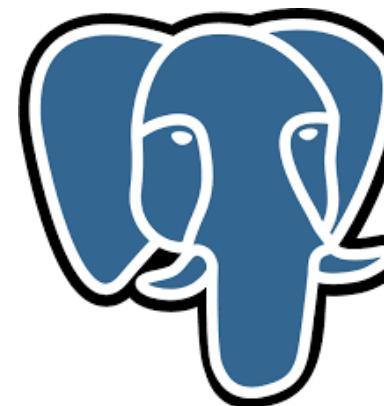
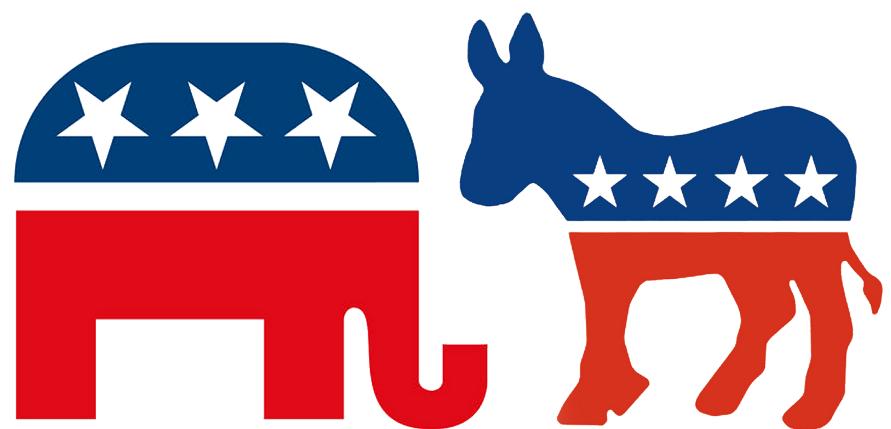


US Election - czy demografia determinuje na kogo ludzie głosują?

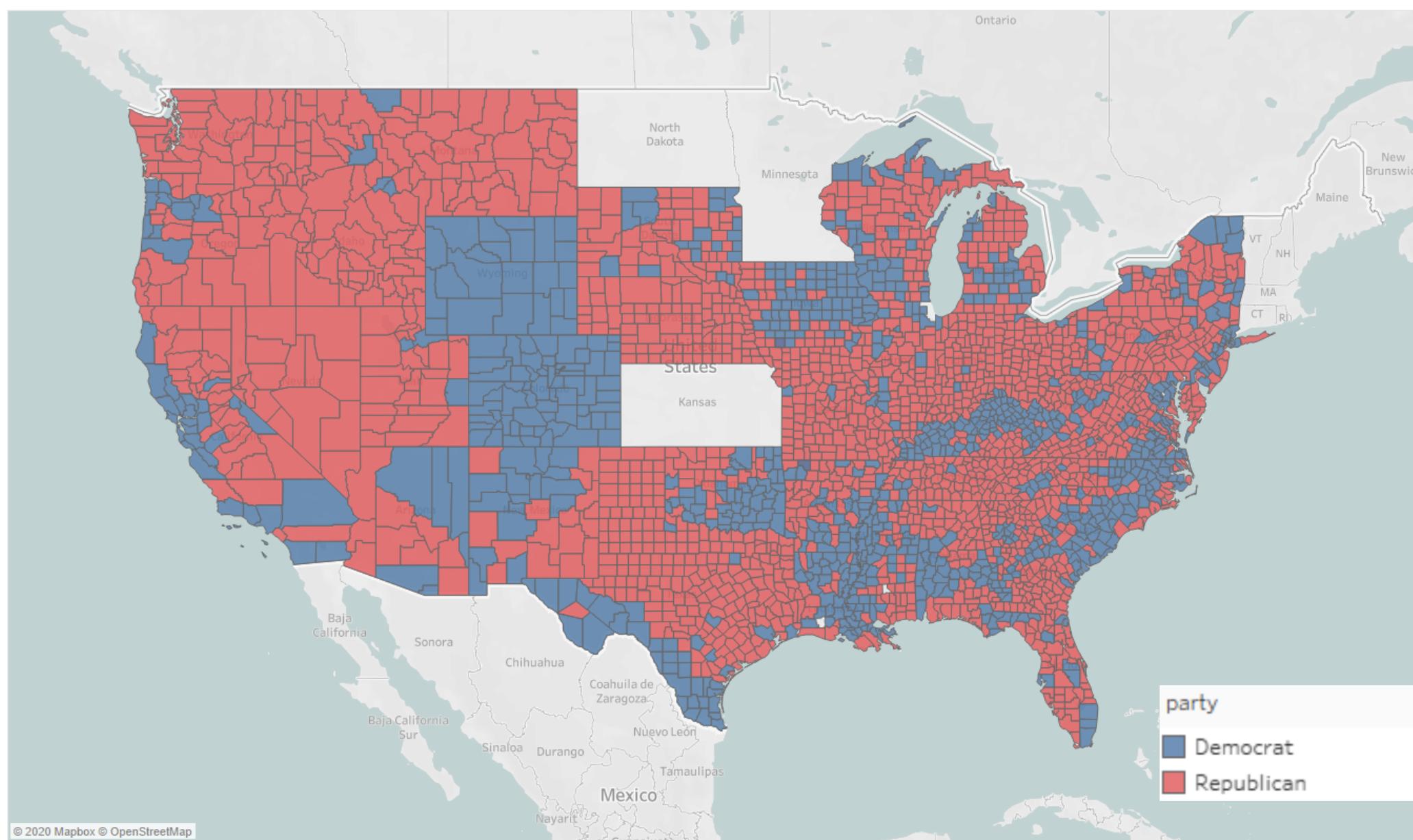
Przegląd ogólnych statystyk, ciekawych przypadków i anomalii na przykładzie prawyborów w roku 2016

Data Researchers: Grzegorz Sochaj, Krzysztof Milimen, Michał Pawłowski



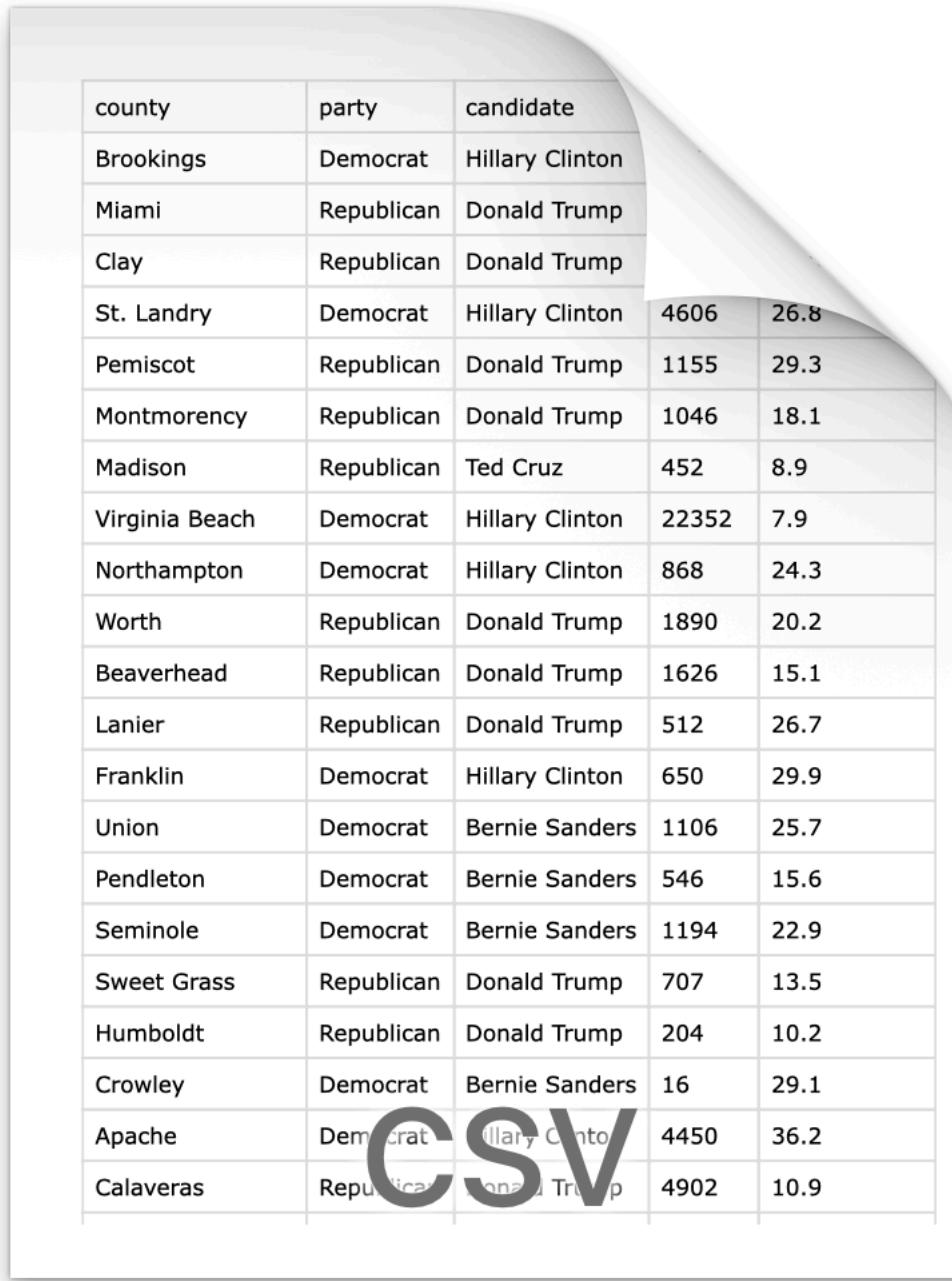
Jak głosują hrabstwa?

Jak czynniki demograficzne determinują wynik głosowania?

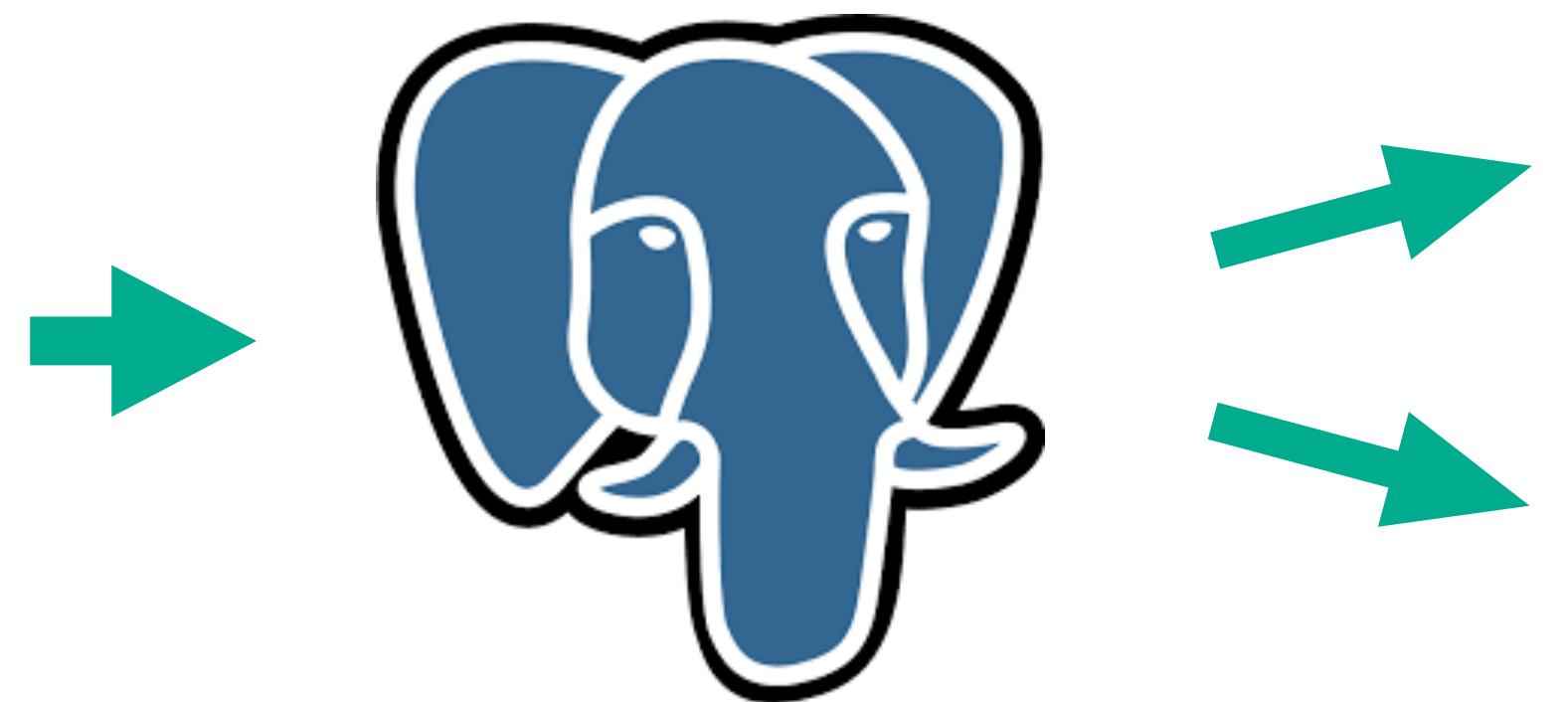


Metodologia badawcza

Które cechy mają wpływ na wynik?



county	party	candidate	
Brookings	Democrat	Hillary Clinton	
Miami	Republican	Donald Trump	
Clay	Republican	Donald Trump	
St. Landry	Democrat	Hillary Clinton	4606 26.8
Pemiscot	Republican	Donald Trump	1155 29.3
Montmorency	Republican	Donald Trump	1046 18.1
Madison	Republican	Ted Cruz	452 8.9
Virginia Beach	Democrat	Hillary Clinton	22352 7.9
Northampton	Democrat	Hillary Clinton	868 24.3
Worth	Republican	Donald Trump	1890 20.2
Beaverhead	Republican	Donald Trump	1626 15.1
Lanier	Republican	Donald Trump	512 26.7
Franklin	Democrat	Hillary Clinton	650 29.9
Union	Democrat	Bernie Sanders	1106 25.7
Pendleton	Democrat	Bernie Sanders	546 15.6
Seminole	Democrat	Bernie Sanders	1194 22.9
Sweet Grass	Republican	Donald Trump	707 13.5
Humboldt	Republican	Donald Trump	204 10.2
Crowley	Democrat	Bernie Sanders	16 29.1
Apache	Democrat	Hillary Clinton	4450 36.2
Calaveras	Republican	Donald Trump	4902 10.9



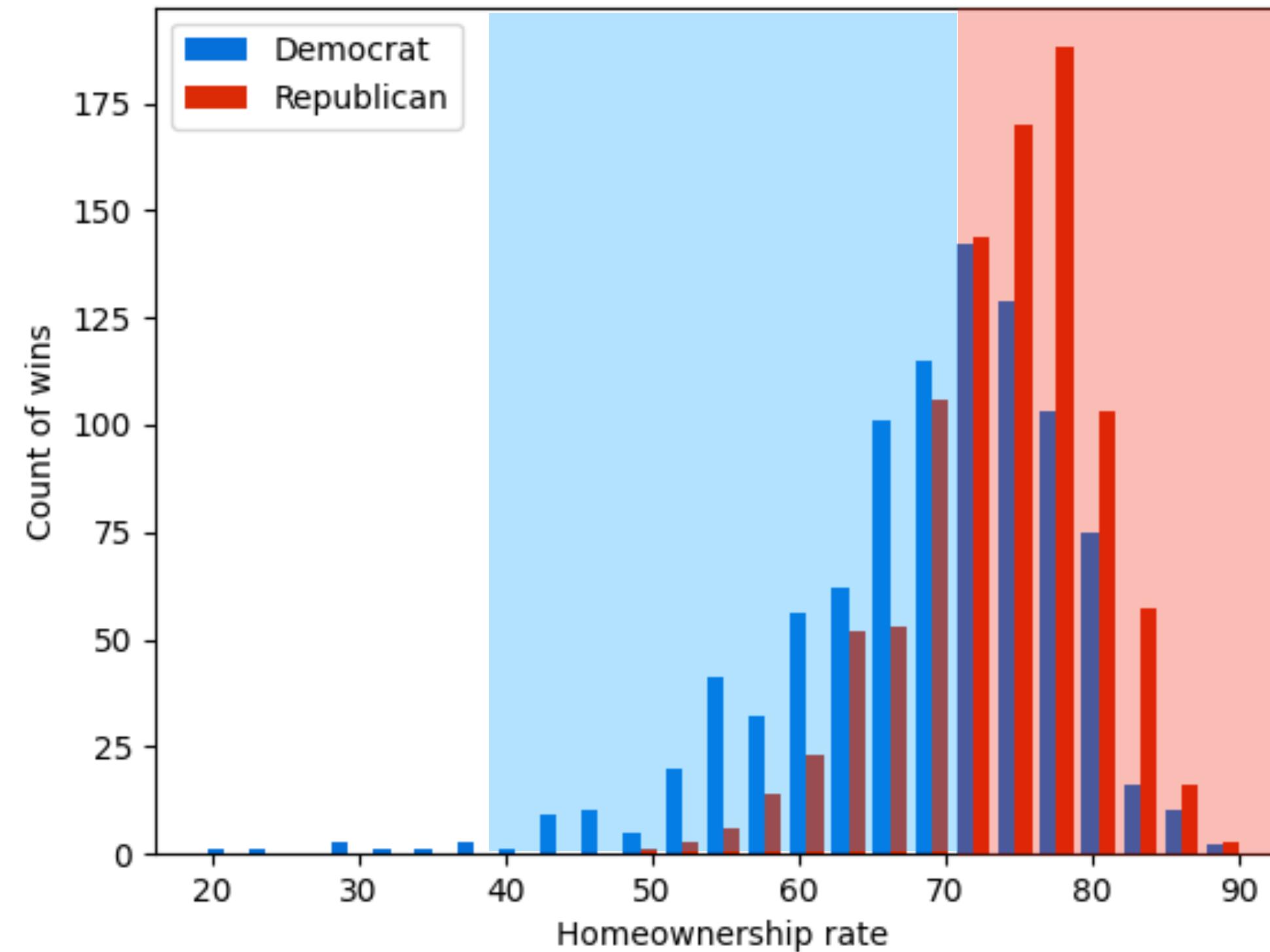
Statistical
distribution

Information
Value
analysis

Predictive
power on
the dependent
variable

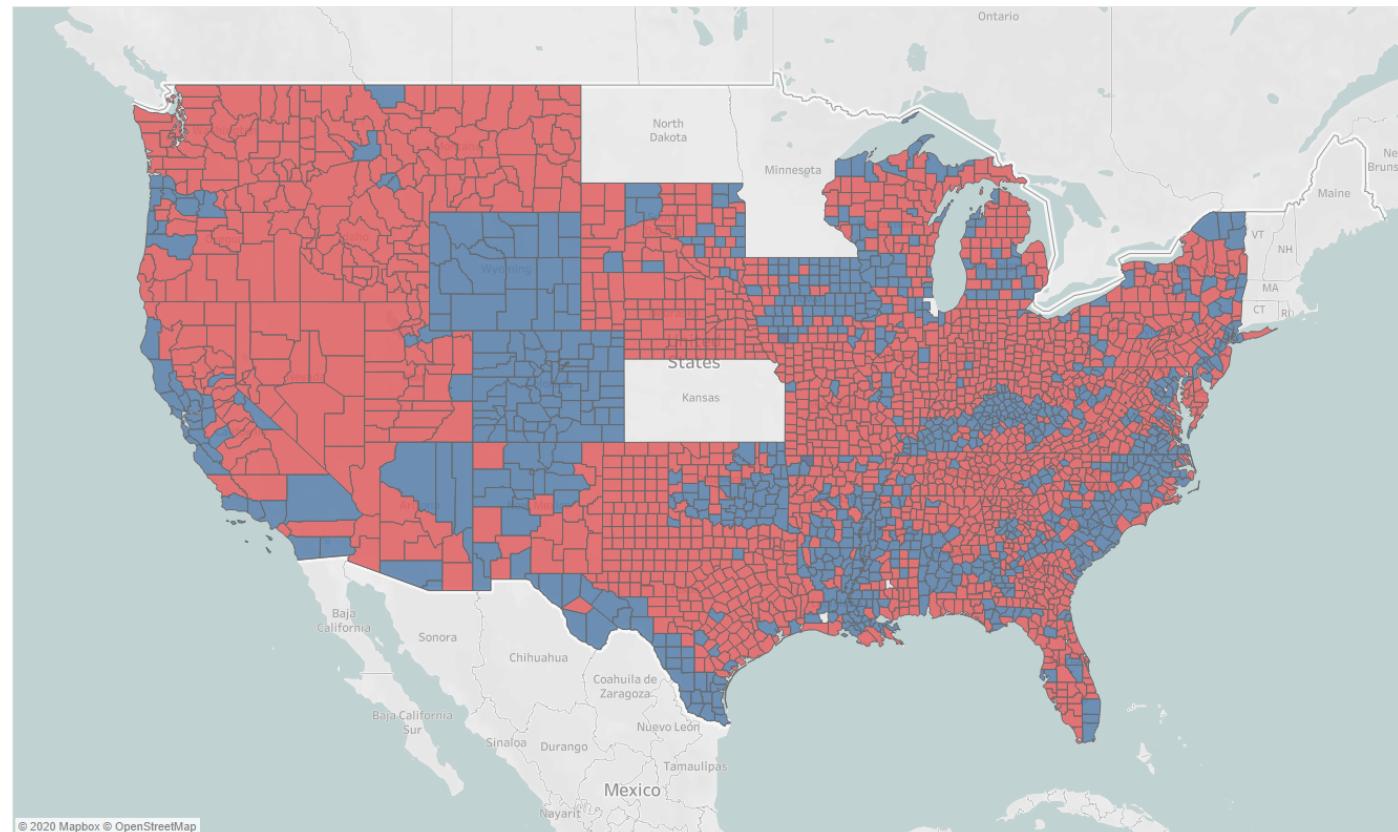
Homeownership rate

Side-by-Side Histogram Democrat/Republican win

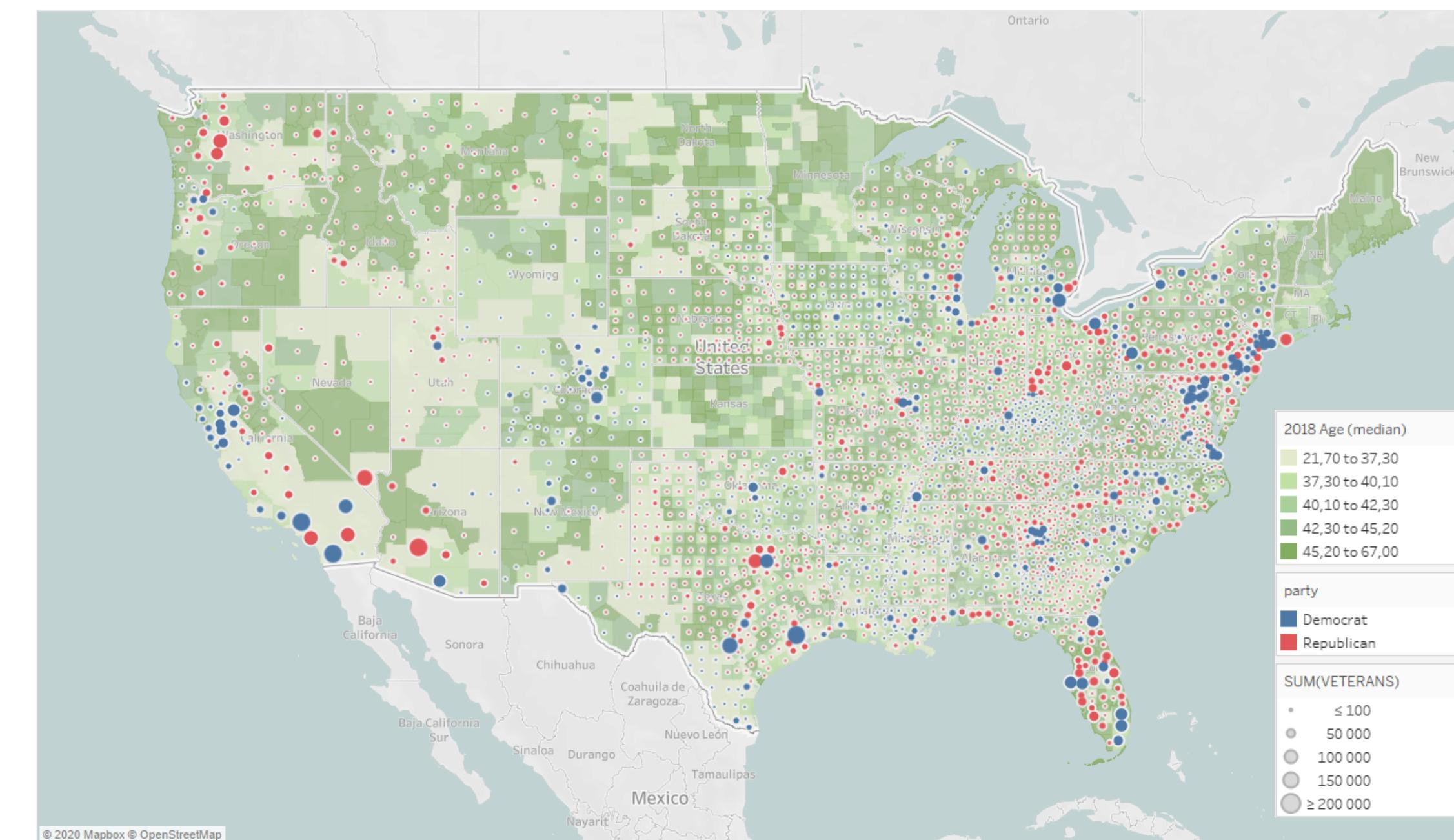
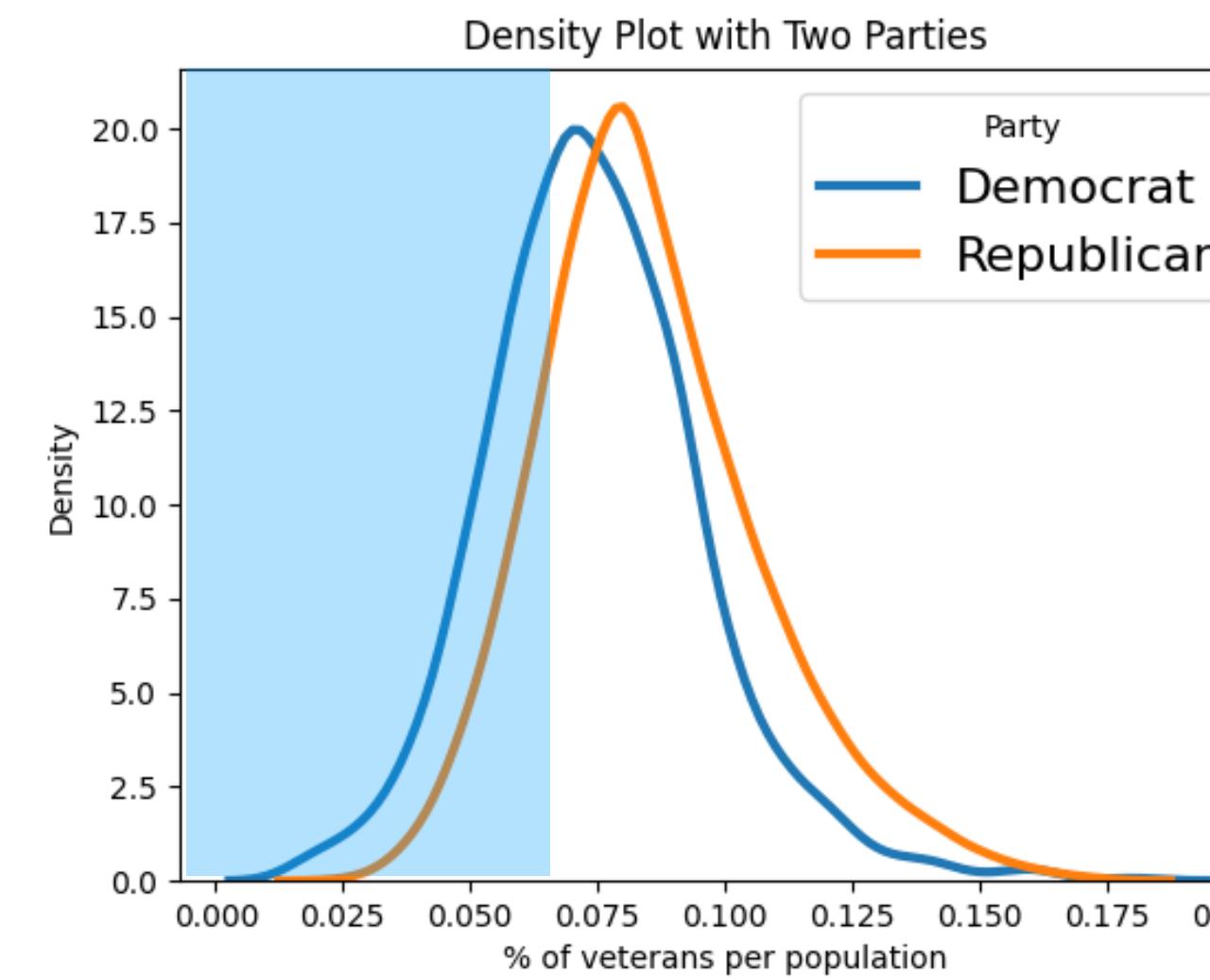


Range, %	Counties	Democrats	Republicans	DB (Democrats)	DG (Republicans)	WOE	Contributor
<69	589	395	194	0,421	0,207	-0,711	0,152
from 69 to 75	578	280	298	0,298	0,317	0,062	0,001
from 75 to 79	429	161	268	0,171	0,285	0,510	0,058
from 79 to 100	282	103	179	0,110	0,191	0,553	0,045
						IV=	0,256

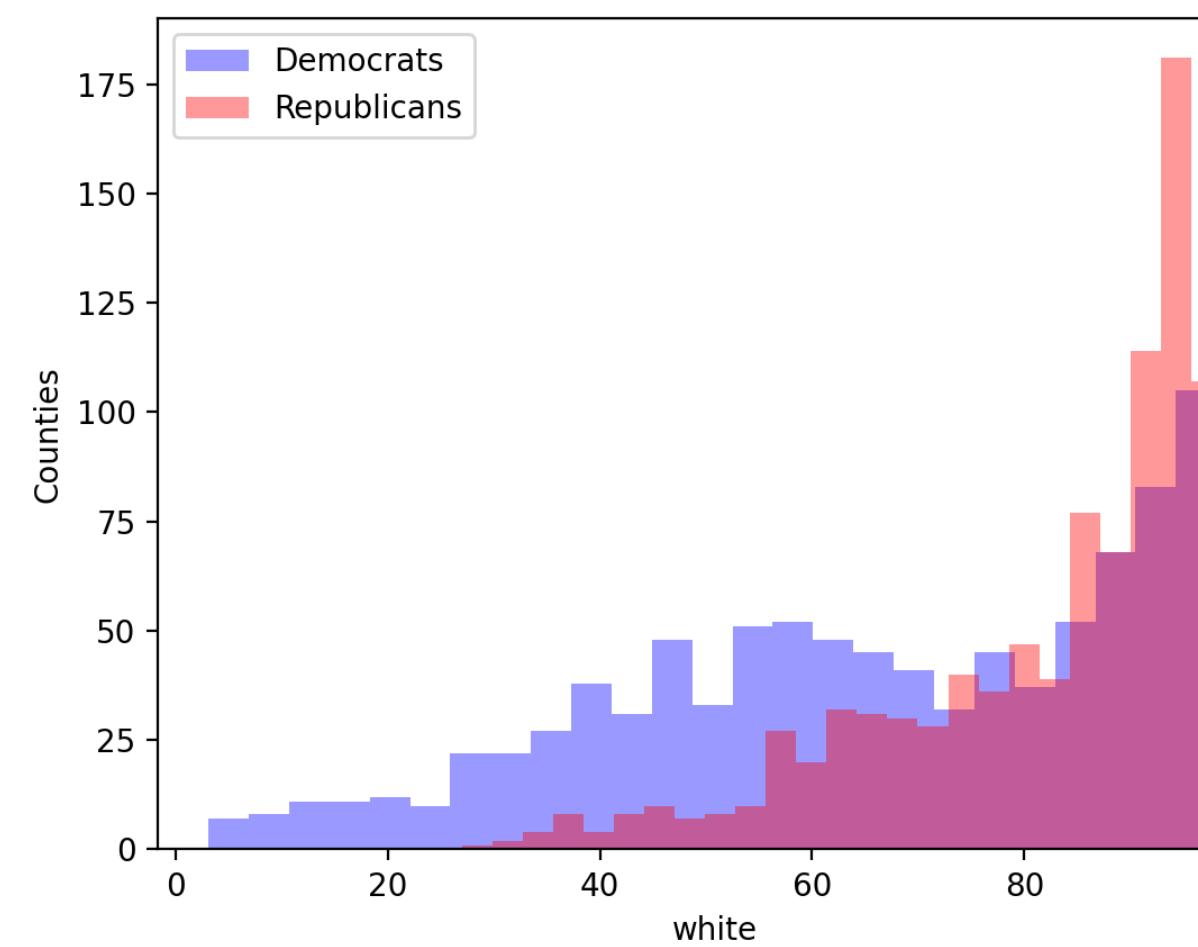
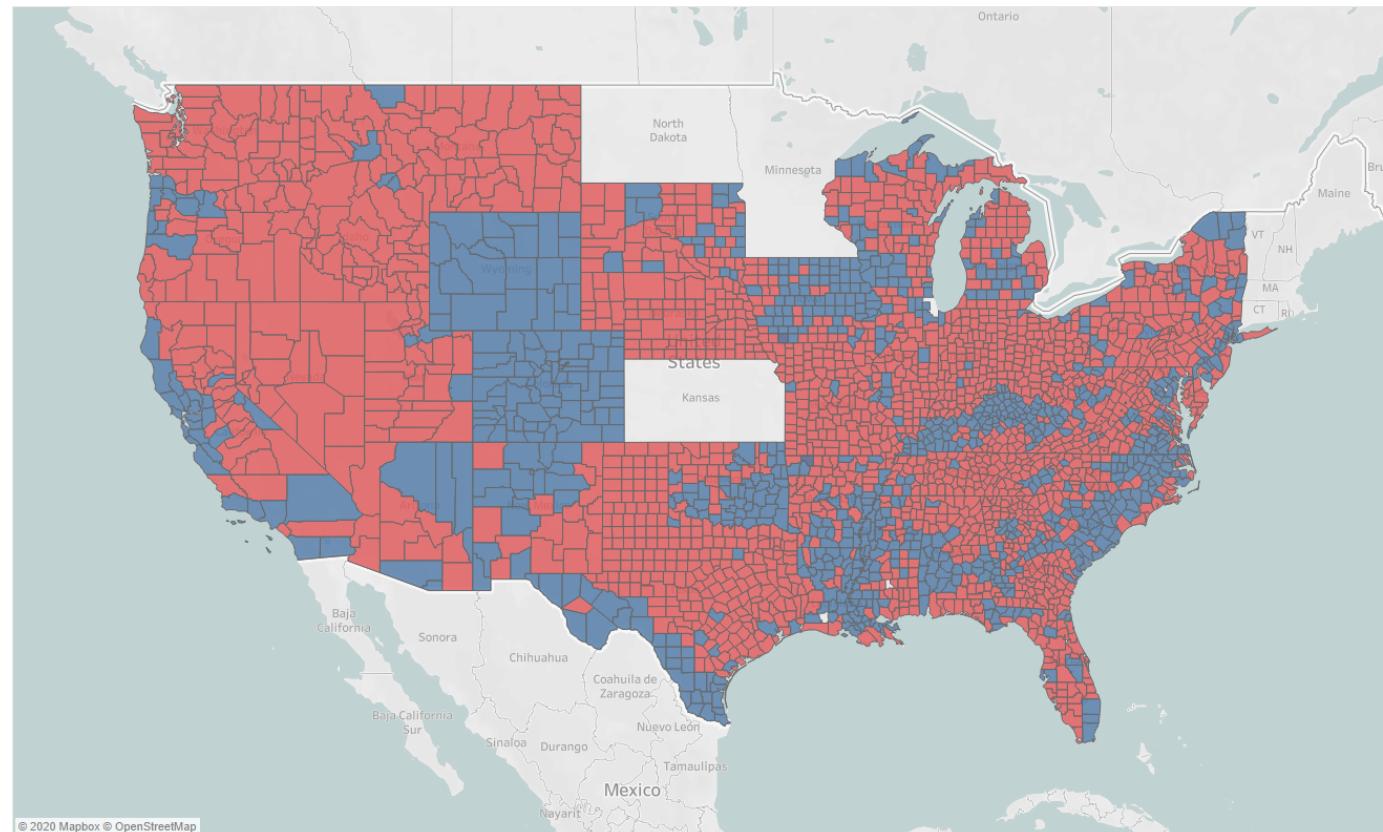
Veterans



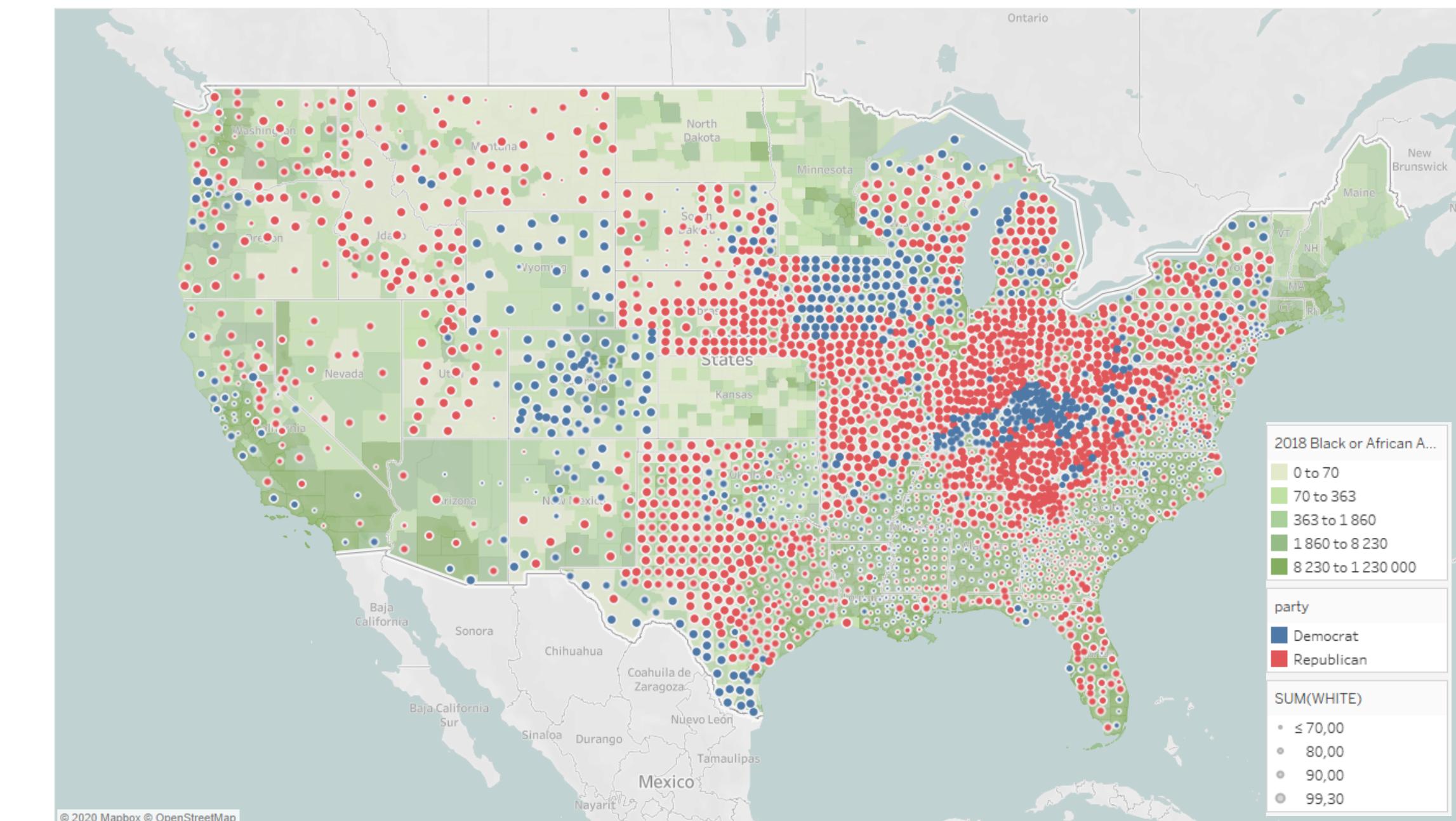
Range, %	Counties	Democrats	Republicans	DB (Democrats)	DG (Republicans)	WOE	Contributor
<0,06	453	306	147	0,3259	0,1565	-0,7332	0,1241
from 0,06 to 0,08	743	369	374	0,3930	0,3983	0,0135	0,0001
from 0,08 to 0,1	454	196	258	0,2087	0,2748	0,2748	0,0181
from 0,1 to 1	228	68	160	0,0724	0,1704	0,8557	0,0838
						IV=	0,2262



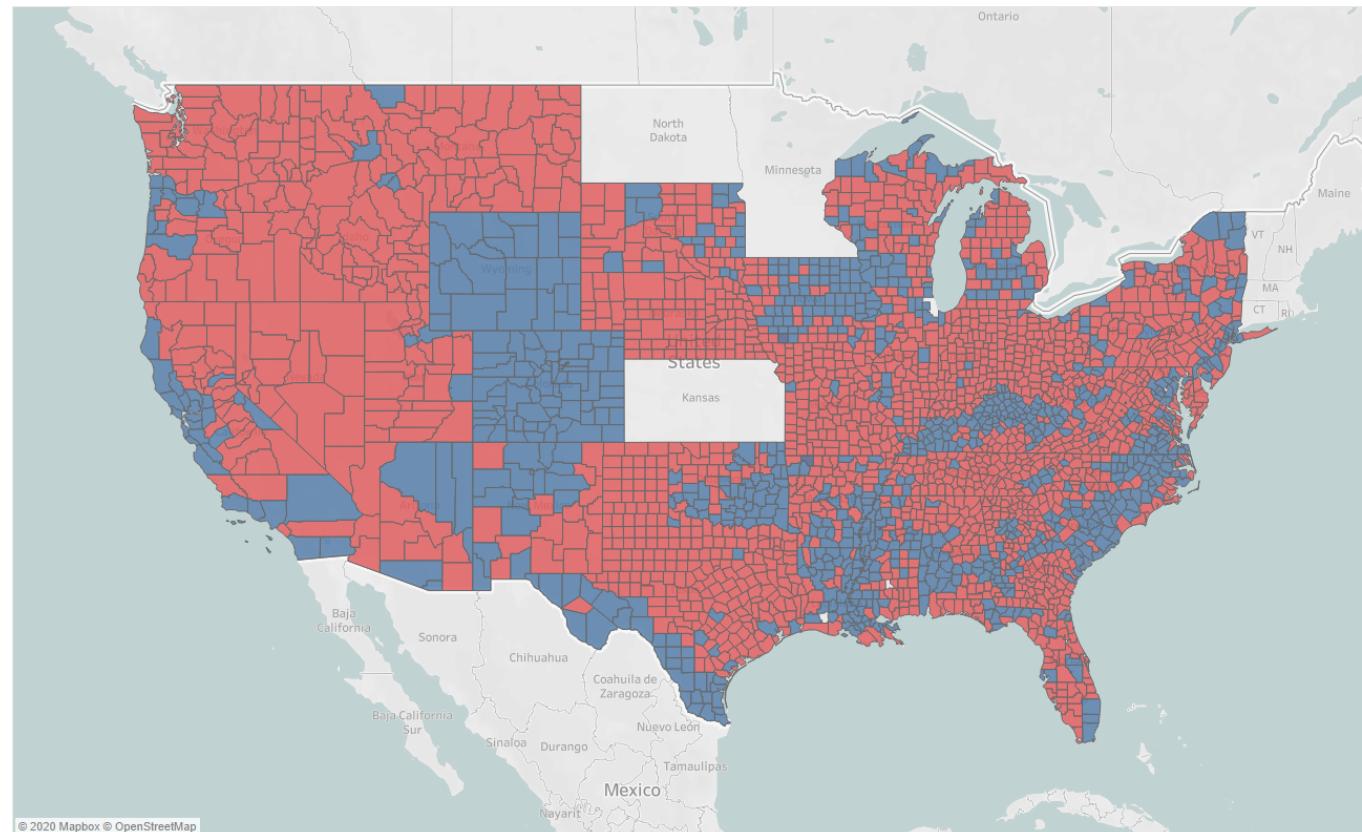
White alone (without latin)



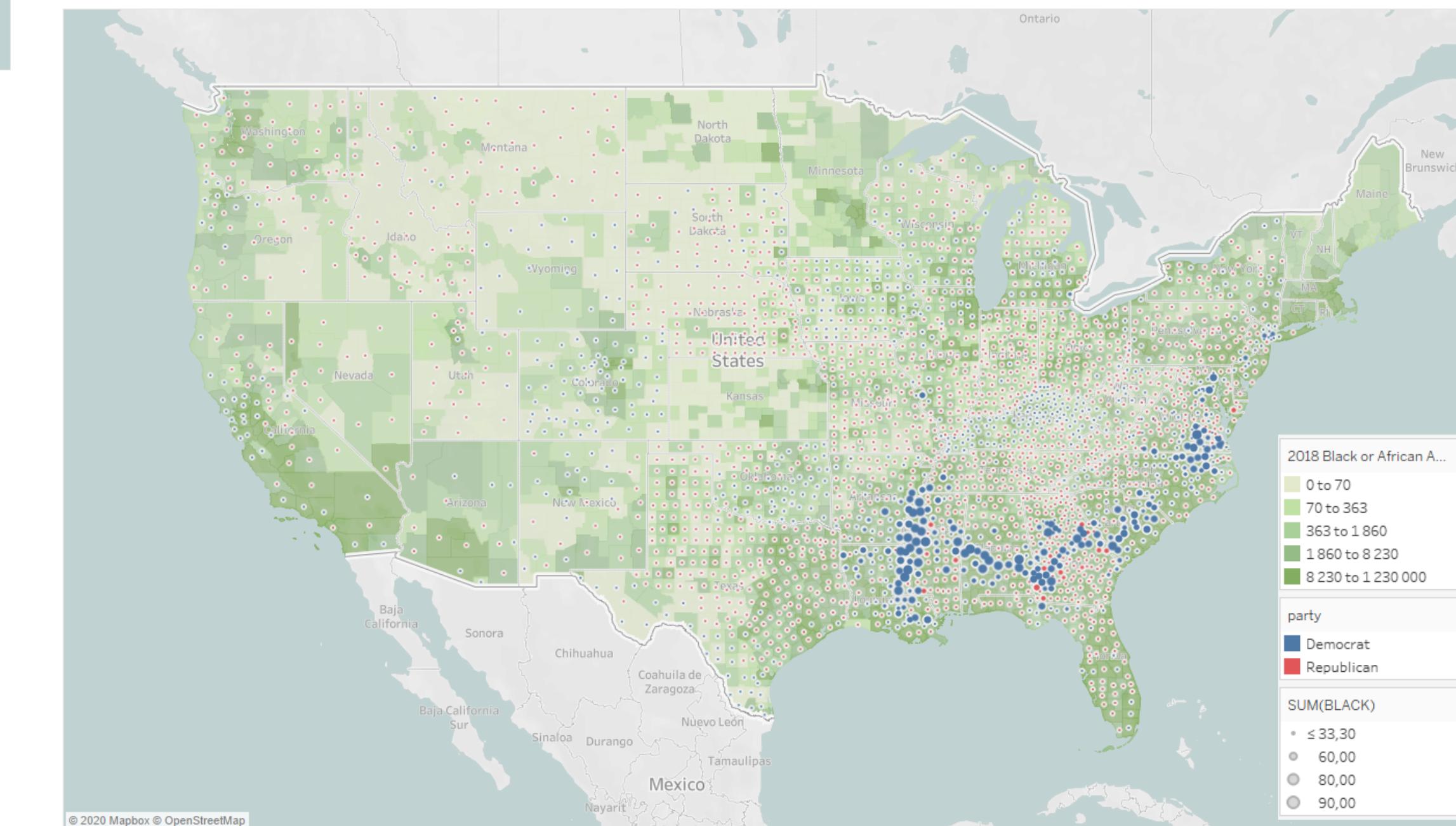
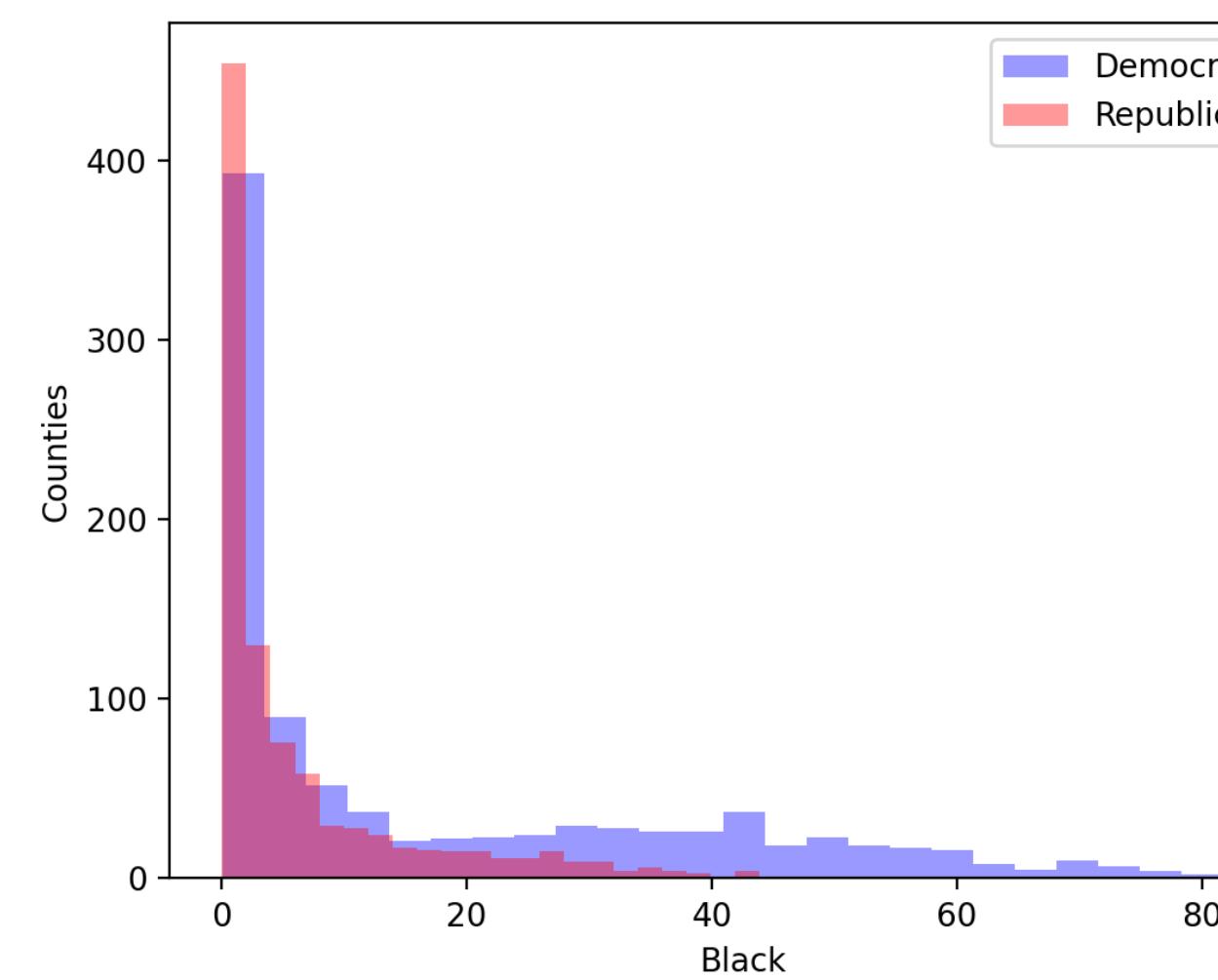
Range, %	Counties	Democrats	Republicans	DB (Democrats)	DG (Republicans)	WOE	Contributor
white > 75%	929	338	591	0,360	0,629	0,559	0,151
white between 65 and 75%	254	102	152	0,109	0,162	0,399	0,021
white < 64	695	499	196	0,531	0,209	-0,934	0,302
							IV= 0,473



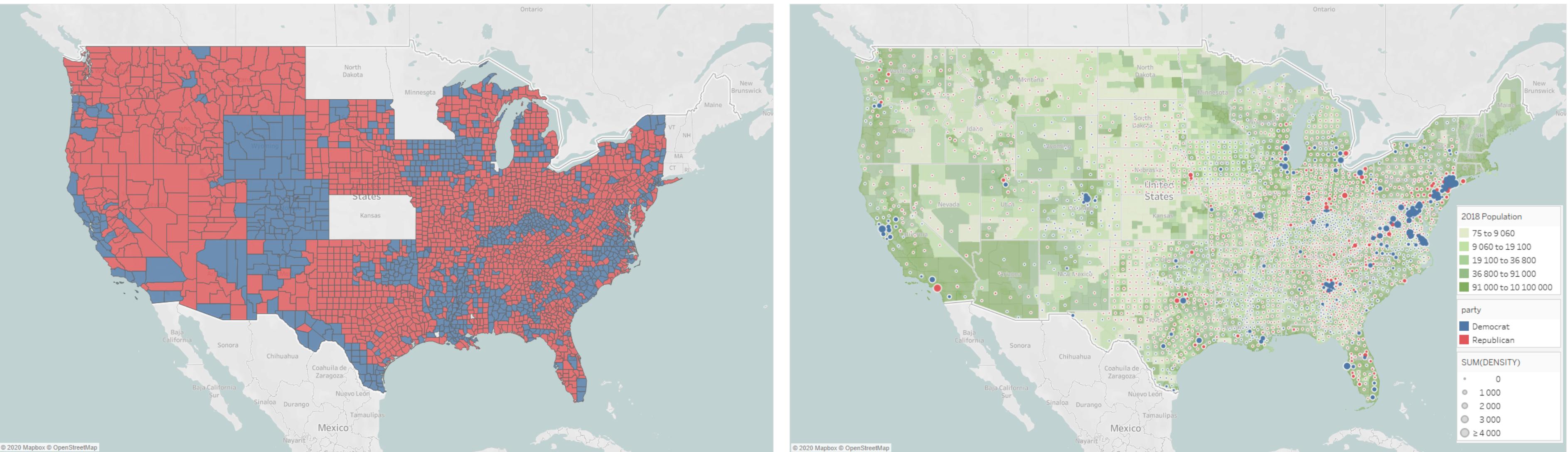
Black or African American alone



Range, %	Counties	Democrats	Republicans	DB (Democrats)	DG (Republicans)	WOE	Contributor
black > 19	424	335	89	0,357	0,095	-1,325	0,347
black between 15 and 19	65	24	41	0,026	0,044	0,536	0,010
black < 15	1389	580	809	0,618	0,862	0,333	0,081
						IV=	0,438



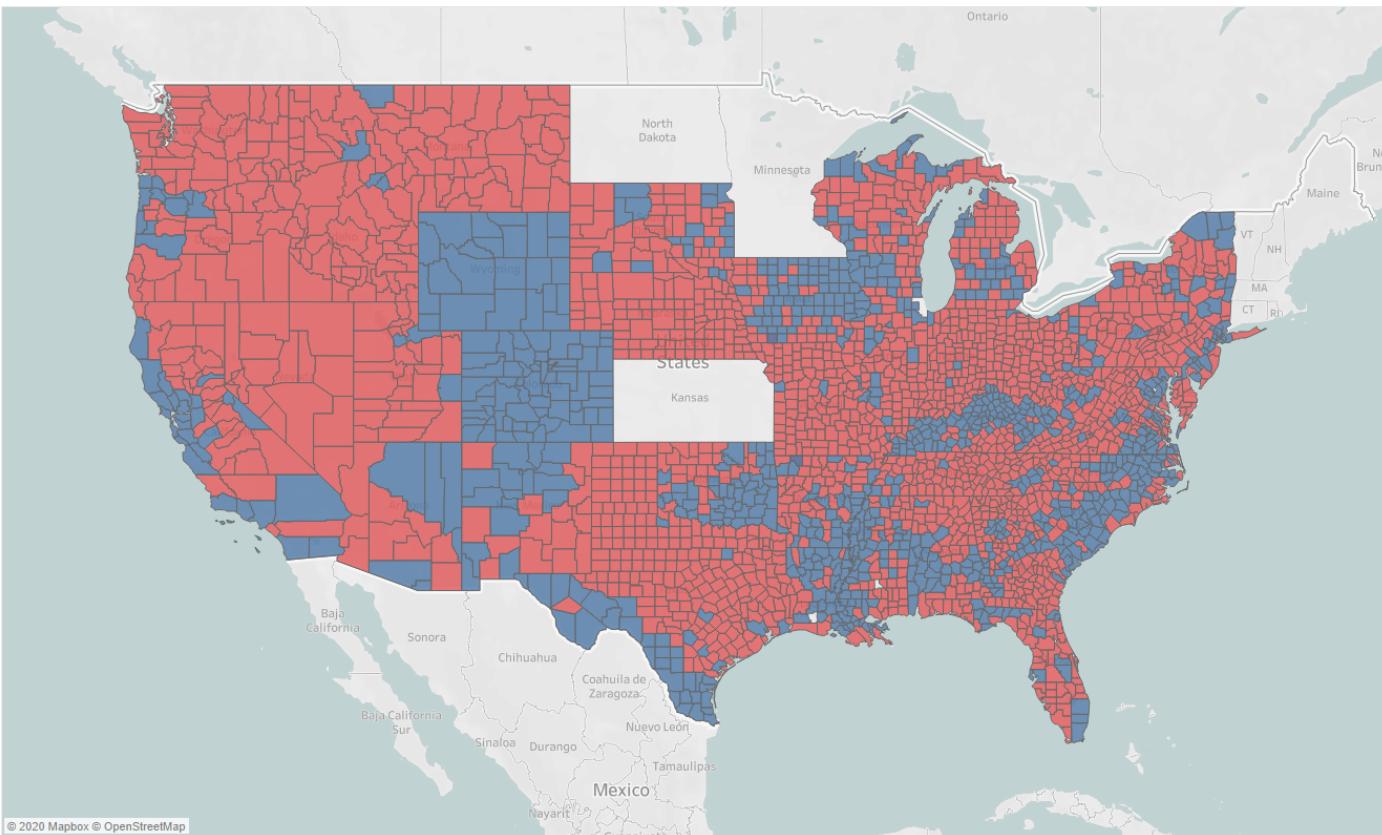
Population per square mile



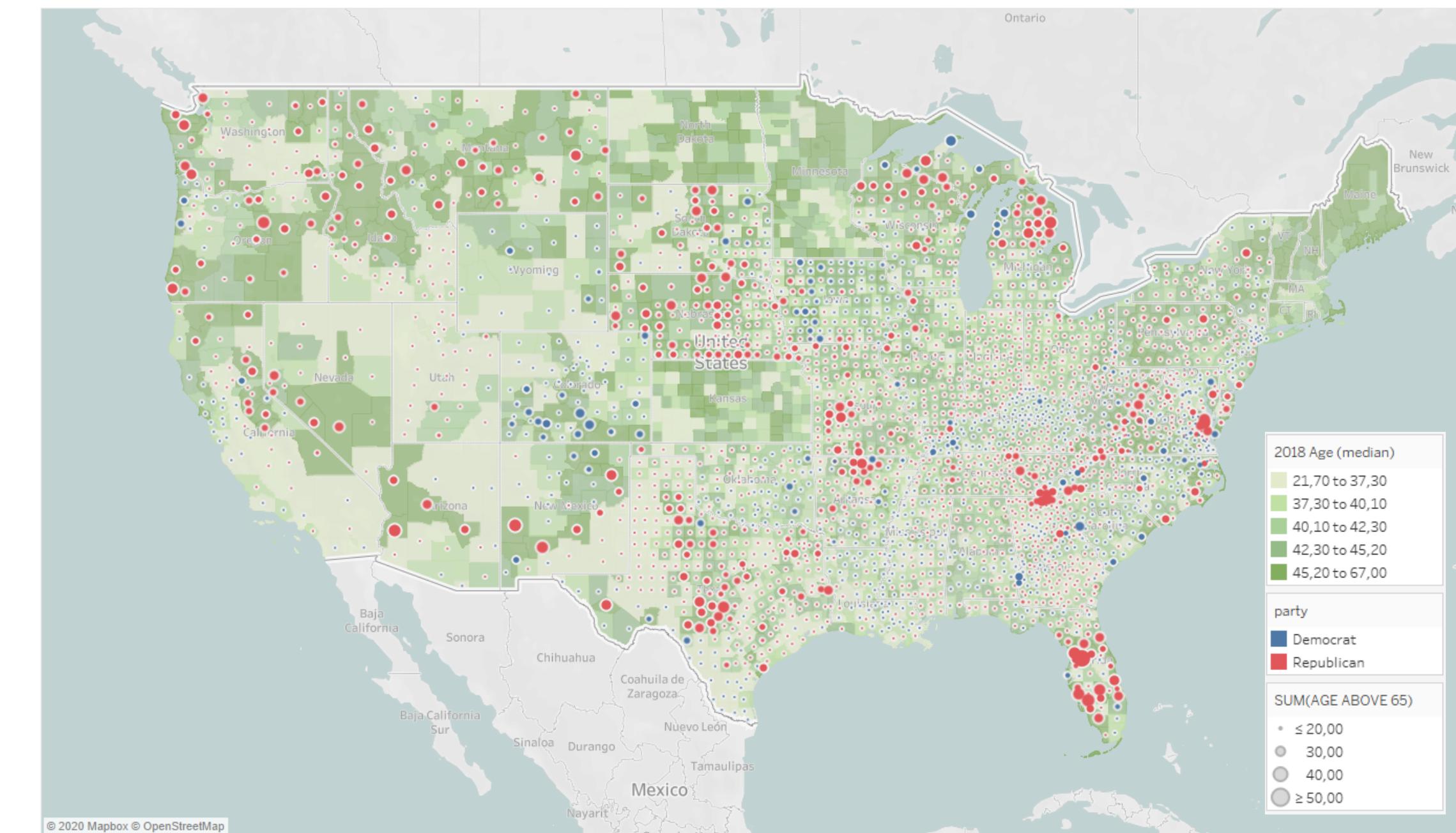
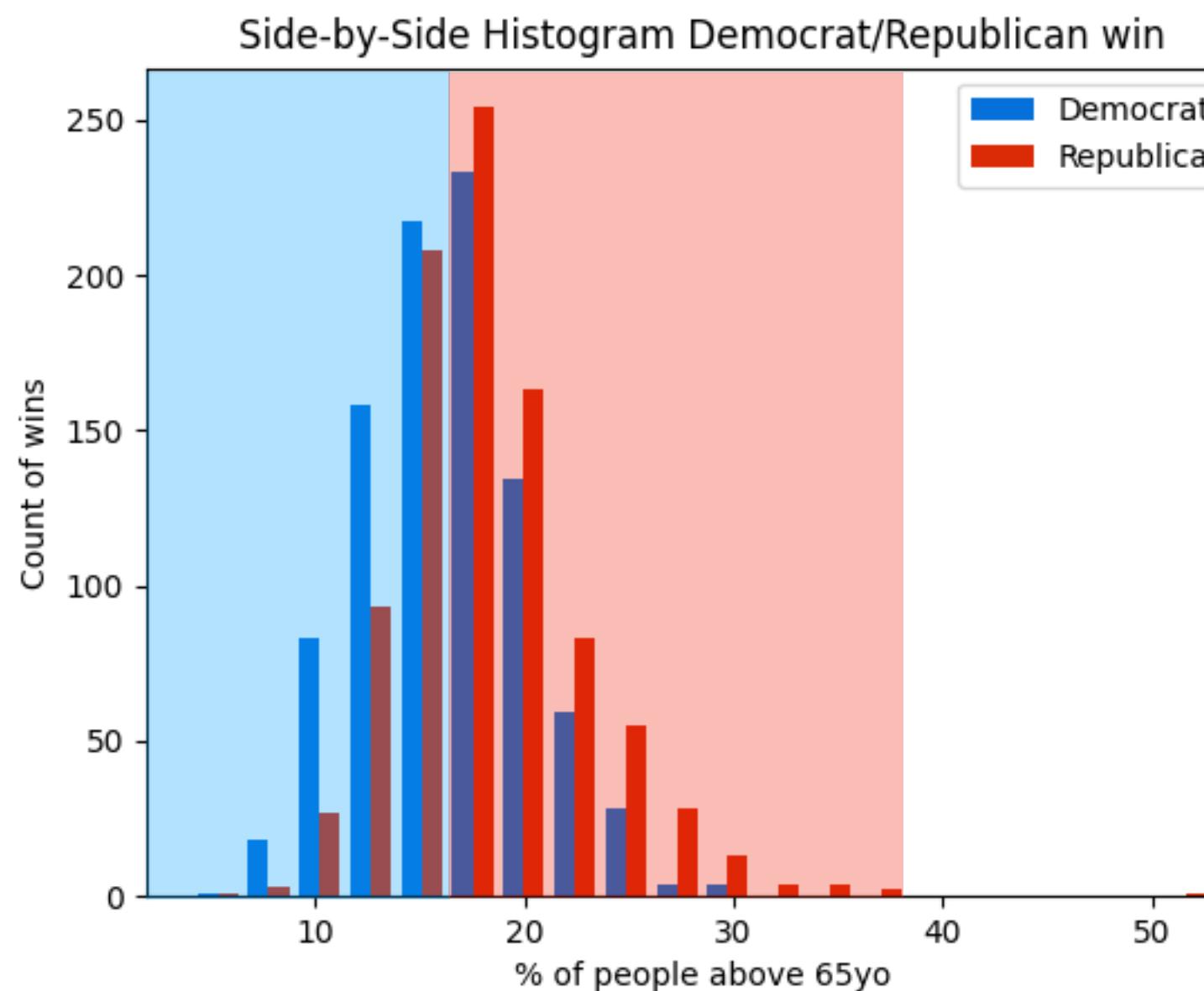
Range	Counties	Democrats	Republicans	DB (Democrats)	DG (Republicans)	WOE	Contributor
< 99	1993	621	1372	0,6613	0,7313	0,1006	0,0070
from 100 to 299	456	123	333	0,1310	0,1775	0,3039	0,0141
from 300 to 799	210	75	135	0,0799	0,0720	-0,1043	0,0008
from 800 to 1399	62	41	21	0,0437	0,0112	-1,3611	0,0442
≥ 1400	94	79	15	0,0841	0,0080	-2,3535	0,1792
						IV=	0,2454

Thank you for your attention

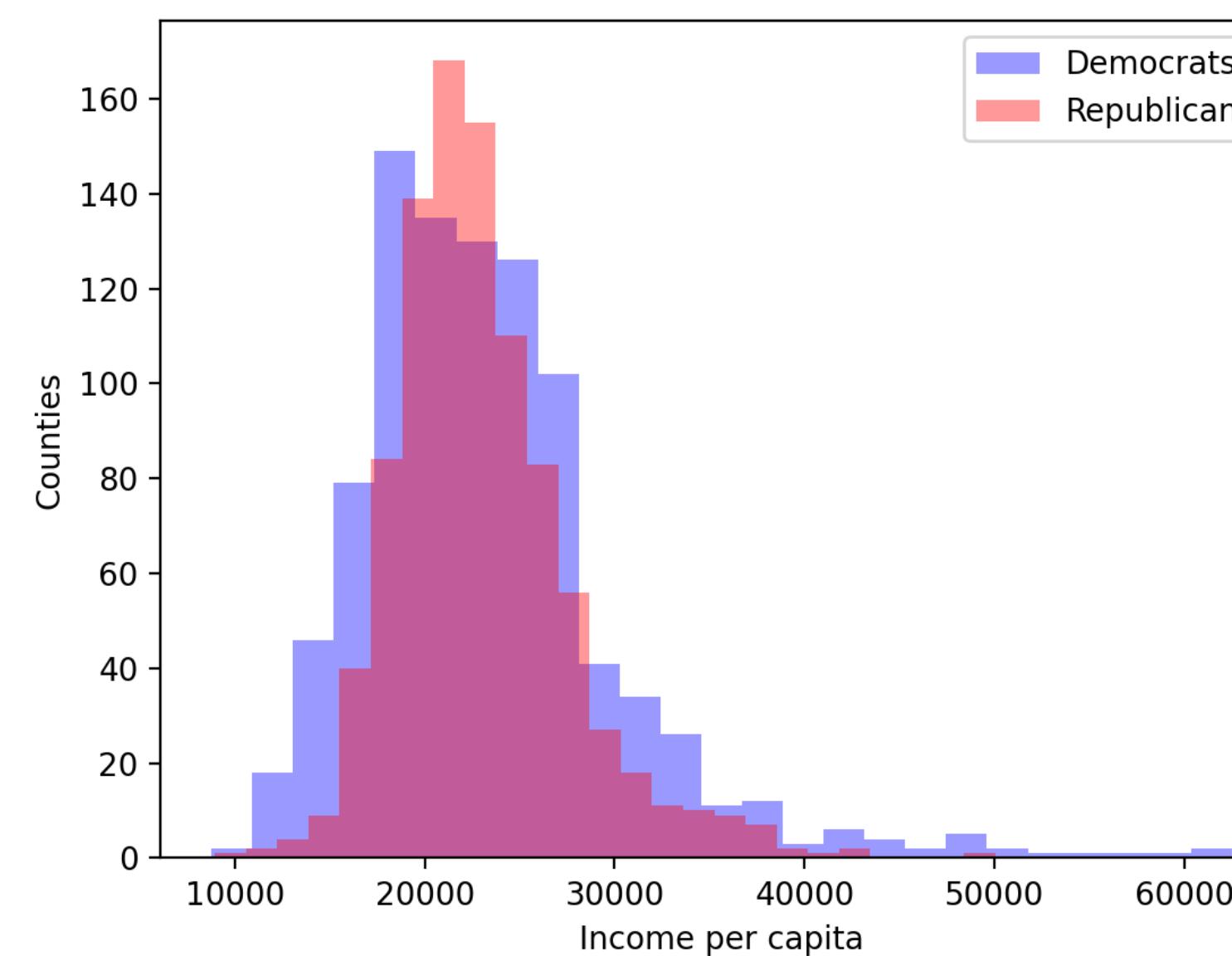
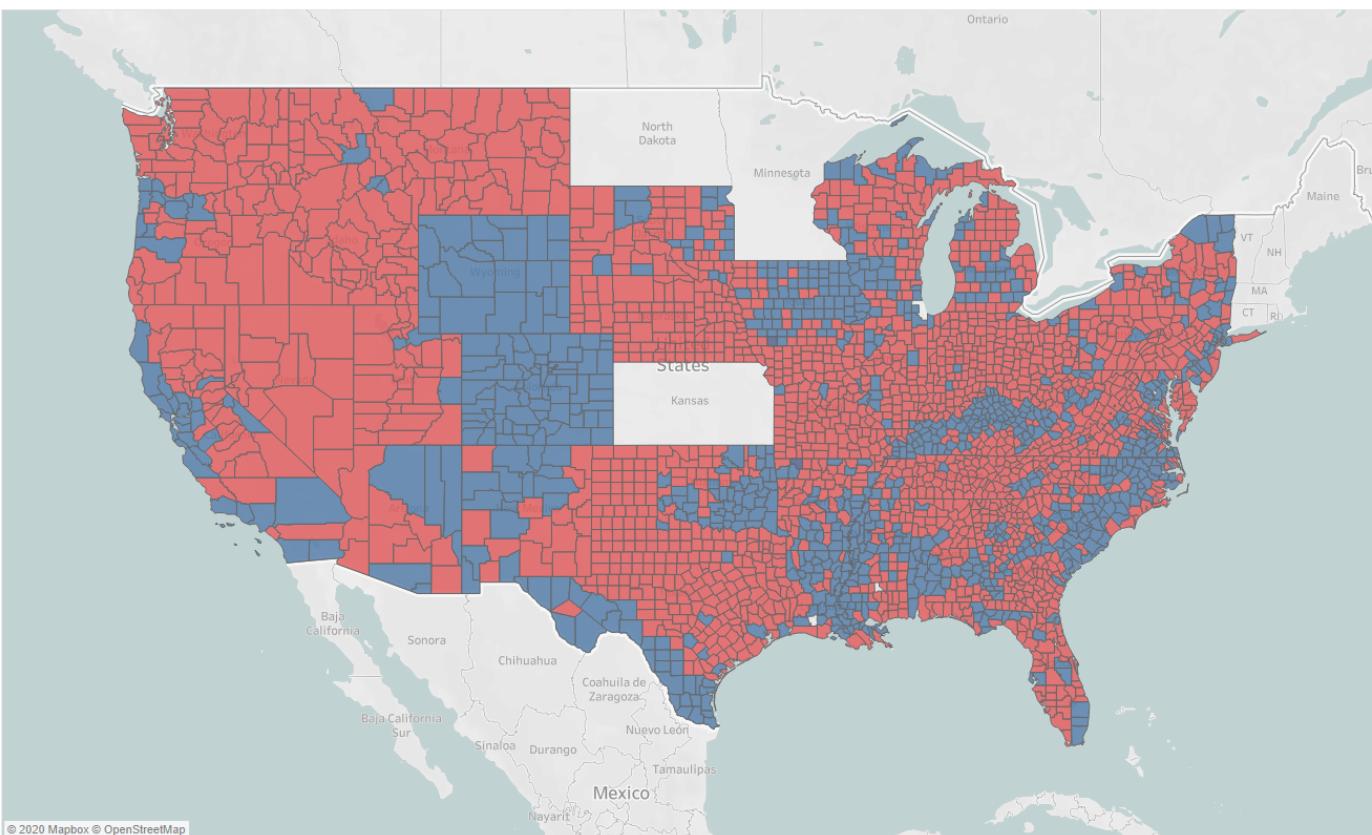
Persons 65 years and over



Range, %	Counties	Democrats	Republicans	DB (Democrats)	DG (Republicans)	WOE	Contributor
<69	406	269	137	0,2865	0,1459	-0,6747	0,0949
from 69 to 75	768	380	388	0,4047	0,4132	0,0208	0,0002
from 75 to 79	341	161	180	0,1715	0,1917	0,1116	0,0023
from 79 to 100	363	129	234	0,1374	0,2492	0,5955	0,0666
						IV=	0,1639



Per capita money income in past 12 months (2013)



Range, %	Counties	Democrats	Republicans	DB (Democrats)	DG (Republicans)	WOE	Contributor
<17000	171	125	46	0,1331	0,0490	-0,9997	0,0841
from 17000 to 19999	391	207	184	0,2204	0,1960	-0,1178	0,0029
from 20000 to 24999	745	299	446	0,3184	0,4750	0,3999	0,0626
from 25000 to 29999	394	194	200	0,2066	0,2130	0,0305	0,0002
>= 30000	177	114	63	0,1214	0,0671	-0,5931	0,0322
						IV=	0,1820

