



# 2018 Michigan State Legislative Election Analysis

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## **I. Methodology**

### **Finding the Data**

Data on the 2018 Michigan State House and Senate races was obtainable on the Michigan Secretary of State website. A downloadable Excel sheet containing the results of the election was available to the public. The data included the names of each candidate running for every major office in the state, along with how many votes they each received from every county.

### **Cleansing and Organizing the Data**

In order to find the relevant data that could be utilized for analysis, the data was converted into a table in Excel and filtered based on the office description. Pivot Tables was created for State Senate races, State House races, major state executive races, U.S. House, and U.S. Senate races.

The vote tally of each party in every State House district was aggregated in the Pivot Table. A 'rank' column was added based on the number of votes for each party. The table was sorted based on the rank, so that the winner of each race could easily be determined. The same steps were repeated in a separate Pivot Table for the State Senate races.

### **Exploring the Data**

Next, the total number of statewide votes for State Senate races for each party were aggregated using a SUMIF formula in Excel. Based on the party (DEM or REP) in one column of the Pivot Table, the votes would be added to the appropriate total. The same was done for the State House races.

A similar formula, COUNTIFS, was utilized in order to count the number of State Senate races in which Democrats had a rank of "1", meaning they had won that race. Similarly, the number of State Senate races Republicans won could be found. The composition of the State House and State Senate could then be determined.

### **Analyzing the Data**

The findings were compiled in tables and converted into pie charts to show the difference between the popular vote and seat breakdown in the State House and State Senate.

One of the goals was also to compare turnout and partisan performance with other statewide races, such as the state executive branch races and elections for the U.S. Congress.

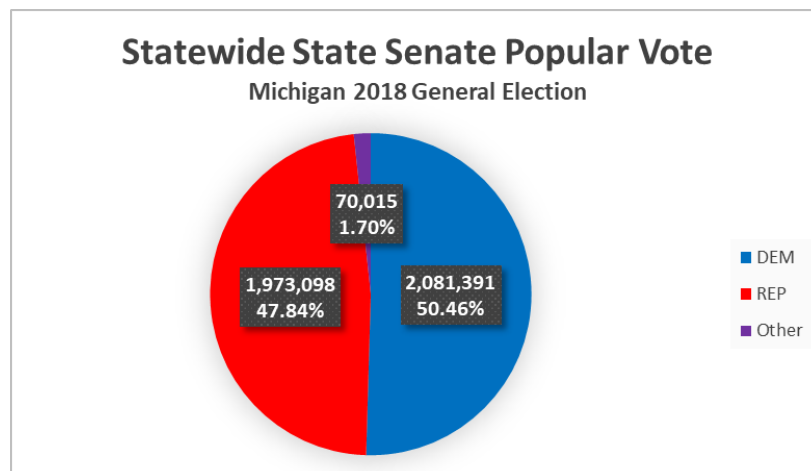
A Pivot Table was constructed for the three major state executive branch races: Governor, Secretary of State, and Attorney General. Like before, the sum of the votes by party were calculated, as well as the total turnout for each race. Two more Pivot Tables were created to show similar data for the U.S. Senate race and U.S. House races in Michigan.

The total turnout, as well as the turnout on both the Democratic and Republican sides, for those races could then be compared with the state legislative voter turnout.

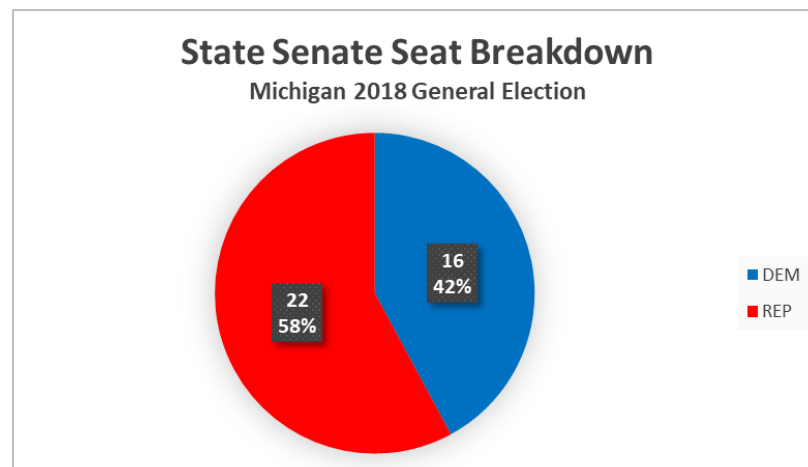
## II. Analysis

### State Senate

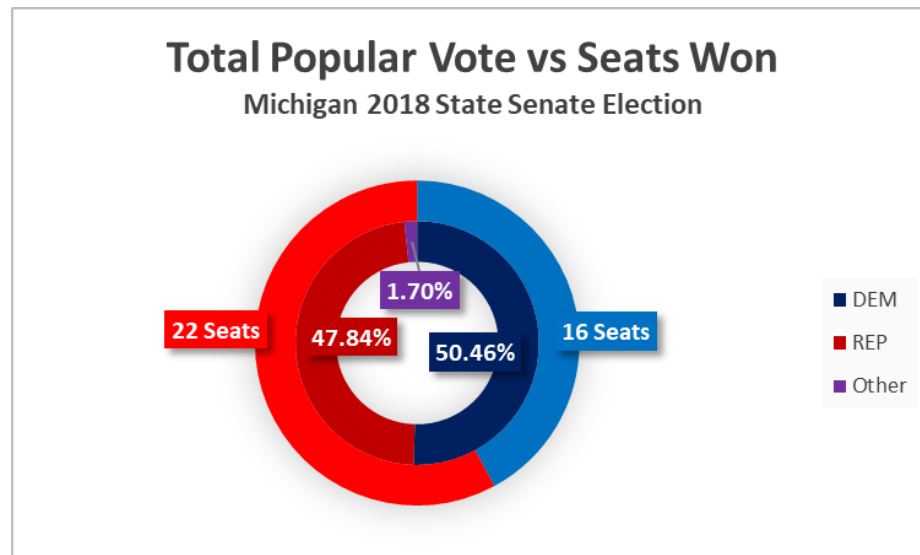
For state Senate races, the total number of votes cast was over 4.1 million, with just over 50% of those being for Democrats.



However, despite earning more votes, Democrats won far fewer seats.

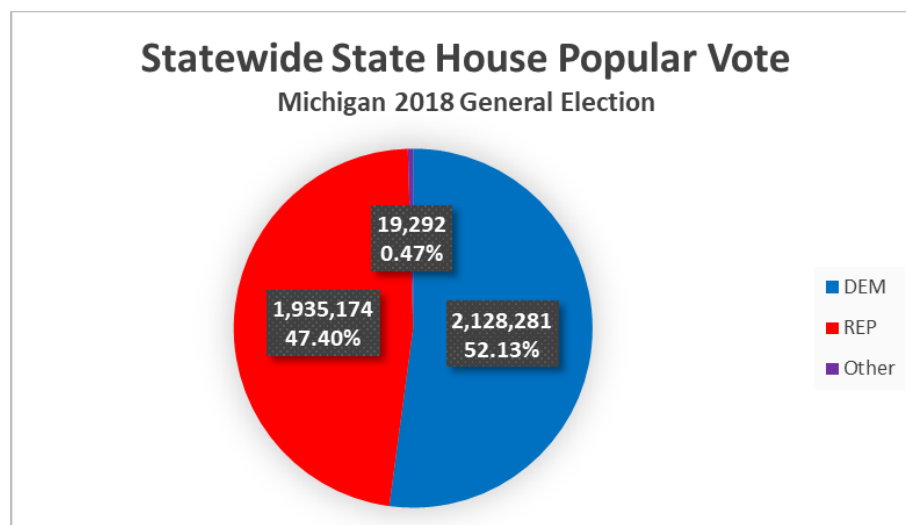


The comparison between the popular vote and number of seats won by each party in the state Senate is shown below. Democrats won over half the popular vote but ended up with only 16 seats, while Republicans had 22 seats.

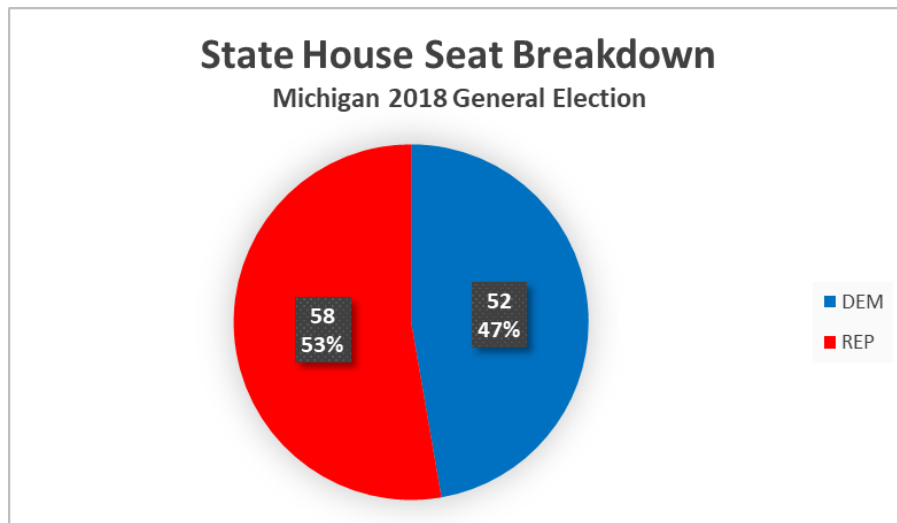


## State House

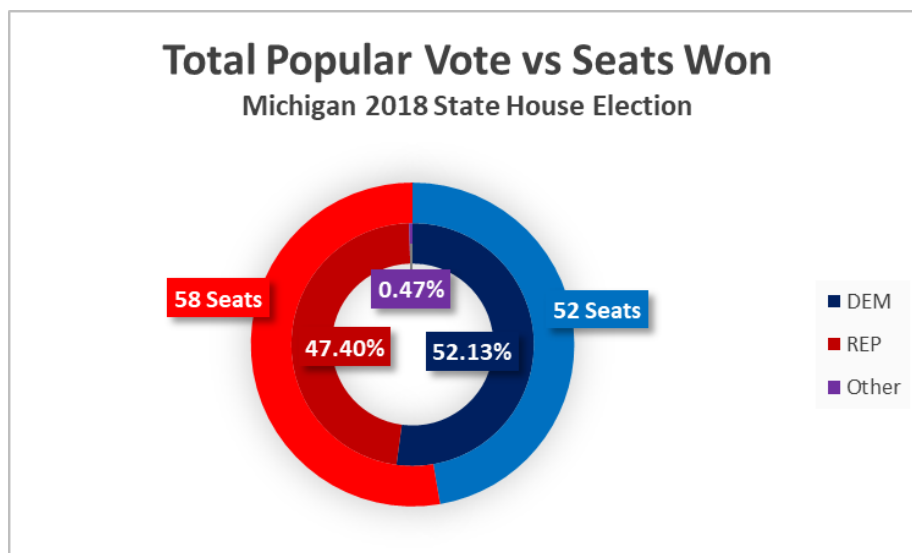
In the State House, Democrats again won the popular vote, but by an even larger margin, with over 52% of the 4 million+ votes going to Democrats.



However, a similar outcome occurred, as Democrats won only 47% of the State House district races.



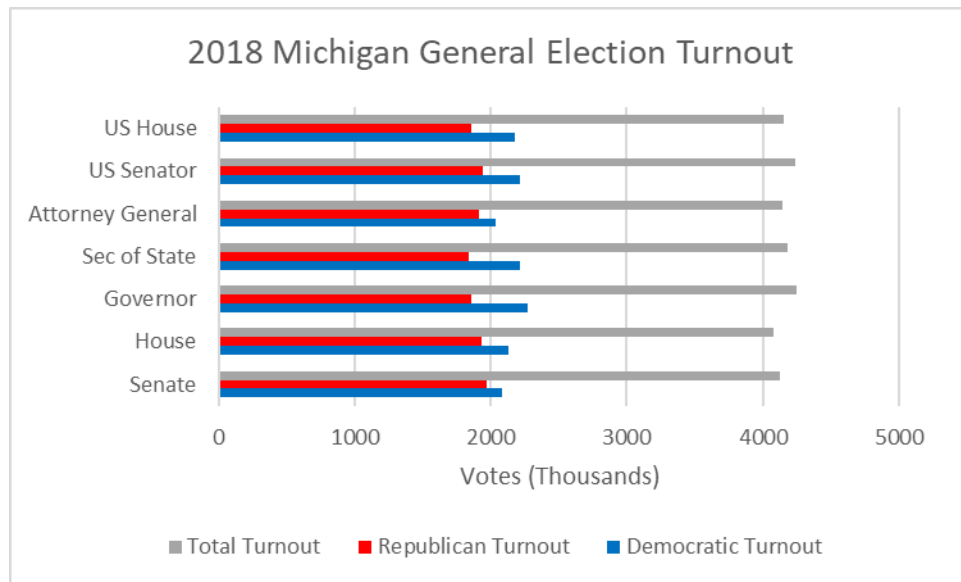
Again, a comparison between the popular vote and number of seats won in the state House can be seen to favor Republicans. Republicans won 58 seats, while Democrats won 52 seats.



The outcome in both chambers is likely due to the way districts are drawn and gerrymandered, so that Democrats are concentrated into fewer districts despite being the majority in the state. This is aided by the fact that Democrats in Michigan tend to be concentrated in compact, urban areas.

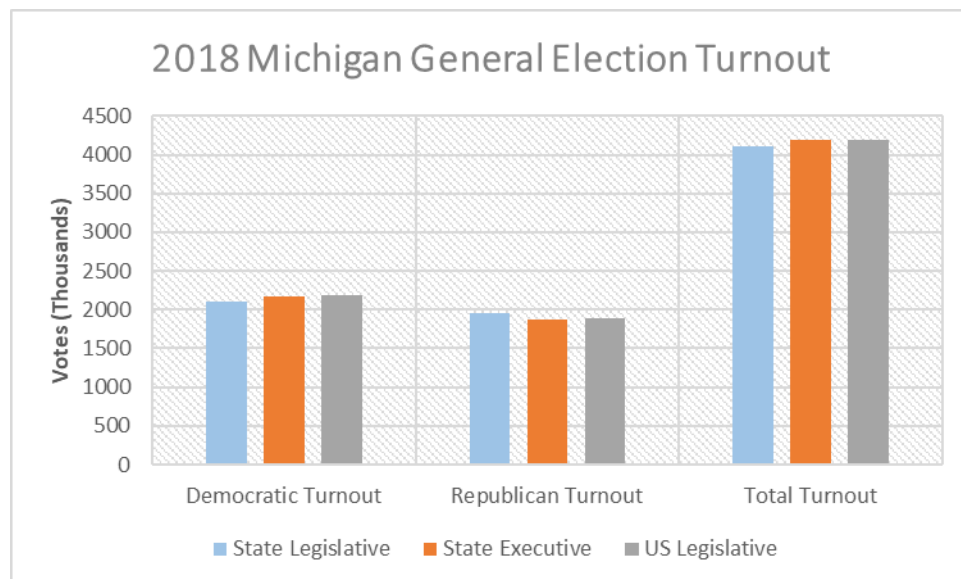
## Turnout

Compared with other statewide races, state legislative elections had slightly lower total turnouts than other races, as shown below. On average, Democratic turnout was consistently higher than that of Republicans.



Turnout was examined further as a breakdown within each party. Democrats had relatively high turnout on average for national races (i.e. U.S. House, U.S. Senate) and state executive races, while their turnout for state legislative races was slightly lower.

Republicans, on the other hand, experienced high turnout in state legislative races and relatively lower turnout in state executive and national races.



### III. References

“2018 Michigan Election Results.” *Michigan Department of State*, Michigan Secretary of State, 6 Nov. 2018, [mielections.us/election/results/2018GEN\\_CENR.html](http://mielections.us/election/results/2018GEN_CENR.html).

### IV. Appendix

For reference, below are the results of the calculations of total votes.

#### State Senate

Party	Votes	Percent
DEM	2081391	50.46%
REP	1973098	47.84%
Other	70015	1.70%
Total	4124504	

Party	Seats	Percent
DEM	16	42.11%
REP	22	57.89%
Total	38	

#### State House

Party	Votes	Percent
DEM	2128281	52.13%
REP	1935174	47.40%
Other	19292	0.47%
Total	4082747	

Party	Seats	Percent
DEM	52	47.27%
REP	58	52.73%
Total	110	

#### Total Turnout

Party	Senate	House	Governor	Sec of State	Attorney General	US Senator	US House
Democratic	2081391	2128281	2266193	2213243	2031117	2214478	2175003
Republican	1973098	1935174	1859534	1840118	1916117	1938818	1853459
Total Turnout	4124504	4082747	4250585	4184026	4142044	4237271	4154703

#### Average Turnout Categorized by Race Type

Party	State Legislative	State Executive	US Legislative
Democratic	2104836	2170184.333	2194740.5
Republican	1954136	1871923	1896138.5
Total Turnout	4103625.5	4192218.333	4195987