



# **The Variation of Voting by Age**

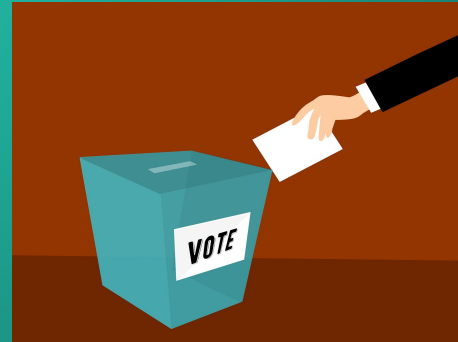
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# **Why is this topic important?**

**The motivation behind my research**

- ★ **As we all know, remaining politically engaged is vital, yet hard to achieve for some demographics**
- ★ **I'm intrigued to understand voter turnout by age groups within each state**
- ★ **Hopefully, completing this data analysis can support my theoretical claims for future projects about political behavior at the polls**



# Information about Data

- ★ **I got this dataset from the United States Census Bureau**
- ★ **The originally dataset is about reported voting and registration of the total voting-age population by age and states in 2022. These numbers are calculated in the thousands**
- ★ **I then restructured the dataset to examine turnout by age and the unit of analysis is by state.**



(Numbers in thousands)													
Characteristics		Total population	Total citizen population	Registered					Voted				
				Total registered	Percent registered (Total)	Margin of error <sup>1</sup>	Percent registered (Citizen)	Margin of error <sup>1</sup>	Total voted	Percent voted (Total)	Margin of error <sup>1</sup>	Percent voted (Citizen)	Margin of error <sup>1</sup>
UNITED STATES		255,457	233,546	161,422	63.2	0.5	69.1	0.5	121,916	47.7	0.5	52.2	0.5
	18 to 24 years	28,794	26,749	13,130	45.6	1.1	49.1	1.2	7,372	25.6	1.0	27.6	1.1
	25 to 34 years	44,084	38,879	24,393	55.3	0.9	62.7	1.0	15,396	34.9	1.0	39.6	1.1
	35 to 44 years	43,136	37,491	25,967	60.2	1.0	69.3	1.0	18,401	42.7	1.0	49.1	1.1
	45 to 64 years	82,023	74,944	55,014	67.1	0.7	73.4	0.7	43,661	53.2	0.7	58.3	0.7
	65 years and over	57,420	55,483	42,919	74.7	0.8	77.4	0.7	37,086	64.6	0.8	66.8	0.8
ALABAMA	Total	3,857	3,716	2,499	64.8	3.0	67.3	2.7	1,688	43.8	3.3	45.4	3.0
	18 to 24 years	411	401	179	43.4	8.2	44.6	8.2	77	18.7	4.6	19.2	5.0
	25 to 34 years	617	587	312	50.5	7.0	53.1	6.4	158	25.6	5.4	27.0	5.4
	35 to 44 years	646	604	405	62.7	5.6	67.0	6.0	270	41.8	7.5	44.7	7.8
	45 to 64 years	1,310	1,253	918	70.1	3.8	73.3	3.2	660	50.4	5.4	52.7	4.8
	65 years and over	873	871	686	78.6	3.8	78.8	3.8	523	59.9	4.7	60.0	4.7
ALASKA	Total	531	516	373	70.2	2.9	72.2	2.9	282	53.1	2.8	54.6	2.7
	18 to 24 years	65	65	30	45.5	7.5	45.9	7.5	16	25.0	8.7	25.2	8.7
	25 to 34 years	105	104	65	61.4	6.8	62.5	7.3	36	33.7	6.3	34.3	6.5
	35 to 44 years	89	88	63	71.0	6.2	72.1	6.3	46	51.4	7.4	52.1	7.6
	45 to 64 years	170	161	131	77.3	4.6	81.7	4.1	112	66.2	5.0	70.0	4.7
	65 years and over	101	99	84	82.7	6.9	84.4	7.5	72	71.0	6.8	72.5	7.3
ARIZONA	Total	5,731	5,093	3,560	62.1	3.2	69.9	3.3	2,844	49.6	3.1	55.8	3.3
	18 to 24 years	751	694	322	42.9	7.4	46.5	8.3	170	22.6	6.4	24.5	6.8
	25 to 34 years	911	782	509	55.9	6.5	65.1	6.7	300	32.9	6.1	38.3	7.0
	35 to 44 years	937	800	532	56.8	6.2	66.5	6.5	428	45.7	6.1	53.5	7.6
	45 to 64 years	1,800	1,530	1,148	63.8	5.3	75.0	4.8	975	54.1	5.3	63.7	5.1
	65 years and over	1,222	1,287	1,047	78.6	3.8	81.4	3.5	971	72.9	3.9	75.5	3.7

States	Age	Total Population	Total Citizen Populati	Total Voted
ALABAMA	18 to 24 years	411	401	77
ALABAMA	25 to 34 years	617	587	158
ALABAMA	35 to 44 years	646	604	270
ALABAMA	45 to 64 years	1,310	1,253	660
ALABAMA	65 years and over	873	871	523
ALASKA	18 to 24 years	65	65	16
ALASKA	25 to 34 years	105	104	36
ALASKA	35 to 44 years	89	88	46
ALASKA	45 to 64 years	170	161	112
ALASKA	65 years and over	101	99	72
ARIZONA	18 to 24 years	751	694	170
ARIZONA	25 to 34 years	911	782	300
ARIZONA	35 to 44 years	937	800	428
ARIZONA	45 to 64 years	1,800	1,530	975
ARIZONA	65 years and over	1,332	1,287	971
ARKANSAS	18 to 24 years	261	250	57
ARKANSAS	25 to 34 years	366	348	100
ARKANSAS	35 to 44 years	382	361	144
ARKANSAS	45 to 64 years	726	691	368
ARKANSAS	65 years and over	542	539	292
CALIFORNIA	18 to 24 years	3,460	3,110	900
CALIFORNIA	25 to 34 years	5,457	4,591	1,970
CALIFORNIA	35 to 44 years	5,325	4,164	2,132
CALIFORNIA	45 to 64 years	9,476	7,815	4,343
CALIFORNIA	65 years and over	6,151	5,635	3,699
COLORADO	18 to 24 years	471	458	158
COLORADO	25 to 34 years	918	875	437
COLORADO	35 to 44 years	873	825	490
COLORADO	45 to 64 years	1,465	1,419	1,001
COLORADO	65 years and over	845	808	601
CONNECTICUT	18 to 24 years	298	289	70
CONNECTICUT	25 to 34 years	458	388	146
CONNECTICUT	35 to 44 years	465	355	123
CONNECTICUT	45 to 64 years	1,031	939	556
CONNECTICUT	65 years and over	585	556	359
DELAWARE	18 to 24 years	96	88	25
DELAWARE	25 to 34 years	124	110	39
DELAWARE	35 to 44 years	108	97	44
DELAWARE	45 to 64 years	219	211	122
DELAWARE	65 years and over	252	249	180
DISTRICT OF COLUMBIA	18 to 24 years	53	51	23

- ★ **The three variables I'll be using are: total voted, total citizen population, and age**
- ★ **Dependent Variable: Total Voted (continuous)**
- ★ **Independent Variable: Total Population**
- ★ **Hypothesis: An increase in the total population is associated with an increase in total voted?**

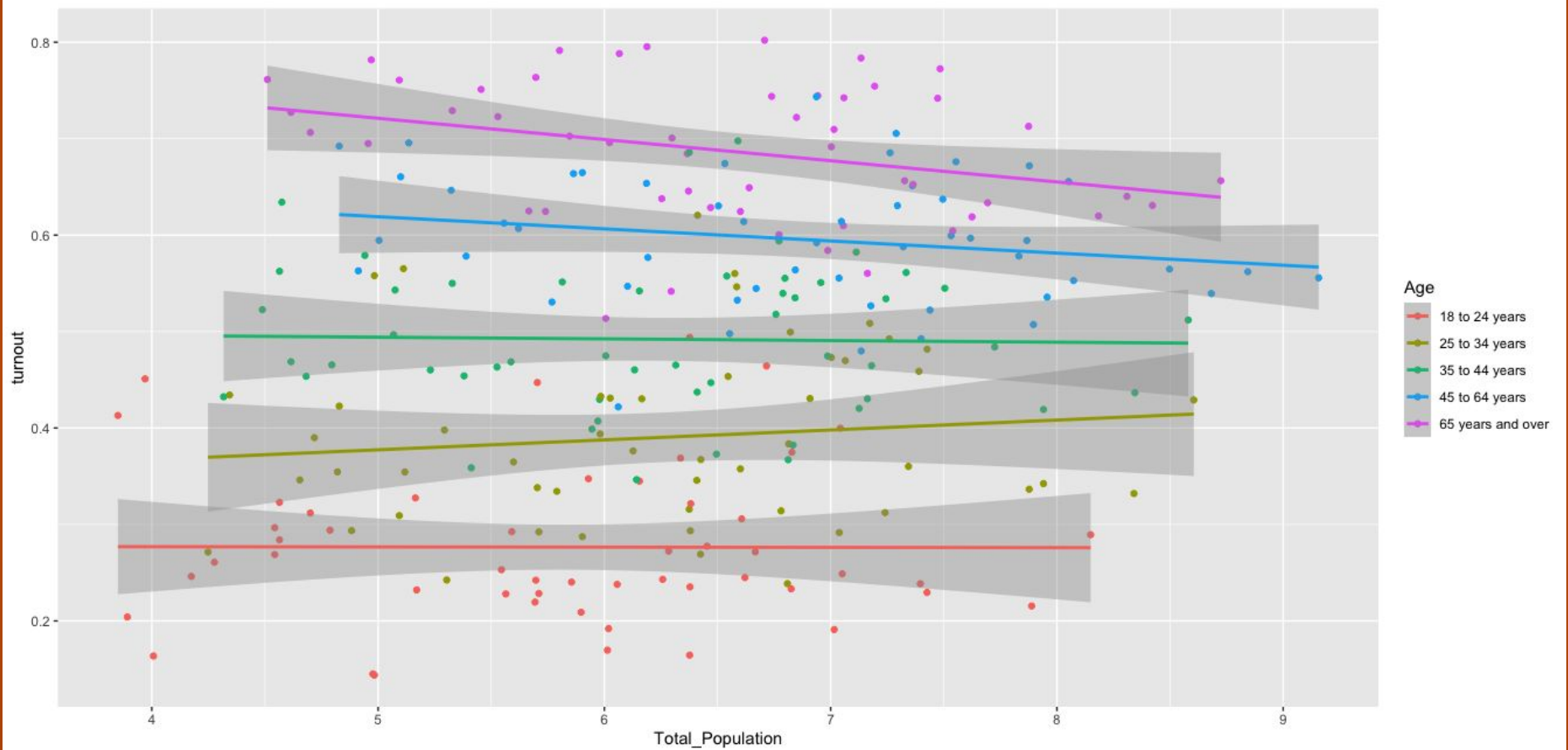
# Regression Table

- ★ **Baseline group is the 18-25 years voting age group**
- ★ **Each voting age group is compared to the baseline voting age group (18-24 years)**
- ★ **The older you are is associated with higher turnout**
- ★ **You can see this demonstrated in the regression table with each age group's coefficients and standard errors**

Dependent variable:	
turnout	
Age25 to 34 years	0.116*** (0.016)
Age35 to 44 years	0.218*** (0.016)
Age45 to 64 years	0.325*** (0.016)
Age65 years and over	0.414*** (0.016)
Total_Population	-0.005 (0.005)
Constant	0.307*** (0.030)
Observations	255
R2	0.779
Adjusted R2	0.774
Residual Std. Error	0.078 (df = 249)
F Statistic	175.116*** (df = 5; 249)
Note: *p<0.1; **p<0.05; ***p<0.01	



# Results



## Conclusion

- ★ After evaluating my regression table and scatterplot, I've determine that there isn't enough empirical evidence to support my hypothesis.

## Areas for Future Research

- ★ Search for literature about racial groups impact the result of voter turnout by age
- ★ Search for individual level data about voter turnout
- ★ Search for literature about registration laws cause low voter turnout to see if this changes the results