters in this age group. In terms of registrations, the smallest number of No Party registrants in the 18-24 age group after the mid-1990s surge occurred in 2010 with 122,490. In contrast, the largest number of No Party registrants in the 65 & Over group was in 2018 with 112,446. The No Party line is even straighter than for the 50-64 group.

## **Iowa Voter Distribution by Age Group and Sex**

The 10 lines in Figure 8 represent the proportions of voters in the subgroups determined by sex and age group. It is not surprising that the patterns here are quite similar to those of Figure 6. Women consistently had a larger proportion of the voters for all five age groups. The only election when men in an age group had a higher proportion than women of the same age group was in 1986 for the 18-24 group when men were 0.01% higher. As noted in prior papers, women tend to have lower turnout percentages than men in midterm years and higher in presidential years, but Figure 2 from the fifth paper in the series showed that for the four younger age groups women made up roughly 51-52% of the registrants. The result, as we can see in this figure is the consistent gap between men and women regardless of age group. For the 65 & Over group there was a jump of roughly 5% in the percentage of registrants who are women. This increase is reflected in this figure in that the gap between men and women was the largest for the 65 & Over group.

## **Iowa Voter Distribution by Age Group, Sex, and Party**

Figure 9 is divided into five parts, one for each of the age groups. Each part shows six lines for the subgroups based on party and sex. As with Figure 7, the percentages for each subgroup sum to the percentage for that age group among all voters. To use the 18-24 group as an example again, the percentages in the column for the 2000 election

sum to 7.37%, which is the proportion of 18-24 voters shown in Figure 6 (with allowances for rounding error). Also, given that we are now looking at 30 subgroups (five age groups, three parties, and two sexes) the proportion for any particular subgroup will be fairly small. As with Figure 7, the vertical scale of each part is the same to allow for easier comparisons across age groups.

In examining the parts of Figure 9 it is probably best to compare them with the parts of Figure 7 and then look for deviations from the expectation that the women of each party will have a slightly larger proportion than the men. Using this approach, the first deviation from the expectation occurs in Figure 9a for the 18-24 group. Here, although the proportions for Republican men and women were very close to each other – closer than for either Democrats or No party voters – the men actually had a slightly higher proportion in all 19 elections.

In Figure 9b, the 25-34 group again shows Republicans had the closest intra-party lines, but men still had a larger proportion in 18 of the 19 elections. The intra-party gap for Democrats and No Party voters was wider for this age group compared to the 18-24 group. The gap was fairly consistent for Democrats, but varied more for No Party voters based on the type of election: larger for presidential years, smaller for midterms.

Figure 9c shows the lines for the 35-49 group. Again, Republican men had a larger proportion of voters than their women counterparts, but only after the 1988 election. The gap between men and women Democrats widened from the previous age group. The lines are fairly mixed among five of the six subgroups, with only men Democrats clearly below the others after the 1998 election.

Figure 9d shows the lines for the 50-64 group. As with the 35-49 group, Republican women had higher proportions than Republican men in the first several elections and then men thereafter, but the switch did not occur until the 2000 election. The difference was very small in 2000 (only 0.01%), but grew during the rest of the period. The closest set of intra-party lines are now those of No Party voters. In addition to being quite close for all 19 elections, after 2000 we see a familiar pattern of No Party men having slightly higher proportions in midterm elections and women in presidential elections through 2010. Again, the gap between men and women Democrats was the widest of the three parties, though similar to the gap for the 35-49 group. The lines for men and women No Party voters have now fallen below those of the other two parties with the lone exception of No Party women having a higher proportion than men Democrats in 2016. As mentioned previously, it was for this age group that the number of registrants for each of the three parties was most even. The generally lower turnout percentages of No Party voters resulted in lower proportions for this age group.

Finally, Figure 9e shows the lines for the 65 & Over group. Here Republican women were at last a larger proportion of the voters than the men of their party for every

election. Moreover, the gap was nearly as large as it was between men and women Democrats. In fact, the lines for the men of the two major parties were closer to each other than to the women of their respective parties (and similarly for the women). There was more of a gap between the lines for No Party voters, but both men and women were well below the proportions for the other four subgroups.

## Concluding Comments

The distribution of voters for a particular election is determined by a combination of underlying voter registration numbers and the turnout percentages for various groups. Although it is important to examine voter registration numbers and turnout percentages for various groups and subgroups, it is also worth looking at the actual distributions those numbers and percentages produce. This is particularly true for the larger groups based on party, sex, and age group. Drilling down to the various subgroups can also be of interest to see the differences between them as the factors change.

In looking at the distribution by party it was interesting to see how the proportions for Republicans and No Party voters seemed to vary in lockstep in many instances. It was also interesting to see how there were actually more Republican voters in Iowa in 12 of the 13 elections from 1994 on (all but 2008) and yet, Iowans voted for Democrats for president (2000 and 2012) and governor (1998, 2002, and 2006) in five of those elections. On the other hand, of the seven elections when there were more Democrats than Republicans who voted, Iowa elected a Republican governor three times (1982, 1986, and 1990) and voted for the Republican presidential nominee once (1984). This emphasizes the “purple” nature of Iowa and the importance of No Party voters despite their often smaller proportions of the voters.

The larger number of women voters in the distributions was fairly consistent. It becomes interesting when combined with either party or age group divisions (or both). It is then we see the large intra-party gap for Democrats and the near parity for Republicans.

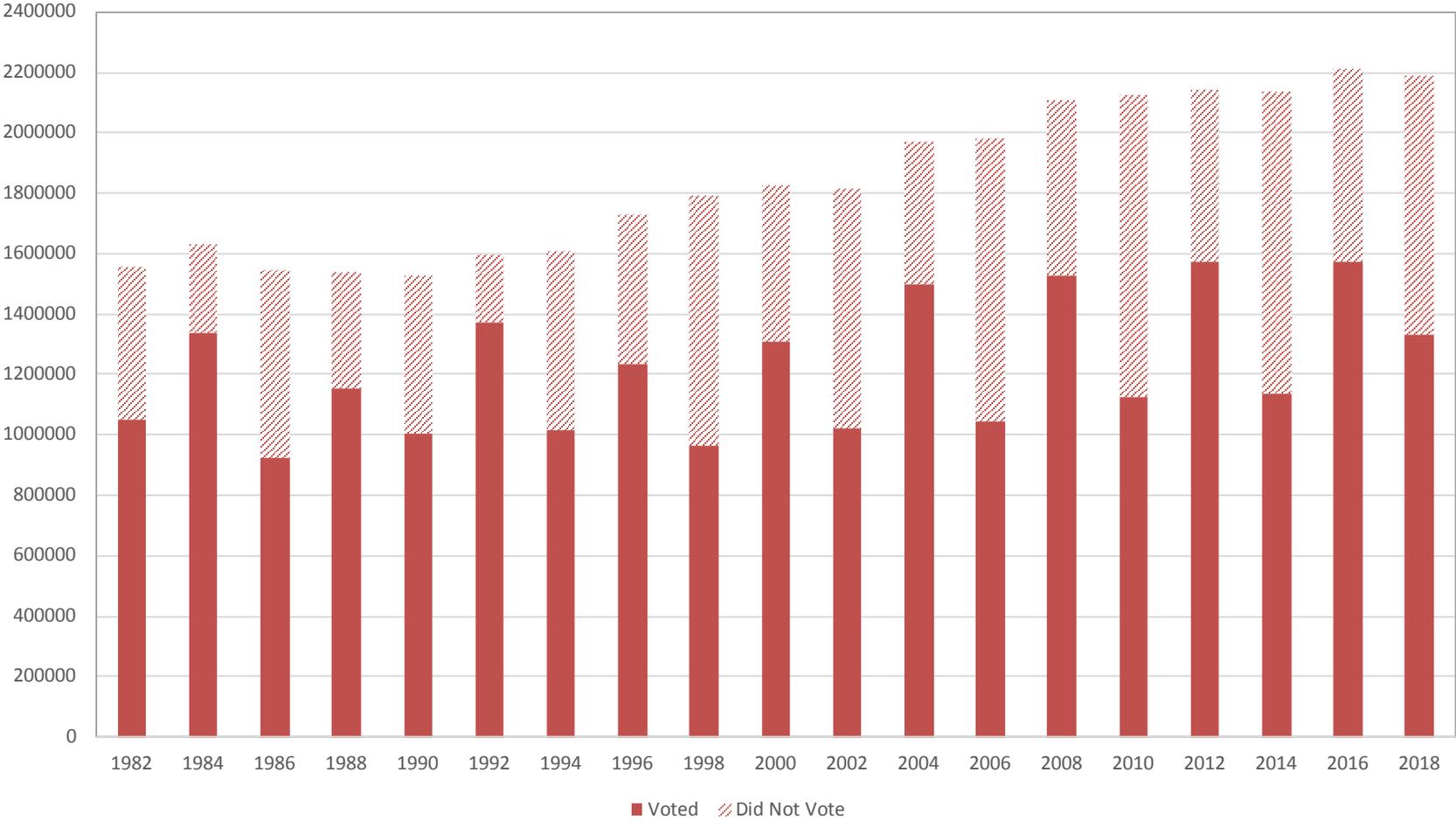
Distribution differences by age group were largely driven by registration numbers, particularly when also considering party affiliation. The two younger age groups had the lowest turnout percentages, but No Party registrants dominated these groups so their proportions of the distributions were larger than that of the two major parties. The turnout percentages increased for the older groups, but the substantial drop in the number of No Party registrants resulted in their having had the lowest proportion for the oldest group.

Also of interest for the age groups was how the 25-34 and 35-49 groups were the only ones that became smaller during the period. The 50-64 group was the one that grew the

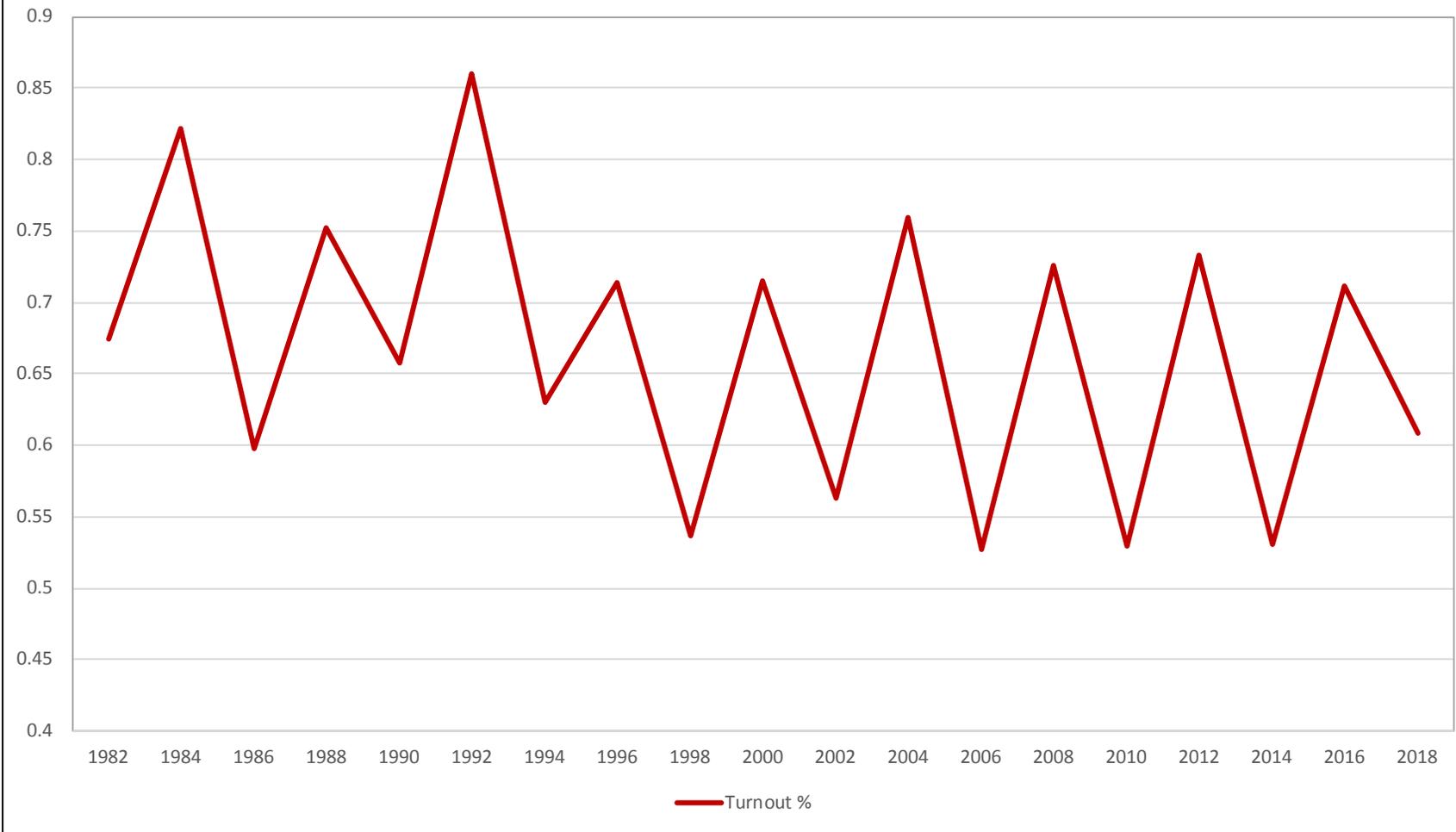
most. This would make some sense as the losses experienced by the 25-34 group at the beginning of the period would then be reflected in the losses experienced by the 35-49 group later as most aged and moved into the next group. Similarly, the gains by the 35-49 group in the first half of the period were reflected by the gains of the 50-64 group in the second half of the period.

On the whole, examining voter distributions is a good reminder that neither registration numbers nor turnout percentages tells the whole story of an election.

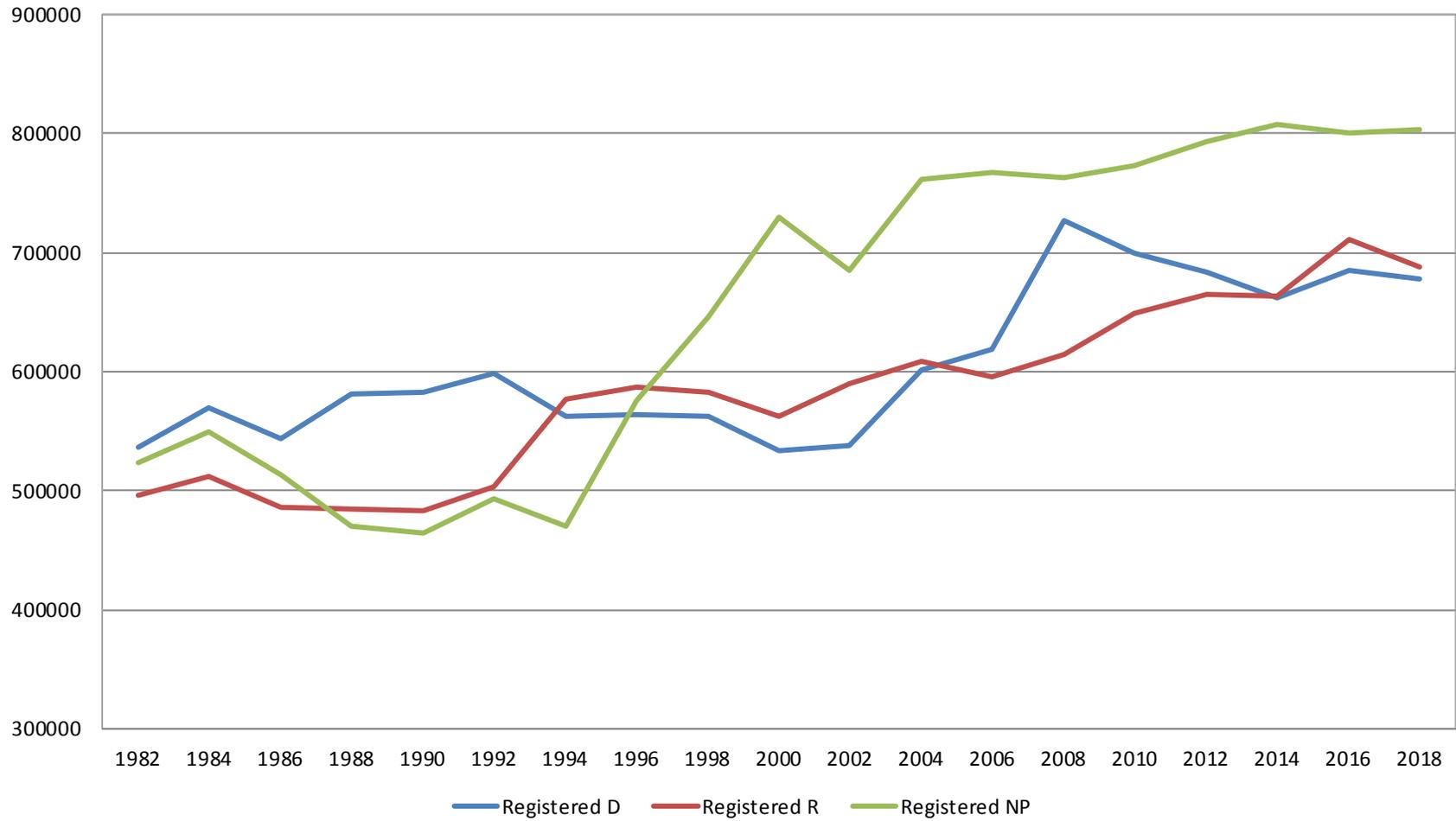
**Figure 1a: Turnout numbers for Iowa Registered Voters in Elections Since 1982**



**Figure 1b: Turnout Percentage of Iowa Registered Voters in Elections Since 1982**



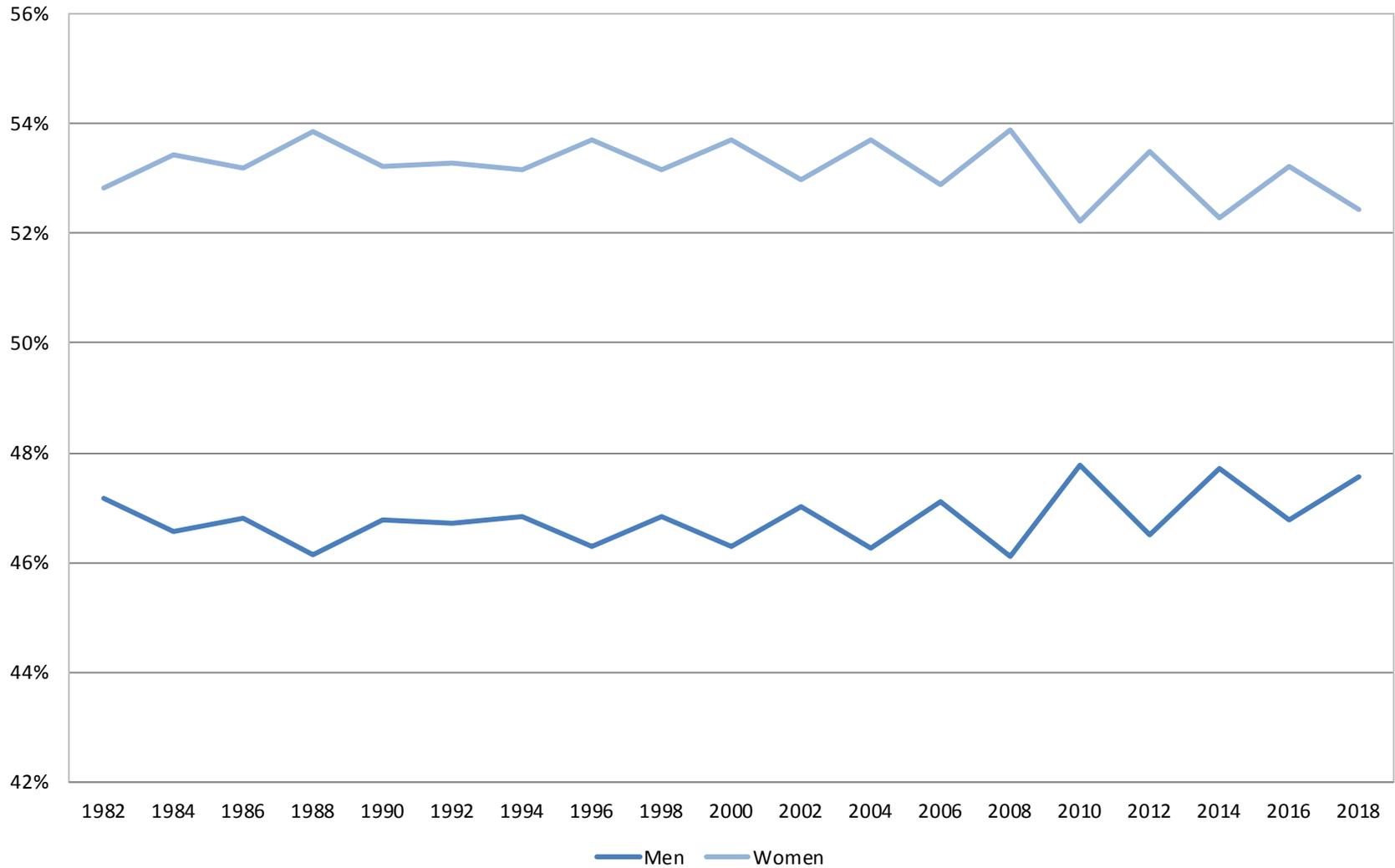
**Figure 2: Iowa Registered Voters by Party in Election Years Since 1982**



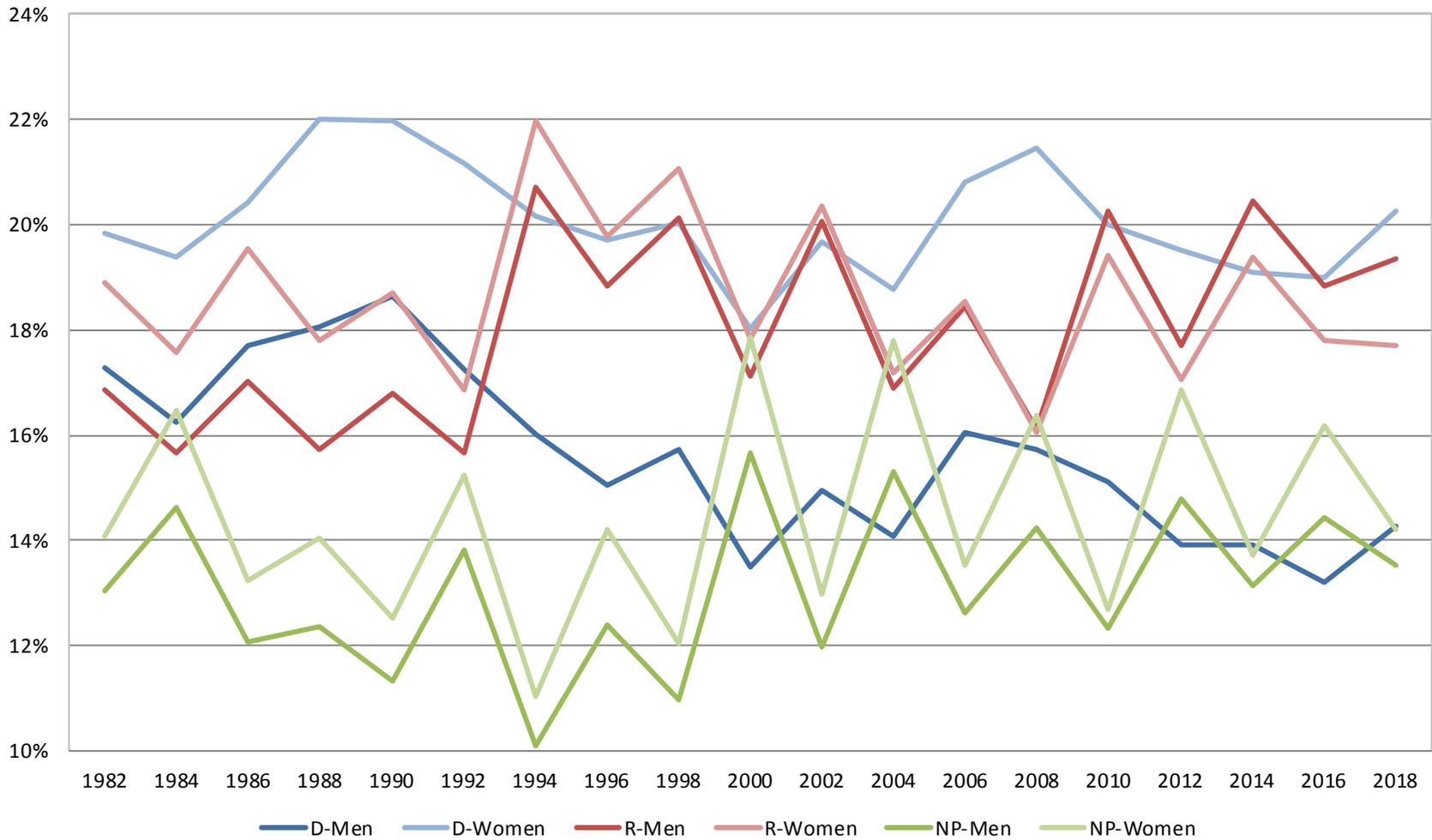
**Figure 3: Iowa Voter Distribution by Party in Elections Since 1982**



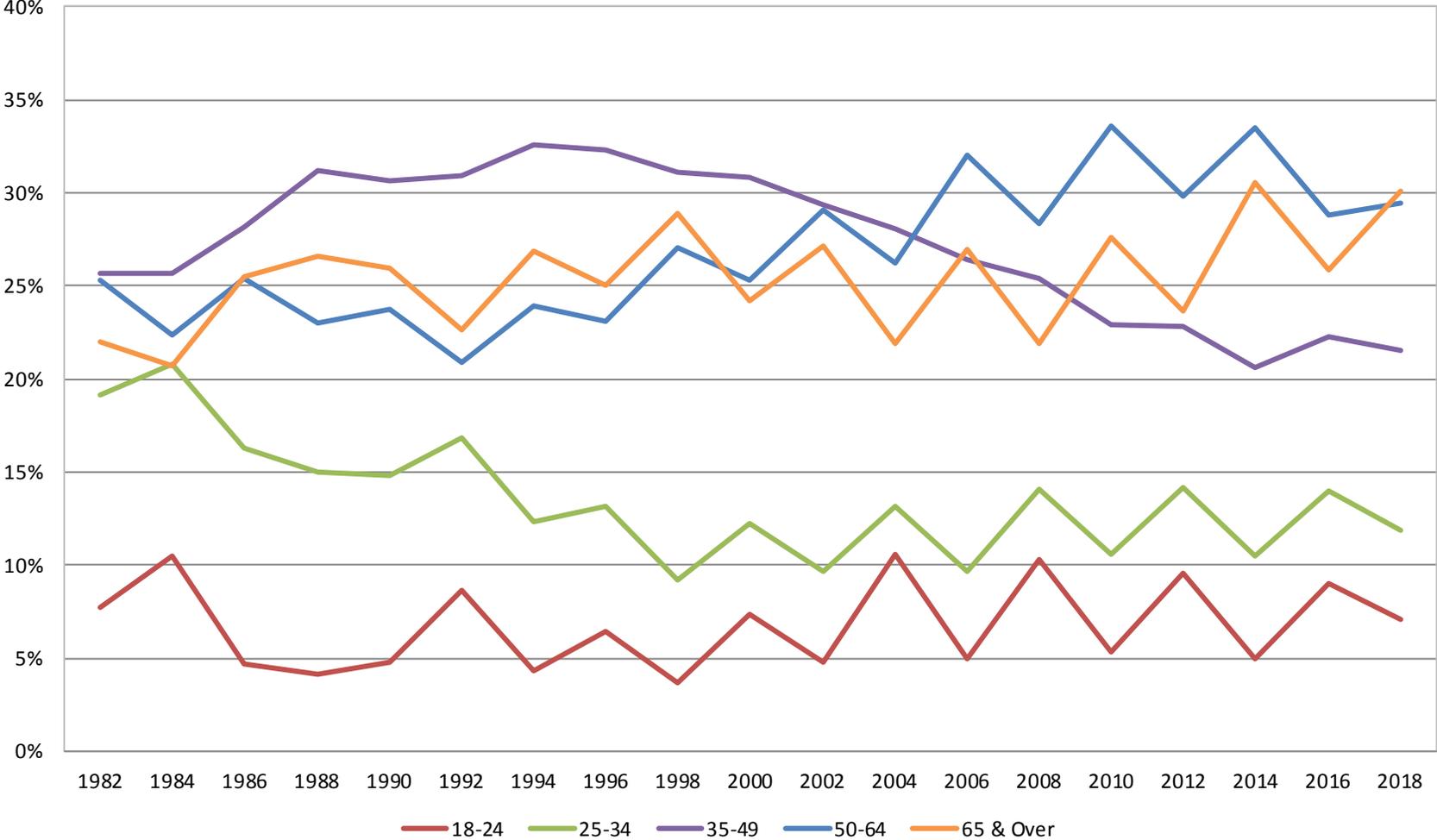
**Figure 4: Iowa Voter Distribution by Sex in Elections Since 1982**



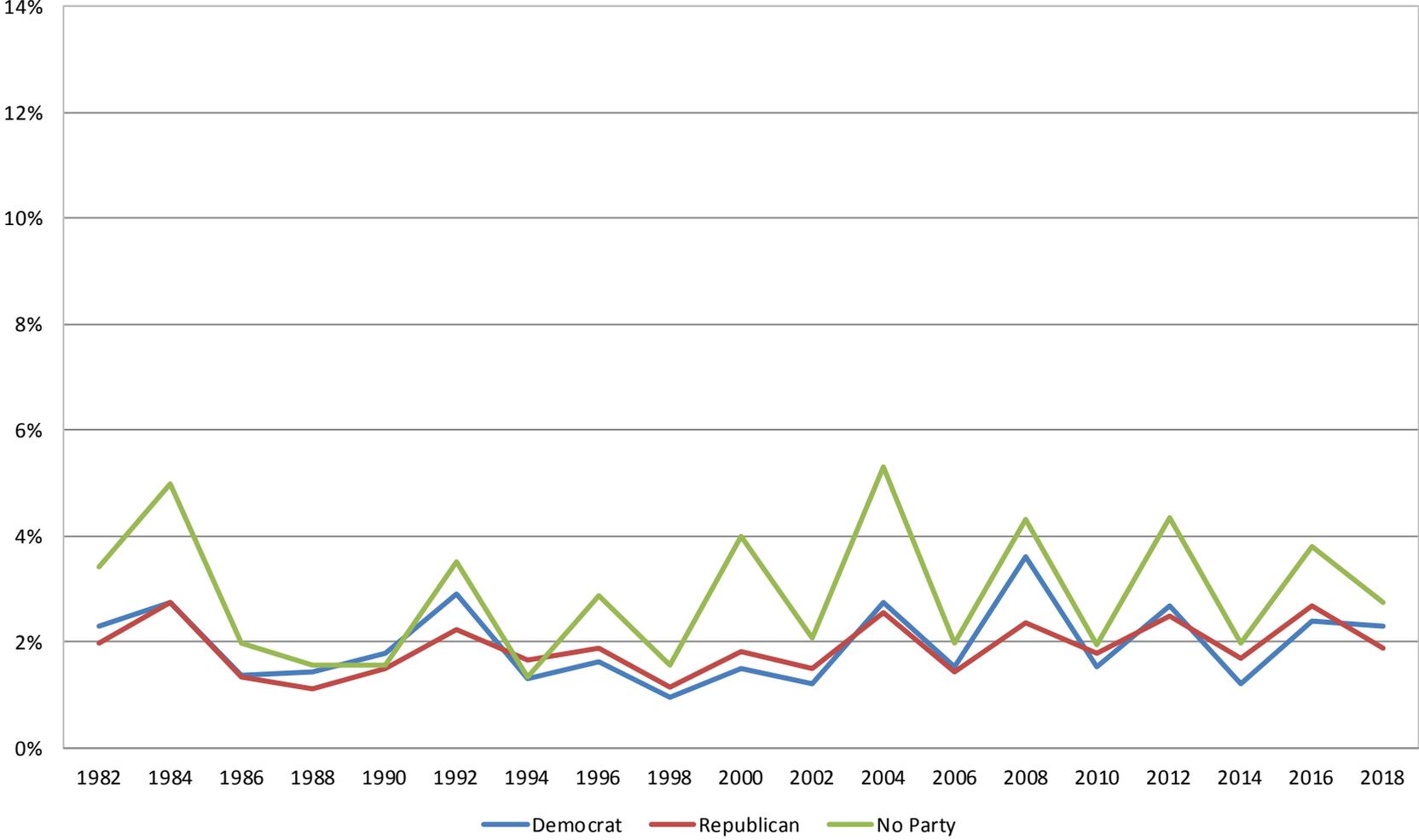
**Figure 5: Iowa Voter Distribution by Sex and Party in Elections Since 1982**



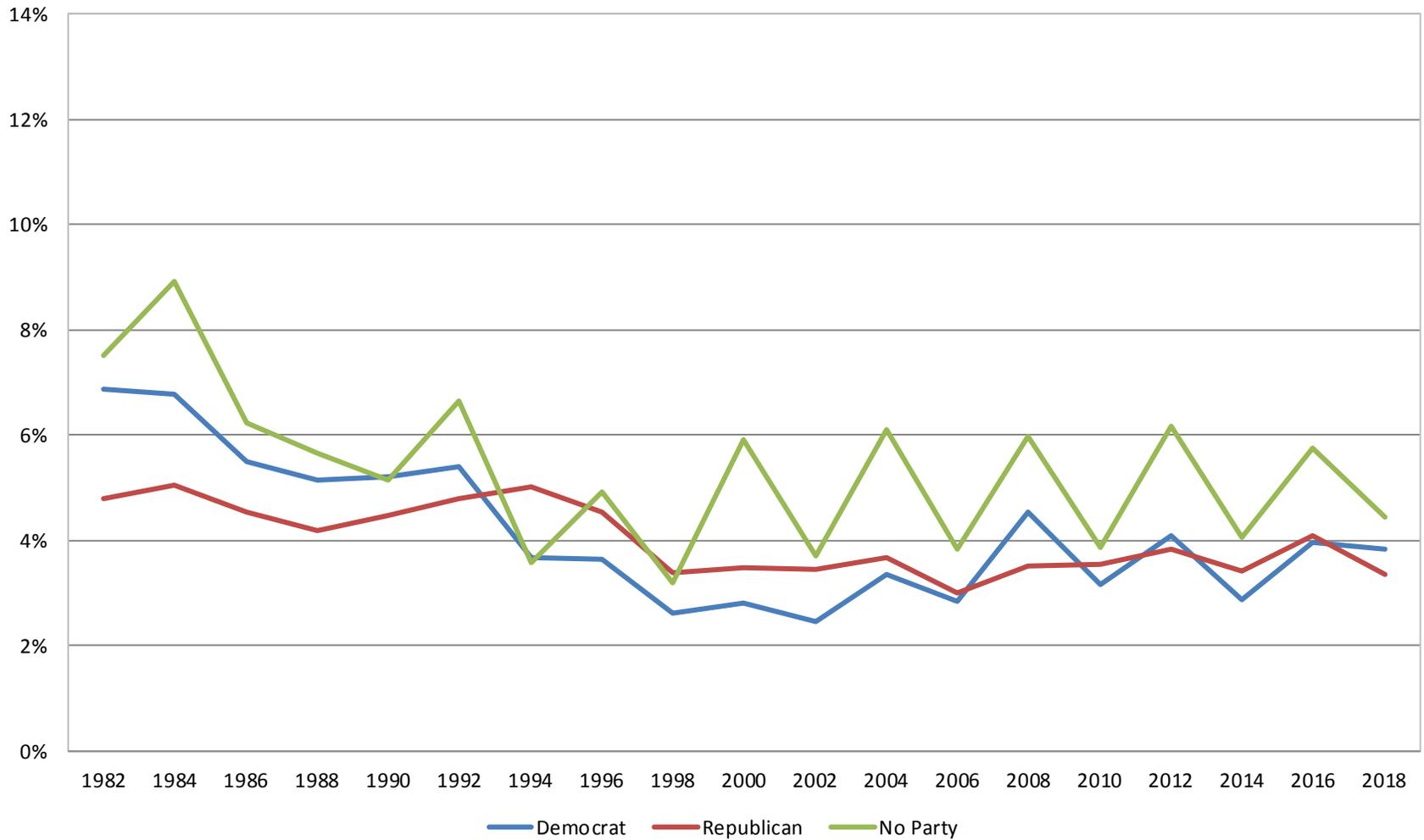
**Figure 6: Iowa Voter Distribution by Age Group in Elections Since 1982**



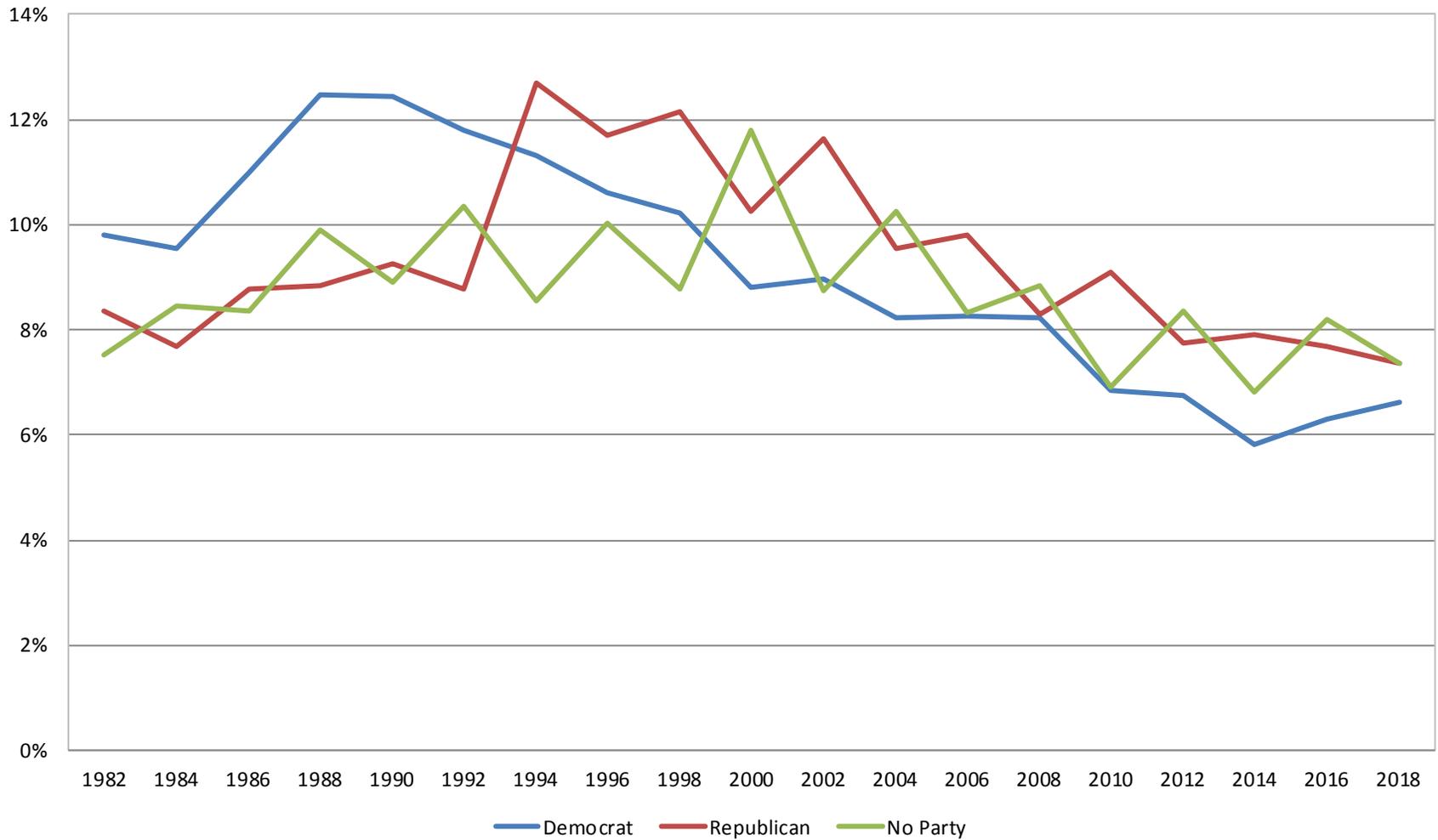
**Figure 7a: Iowa Voter Distribution for Age Group 18-24 by Party in Elections Since 1982**



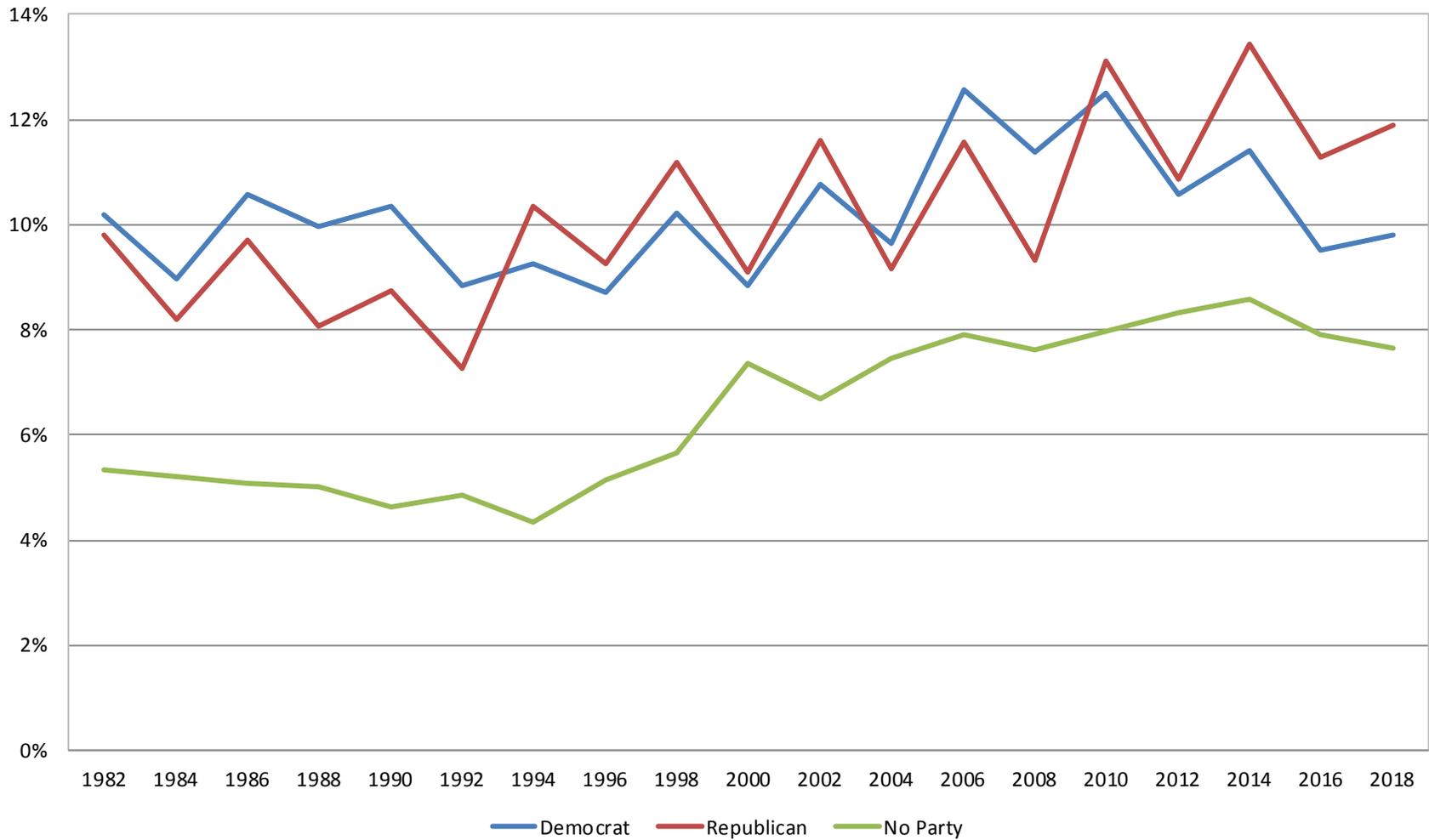
**Figure 7b: Iowa Voter Distribution for Age Group 25-34 by Party in Elections Since 1982**



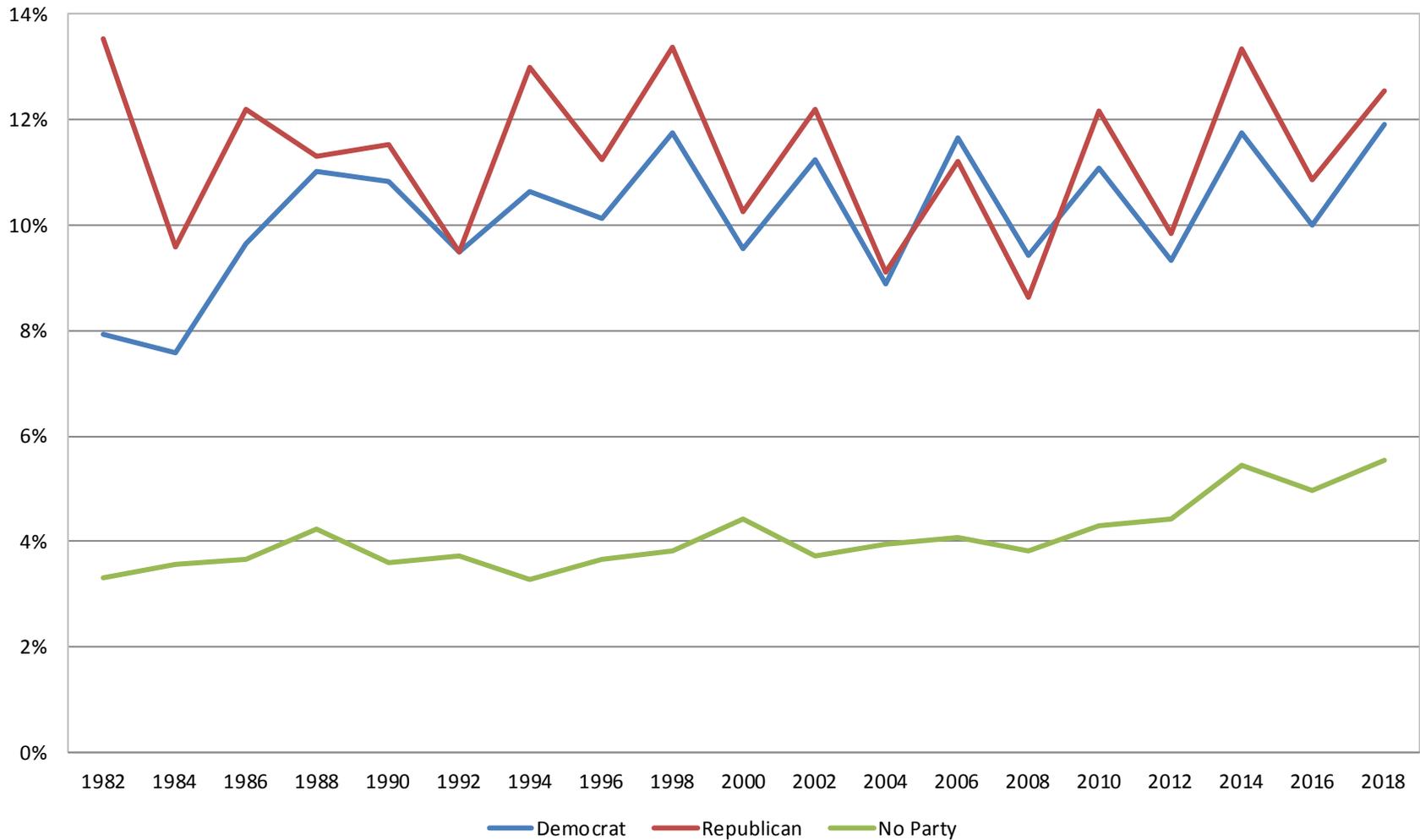
**Figure 7c: Iowa Voter Distribution for Age Group 35-49 by Party in Elections Since 1982**



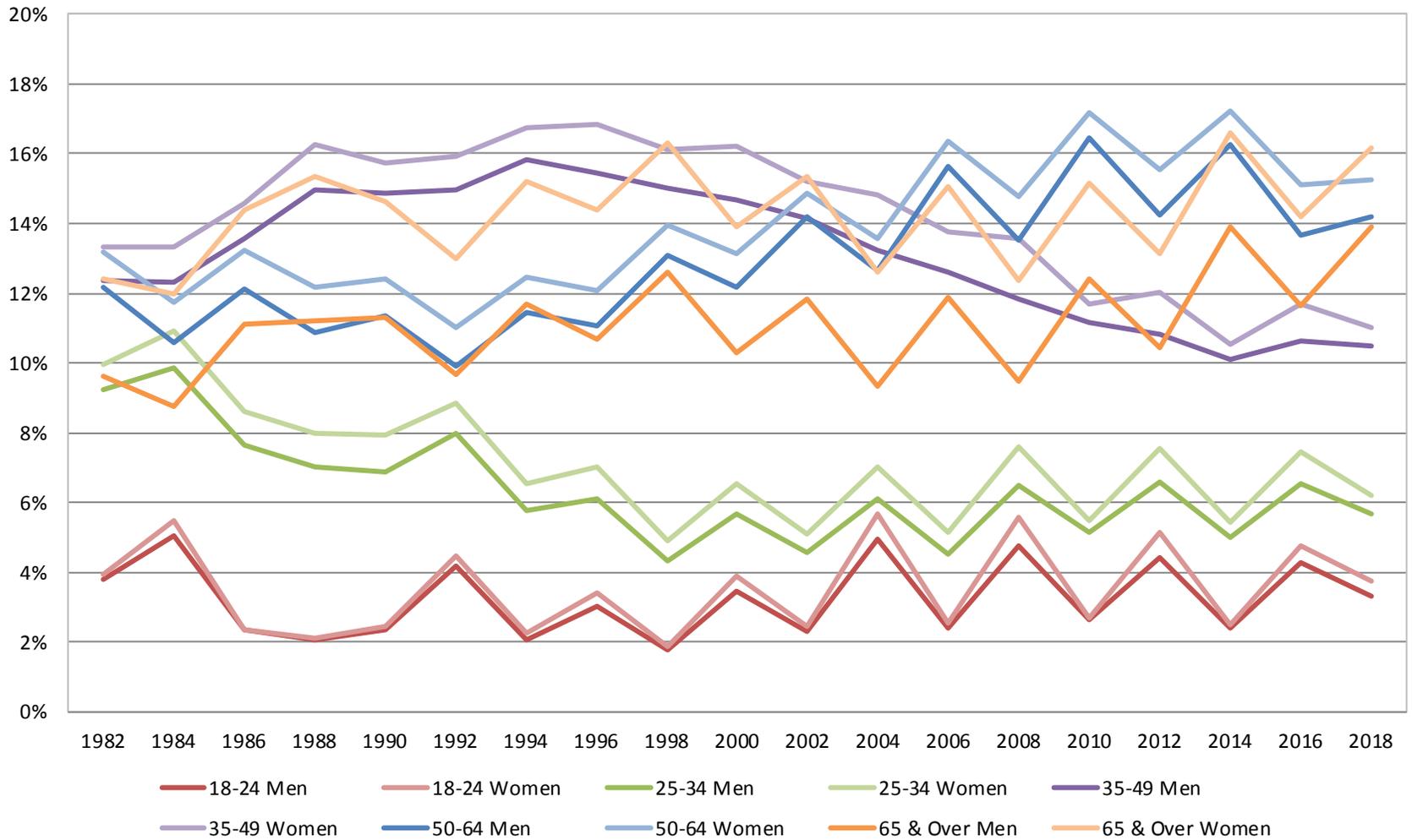
**Figure 7d: Iowa Voter Distribution for Age Group 50-64 by Party in Elections Since 1982**



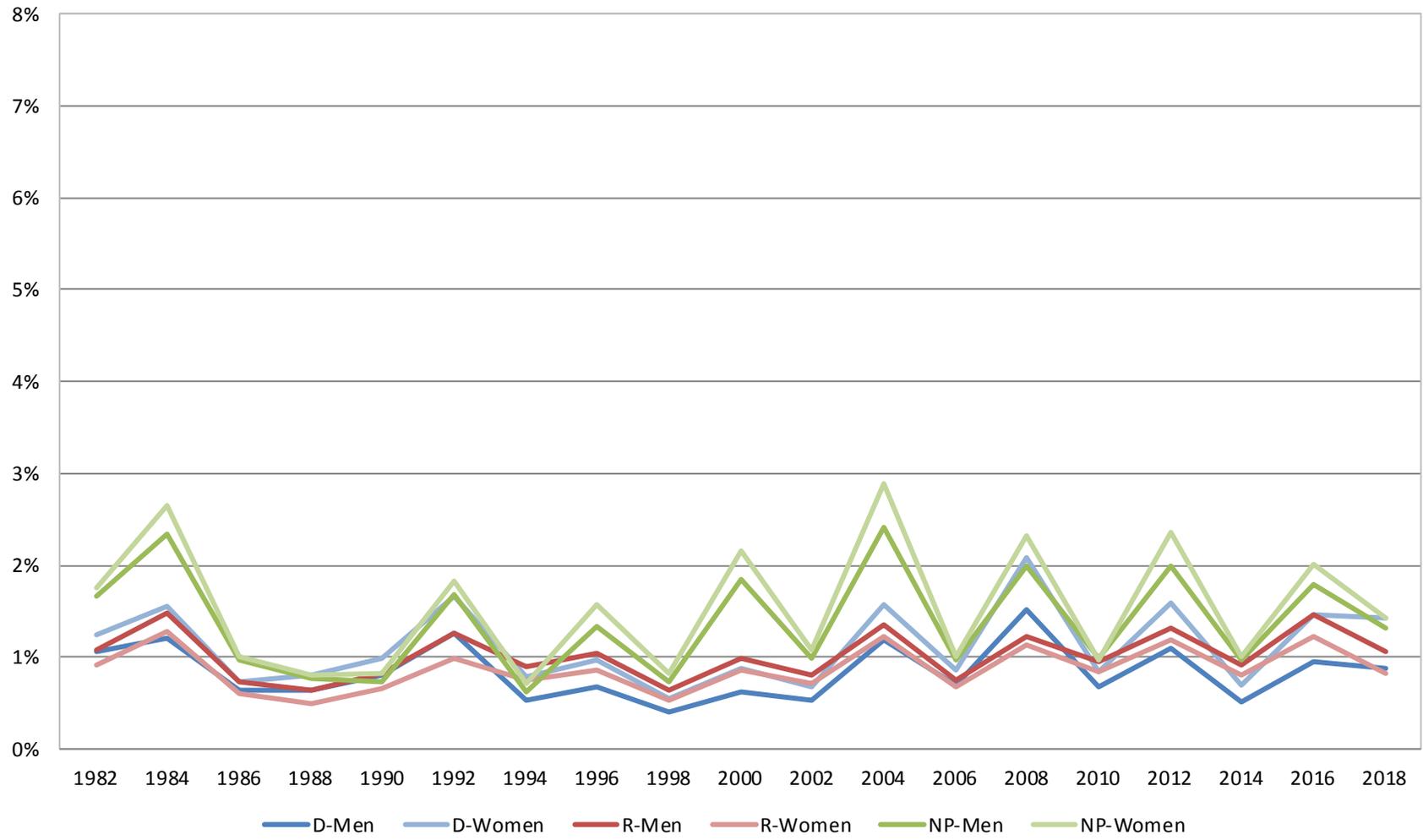
**Figure 7e: Iowa Voter Distribution for Age Group 65 & Over by Party in Elections Since 1982**



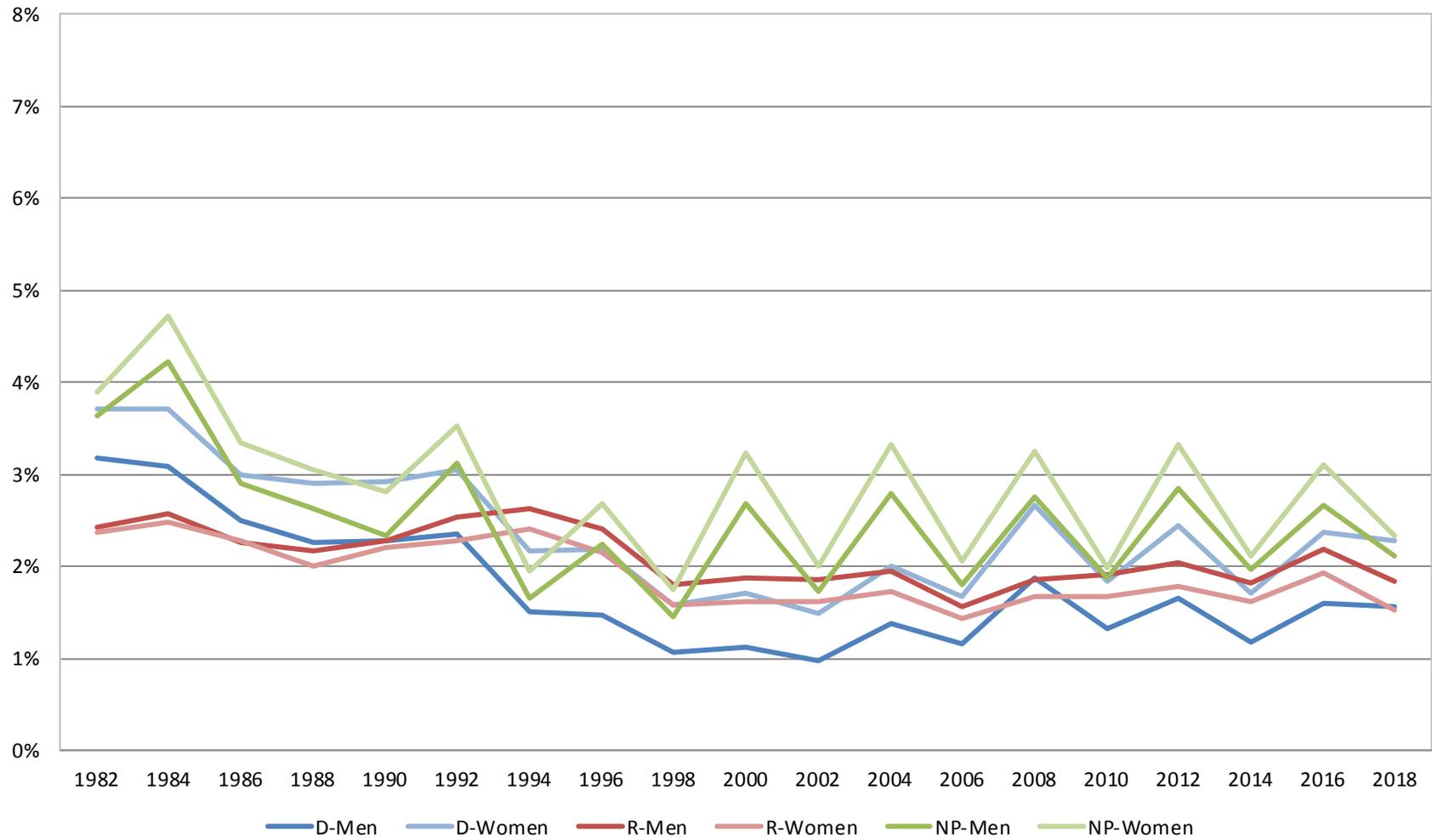
**Figure 8: Iowa Voter Distribution by Sex and Age Group in Elections Since 1982**



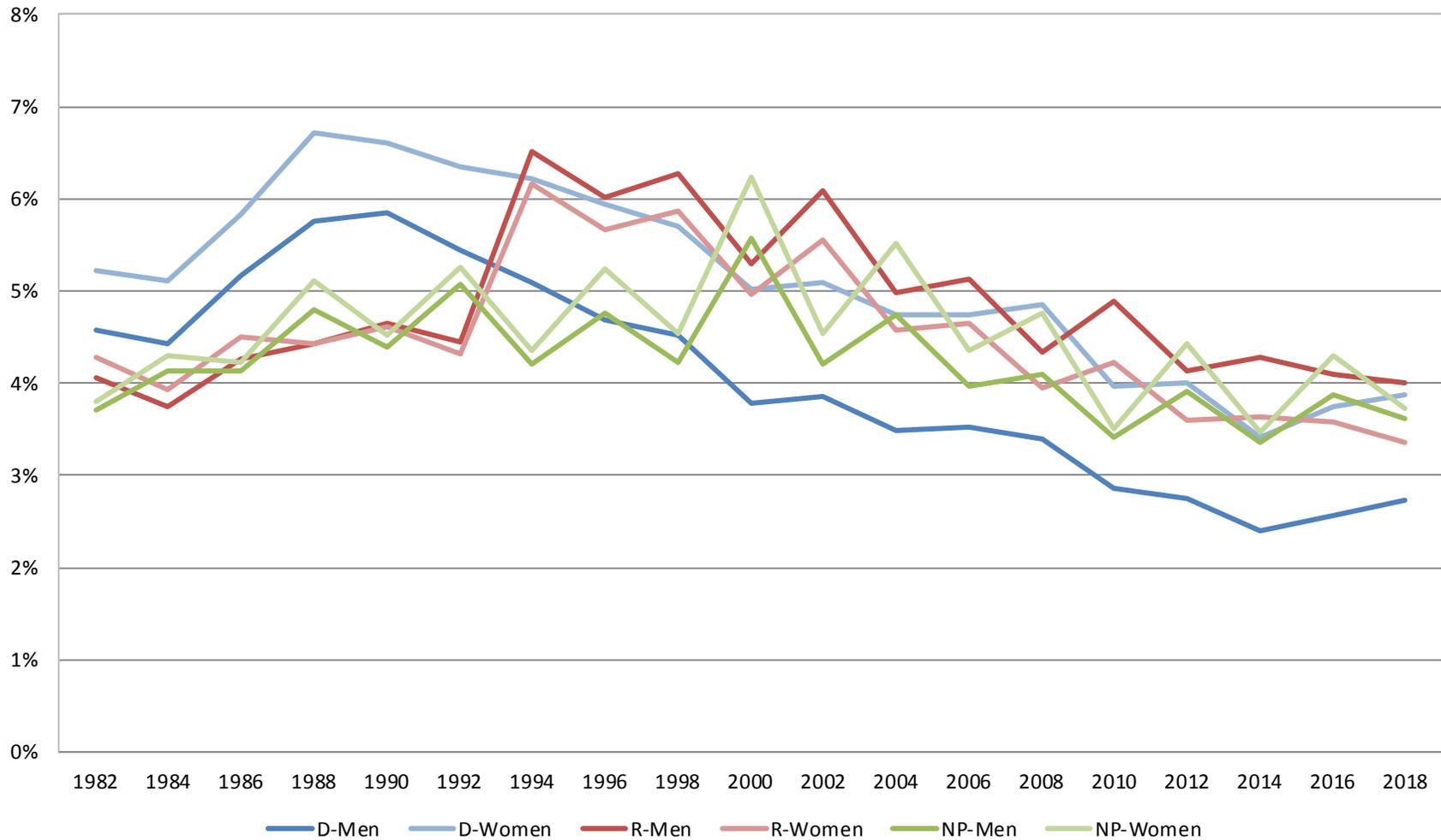
**Figure 9a: Iowa Voter Distribution for Age Group 18-24 by Sex and Party in Elections Since 1982**



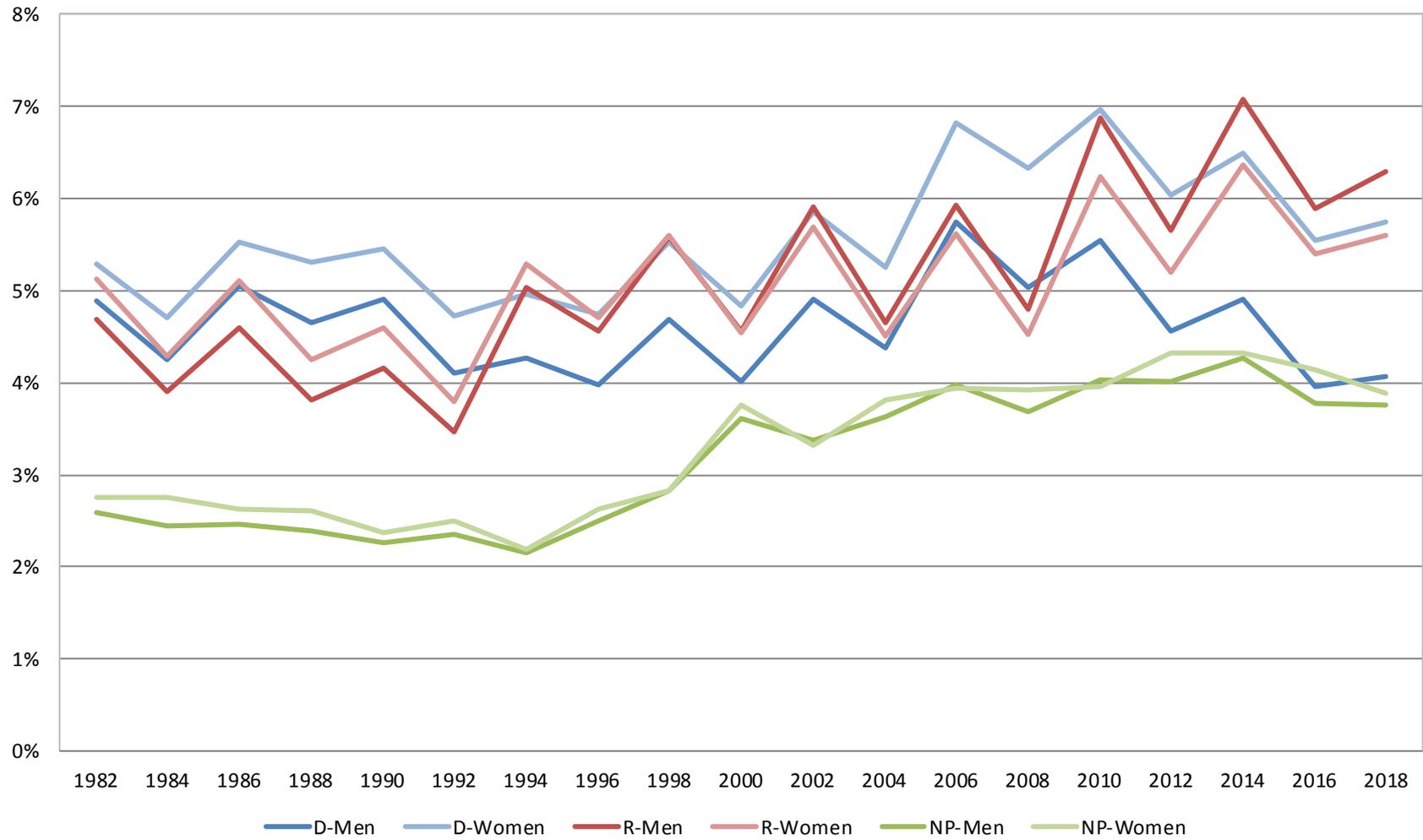
**Figure 9b: Iowa Voter Distribution for Age Group 25-34 by Sex and Party in Elections Since 1982**



**Figure 9c: Iowa Voter Distribution for Age Group 35-49 by Sex and Party in Elections Since 1982**



**Figure 9d: Iowa Voter Distribution for Age Group 50-64 by Sex and Party in Elections Since 1982**



**Figure 9e: Iowa Voter Distribution for Age Group 65 & Over by Sex and Party in Elections Since 1982**

