

Nationwide Socio-Economic Impact of COVID In US Between 2020-2021

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Summary

Problem Statement

- Analyze how emergence of COVID-19, subsequent vaccination roll-out across states have impacted critical socio-economic sectors like housing and employment (between Jan-2020 and April-2021) in US.
- Analyze the said data in relation to how different states voted in the last 2020 presidential election.
- Analyze the cumulative cases and deaths resulting from COVID

Approach

- Determined the cumulative numbers for all key measures (like Cases, Deaths, Employment etc.) for states and identified states on both side of the spectrum (High and Low) for comparison/analysis.
- Used excel to create pivot tables for further analysis and regression models in order to be able to see over time the trend that was occurring.

Conclusion

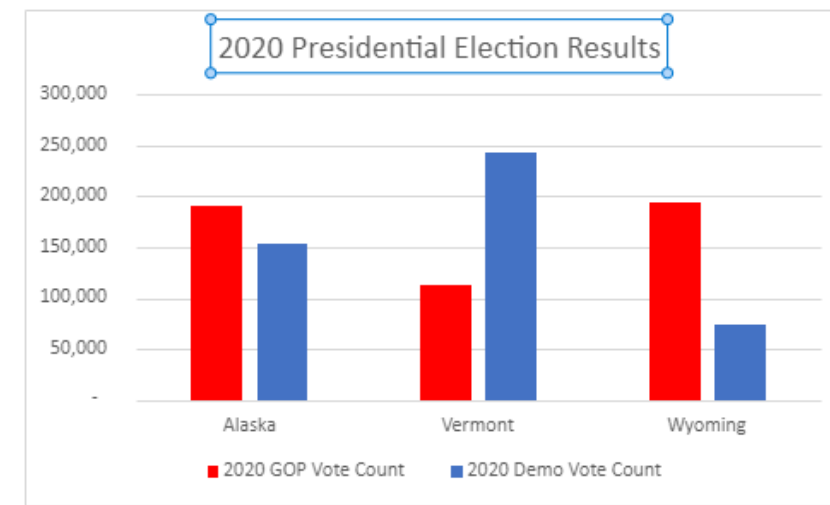
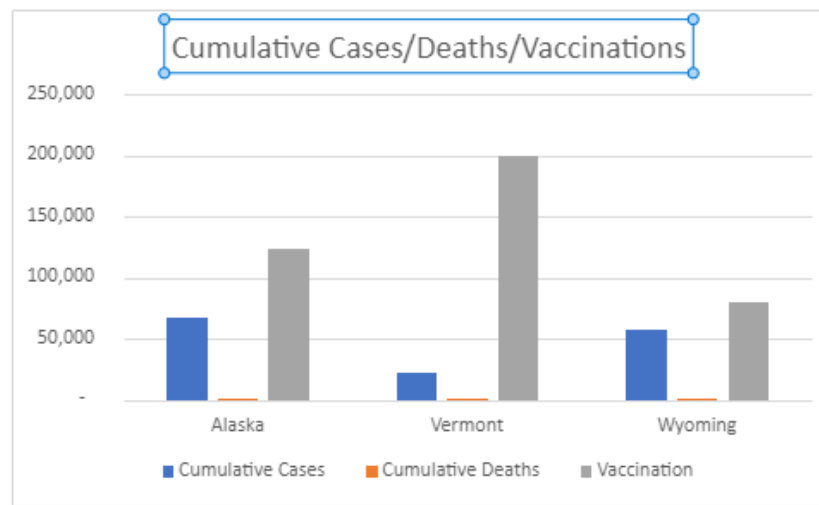
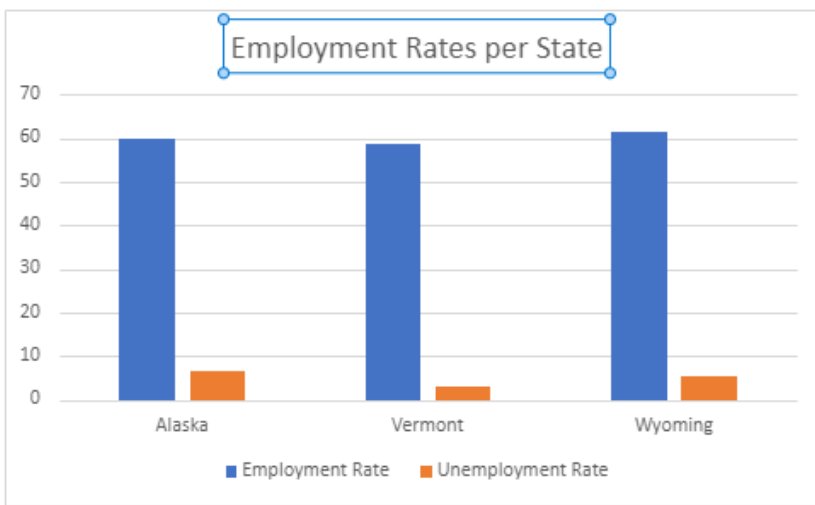
Data Source

- COVID and some socio-economic data was extracted from the following sources
 - CDC
 - Github
 - US Bureau Of Labor Statistics
 - US Census Bureau
 - Redfin
- 5 Data Sources
- 728 records
- 19 attributes

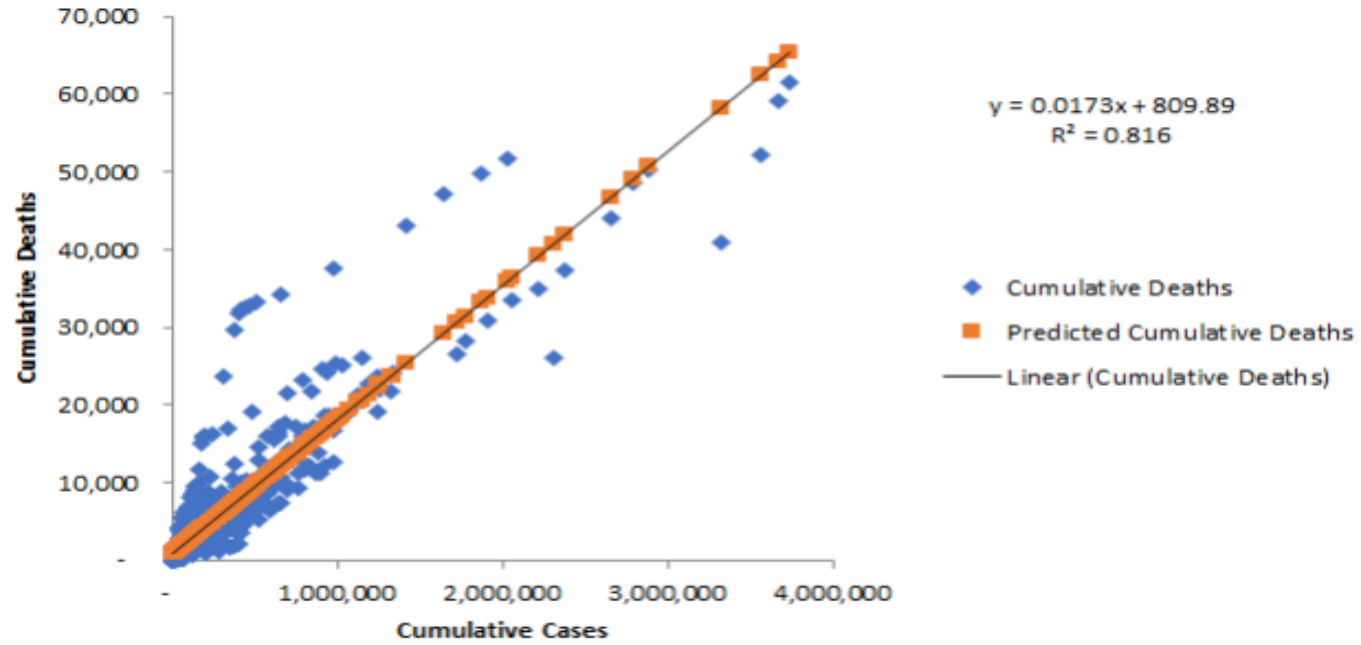
Attribute	Description
Month-Year	Month & Year
State	State Name
FIPS	Federal Information Processing Standard
Monthly Cases	Count of Monthly COVID Cases
Cumulative Cases	Cumulative COVID Case Count (Caused due to COVID)
Monthly Deaths	Count of Monthly Death Count
Cumulative Deaths	Cumulative Death Count (Caused due to COVID)
Total Population	Total State Population
State Area (Sq Mi)	Total Area Of A State
Total Vaccine Allocation	Total Vaccine Allocation To States (By All Approved Vaccine Manu
Vaccination	Total Vaccination Administered
2020 GOP Vote Count	2020 US Presendial Election GOP Vote Count*
2020 Demo Vote Count	2020 US Presendial Election Democrates Vote Count*
Employment Rate	Employment Rate
Unemployment Rate	Unemployment Rate
Employment Count	Employment Count
Unemployment Count	Unemployment Count
Active Listing Count	Active house listing count
Median Listing Price	Median listing price
Month death rate / 100000	Monthly Death Rate, Per Thousand
Cumul Death Rate / 100000	Cumulative Death Rate, Per Thousand

Pre-Analysis Visualization Of The Summarized Dataset

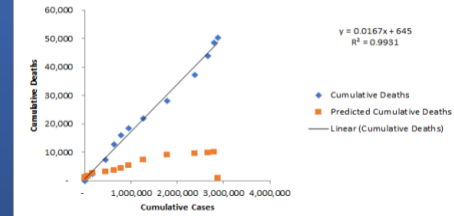
Month Year	State	Monthly Cases	Cumulative Case	Monthly Death	Cumulative Death	Total Population	State Area (Sq Ft)	Total Vaccine Allocation	Vaccination Administered	2020 GOP Vote Count	2020 Demo Vote Count	Employment Rate	Unemployment Rate	Employment Count	Unemployment Count	active_listing_count	median_listing_price
Jan-21	Alabama	98,413	459,639	2,861	7,688	3,890,500	52,420	476500	300878	1,441,168	849,648	55.5	4.3	2,160,236	97,725	10,773	256,000
Feb-21	Alabama	33,613	493,252	2,241	9,929	3,891,139	52,420	637090	500249	1,441,168	849,648	55.5	4	2,157,723	91,041	9,378	263,298
Mar-21	Alabama	22,136	515,388	625	10,554	3,892,132	52,420	1214140	668299	1,441,168	849,648	55.3	3.8	2,151,610	84,670	8,493	267,835
Apr-21	Alabama	11,319	526,707	300	10,854	3,892,132	52,420	1053560	733063	1,441,168	849,648	55.3	3.8	2,151,610	84,670	8,493	267,835
Jan-21	Alaska	7,245	53,985	55	253	544,894	665,384	105800	101652	189,892	153,405	60.8	6.6	331,373	23,585	1,324	299,900



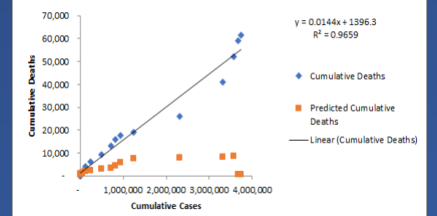
Total Cumulative Cases & Deaths



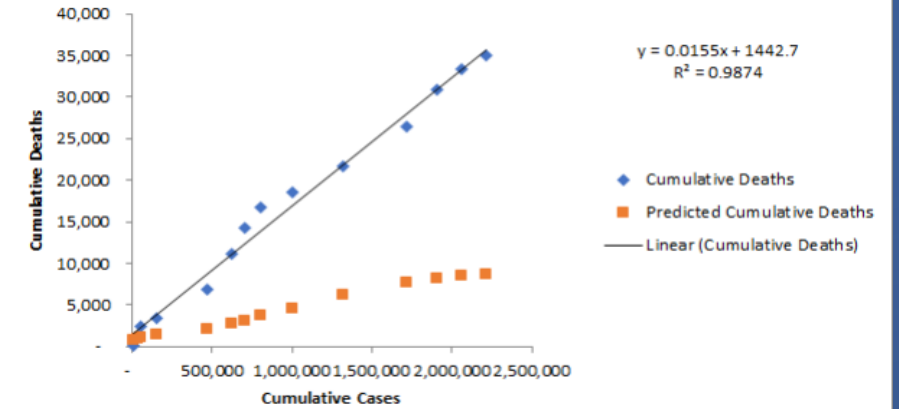
Texas Cumulative Cases & Deaths



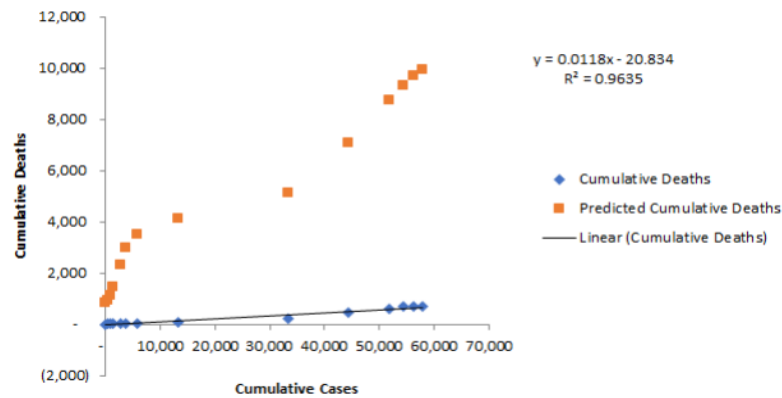
California Cumulative Cases & Deaths



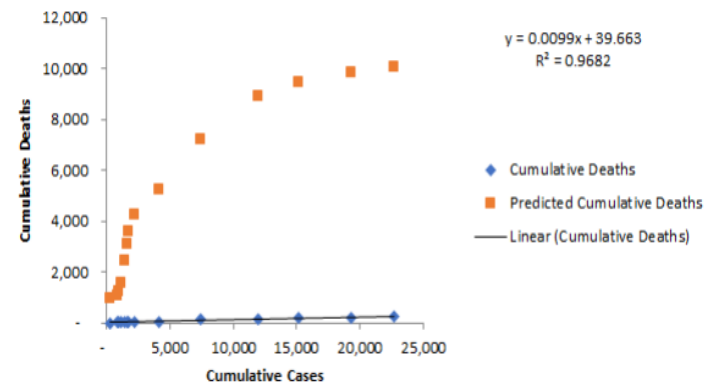
Florida Cumulative Cases & Deaths



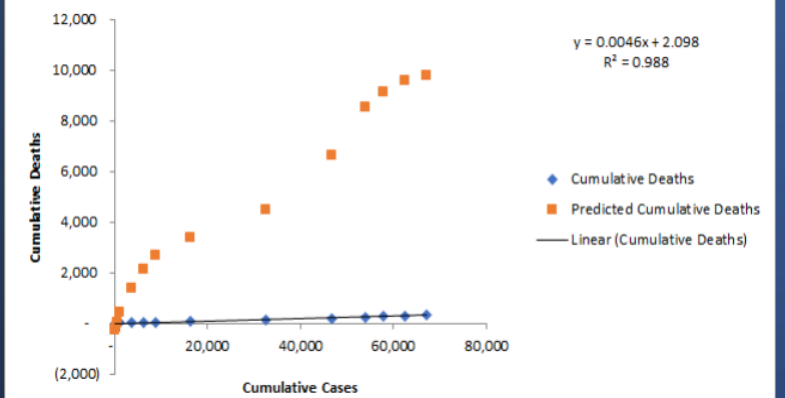
Wyoming Cumulative Cases & Deaths



Vermont Cumulative Cases & Deaths



Alaska Cumulative Cases & Deaths



Death Rate Statistics

Average Death Rate (per 100,000 people) : 202.097

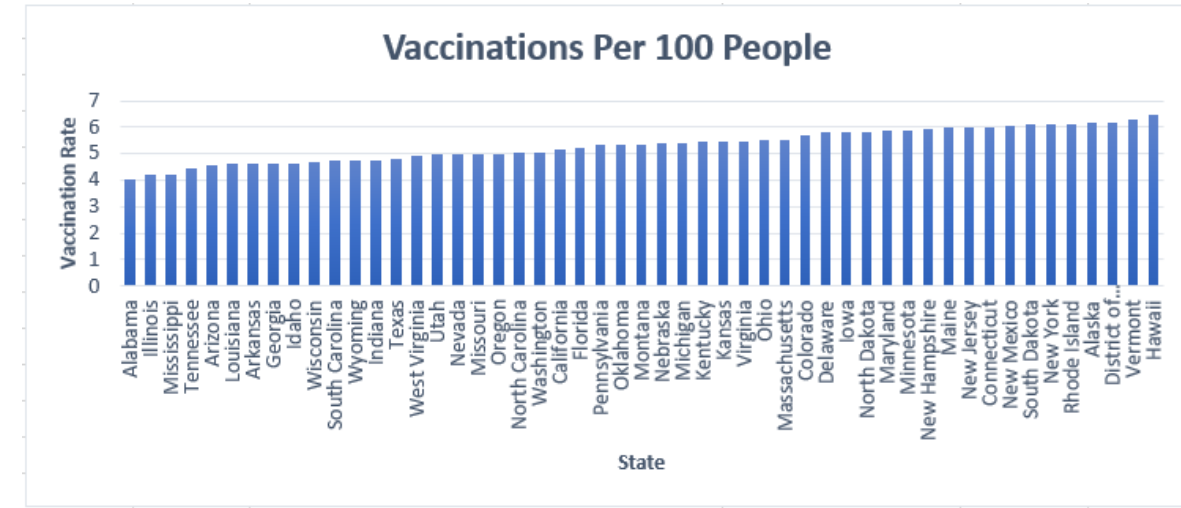
Average Population Density : 302.878

Highest Death Rate					
Death Rate	State	Party	Population	Pop Density	Dense or Not
360.104	New Jersey	1	7,079,846.00	811.630	Dense
332.741	New York	1	15,612,413.00	286.177	Not Dense
314.492	Mississippi	0	2,287,475.00	47.231	Not Dense
311.253	Massachusetts	1	5,648,468.00	535.197	Dense
308.333	Rhode Island	1	864,222.00	559.367	Dense

Lowest Death Rate					
Death Rate	State	Party	Population	Pop Density	Dense or Not
44.000	Hawaii	1	1,088,470.00	99.567	Not Dense
47.223	Vermont	1	518,976.00	53.970	Not Dense
60.601	Alaska	0	545,866.00	0.820	Not Dense
69.286	Maine	1	1,121,440.00	31.697	Not Dense
72.286	Oregon	1	3,461,246.00	35.183	Not Dense

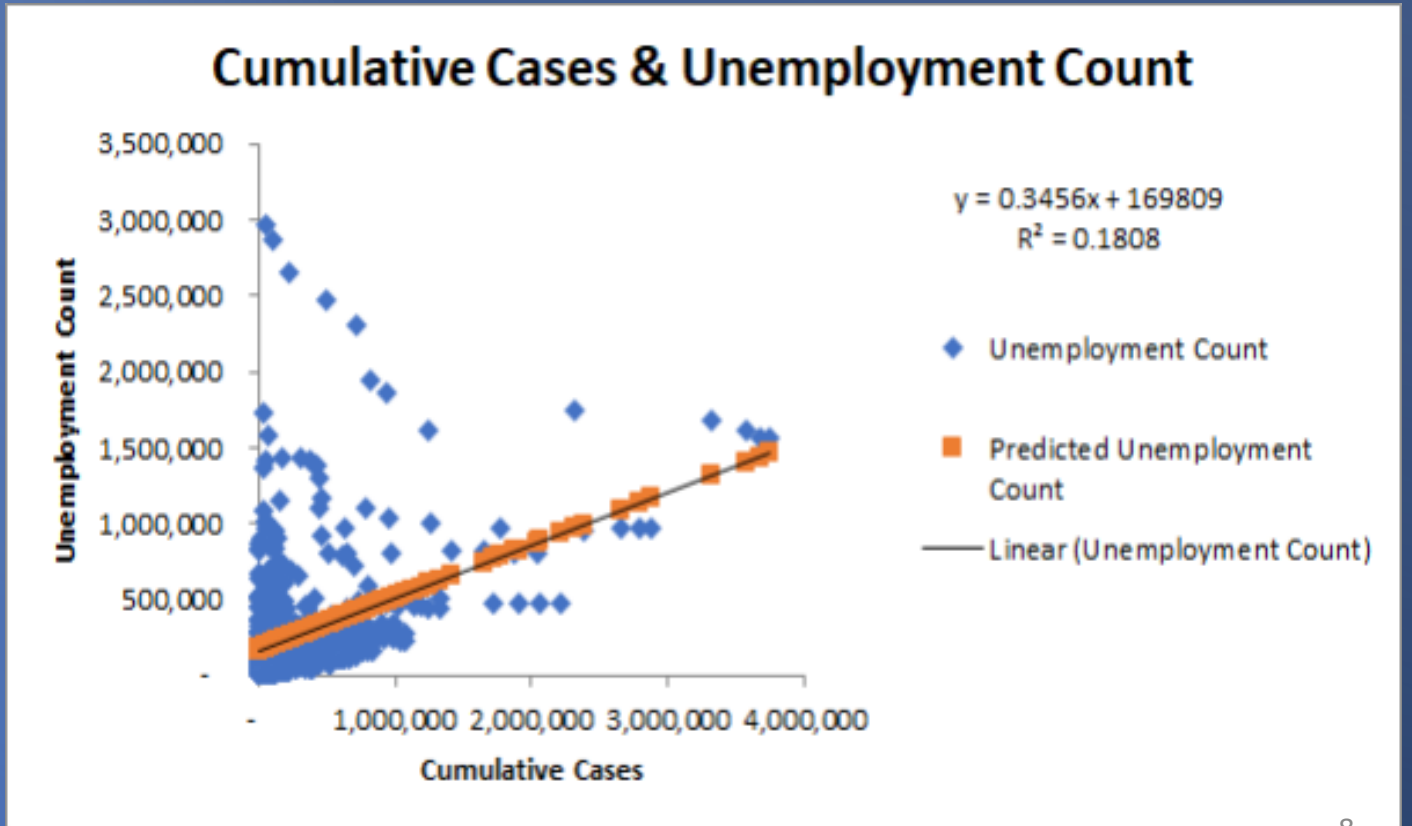
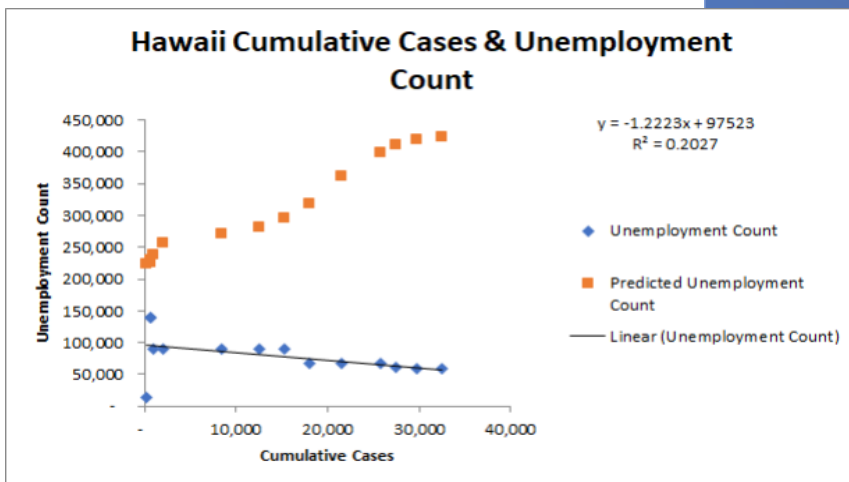
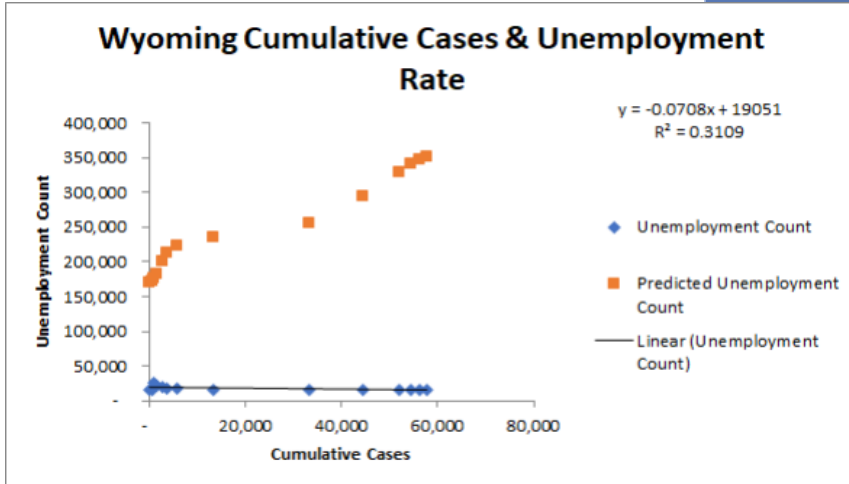
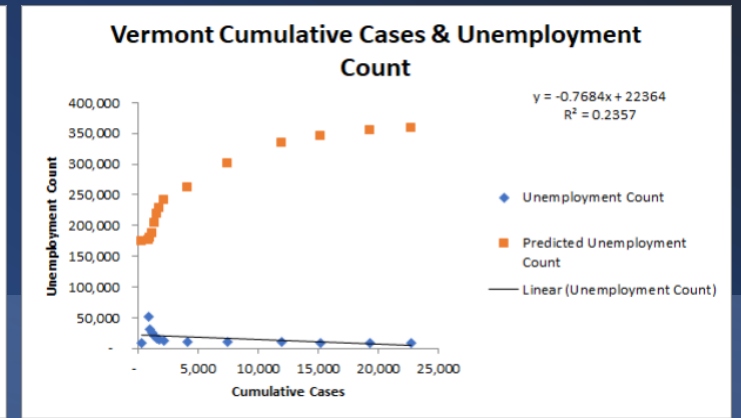
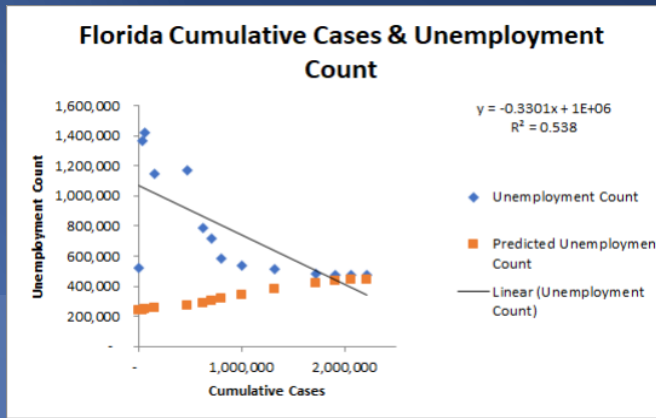
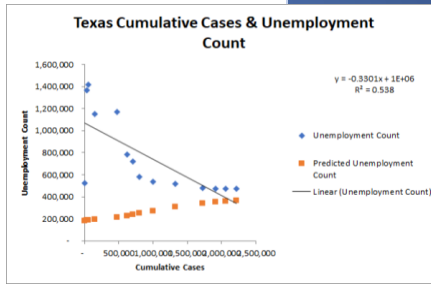
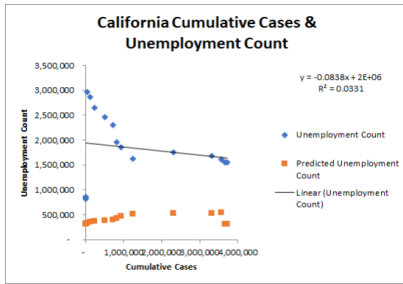
Vaccination Rate Statistics

Average Vaccine Administered Rate : 0.7706



Lowest Vaccination Rate		
Vaccine Administered Rate	State	Party
0.5424	Alaska	0
0.5759	Alabama	0
0.5849	Mississippi	0
0.6352	Louisiana	0
0.6410	Wyoming	0
0.6514	Tennessee	0
0.6520	Arkansas	0
0.6697	West Virginia	0
0.6781	Georgia	1
0.6853	Indiana	0

Highest Vaccination Rate		
Vaccine Administered Rate	State	Party
0.8498	New Jersey	1
0.8498	Colorado	1
0.8498	Pennsylvania	1
0.8498	Hawaii	1
0.8497	South Dakota	0
0.8495	Rhode Island	1
0.8492	Minnesota	1
0.8492	Illinois	1
0.8488	New Hampshire	1
0.8485	Washington	1



Unemployment Rate Statistics

Average Unemployment Rate : 13.87

Lowest Unemployment Rate		
Unemployment Rate	State	Party
7.4	Nebraska	0
8.5	Wyoming	0
8.7	North Dakota	0
9	Maryland	1
9.1	Maine	1
9.2	South Dakota	0
10	Arkansas	0
10.1	Utah	0
11.1	District of Columbia	1
11.1	Iowa	0

Highest Unemployment Rate		
Unemployment Rate	State	Party
29.5	Nevada	1
23.6	Michigan	1
21.9	Hawaii	1
17.4	Rhode Island	1
16.9	Indiana	0
16.9	Kentucky	0
16.6	New Jersey	1
16.5	Illinois	1
16.4	Massachusetts	1
16.4	Ohio	0

Unemployment Volatility Statistics

Beginning Pandemic Unemployment Volatility

Most Volatile			Least Volatile		
942.86	Hawaii	1	7.84	Wyoming	0
537.84	Michigan	1	85.19	New Mexico	1
507.41	Massachusetts	1	113.46	District of Columbia	1
492.59	New Hampshire	1	126.32	Connecticut	0
469.23	Vermont	1	131.37	Alaska	1

Average Percent : 270.98

Volatility To Most Recent Unemployment

Largest Improvement			Smallest Improvement		
-81.25	New Hampshire	1	-3.49	Connecticut	1
-80.41	Vermont	1	-3.64	Wyoming	0
-78.39	Michigan	1	-17.00	New Mexico	1
-76.92	Indiana	0	-29.73	District of Columbia	1
-74.32	Wisconsin	1	-31.11	Maryland	1

Average Percent : -57.23

Before Volatility To Most Recent

Biggest Change			Smallest Change		
328.57	Hawaii	1	-6.45	Nebraska	0
151.85	Massachusetts	1	-4.08	Florida	0
118.42	Connecticut	1	-4.08	Ohio	0
117.95	New York	1	0.00	Montana	0
102.63	New Jersey	1	0.00	South Dakota	0

Average Percent : 45.59

Conclusions / Next Steps

Conclusions

- Our findings provided a general overview of how each state was impacted by COVID in regards to death, vaccinations, and unemployment
- Many of the conclusions were made on a subject basis in the prior portions
- Death rate was higher in states with a higher population density with an exception of Mississippi (low density) as opposed to those with lower densities
- Vaccination rates were predominately higher in states that voted Democrat in the 2020 election and were lower in states that voted Republican
- Top-down level shows that unemployment rate on opposite ends of the spectrum show statistics that seem uniform with general beliefs
- The first month (March-April 2020) that COVID hit was when each state's unemployment rate experienced extremely volatility

Actionability

- Use towards understanding political axioms at state level based around biases and skepticism
- Improvements to be made on vaccination rollouts on future pandemics
- Use towards better campaign efforts for future vaccinations to thwart against conspiracies and mistrust

Improvements and Recommendations

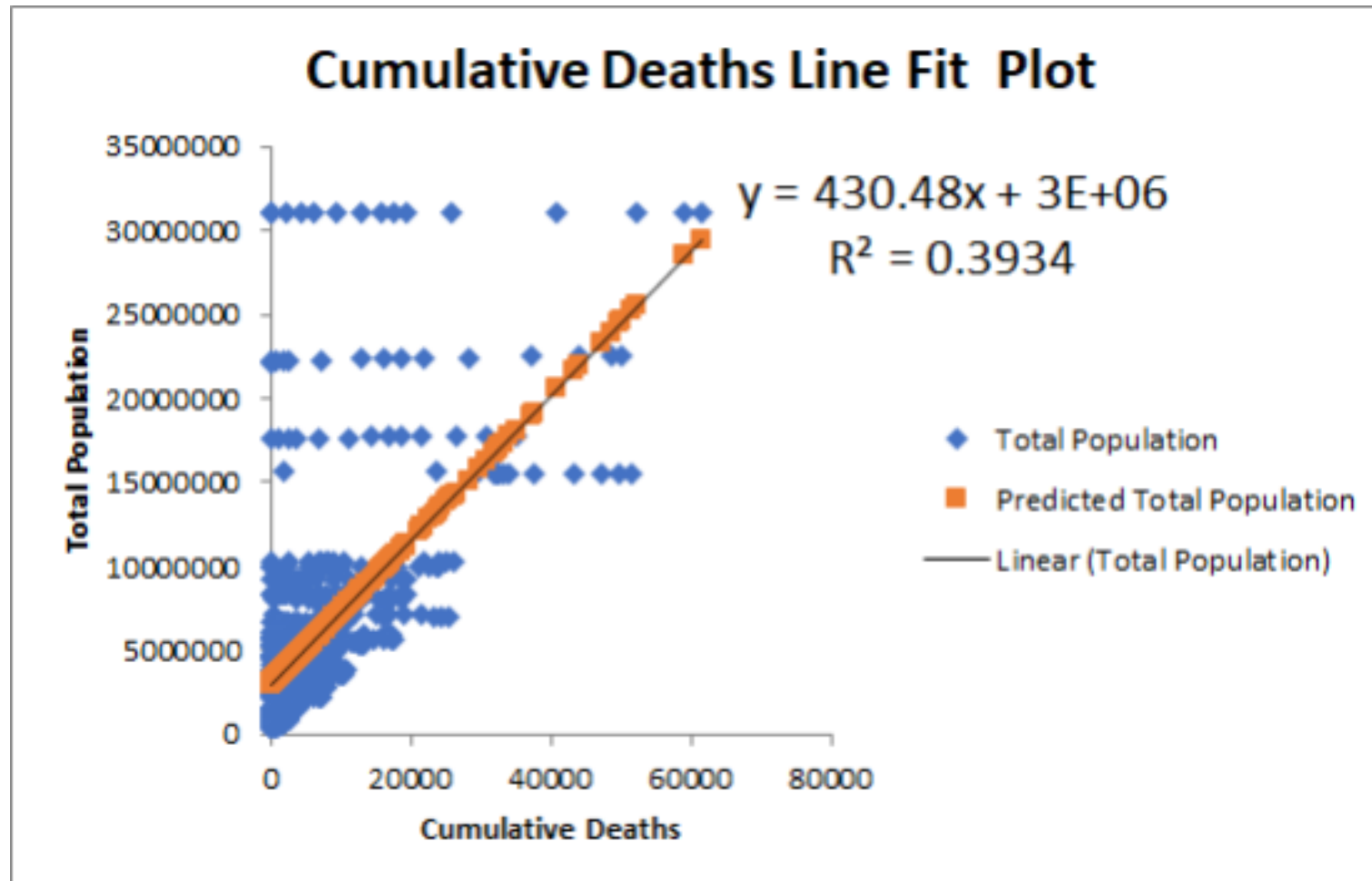
- Using more advanced technology to perform stronger analyses (a la SAS or Python)
- More granular analysis at the county/city level or by race/ethnicity etc.
- Further analysis with house statistics / more robust dataset

Appendix

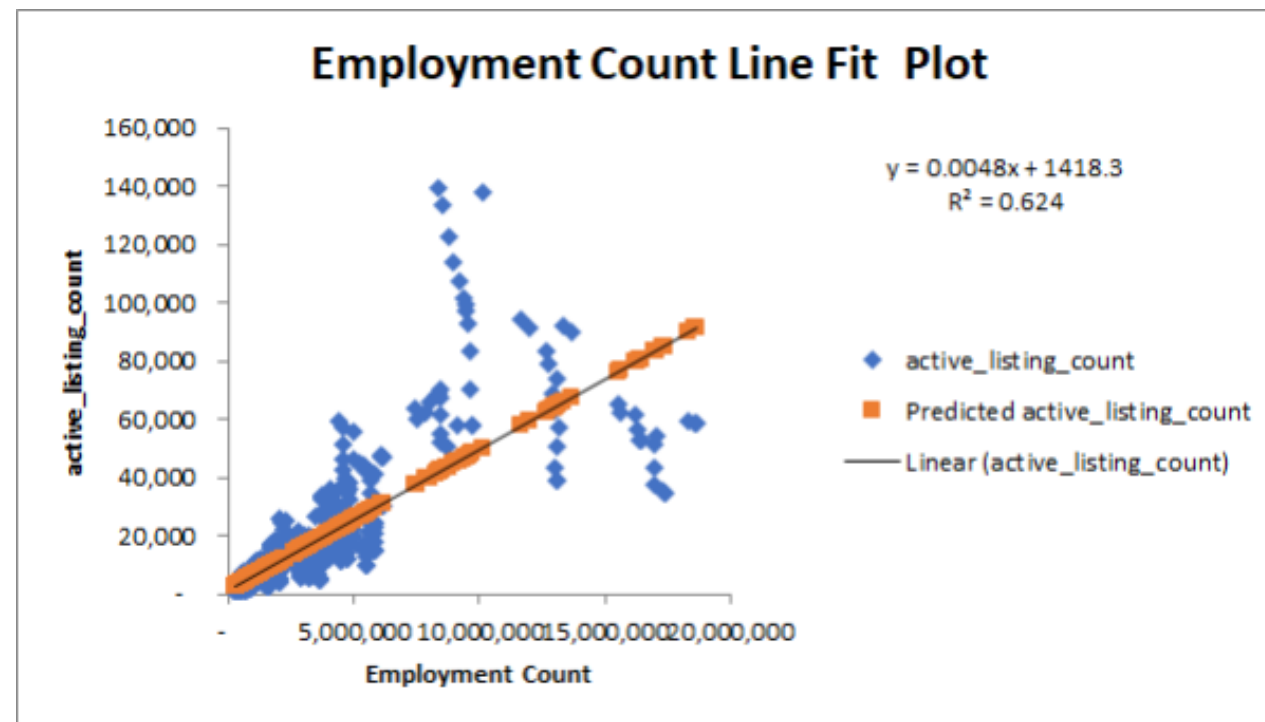
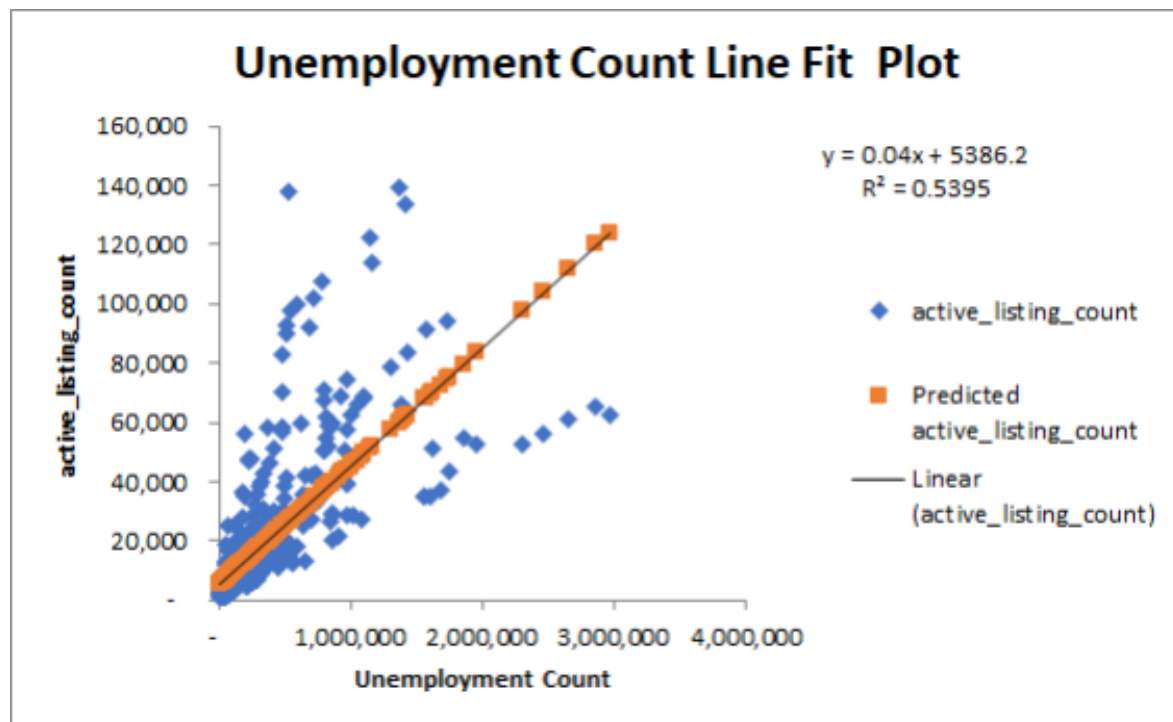
Data Source Details

- Daily COVID cases recorded in US (By state, since Jan-2021). Sourced it from an ongoing repository maintained on GitHub by The New York Times.
- Weekly vaccination allocation to states by Pfizer, Moderna, and J&J (since their initial rollout) and vaccine administered. Sourced it from an ongoing repository maintained by CDC on their website.
- 2020 US Presidential election results and votes polled by county. Sourced it from GitHub
- Monthly population, employment and unemployment data by state (Since Jan-2020). Sourced it from “US Bureau Of Labor Statistics” website
- Monthly housing summary (includes active listing, median listing price, price change etc.) by state (Since Jan-2020). Sourced if from Redfin.
- Area of states. Sourced it US Census Bureau website.
- Relevant data points were present for all 50 states, but some were by state, and some were by county/jurisdiction, so we had to aggregate it.
- Used excel to create regression models in order to be able to see over time the trend that was occurring.

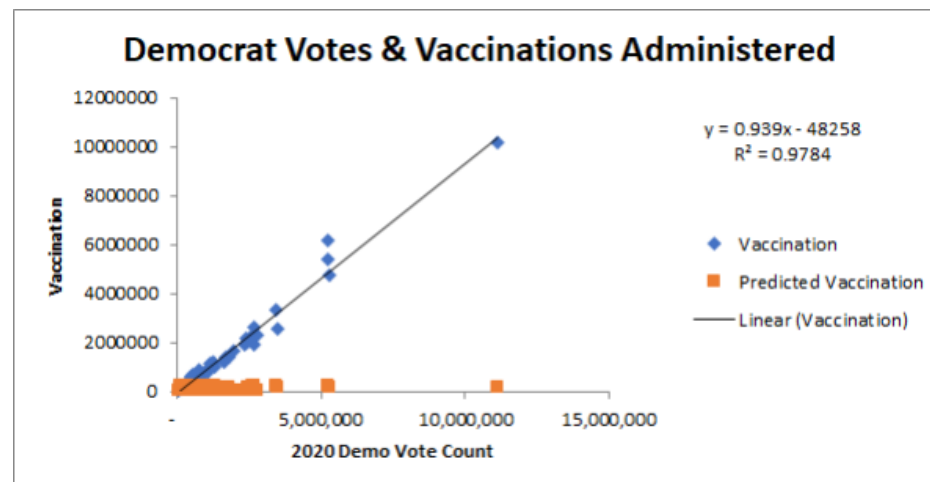
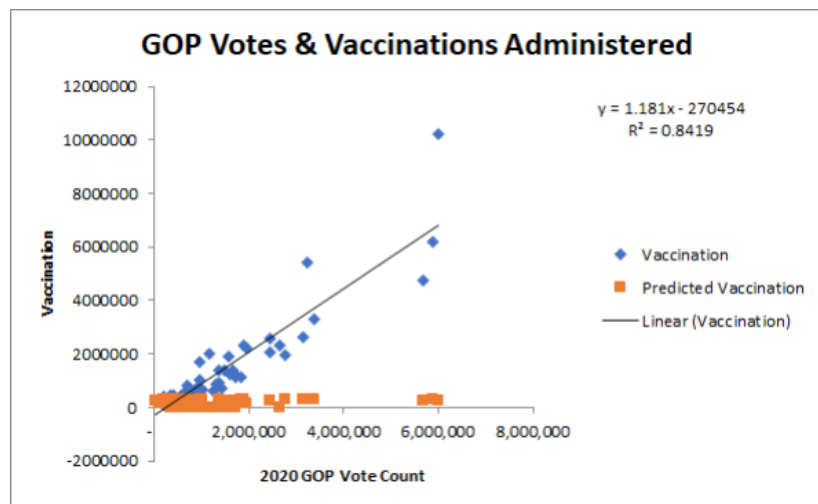
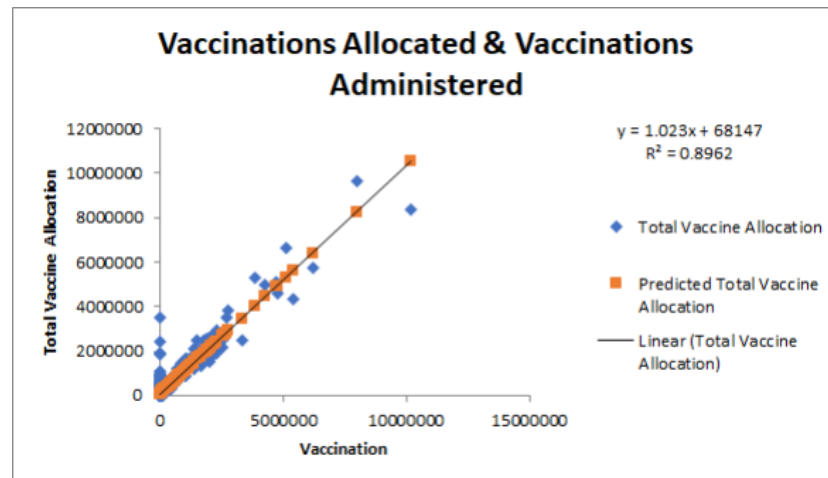
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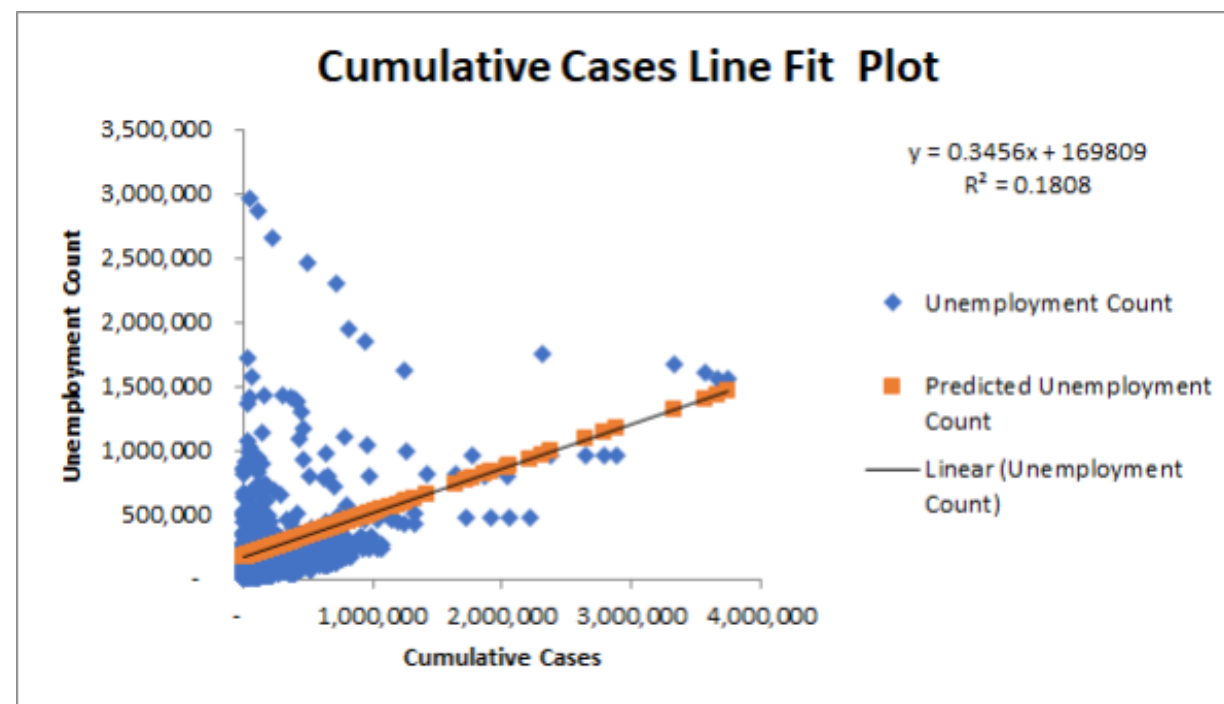
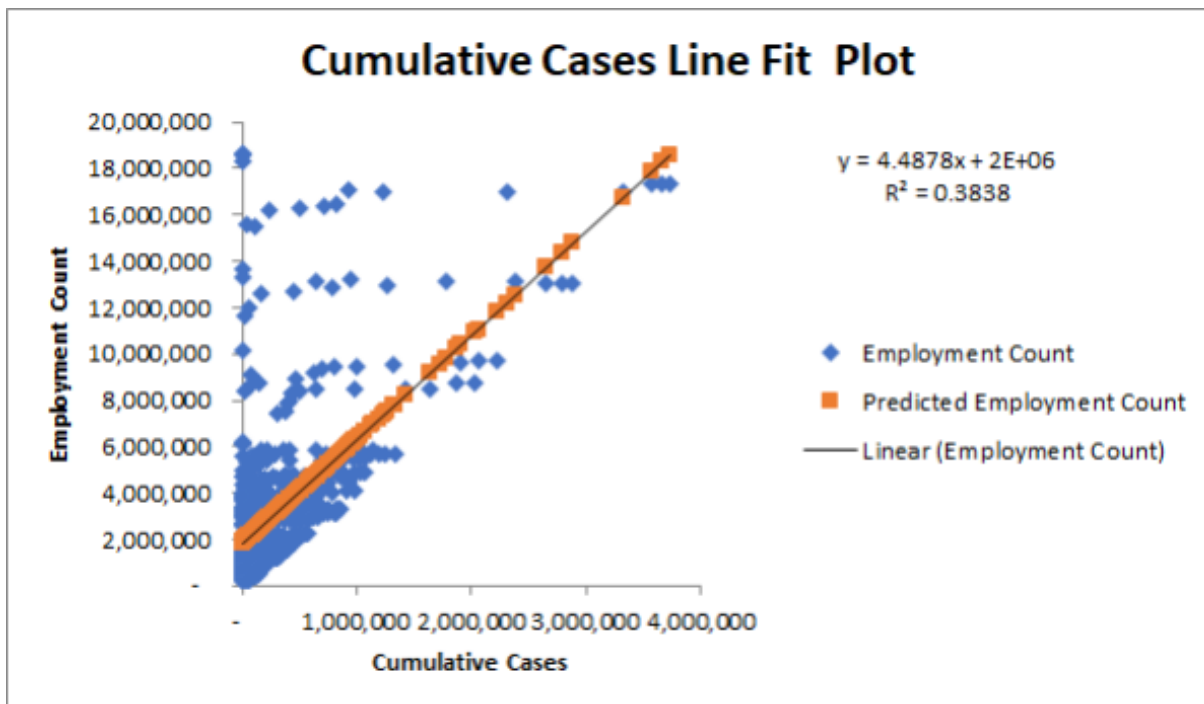
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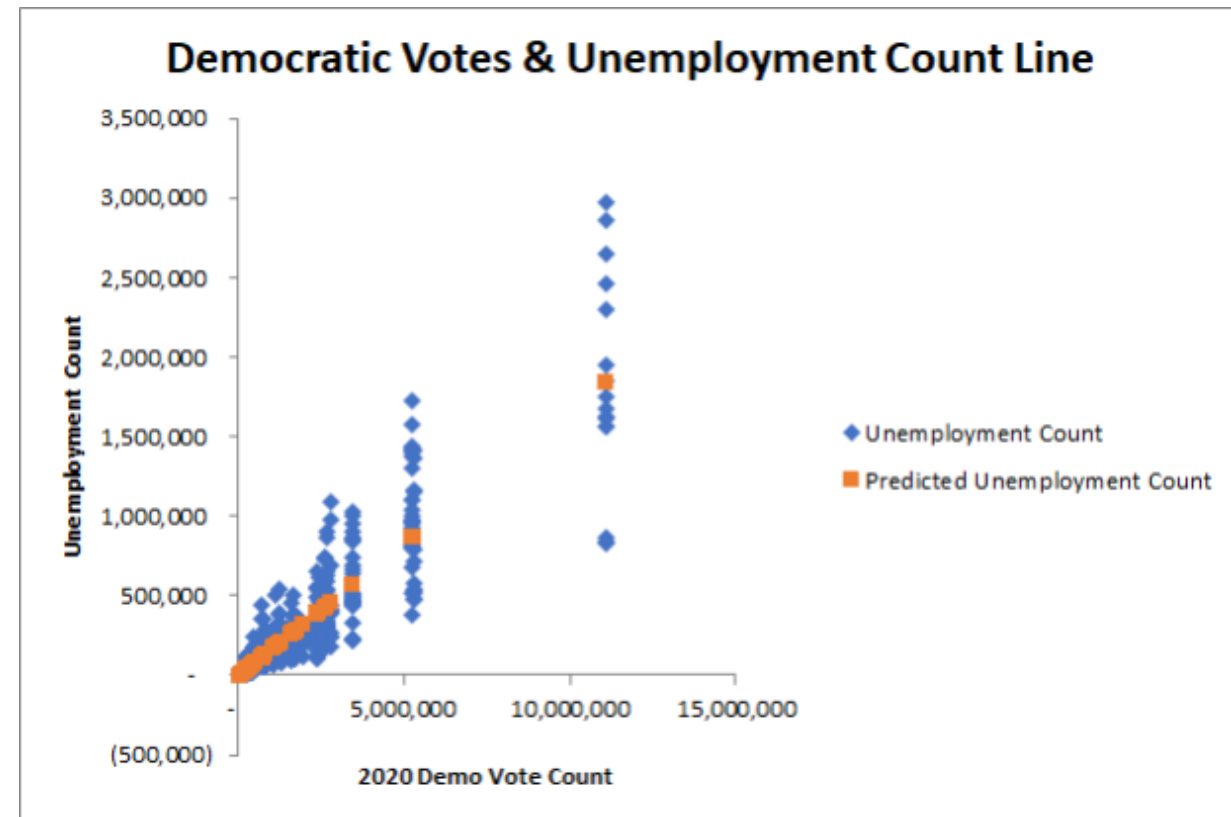
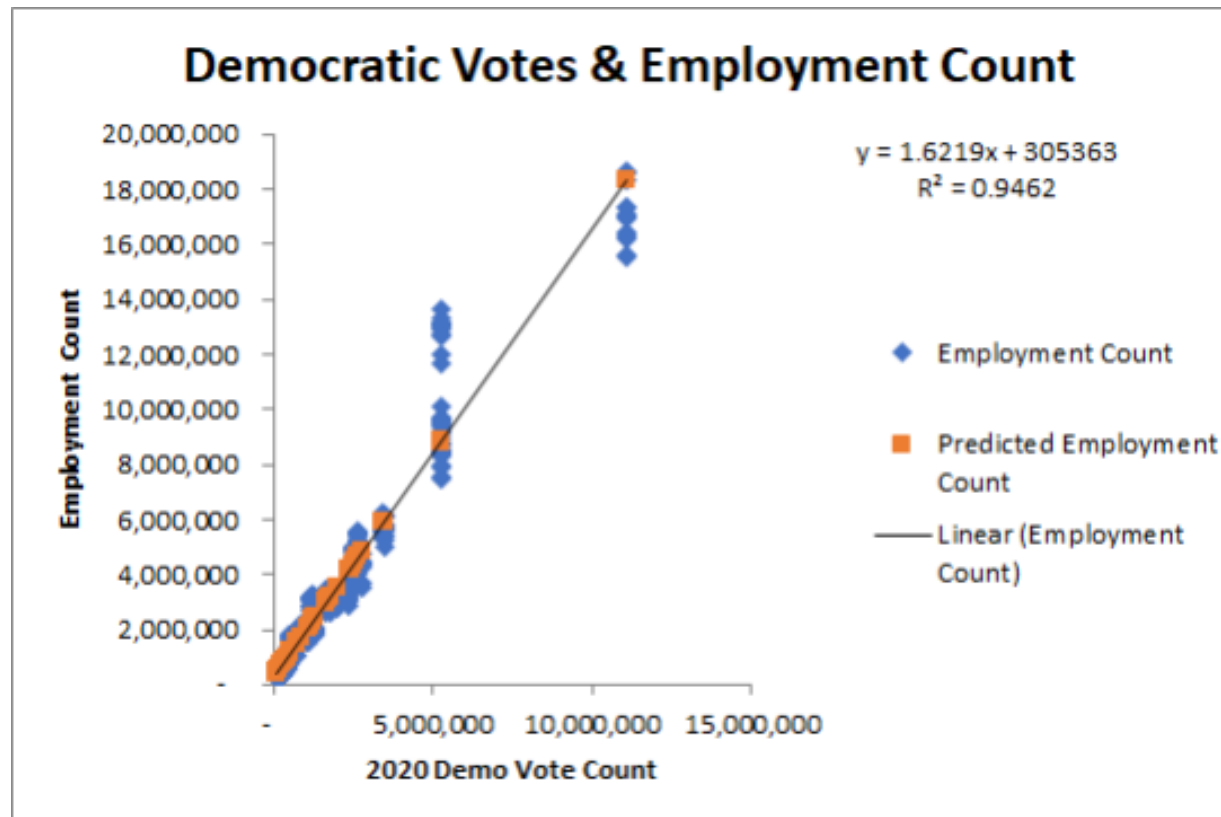
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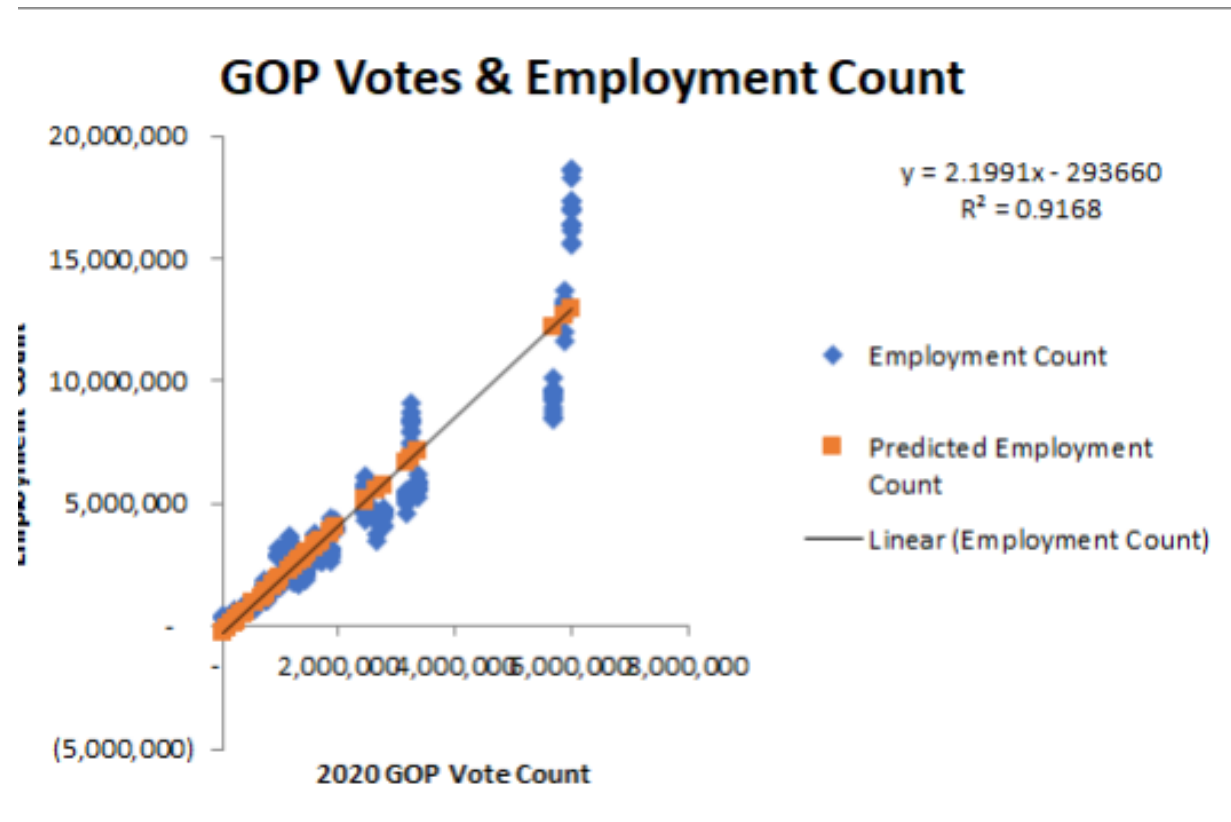
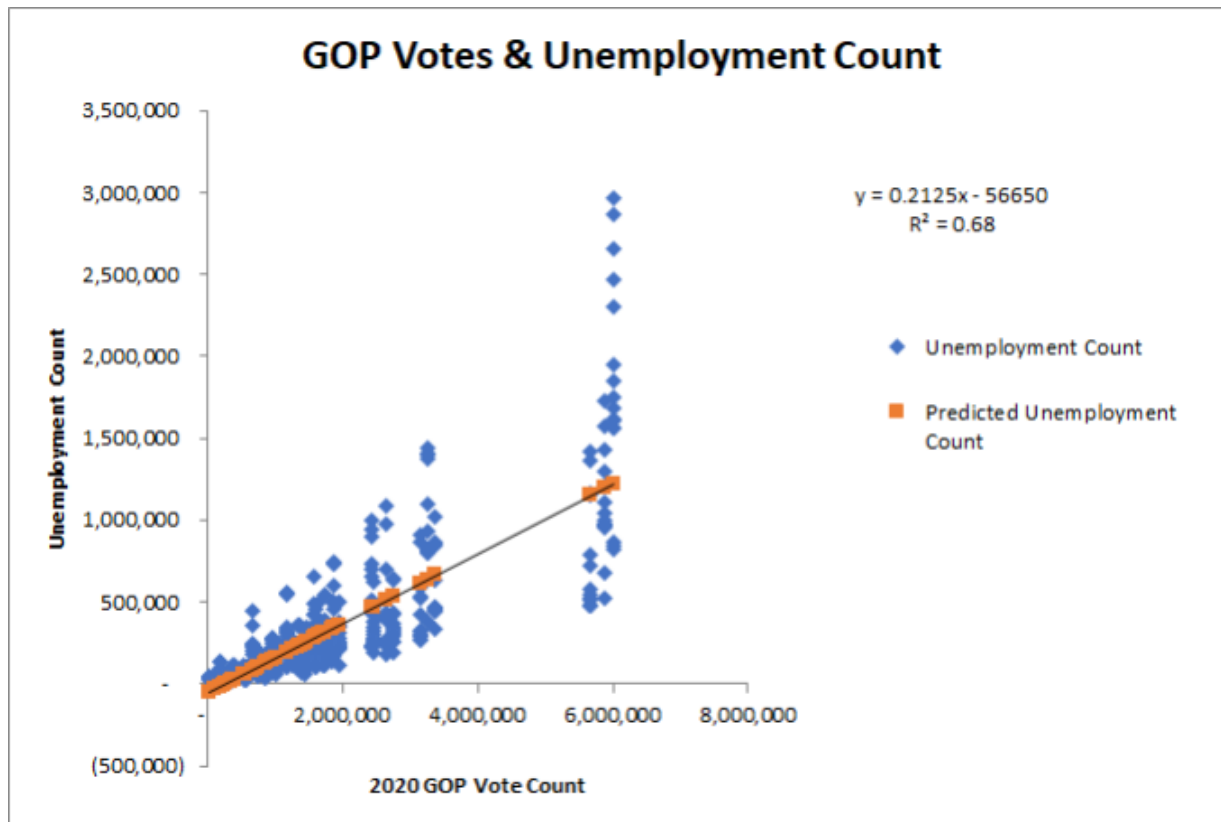
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Appendix



Appendix



Appendix

Death Rate Pivot Table							
Row Labels	Max of Total Population	Max of Cumulative Deaths	Max of 2020 GOP Vote Count	Max of 2020 Demo Vote Count	Sum of GOP 0, DEM 1	Max of Cumul Death Rate / 100000	Max of Population Density
Alabama	3892132	10854	1441168	849648	-	278.8702953	74.24898894
Alaska	545866	330	189892	153405	-	60.60071839	0.820377406
Arizona	5952938	17276	1661686	1672143	1	290.209641	52.22333538
Arkansas	2367295	5725	760647	423932	-	241.8372024	44.51559826
California	31093847	61480	6005961	11109764	1	197.7481096	189.9498885
Colorado	4651709	6402	1364607	1804352	1	137.6268378	44.68758046
Connecticut	2885051	8067	715291	1080680	1	280.2574325	520.4854772
Delaware	797621	1617	200603	296268	1	202.727862	320.458417
District of Columbia	584522	1100	18586	317323	1	188.1879553	8595.911765
Florida	17783671	34957	5668731	5297045	-	196.5679639	270.4411783
Georgia	8356449	19407	2461854	2473633	1	232.2397947	140.6217753
Hawaii	1088470	476	196864	366130	1	44.00017008	99.56732528
Idaho	1432388	2043	554118	287021	-	142.6289525	17.14018356
Illinois	9983613	24174	2446891	3471915	1	243.5754138	172.3868667
Indiana	5288901	13293	1729852	1242495	-	251.3376598	145.219687
Iowa	2482030	5930	897672	759061	-	238.9173378	44.10694294
Kansas	2237761	5010	758100	558669	-	223.8844988	27.19756192
Kentucky	3513671	6595	1326646	772474	-	187.6954331	86.95483568
Louisiana	3583040	10352	1255776	856034	-	289.4702404	68.4073466
Maine	1121440	777	359899	430473	1	69.28591811	31.69700396
Maryland	4774055	8688	976414	1985023	1	182.0523384	384.8182331
Massachusetts	5648468	17566	1167202	2382202	1	311.253352	535.1968922
Michigan	7996478	18552	2649852	2804040	1	232.1102919	82.68170068
Minnesota	4460873	7169	1484065	1717077	1	160.7084533	51.31214917
Mississippi	2287475	7188	756764	539398	-	314.4916877	47.23065329
Missouri	4847023	9217	1718736	1253014	-	190.1579588	69.53423616
Montana	868461	1566	343602	244786	-	180.3189781	5.906290805
Nebraska	1491090	2364	556846	374583	-	158.5417379	19.2776801
Nevada	2512490	5444	669890	703486	1	216.6774793	22.72266035
New Hampshire	1134526	1294	365654	424921	1	114.056443	121.352658
New Jersey	7079846	25460	1883274	2608335	1	360.1035786	811.6297145
New Mexico	1660619	4041	401894	501614	1	243.3429944	13.6575294
New York	15612413	51587	3250230	5244006	1	332.7412787	286.1774906
North Carolina	8428566	12611	2758773	2684292	-	149.6221303	156.6094874
North Dakota	586001	1517	235595	114902	-	258.8732784	8.288791762
Ohio	9262261	19188	3154834	2679165	-	207.1888976	206.6269799
Oklahoma	3067258	6716	1020280	503890	-	218.9577792	43.88128586
Oregon	3461246	2502	958448	1340383	1	72.28610737	35.18277275
Pennsylvania	10280347	26120	3378263	3459923	1	254.2945303	223.2237591
Rhode Island	864222	2664	199837	306210	1	308.3333333	559.3669903
South Carolina	4172613	9435	1385103	1091541	-	226.1173035	130.3127108
South Dakota	683317	1961	261043	150471	-	286.9824693	8.860897868
Tennessee	5477548	12066	1852475	1143711	-	220.2810455	129.9721906
Texas	22526074	50196	5890347	5259126	-	222.8351021	83.86600694
Utah	2433891	2186	865140	560282	-	89.8150328	28.66875155
Vermont	518976	245	112704	242820	1	47.2227255	53.97004992
Virginia	6742545	10706	1962430	2413568	1	158.7827742	157.6281707
Washington	6145770	5510	1584651	2369612	1	89.65516119	86.19835058
West Virginia	1445593	2676	545382	235984	-	186.0188354	59.66128766
Wisconsin	4666237	7494	1610065	1630673	1	160.600501	71.24461036
Wyoming	456556	707	193559	73491	-	154.8550452	4.667641316
Grand Total	31093847	61480	6005961	11109764	1	360.1035786	8595.911765

Appendix

Vaccination Rate Pivot Table									
Row Labels	Sum of Total Vaccine Allocation	Sum of Vaccination	Sum of Vaccine Rate	Sum of 2020 GOP Vote Count	Sum of 2020 Demo Vote Count	Sum of Total Population	Sum of Vax per 100	Pol Party	
Alabama	3,824,540	2,202,489	0.575883257	20176352	11895072	54393666	4.049163647		0
Illinois	7,913,180	6,719,607	0.849166454	39150256	55550640	159232580	4.219995054		1
Mississippi	2,312,300	1,352,525	0.584926307	10594696	7551572	32006779	4.22574574		0
Tennessee	5,232,290	3,408,106	0.651360227	25934650	16011954	76320736	4.465504106		0
Arizona	5,421,860	4,309,843	0.794901113	26586976	26754288	94106701	4.579740342		1
Louisiana	3,625,040	2,302,557	0.635181226	17580864	11984476	50110106	4.594995967		0
Arkansas	2,329,940	1,519,201	0.65203428	10649058	5935048	33060533	4.59520949		0
Georgia	7,905,280	5,360,177	0.678050284	34465956	34630862	116453746	4.602838066		1
Idaho	1,283,960	915,077	0.712698877	7757652	4018294	19815005	4.618100525		0
Wisconsin	4,588,080	3,285,536	0.716102509	24150975	24460095	69871498	4.702254416		1
South Carolina	3,924,050	2,755,493	0.702206292	19391442	15281574	58030868	4.748322221		0
Wyoming	472,140	302,648	0.641014212	2709826	1028874	6371767	4.749835485		0
Indiana	5,141,230	3,523,157	0.685275022	24217928	17394930	73899614	4.767489719		0
Texas	20,835,370	16,052,820	0.770460057	88355205	78868890	335360128	4.786740882		0
West Virginia	1,489,260	997,406	0.66973272	7635348	3303776	20185479	4.94120625		0
Utah	2,179,550	1,798,816	0.825315272	12977100	8404230	36141334	4.977170738		0
Nevada	2,295,780	1,743,439	0.759410418	9378460	9848804	34884070	4.997809172		1
Missouri	4,779,400	3,387,604	0.70879283	24062304	17542196	67748948	5.000231812		0
Oregon	3,286,420	2,589,964	0.788080784	14376720	20105745	51700529	5.00955116		1
North Carolina	7,974,280	5,934,037	0.744147058	38622822	37580088	117368486	5.055903166		0
Washington	5,838,950	4,954,109	0.848458807	25354416	37913792	97756238	5.067818332		1
California	30,418,680	25,689,967	0.844545764	96095376	177756224	497369131	5.165171248		1
Florida	16,641,360	12,885,931	0.774331614	79362234	74158630	247731010	5.201581808		0
Pennsylvania	9,003,930	7,651,403	0.849784761	48438922	48438922	143860456	5.318628004		1
Oklahoma	3,022,910	2,279,069	0.753932237	14283920	7054460	42810066	5.323676212		0
Montana	849,790	644,394	0.758298344	4810428	3427004	12096172	5.327258491		0
Nebraska	1,485,160	1,200,968	0.808645802	8352690	5618745	22319824	5.380725224		0
Michigan	7,862,360	6,050,503	0.769553054	37097928	39256560	111922558	5.405972896		1
Kentucky	3,498,770	2,671,125	0.763446868	18573044	10814636	49134347	5.436370204		0
Kansas	2,243,020	1,713,019	0.76371118	10613400	7821366	31298744	5.473125216		0
Virginia	6,637,730	5,165,219	0.778160425	27474020	33789952	94231817	5.481395737		1
Ohio	9,147,670	7,111,315	0.77739086	44167676	37508310	129624492	5.486089041		0
Massachusetts	5,533,700	4,687,623	0.847104713	17508030	35733030	84702852	5.534197774		1
Colorado	4,340,850	3,688,854	0.849799878	19104498	25260928	64743905	5.697607829		1
Delaware	783,680	645,578	0.823776988	2808442	4147752	11104786	5.813507347		1
Iowa	2,448,610	2,021,646	0.825630031	12567408	10626854	34724925	5.82188716		0
North Dakota	611,590	477,828	0.78128869	3298330	1608628	8197336	5.829068736		0
Maryland	4,736,260	3,914,348	0.826463866	13669796	27790322	66824514	5.857652403		1
Minnesota	4,314,030	3,663,609	0.849231183	20776910	24039078	62340847	5.87673889		1
New Hampshire	1,110,560	942,692	0.848843511	5119156	5948894	15843421	5.950051128		1
Maine	1,109,860	937,825	0.844994324	5038586	6026622	15666774	5.986078563		1
New Jersey	7,003,500	5,951,896	0.849845984	26365836	36516690	99050984	6.008921981		1
Connecticut	2,888,760	2,428,216	0.840573897	10014074	15129520	40346410	6.018419607		1
New Mexico	1,657,960	1,406,045	0.84805695	5626516	7022596	23181435	6.065390257		1
South Dakota	683,450	580,709	0.84967291	3654602	2106594	9536226	6.089504905		0
New York	15,676,740	13,291,118	0.847824079	45503220	73416084	217765182	6.103417235		1
Rhode Island	872,610	741,302	0.849522696	2797718	4286940	12096303	6.128335244		1
Alaska	866,360	469,873	0.542353294	2658488	2147670	7632767	6.156008832		0
District of Columbia	596,750	504,721	0.845782405	260204	4442522	8175657	6.173456763		1
Vermont	541,850	456,814	0.843063209	1577856	3399480	7263500	6.289169133		1
Hawaii	1,154,500	981,059	0.849769554	2756096	5125820	15187774	6.45953087		1
Grand Total	250,395,900	196,269,280	0.783835837	1073361170	1186504033	3791603026	5.176419536		1

Appendix

Unemployment Rate Pivot Table								
Row Labels	Max of 2020 GOP Vote Count	Max of 2020 Demo Vote Count	Max of Employment Count	Max of Unemployment Count	Max of Total Population	Max of Employment Rate	Max of Unemployment Rate	Sum of GOP 0, DEM 1
Alabama	1441168	849648	2176275	288253	3892132	56.1	13.2	-
Alaska	189892	153405	334331	40680	545866	61.2	11.8	-
Arizona	1661686	1672143	3409624	504698	5952938	58.8	14.2	1
Arkansas	760647	423932	1318251	137367	2367295	56	10	-
California	6005961	11109764	18613291	2966435	31093847	59.9	16	1
Colorado	1364607	1804352	2983155	361769	4651709	64.3	12.1	1
Connecticut	715291	1080680	1842200	215410	2885051	63.9	11.4	1
Delaware	200603	296268	458200	63481	797621	58.1	13.4	1
District of Columbia	18586	317323	398895	45122	584522	68.4	11.1	1
Florida	5668731	5297045	10106833	1416421	17783671	57.5	14.2	-
Georgia	2461854	2473633	5018477	620840	8356449	60.7	12.5	1
Hawaii	196864	366130	657086	140209	1088470	60.4	21.9	1
Idaho	554118	287021	870560	101309	1432388	62	11.6	-
Illinois	2446891	3471915	6149010	996478	9983613	61.6	16.5	1
Indiana	1729852	1242495	3235038	544935	5288901	61.4	16.9	-
Iowa	897672	759061	1671622	190195	2482030	67.5	11.1	-
Kansas	758100	558669	1454132	187075	2237761	65	12.6	-
Kentucky	1326646	772474	1988308	352568	3513671	56.7	16.9	-
Louisiana	1255776	856034	2036022	268196	3583040	56.8	13.1	-
Maine	359899	430473	676175	60585	1121440	60.6	9.1	1
Maryland	976414	1985023	3181957	282222	4774055	66.7	9	1
Massachusetts	1167202	2382202	3642616	558382	5648468	64.5	16.4	1
Michigan	2649852	2804040	4734860	1084356	7996478	59.2	23.6	1
Minnesota	1484065	1717077	3008879	348262	4460873	67.7	11.3	1
Mississippi	756764	539398	1206406	191000	2287475	52.7	15.7	-
Missouri	1718736	1253014	2982405	373519	4847023	61.7	12.5	-
Montana	343602	244786	521657	64455	868461	60.7	11.9	-
Nebraska	556846	374583	1012002	77832	1491090	68.2	7.4	-
Nevada	669890	703486	1485811	442217	2512490	60.2	29.5	1
New Hampshire	365654	424921	748302	117688	1134526	66.3	16	1
New Jersey	1883274	2608335	4404152	742322	7079846	62.2	16.6	1
New Mexico	401894	501614	911218	118028	1660619	55.2	12.5	1
New York	3250230	5244006	9115724	1435688	15612413	58.4	16.2	1
North Carolina	2758773	2684292	4757553	647514	8428566	56.6	13.5	-
North Dakota	235595	114902	397057	35724	586001	67.9	8.7	-
Ohio	3154834	2679165	5549718	908862	9262261	60	16.4	-
Oklahoma	1020280	503890	1786115	236541	3067258	58.6	13	-
Oregon	958448	1340383	2033344	270838	3461246	59.3	13.2	1
Pennsylvania	3378263	3459923	6194061	1023035	10280347	60.3	16.2	1
Rhode Island	199837	306210	539591	94704	864222	62.5	17.4	1
South Carolina	1385103	1091541	2306258	273164	4172613	55.8	11.5	-
South Dakota	261043	150471	458060	43224	683317	67.1	9.2	-
Tennessee	1852475	1143711	3193850	503585	5477548	58.9	15.8	-
Texas	5890347	5259126	13662942	1727869	22526074	61.6	12.9	-
Utah	865140	560282	1590455	164014	2433891	66.8	10.1	-
Vermont	112704	242820	333471	52219	518976	64.3	14.8	1
Virginia	1962430	2413568	4333184	495710	6742545	64.5	11.3	1
Washington	1584651	2369612	3799953	652077	6145770	62.6	16.3	1
West Virginia	545382	235984	763051	119473	1445593	52.8	15.6	-
Wisconsin	1610065	1630673	2974233	453138	4666237	64	14.8	1
Wyoming	193559	73491	283757	25515	456556	62.6	8.5	-
Grand Total	6005961	11109764	18613291	2966435	31093847	68.4	29.5	1

Appendix

Unemployment Volatility Pivot Table							
State	0	1	13	Unemp Pct Inc 0-1	Unemp Pct Inc 1-13	Unemp Pct 0-13	Sum of GOP 0, DEM 1
Alabama	2.6	13.2	3.8	407.69	-71.21	46.15	-
Alaska	5.1	11.8	6.6	131.37	-44.07	29.41	-
Arizona	5	14.2	6.7	184.00	-52.82	34.00	1
Arkansas	3.9	10	4.4	156.41	-56.00	12.82	-
California	4.5	16	8.3	255.56	-48.13	84.44	1
Colorado	4.7	12.1	6.4	157.45	-47.11	36.17	1
Connecticut	3.8	8.6	8.3	126.32	-3.49	118.42	1
Delaware	4.8	13.4	6.5	179.17	-51.49	35.42	1
District of Columbia	5.2	11.1	7.8	113.46	-29.73	50.00	1
Florida	4.9	14	4.7	185.71	-66.43	-4.08	-
Georgia	3.6	12.5	4.5	247.22	-64.00	25.00	1
Hawaii	2.1	21.9	9	942.86	-58.90	328.57	1
Idaho	2.7	11.6	3.2	329.63	-72.41	18.52	-
Illinois	3.7	16.5	7.1	345.95	-56.97	91.89	1
Indiana	3.3	16.9	3.9	412.12	-76.92	18.18	-
Iowa	2.9	11.1	3.7	282.76	-66.67	27.59	-
Kansas	3.2	12.6	3.7	293.75	-70.63	15.63	-
Kentucky	4.2	16.9	5	302.38	-70.41	19.05	-
Louisiana	5.3	13.1	7.3	147.17	-44.27	37.74	-
Maine	3.1	9.1	4.8	193.55	-47.25	54.84	1
Maryland	3.5	9	6.2	157.14	-31.11	77.14	1
Massachusetts	2.7	16.4	6.8	507.41	-58.54	151.85	1
Michigan	3.7	23.6	5.1	537.84	-78.39	37.84	1
Minnesota	3.5	9	4.2	157.14	-53.33	20.00	1
Mississippi	6	15.7	6.3	161.67	-59.87	5.00	-
Missouri	3.7	12.5	4.2	237.84	-66.40	13.51	-
Montana	3.8	11.9	3.8	213.16	-68.07	0.00	-
Nebraska	3.1	7.4	2.9	138.71	-60.81	-6.45	-
Nevada	6.4	29.5	8.1	360.94	-72.54	26.56	1
New Hampshire	2.7	16	3	492.59	-81.25	11.11	1
New Jersey	3.8	16.6	7.7	336.84	-53.61	102.63	1
New Mexico	5.4	10	8.3	85.19	-17.00	53.70	1
New York	3.9	16.2	8.5	315.38	-47.53	117.95	1
North Carolina	3.9	13.5	5.2	246.15	-61.48	33.33	-
North Dakota	2.3	8.7	4.4	278.26	-49.43	91.30	-
Ohio	4.9	16.4	4.7	234.69	-71.34	-4.08	-
Oklahoma	3.2	13	4.2	306.25	-67.69	31.25	-
Oregon	3.6	13.2	6	266.67	-54.55	66.67	1
Pennsylvania	5.1	16.2	7.3	217.65	-54.94	43.14	1
Rhode Island	4	17.4	7.1	335.00	-59.20	77.50	1
South Carolina	3	11.5	5.1	283.33	-55.65	70.00	-
South Dakota	2.9	9.2	2.9	217.24	-68.48	0.00	-
Tennessee	4	15.8	5	295.00	-68.35	25.00	-
Texas	4.9	12.9	6.9	163.27	-46.51	40.82	-
Utah	2.5	10.1	2.9	304.00	-71.29	16.00	-
Vermont	2.6	14.8	2.9	469.23	-80.41	11.54	1
Virginia	2.6	11.3	5.1	334.62	-54.87	96.15	1
Washington	5.3	16.3	5.4	207.55	-66.87	1.89	1
West Virginia	5.3	15.6	5.9	194.34	-62.18	11.32	-
Wisconsin	3.2	14.8	3.8	362.50	-74.32	18.75	1
Wyoming	5.1	5.5	5.3	7.84	-3.64	3.92	-