

# **DETERMINANTS OF TURNOUT IN UC DAVIS STUDENT GOVERNMENT ELECTIONS**

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## **ABSTRACT**

Electoral turnout is an indicator of the legitimacy and representativeness of governments, and thus is an important area of study in elections. In student governments, turnout can serve as an indicator of authority to university administration and how well a governing body represents the whole student body. While there are numerous studies of turnout on a national level and numerous studies of student governments, few have attempted to study the combination of the two. This paper contributes to filling this gap by studying determinants of turnout in student government elections. I use data from UC Davis student government elections for my research. My analysis suggests that fee measures and the quantity of candidates demonstrate significant positive correlations to increased turnout in UC Davis student government elections.

## INTRODUCTION

Turnout is one of the most important variables when studying elections, as it is a direct measure of political participation and can imply support for a government. In the case of student elections, high turnout can supply legitimacy to student government officials during interactions with university officials. Student governments are often referred to as the voice of the students. If turnout is low, then we cannot assume the student government represents all students.

A relatively small body of research exists about university student governments. Many studies regarding university student governments focus on the effect of student participation in these governments on student outcomes (Kuh & Lund 1994, Pasek et al. 2007, Nevin 2017). Few discuss the structure of student governments (Alexander 2016, Dunham et al. 2020), and even fewer discuss turnout in university elections (Lewis & Rice 2005).

In this paper, I aim to analyze the determinants of turnout in UC Davis student government (ASUCD) elections. I aim to analyze how the quantity of candidates running for office and the presence of fee measures affects undergraduate turnout. My predictions were that in elections where there are more candidates, turnout will be higher than in elections where the number of candidates is low, and that elections with fee measures will see increased turnout. In this study, the quantity of candidates in student elections acts as a proxy for voter mobilization efforts; potential candidates must get signatures to get on the ballot, and then must encourage people to vote for them. Studies on voter mobilization find evidence that increased campaign efforts increase turnout (Druckman 2004, Holbrook & Weinschenk 2013, Jacobson 2015). Secondly, I analyzed how the inclusion of ballot measures on university elections affects turnout. Studies find that the presence of initiatives increases turnout (Tolbert et al. 2009, Biggers 2011). I anticipated I would find a similar trend in student government elections.

This article proceeds with an explanation of the data and methodology, including data collection and variable creation. The following section is the results of my analysis. The final section discusses the findings and provides areas for further research.

## DATA AND METHODOLOGY

My data spans 38 UC Davis student government (ASUCD) elections between fall 2003 and spring 2022. This time frame represents elections that used the single transferable vote method (STV)—elections that used block voting (elections prior to fall 2003) are excluded from the scope of this study due to a possible confounding effect. Four special elections, which include only measures and no candidates, are excluded as well.

Two elections occur per academic year. Currently, six senators are elected in the fall, and then one presidential ticket (president and vice president) and six senators are elected in the spring<sup>1</sup>. In recent years, more elected offices have been added<sup>2</sup>, such as the transfer student representative and external affairs vice president. Every election, referendums may also appear on the ballot—including amendments to ASUCD Constitution and fee referendums. While all referendums must meet a 60% approval threshold, fee referendums must also garner 20% turnout from the eligible student body to pass.

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<sup>1</sup> Elections prior to 2020 conducted the presidential election in winter rather than spring.

<sup>2</sup> The positions Student Advocate and External Affairs Vice President were added in 2020. The positions International Student Representative and Transfer Student Representative were added in 2021.

My primary source of elections data is the ASUCD elections website and an unaffiliated UC Davis elections website created and maintained by a former ASUCD Elections Committee Chair Johnathon Leathers (ASUCD Elections Website 2022, Leathers 2022). For elections from winter 2013 to spring 2022, I use the ballot data files and past elections archive provided by the ASUCD elections website to collect candidate and ballot measure data. For elections prior to winter 2013, I use Leathers’s website because the ASUCD elections website does not host elections data prior to 2013; he provides an archive of all past STV elections (including all offices plus ballot measures) and official ballot data files downloaded from past ASUCD elections websites.

For undergraduate population data, I source the eligible population count from AggieData, the publicly available UC Davis portal for university related data (AggieData 2022). I collect population data based on the quarter in which the election took place because the undergraduate population at the beginning of the year differs from that of the end, which could alter turnout calculations<sup>3</sup>.

### **Turnout, Quantity of Candidates, and Fee Measures**

For my analysis, I use undergraduate student turnout as the dependent variable. I measure turnout as the total vote count—all valid votes plus abstentions—for each election as a percent of the total eligible undergraduate population. The valid vote counts, those who casted a vote rather than abstained, differ greatly between senate, presidential tickets, and ballot measures, so a single total valid vote count per election does not exist. It was necessary to create a single variable that measured turnout, so I use the number of undergraduate students who logged into the election portal to create a total vote count variable<sup>4</sup>. This measure is resistant to the changes in undergraduate population since it is a relative statistic. If total vote counts were used to measure turnout, the results would be skewed by the changing nature of the undergraduate population, which has increased by about 10,000 students since 2003.

Candidate numbers and fee measures are obtained from the ASUCD ballot files when they are provided or from Leathers’s website to fill in gaps. For my analysis of candidates, I created a variable that is the sum of total number of candidates running for any office (the number of presidential tickets were multiplied by two to account for both president and vice president)—I will refer to this variable as “quantity of candidates”. For fee measures, I use a variable that is the total number of fee measures per election.

### **Control Variables**

I control for two possible confounding variables: non-fee measures and whether the election included a presidential ticket. It is possible that some non-fee measures garner a large amount of student attention; to account for this effect, I created a variable that measures the number of non-fee measures per election. Additionally, in US government elections, midterm elections observe lower turnout than presidential elections—I find the same effect in student government elections. To account for the increased attention garnered by presidential races, I created a binary variable indicating if the race included a presidential ticket or not.

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<sup>3</sup> I ran into some minor discrepancies when measuring turnout. AggieData, the ASUCD elections website, and Leathers’s website all list different population counts. I use the AggieData headcounts over the elections website because the elections website only goes to 2013.

<sup>4</sup> When the elections portal login information was not available, I use highest vote count from any measure or candidate as an estimate.

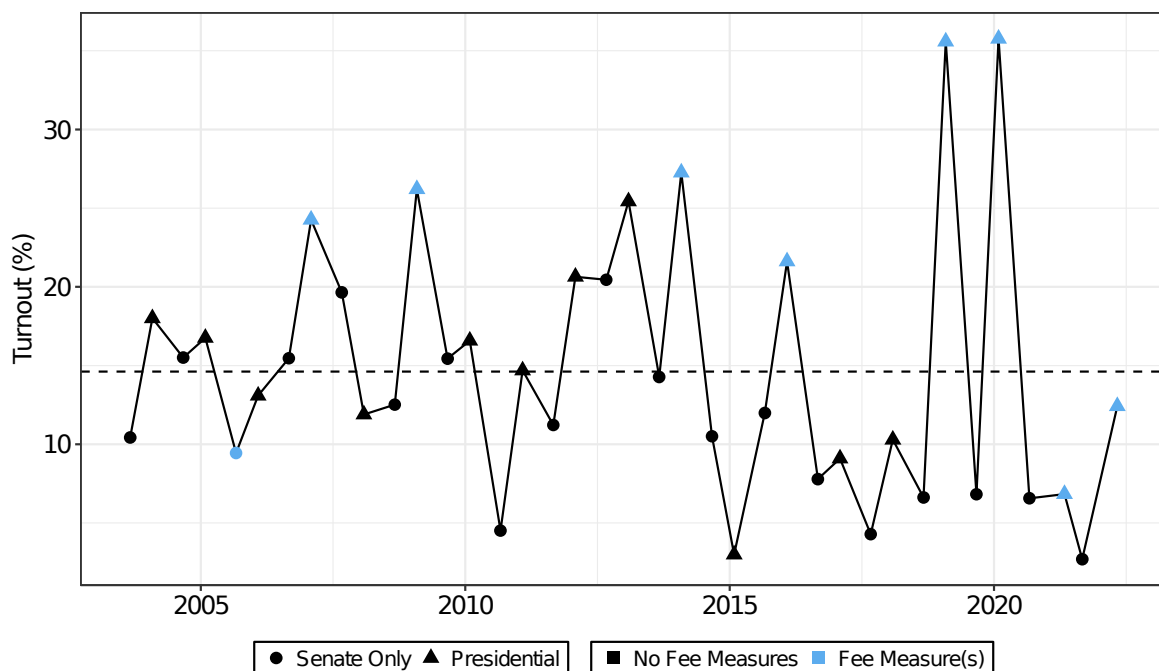
## RESULTS

From fall 2003 to spring 2022, student government turnout ranged from 2.7% to 35.8% over the course of 19 presidential elections and 19 non-presidential elections. *Table 1* summarizes descriptive statistics for electoral turnout and quantity of candidates.

**Table 1.** Descriptive Statistics

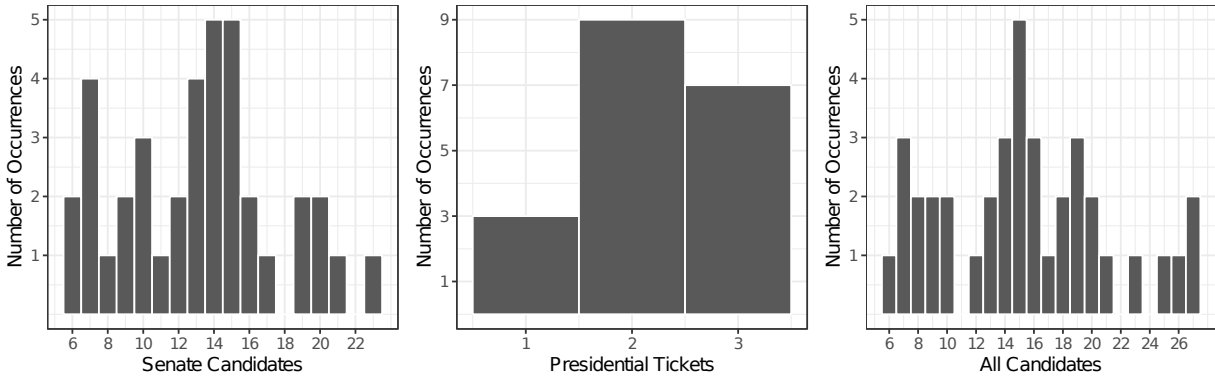
	Mean	Median	SD
Turnout	14.6%	12.8%	8.2%
Quantity of Candidates	15.3	15	5.8

There is moderate variability in student government elections, however, turnout on average remains low. The mean and median are similar, denoting that turnout data does not exhibit much skew. The number of candidates also displays variability—with the lowest being six candidates (which is the number of seats open per election) and up to 27 candidates. The mean and median are almost identical, denoting very little skew.



**Figure 1.** ASUCD Turnout by Year (2003–2022)

*Figure 1* illustrates turnout in ASUCD elections covered by the scope of this study. In 38 elections, there were nine elections with fee measures and 19 elections with non-fee measures. Of those nine fee measures, eight were on the ballot during presidential quarters. The dashed line represents the mean; 17 elections had turnout above the mean and 21 had turnout below the mean. Additionally, the graphs shows that turnout in presidential quarters are almost always higher than the non-presidential quarter that took place in the same school year. A Welch Two Sample t-test confirms that the differences in turnout between presidential and non-presidential elections are statistically significant.



**Figure 2. Distributions of Senate, Presidential, and All Candidates**

Figure 2 displays three histograms: two for the quantity of presidential and senate candidates, plus another histogram displaying all offices combined. All histograms reflect a unimodal distribution, meaning that observations are clustered around the middle rather than at the extremes.

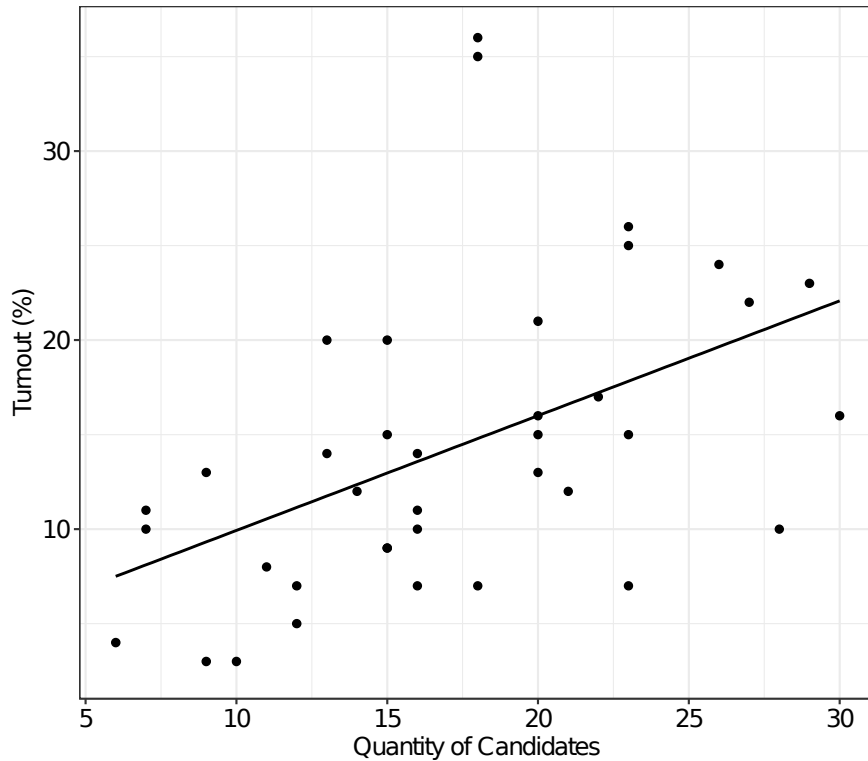
### Regression Analysis

I test the effects of the discussed variables on electoral turnout in a regression model. The size of the data presents a few methodological problems. Due to the small number of data points, it was difficult to determine if there were any outliers that were affecting the results.

Table 2 reports the results of my linear regression analysis. In my model, I measure if the quantity of candidates and fee measures are related to student government turnout. In my model, I also account for the quantity of non-fee measures and if the election was presidential or not.

<b>Table 2. Regression Results for ASUCD Turnout</b>	
<b>Intercept</b>	0.051 (0.032)
<b>Quantity of Candidates</b>	0.0054 * (0.0023)
<b>Fee Measures</b>	0.048 * (0.022)
<b>Non-Fee Measures</b>	-0.0074 (0.0073)
<b>Presidential Quarter</b>	0.0070 (0.030)
<b>R-squared</b>	0.382
<b>No. Observations</b>	38
Standard errors are reported in parentheses.	
* indicates $p < 0.05$	

The model confirms the significance of the quantity of candidates and fee measures. Both fee measures and quantity of candidates demonstrate positive relationships with turnout—even when controlling for other variables. The model indicates that one fee measure is related to a positive increase in turnout of about 4.8% (SD = 0.23%) and each candidate is related to an increase in turnout of about 0.5% (SD = 0.22%). *Figure 3* displays a graphical representation of the regression model paired with a scatterplot of turnout ordered by the number of candidates. We can observe a moderate linear correlation from the graph.



**Figure 3. Linear Regression Model**

Overall, my findings point to the significance of fee measures and the quantity of candidates when measuring turnout in ASUCD elections.

### CONCLUSIONS AND FURTHER DISCUSSION

With this analysis, I have been able to shed some light on some determinants of turnout in UC Davis student government elections. My main results find significant positive relationships between quantity of candidates, fee measures, and turnout—quantity of candidates and turnout are positively related, and fee measures and turnout are positively related.

A limitation of this study is the small number of observations. More data is needed to further confirm the results of this study. Future research should add data from all previous ASUCD elections that used block voting<sup>5</sup>. The small number of observations made it difficult to determine if there were any significant outliers. Additionally, given the current data, these results

<sup>5</sup> As of 2022, ASUCD elections documents are available from 1991 onwards in the special collections archive

should not be generalized to other universities. A potential avenue of future research would be to include the elections data for other UC campuses.

These findings have important implications for future studies of student governments. My results point to the importance of candidates and fee measures as mobilizing agents. Further research needs to explore other possible determinants of turnout. As a further point of study, I would like to see how the year of students impacts the likelihood of voting. In addition to this, the news coverage of elections could affect turnout, such as the student media publicity of elections, the university publicity of elections, and election scandals. Another possible confounder is the instability of student government parties and the turnover of the student population. Lastly, competitiveness between candidates could also influence turnout. In all cases, research on these possible determinants can further our understanding of student government turnout.

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