

# Job Recovery Following the Pandemic Summary for New York

April 19, 2022

## State Summary

This state-specific job<sup>1</sup> recovery summary is for the state of New York and is part of an on-going project by the Georgia Center for Opportunity (GCO) to follow and understand state-level employment situations following the pandemic. In December 2021, GCO published a statistical report correlating the severity of governmental actions in shutting down their economies with their impacts on employment. The full report and related material can be found at <https://georgiaopportunity.org/state-pandemic-response-impact-on-work-opportunity>.

As of March 2022,<sup>2</sup> New York recovered 76.4% of its lost jobs because of the pandemic, ranking 43<sup>rd</sup> in the nation. When the pre-pandemic job trajectory is captured, New York's rank slips to 49<sup>th</sup>. Its initial job loss impact from the pandemic was worse than most states, ranking New York 45<sup>th</sup> in the nation.

Relative to severity of governmental responses in shutting down the economies, such as closing down businesses or stay-at-home orders, New York ranked 3<sup>rd</sup> with the Government Severity Index created by GCO specifically for the project, and also 3<sup>rd</sup> with the Abridged Oxford Stringency Index. New York was one of the states with the most restrictive policies as measured by the indexes. Note that the indexes include significant local actions in addition to state actions.

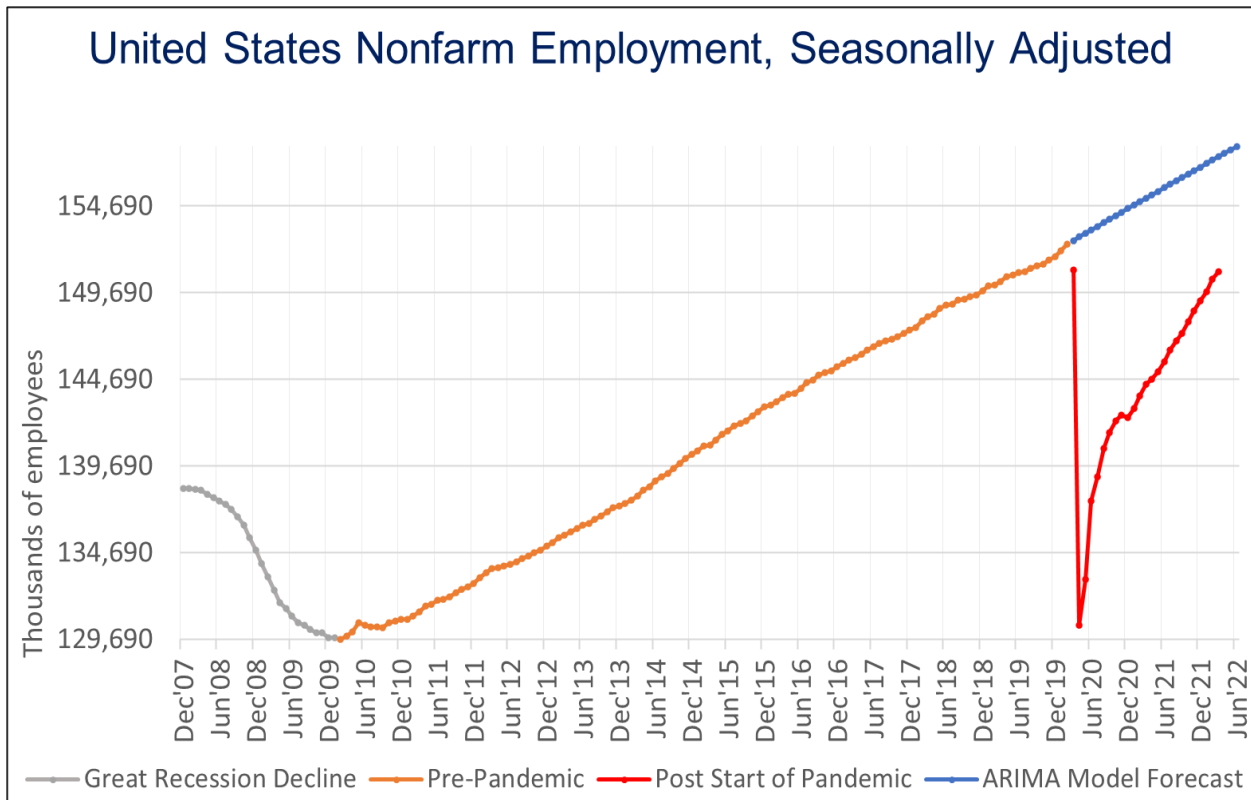
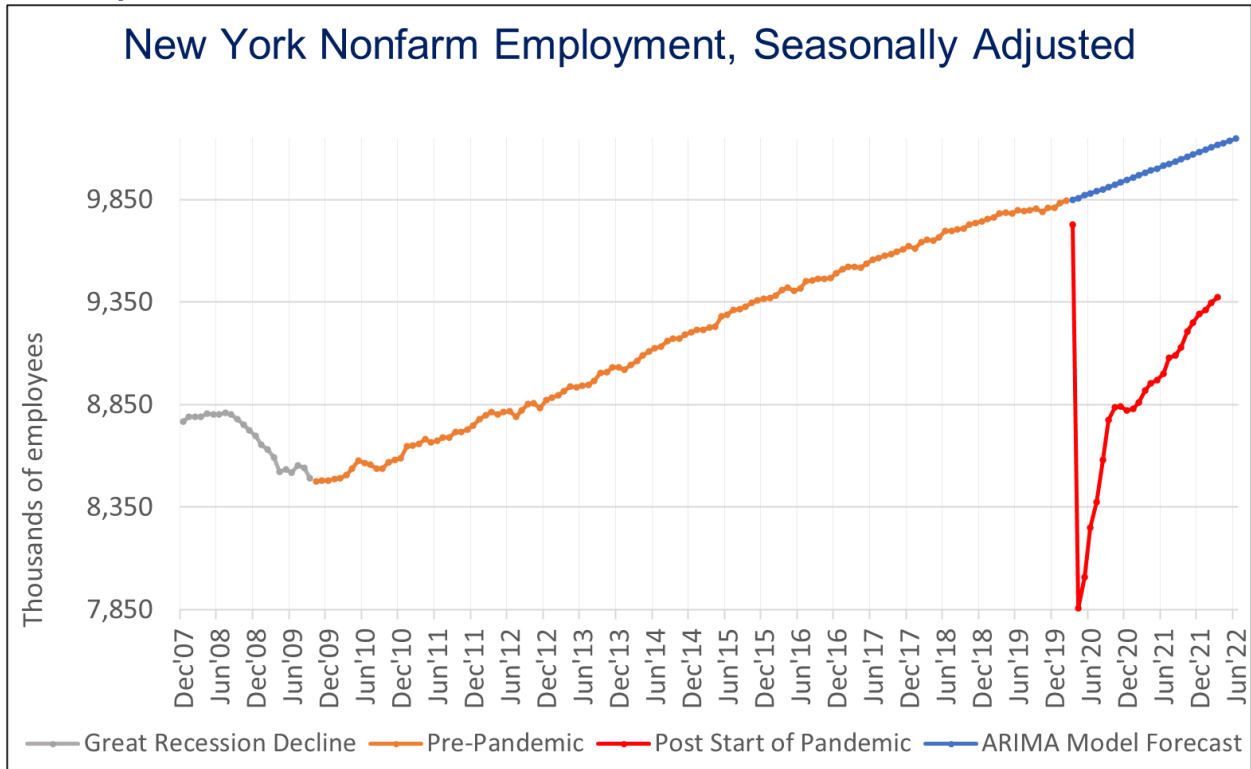
Interpretation: New York has one of the worst job recoveries among the states, and its pandemic policies are among the most restrictive per the analysis. Therefore, according to the findings from the regression analysis, its job recovery could be better had its pandemic responses been less restrictive.

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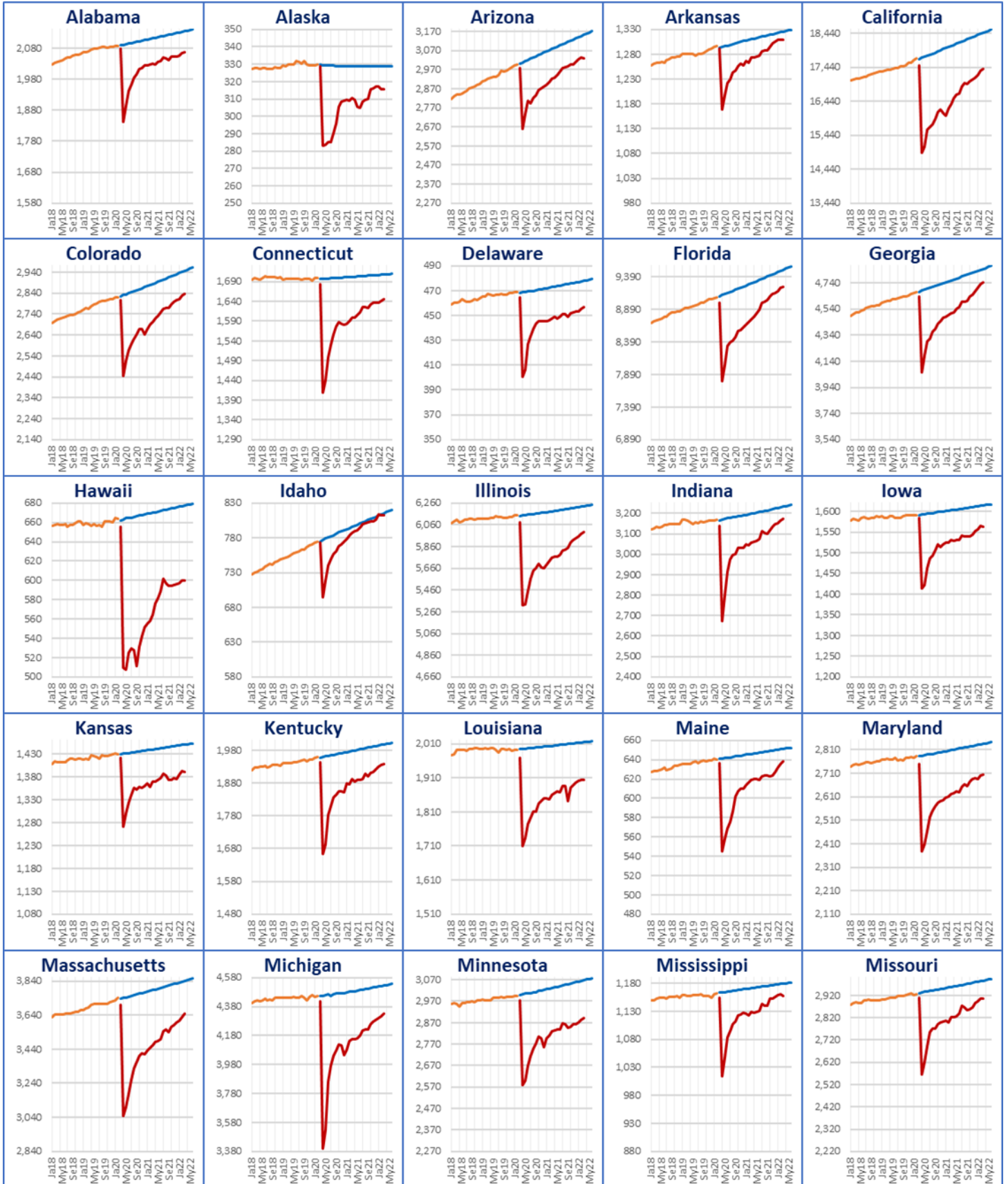
<sup>1</sup> This report uses state-level total non-farm employment levels, seasonally adjusted, per the U.S. Bureau of Labor Statistics. For further explanation on why this metric was chosen, please see the full report released in December 2021: <https://georgiaopportunity.org/state-pandemic-response-impact-on-work-opportunity>.

<sup>2</sup> All the job recovery data shown in this report were updated pursuant to the March 2022 data revisions by the U.S. Bureau of Labor Statistics.

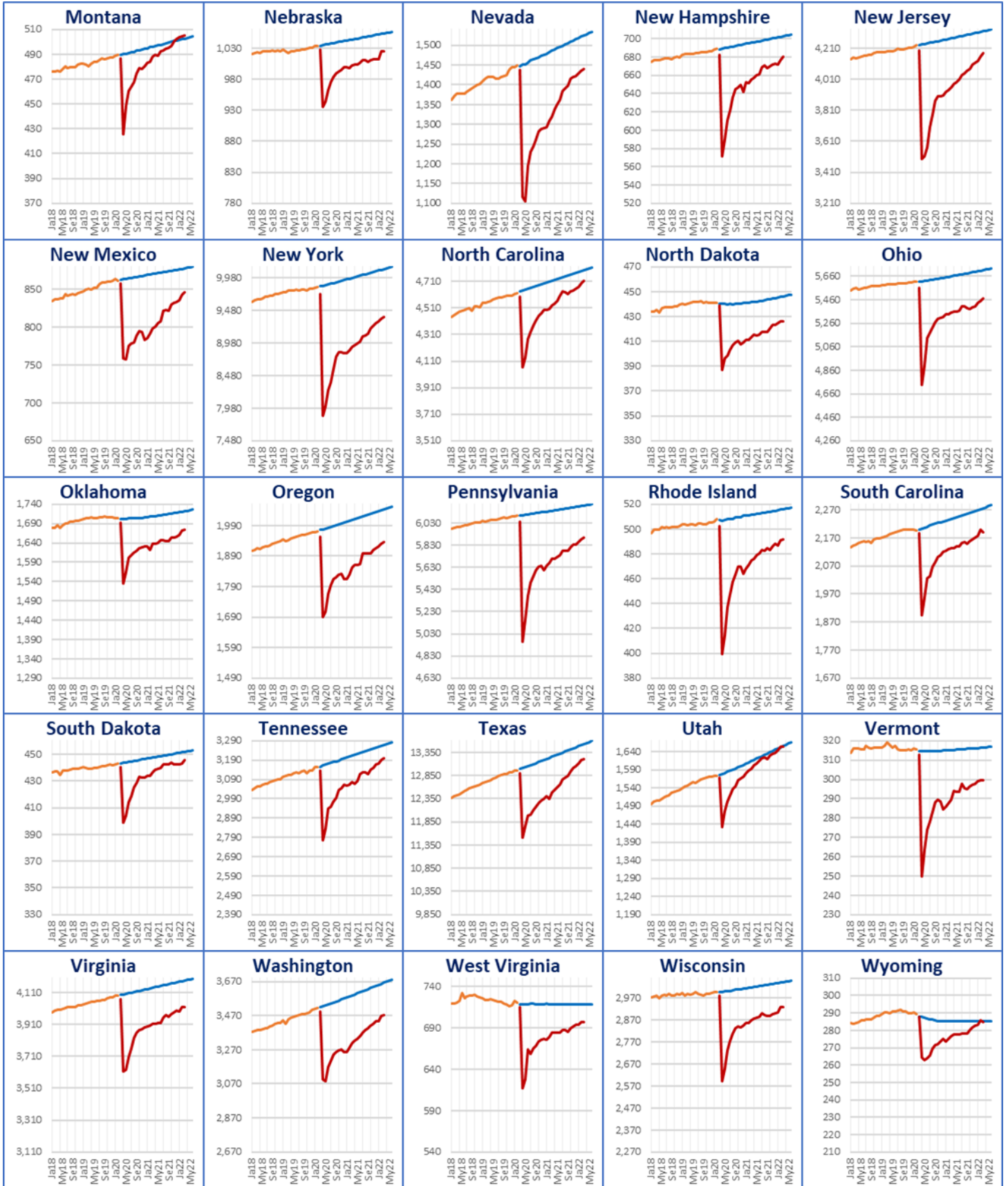
## Job Impact from COVID-19 Pandemic



**Job Growth Comparison. Thousands of Employees. Key:** — Pre-Pandemic — ARIMA Model Forecast — Pandemic



Job Growth Comparison. Thousands of Employees. Key: — Pre-Pandemic — ARIMA Model Forecast — Pandemic



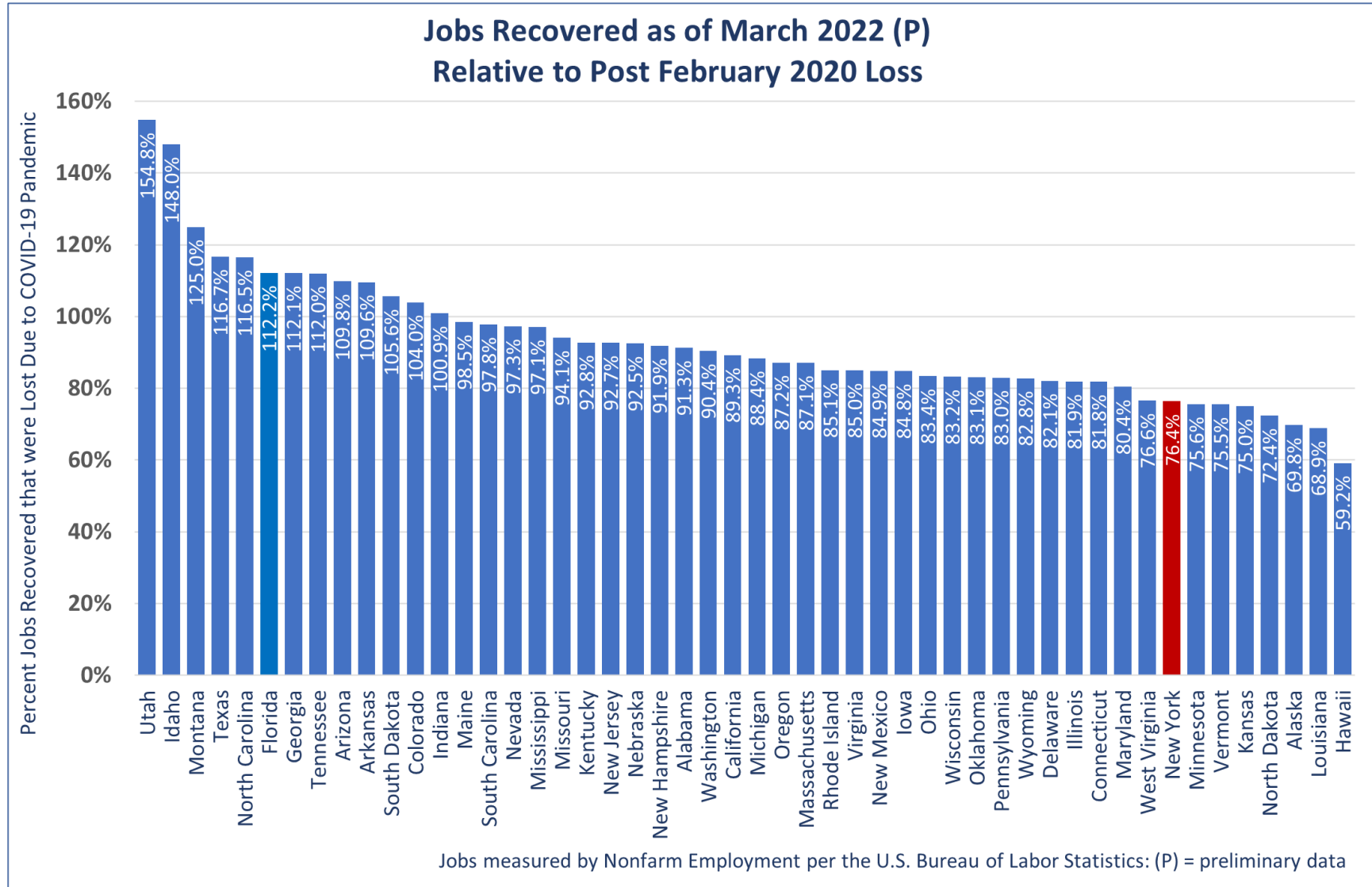
## Initial Job Loss Impact Due to COVID-19 Pandemic<sup>3</sup>

Area	Employment	Monthly Percent Change				Job Trough	Maximum Job Loss	Percent Impact	Least to Worst Rank	Pre-Pandemic Job Growth Rate: Dec 2018 to Dec 2019
	Feb 2020	Mar 2020	Apr 2020	May 2020	Jun 2020					
United States	152,504,000	-1.0%	-13.6%	2.0%	3.4%	130,513,000	-21,991,000	-14.4%		1.3%
Alabama	2,087,800	-0.4%	-11.3%	2.7%	2.6%	1,843,500	-244,300	-11.7%	12	1.2%
Alaska	329,700	-0.3%	-13.8%	0.1%	0.4%	283,300	-46,400	-14.1%	28	0.4%
Arizona	2,996,200	-0.5%	-10.8%	3.0%	2.5%	2,657,500	-338,700	-11.3%	11	3.1%
Arkansas	1,296,200	-0.4%	-9.5%	2.5%	2.2%	1,168,100	-128,100	-9.9%	4	1.2%
California	17,691,900	-1.1%	-14.7%	1.2%	3.3%	14,933,000	-2,758,900	-15.6%	37	1.4%
Colorado	2,819,600	-0.5%	-12.9%	3.0%	2.0%	2,445,100	-374,500	-13.3%	23	2.2%
Connecticut	1,699,000	-0.9%	-16.3%	2.2%	4.0%	1,409,600	-289,400	-17.0%	40	-0.6%
Delaware	469,100	-0.9%	-13.8%	1.4%	5.0%	400,900	-68,200	-14.5%	33	0.9%
Florida	9,075,500	-0.8%	-13.4%	3.0%	3.7%	7,793,000	-1,282,500	-14.1%	28	2.1%
Georgia	4,666,400	-0.6%	-12.6%	3.2%	2.6%	4,053,000	-613,400	-13.1%	22	1.9%
Hawaii	663,600	-1.3%	-22.3%	-0.4%	3.5%	507,500	-156,100	-23.5%	48	-0.1%
Idaho	774,200	-0.1%	-10.2%	3.5%	2.9%	694,400	-79,800	-10.3%	7	3.0%
Illinois	6,144,600	-1.0%	-12.6%	0.3%	2.2%	5,316,400	-828,200	-13.5%	24	0.3%
Indiana	3,167,400	-0.8%	-14.9%	4.7%	4.1%	2,672,000	-495,400	-15.6%	37	0.7%
Iowa	1,590,500	-0.4%	-10.7%	0.6%	2.8%	1,413,900	-176,600	-11.1%	9	0.3%
Kansas	1,429,500	-0.5%	-10.5%	2.2%	1.8%	1,272,100	-157,400	-11.0%	8	0.6%
Kentucky	1,959,400	-0.8%	-14.5%	1.7%	5.3%	1,663,300	-296,100	-15.1%	36	1.0%
Louisiana	1,993,300	-1.2%	-13.2%	1.3%	2.4%	1,709,500	-283,800	-14.2%	30	-0.2%
Maine	640,100	-0.6%	-14.4%	2.4%	2.0%	544,800	-95,300	-14.9%	35	0.7%
Maryland	2,782,000	-1.1%	-13.5%	1.2%	2.3%	2,379,200	-402,800	-14.5%	33	0.6%
Massachusetts	3,740,100	-1.0%	-17.6%	1.6%	2.6%	3,051,000	-689,100	-18.4%	43	1.4%
Michigan	4,452,700	-0.8%	-23.0%	3.7%	9.5%	3,399,400	-1,053,300	-23.7%	49	0.4%
Minnesota	2,995,500	-0.7%	-13.4%	0.9%	2.7%	2,577,900	-417,600	-13.9%	26	0.6%
Mississippi	1,162,400	-0.7%	-12.2%	3.2%	3.5%	1,014,000	-148,400	-12.8%	20	0.0%
Missouri	2,925,400	-0.6%	-11.8%	2.1%	2.7%	2,566,700	-358,700	-12.3%	19	1.0%
Montana	489,300	-0.5%	-12.6%	5.4%	2.7%	425,700	-63,600	-13.0%	21	1.0%
Nebraska	1,032,800	-0.6%	-9.0%	1.0%	1.9%	934,600	-98,200	-9.5%	3	0.6%
Nevada	1,449,600	-0.8%	-22.4%	-1.0%	8.0%	1,105,100	-344,500	-23.8%	50	2.9%
New Hampshire	689,400	-1.0%	-16.2%	3.2%	3.5%	571,800	-117,600	-17.1%	41	1.0%
New Jersey	4,228,400	-0.8%	-16.7%	0.5%	1.7%	3,495,800	-732,600	-17.3%	42	0.7%
New Mexico	861,700	-0.4%	-11.6%	-0.2%	2.3%	757,300	-104,400	-12.1%	15	1.8%
New York	9,843,500	-1.2%	-19.2%	1.9%	3.0%	7,857,900	-1,985,600	-20.2%	45	0.7%
North Carolina	4,620,400	-0.6%	-11.6%	1.8%	3.4%	4,061,900	-558,500	-12.1%	15	2.0%
North Dakota	440,800	-0.4%	-11.8%	2.4%	0.7%	386,900	-53,900	-12.2%	17	0.3%
Ohio	5,613,800	-0.9%	-14.9%	3.6%	4.7%	4,732,200	-881,600	-15.7%	39	0.6%
Oklahoma	1,702,900	-0.6%	-9.4%	2.1%	2.3%	1,533,900	-169,000	-9.9%	4	0.4%
Oregon	1,972,200	-0.9%	-13.5%	1.1%	3.4%	1,690,200	-282,000	-14.3%	31	1.5%
Pennsylvania	6,095,700	-0.9%	-17.9%	4.0%	4.1%	4,961,100	-1,134,600	-18.6%	44	0.8%
Rhode Island	507,800	-1.1%	-20.4%	3.7%	5.4%	399,700	-108,100	-21.3%	47	0.5%
South Carolina	2,197,800	-0.6%	-13.4%	3.4%	3.6%	1,893,100	-304,700	-13.9%	26	1.5%
South Dakota	443,200	-0.6%	-9.5%	1.4%	2.4%	398,500	-44,700	-10.1%	6	0.5%
Tennessee	3,153,800	-0.5%	-11.5%	2.2%	3.7%	2,774,500	-379,300	-12.0%	14	1.5%
Texas	12,966,200	-0.5%	-10.7%	2.1%	1.9%	11,518,700	-1,447,500	-11.2%	10	2.1%
Utah	1,574,200	-0.3%	-8.8%	3.2%	1.8%	1,430,900	-143,300	-9.1%	2	2.4%
Vermont	315,700	-0.9%	-20.1%	5.4%	4.0%	249,900	-65,800	-20.8%	46	-0.4%
Virginia	4,092,700	-0.6%	-11.2%	0.4%	2.0%	3,612,600	-480,100	-11.7%	12	1.3%
Washington	3,517,200	-0.6%	-11.4%	-0.2%	2.7%	3,086,900	-430,300	-12.2%	17	2.2%
West Virginia	720,800	-0.8%	-13.7%	1.8%	5.7%	616,800	-104,000	-14.4%	32	-1.3%
Wisconsin	2,995,900	-0.6%	-13.0%	2.1%	3.3%	2,591,600	-404,300	-13.5%	24	0.2%
Wyoming	289,100	-0.5%	-8.1%	-0.5%	0.3%	263,000	-26,100	-9.0%	1	0.5%
District of Columbia	805,300	-0.5%	-10.0%	-0.5%	0.2%	717,600	-87,700	-10.9%		0.8%

<sup>3</sup> Total nonfarm employment, seasonally adjusted, per the U.S. Bureau of Labor Statistics



State Job Recovery Comparison (Relative to February 2020)



## Job Recovery Compared to February 2020

Jobs Recovered as of June 2020		
Relative to Post February 2020 Loss		
	United States	32.5%
50	1 Idaho	56.9%
49	2 Montana	54.6%
48	3 Utah	49.8%
47	4 Indiana	48.6%
46	5 Mississippi	46.9%
45	6 Ohio	45.4%
44	7 West Virginia	44.9%
43	8 South Carolina	44.2%
42	9 Arizona	44.1%
41	10 Michigan	43.7%
40	11 Tennessee	43.5%
39	12 Arkansas	42.6%
38	13 Florida	41.4%
37	14 Alabama	40.6%
36	15 Kentucky	40.0%
35	16 Oklahoma	39.9%
34	17 Georgia	39.1%
33	18 North Carolina	38.5%
32	19 Delaware	38.3%
31	20 Vermont	36.5%
30	21 Pennsylvania	36.1%
29	22 Wisconsin	34.9%
28	23 Missouri	34.8%
26	24 Rhode Island	34.2%
26	24 South Dakota	34.2%
25	26 New Hampshire	33.1%
24	27 Colorado	32.8%
23	28 Kansas	32.7%
22	29 Texas	32.1%
21	30 Connecticut	30.8%
20	31 Nebraska	28.0%
19	32 Iowa	27.8%
18	33 Oregon	26.9%
17	34 Nevada	25.6%
16	35 Maine	25.5%
15	36 California	24.3%
14	37 Louisiana	22.6%
13	38 Minnesota	22.2%
12	39 North Dakota	21.9%
11	40 Maryland	20.8%
10	41 New York	19.8%
9	42 Washington	19.1%
8	43 Massachusetts	18.8%
7	44 Virginia	18.7%
6	45 New Mexico	17.0%
5	46 Illinois	16.0%
4	47 Hawaii	11.3%
3	48 New Jersey	10.4%
2	49 Alaska	3.4%
1	50 Wyoming	3.1%
	District of Columbia	1.9%

Jobs Recovered as of September 2020		
Relative to Post February 2020 Loss		
	United States	50.6%
50	1 Idaho	83.0%
49	2 Utah	78.5%
48	3 Montana	77.2%
47	4 South Dakota	67.3%
46	5 Indiana	66.6%
45	6 Mississippi	66.0%
44	7 Michigan	64.1%
43	8 North Carolina	62.9%
41	9 Alabama	62.6%
41	9 South Carolina	62.6%
40	11 Delaware	62.5%
39	12 New Hampshire	62.3%
38	13 Arkansas	61.6%
37	14 Kentucky	61.2%
36	15 Ohio	61.1%
35	16 Maine	60.0%
34	17 Wisconsin	59.3%
33	18 Rhode Island	58.6%
32	19 Tennessee	58.3%
31	20 Vermont	58.2%
30	21 Connecticut	57.7%
29	22 Missouri	57.5%
28	23 Pennsylvania	56.7%
27	24 Nebraska	56.1%
26	25 Georgia	54.6%
25	26 Colorado	53.2%
24	27 Florida	52.6%
23	28 Arizona	51.9%
22	29 Iowa	51.8%
21	30 Kansas	51.7%
20	31 New Jersey	50.9%
19	32 Virginia	50.7%
18	33 Oklahoma	50.4%
17	34 West Virginia	49.5%
16	35 Maryland	47.2%
15	36 Oregon	46.7%
14	37 Minnesota	46.3%
13	38 New York	46.1%
12	39 Nevada	45.4%
11	40 Massachusetts	45.3%
10	41 Texas	45.2%
9	42 Illinois	41.4%
8	43 North Dakota	41.0%
7	44 Washington	39.7%
6	45 Louisiana	36.0%
5	46 California	35.6%
4	47 Wyoming	32.6%
3	48 New Mexico	30.4%
2	49 Alaska	26.7%
1	50 Hawaii	2.4%
	District of Columbia	14.8%

Jobs Recovered as of December 2020		
Relative to Post February 2020 Loss		
	United States	54.5%
50	1 Idaho	101.1%
49	2 Utah	97.1%
48	3 Montana	86.2%
47	4 North Carolina	77.2%
46	5 Mississippi	76.3%
45	6 Tennessee	75.9%
44	7 South Dakota	75.6%
43	8 South Carolina	74.4%
42	9 Alabama	73.4%
41	10 Indiana	72.8%
40	11 Arkansas	69.5%
39	12 Maine	68.5%
38	13 Georgia	68.0%
37	14 Arizona	66.3%
36	15 Ohio	65.7%
34	16 Missouri	65.5%
34	16 Nebraska	65.5%
33	18 Delaware	65.2%
32	19 Florida	64.1%
31	20 Kentucky	63.4%
30	21 Wisconsin	62.1%
29	22 Michigan	61.6%
28	23 Iowa	60.2%
27	24 New Hampshire	59.9%
26	25 Rhode Island	59.4%
25	26 Connecticut	59.0%
24	27 Virginia	57.8%
23	28 Texas	57.6%
22	29 West Virginia	57.1%
21	30 Oklahoma	57.0%
20	31 Pennsylvania	56.8%
19	32 Kansas	55.9%
18	33 New Jersey	55.8%
17	34 Alaska	55.4%
16	35 Nevada	53.9%
15	36 Maryland	53.6%
14	37 Colorado	52.8%
13	38 Massachusetts	52.4%
12	39 Vermont	52.3%
11	40 Louisiana	49.5%
10	41 New York	48.5%
9	42 Wyoming	45.6%
8	43 Oregon	43.8%
7	44 Minnesota	42.4%
6	45 California	42.0%
5	46 Illinois	41.5%
4	47 North Dakota	41.0%
3	48 Washington	39.3%
2	49 Hawaii	28.1%
1	50 New Mexico	24.7%
	District of Columbia	12.8%

## Job Recovery Compared to February 2020

Jobs Recovered as of March 2021		
Relative to Post February 2020 Loss		
	United States	63.3%
50	1 Idaho	116.2%
49	2 Utah	112.6%
48	3 Montana	97.6%
47	4 South Dakota	85.0%
46	5 North Carolina	83.4%
45	6 Arkansas	82.0%
44	7 Tennessee	79.1%
43	8 South Carolina	78.9%
42	9 Maine	78.4%
41	10 Indiana	78.0%
40	11 Arizona	77.7%
39	12 Mississippi	77.2%
38	13 Kentucky	77.1%
37	14 Alabama	76.5%
36	15 Georgia	73.9%
35	16 Florida	73.3%
34	17 Michigan	71.9%
33	18 Missouri	71.2%
31	19 New Hampshire	70.6%
31	19 Ohio	70.6%
30	21 Rhode Island	69.3%
29	22 Nebraska	69.2%
28	23 Colorado	68.9%
27	24 Delaware	68.5%
26	25 Wisconsin	68.1%
25	26 Iowa	66.4%
24	27 Texas	66.1%
23	28 Pennsylvania	65.7%
21	29 Connecticut	65.3%
21	29 West Virginia	65.3%
20	31 New Jersey	63.1%
19	32 Kansas	62.4%
17	33 Nevada	62.3%
17	33 Virginia	62.3%
16	35 Oklahoma	61.4%
15	36 Maryland	60.1%
12	37 Massachusetts	60.0%
12	37 Minnesota	60.0%
12	37 Vermont	60.0%
11	40 Alaska	59.1%
10	41 Oregon	57.7%
9	42 New York	53.4%
8	43 Illinois	53.1%
7	44 Louisiana	52.7%
6	45 Wyoming	51.7%
5	46 California	51.5%
4	47 Washington	51.0%
3	48 North Dakota	48.6%
2	49 New Mexico	39.8%
1	50 Hawaii	36.3%
	District of Columbia	12.9%

Jobs Recovered as of June 2021		
Relative to Post February 2020 Loss		
	United States	69.1%
50	1 Utah	128.1%
49	2 Idaho	125.6%
48	3 Montana	104.4%
47	4 North Carolina	96.7%
46	5 South Dakota	91.7%
45	6 Tennessee	90.2%
44	7 Arizona	88.9%
43	8 Florida	85.6%
42	9 Arkansas	85.0%
41	10 Georgia	81.9%
40	11 Indiana	81.1%
39	12 South Carolina	80.4%
37	13 Alabama	80.3%
37	13 Colorado	80.3%
36	15 Texas	78.3%
35	16 Mississippi	78.2%
34	17 Maine	78.0%
33	18 Kentucky	76.5%
32	19 New Hampshire	76.1%
31	20 Missouri	75.9%
30	21 Nevada	74.6%
29	22 Rhode Island	74.5%
28	23 Michigan	74.1%
27	24 Nebraska	73.7%
26	25 Wisconsin	72.4%
25	26 Ohio	72.3%
24	27 Delaware	70.2%
23	28 Connecticut	69.9%
22	29 New Jersey	69.6%
21	30 Pennsylvania	68.6%
20	31 Vermont	66.7%
19	32 Oklahoma	66.6%
18	33 Kansas	66.5%
17	34 Iowa	66.1%
16	35 Massachusetts	65.1%
15	36 West Virginia	64.5%
14	37 Virginia	64.4%
13	38 California	62.8%
12	39 Minnesota	62.3%
11	40 Maryland	62.0%
10	41 Oregon	61.7%
9	42 Washington	60.6%
8	43 New York	57.6%
6	44 Illinois	56.7%
6	44 Wyoming	56.7%
5	46 Louisiana	56.1%
4	47 North Dakota	53.2%
3	48 Hawaii	52.0%
2	49 New Mexico	48.6%
1	50 Alaska	46.3%
	District of Columbia	24.5%

Jobs Recovered as of September 2021		
Relative to Post February 2020 Loss		
	United States	76.5%
50	1 Idaho	134.6%
49	2 Utah	131.0%
48	3 Montana	109.9%
47	4 North Carolina	99.3%
46	5 South Dakota	98.4%
45	6 Arizona	97.9%
44	7 Florida	97.1%
43	8 Arkansas	93.1%
42	9 Texas	92.0%
41	10 Tennessee	90.4%
40	11 Georgia	89.8%
39	12 Colorado	86.7%
38	13 Indiana	86.1%
37	14 Mississippi	85.4%
36	15 Nevada	84.6%
35	16 South Carolina	84.2%
34	17 Maine	82.5%
33	18 New Hampshire	81.5%
31	19 Alabama	80.4%
31	19 Missouri	80.4%
30	21 Kentucky	80.3%
29	22 Rhode Island	78.8%
28	23 Michigan	78.2%
27	24 New Jersey	78.0%
26	25 Nebraska	74.5%
25	26 Ohio	74.3%
24	27 Oregon	73.9%
22	28 Connecticut	73.7%
22	28 Wisconsin	73.7%
21	30 California	73.3%
19	31 Virginia	72.1%
19	31 Washington	72.1%
18	33 Pennsylvania	72.0%
17	34 Iowa	71.3%
16	35 Massachusetts	71.0%
15	36 Delaware	70.7%
14	37 Maryland	68.6%
13	38 Vermont	68.5%
11	39 Oklahoma	65.4%
11	39 West Virginia	65.4%
10	41 Kansas	65.1%
9	42 Minnesota	64.5%
8	43 New York	64.0%
7	44 Illinois	63.7%
6	45 New Mexico	61.4%
5	46 Wyoming	58.2%
4	47 Alaska	57.1%
3	48 North Dakota	57.0%
2	49 Hawaii	55.6%
1	50 Louisiana	46.3%
	District of Columbia	35.7%



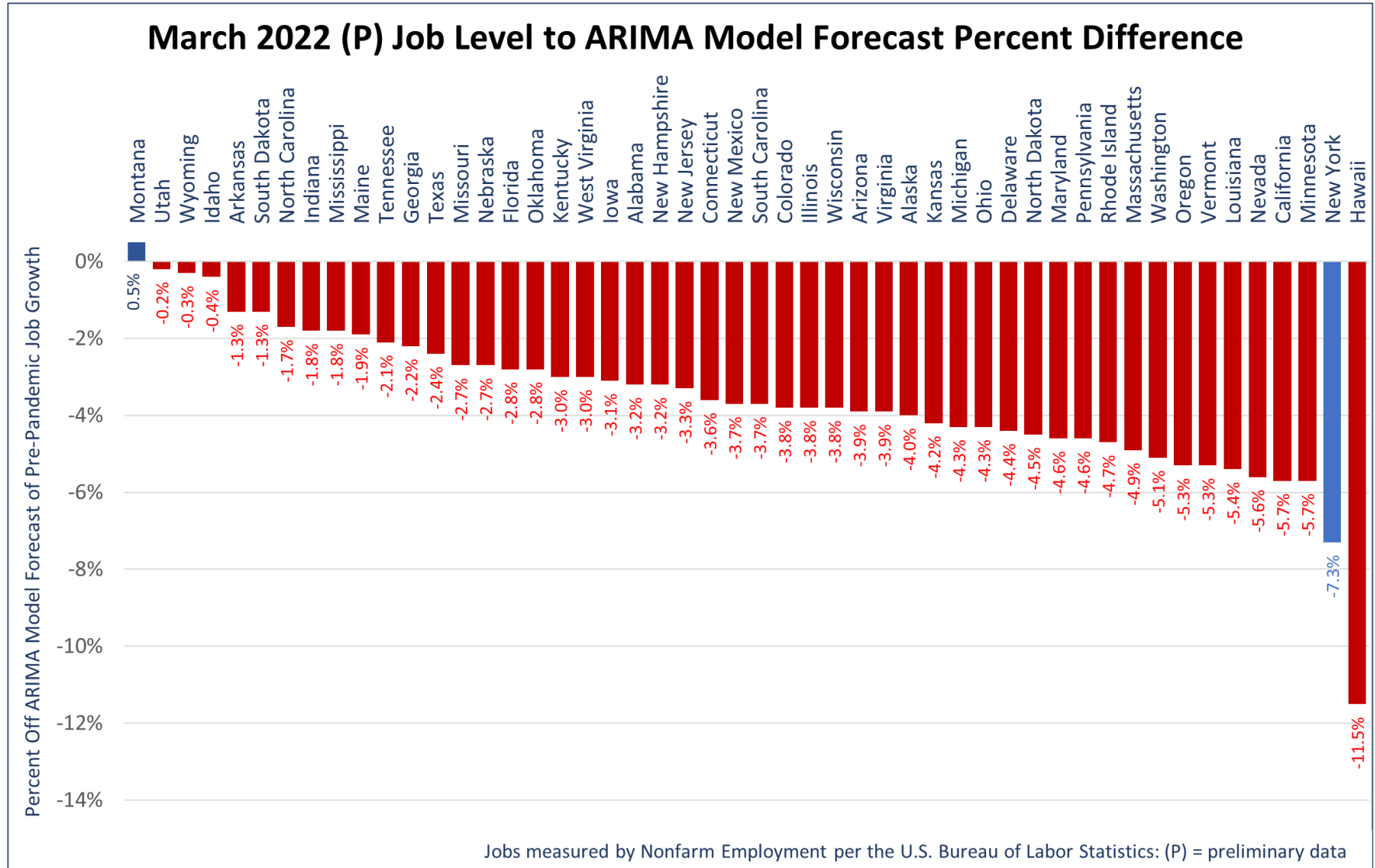
## Job Recovery Compared to February 2020

Jobs Recovered as of December 2021		
Relative to Post February 2020 Loss		
	United States	85.2%
50	1 Utah	143.4%
49	2 Idaho	140.6%
48	3 Montana	120.6%
47	4 Arkansas	106.9%
46	5 North Carolina	106.4%
45	6 Texas	106.2%
44	7 Florida	104.9%
43	8 Arizona	104.6%
42	9 Tennessee	103.3%
41	10 Georgia	101.4%
40	11 South Dakota	97.5%
39	12 Colorado	96.6%
38	13 Indiana	96.3%
37	14 Mississippi	95.1%
36	15 Nevada	92.2%
35	16 South Carolina	91.5%
34	17 Missouri	88.9%
33	18 Maine	87.6%
32	19 Kentucky	87.3%
31	20 Alabama	85.7%
30	21 New Hampshire	85.5%
29	22 New Jersey	84.8%
28	23 Michigan	84.5%
27	24 Rhode Island	81.7%
26	25 Washington	81.1%
24	26 California	80.0%
24	26 Oregon	80.0%
23	28 Virginia	79.5%
22	29 Massachusetts	79.4%
21	30 Iowa	78.9%
19	31 Connecticut	78.2%
19	31 Nebraska	78.2%
18	33 Maryland	77.4%
17	34 Pennsylvania	77.3%
16	35 Delaware	76.7%
15	36 Wisconsin	76.5%
14	37 Ohio	76.1%
13	38 Illinois	75.3%
12	39 Wyoming	75.1%
11	40 West Virginia	74.0%
10	41 New Mexico	73.3%
9	42 Vermont	72.8%
8	43 Alaska	72.4%
7	44 New York	72.2%
6	45 Oklahoma	71.8%
5	46 Minnesota	68.6%
4	47 North Dakota	67.3%
3	48 Louisiana	65.9%
2	49 Kansas	65.4%
1	50 Hawaii	56.9%
	District of Columbia	50.9%

Jobs Recovered as of February 2022		
Relative to Post February 2020 Loss		
	United States	90.9%
50	1 Utah	155.7%
49	2 Idaho	148.5%
48	3 Montana	124.2%
47	4 Texas	114.6%
46	5 North Carolina	113.3%
45	6 Florida	111.4%
44	7 Arizona	110.9%
43	8 Georgia	110.1%
42	9 Tennessee	109.9%
41	10 Arkansas	109.8%
40	11 Colorado	102.4%
39	12 South Carolina	100.2%
38	13 South Dakota	99.8%
37	14 Indiana	99.1%
36	15 Mississippi	98.9%
35	16 Nevada	95.8%
34	17 Maine	94.8%
33	18 Missouri	94.2%
32	19 Kentucky	92.2%
31	20 Nebraska	92.1%
29	21 Alabama	90.3%
29	21 New Jersey	90.3%
28	23 New Hampshire	89.2%
27	24 Washington	88.3%
26	25 California	87.1%
25	26 Michigan	87.0%
24	27 Wyoming	86.6%
23	28 Iowa	85.7%
22	29 Oregon	85.2%
21	30 Rhode Island	84.7%
20	31 Virginia	84.5%
19	32 Massachusetts	84.0%
18	33 Wisconsin	82.9%
16	34 New Mexico	81.6%
16	34 Pennsylvania	81.6%
15	36 Oklahoma	81.5%
14	37 Ohio	81.4%
13	38 Connecticut	80.2%
12	39 Delaware	80.1%
11	40 Illinois	79.7%
10	41 Maryland	79.5%
9	42 West Virginia	77.1%
8	43 Kansas	76.5%
7	44 Vermont	75.7%
6	45 New York	75.0%
4	46 Minnesota	72.9%
4	46 North Dakota	72.9%
3	48 Alaska	70.0%
2	49 Louisiana	69.0%
1	50 Hawaii	59.4%
	District of Columbia	51.7%

Jobs Recovered as of March 2022 (P)		
Relative to Post February 2020 Loss		
	United States	92.8%
50	1 Utah	154.8%
49	2 Idaho	148.0%
48	3 Montana	125.0%
47	4 Texas	116.7%
46	5 North Carolina	116.5%
45	6 Florida	112.2%
44	7 Georgia	112.1%
43	8 Tennessee	112.0%
42	9 Arizona	109.8%
41	10 Arkansas	109.6%
40	11 South Dakota	105.6%
39	12 Colorado	104.0%
38	13 Indiana	100.9%
37	14 Maine	98.5%
36	15 South Carolina	97.8%
35	16 Nevada	97.3%
34	17 Mississippi	97.1%
33	18 Missouri	94.1%
32	19 Kentucky	92.8%
31	20 New Jersey	92.7%
30	21 Nebraska	92.5%
29	22 New Hampshire	91.9%
28	23 Alabama	91.3%
27	24 Washington	90.4%
26	25 California	89.3%
25	26 Michigan	88.4%
24	27 Oregon	87.2%
23	28 Massachusetts	87.1%
22	29 Rhode Island	85.1%
21	30 Virginia	85.0%
20	31 New Mexico	84.9%
19	32 Iowa	84.8%
18	33 Ohio	83.4%
17	34 Wisconsin	83.2%
16	35 Oklahoma	83.1%
15	36 Pennsylvania	83.0%
14	37 Wyoming	82.8%
13	38 Delaware	82.1%
12	39 Illinois	81.9%
11	40 Connecticut	81.8%
10	41 Maryland	80.4%
9	42 West Virginia	76.6%
8	43 New York	76.4%
7	44 Minnesota	75.6%
6	45 Vermont	75.5%
5	46 Kansas	75.0%
4	47 North Dakota	72.4%
3	48 Alaska	69.8%
2	49 Louisiana	68.9%
1	50 Hawaii	59.2%
	District of Columbia	52.7%

Job Impact: Percent Below ARIMA Forecast of Pre-Pandemic Job Growth



## Percent Below ARIMA Model Forecast of Pre-Pandemic Job Growth

June 2021 Job Level to ARIMA Model Forecast Percent Difference		
	United States	-10.2%
49	1 Idaho	-5.2%
49	1 Utah	-5.2%
48	3 Arkansas	-5.8%
47	4 Oklahoma	-6.0%
46	5 Montana	-6.3%
45	6 South Dakota	-6.9%
44	7 Mississippi	-7.0%
42	8 Arizona	-7.1%
42	8 Nebraska	-7.1%
41	10 Alabama	-7.2%
40	11 Tennessee	-7.3%
39	12 Kansas	-7.6%
38	13 West Virginia	-7.7%
37	14 Wyoming	-8.0%
36	15 North Carolina	-8.1%
34	16 Iowa	-8.2%
34	16 Texas	-8.2%
32	18 Indiana	-8.3%
32	18 South Carolina	-8.3%
31	20 Missouri	-8.4%
30	21 Georgia	-8.6%
29	22 Ohio	-8.7%
27	23 Florida	-8.9%
27	23 Wisconsin	-8.9%
26	25 Delaware	-9.0%
25	26 Kentucky	-9.2%
24	27 North Dakota	-9.4%
23	28 Colorado	-9.5%
22	29 Virginia	-9.8%
20	30 New Mexico	-10.4%
20	30 Washington	-10.4%
19	32 Oregon	-10.9%
17	33 Louisiana	-11.2%
17	33 Minnesota	-11.2%
15	35 Illinois	-11.4%
15	35 Maine	-11.4%
14	37 New Hampshire	-11.5%
12	38 Connecticut	-11.7%
12	38 Maryland	-11.7%
11	40 Pennsylvania	-12.1%
10	41 California	-12.2%
9	42 Vermont	-12.9%
7	43 Alaska	-13.5%
7	43 Michigan	-13.5%
6	45 Rhode Island	-14.1%
5	46 Massachusetts	-15.1%
4	47 New Jersey	-15.8%
3	48 New York	-16.5%
2	49 Nevada	-18.1%
1	50 Hawaii	-21.0%
	District of Columbia	-10.8%

September 2021 Job Level to ARIMA Model Forecast Percent Difference		
	United States	-8.0%
49	1 Idaho	-3.2%
49	1 Utah	-3.2%
48	3 Montana	-3.7%
47	4 South Dakota	-3.8%
46	5 Arkansas	-4.3%
44	6 Mississippi	-4.7%
44	6 Nebraska	-4.7%
43	8 Alabama	-4.9%
41	9 Oklahoma	-5.0%
41	9 Wyoming	-5.0%
40	11 North Carolina	-5.6%
37	12 Delaware	-5.7%
37	12 Indiana	-5.7%
37	12 Kansas	-5.7%
34	15 Iowa	-5.8%
34	15 Missouri	-5.8%
34	15 Wisconsin	-5.8%
33	18 Tennessee	-5.9%
32	19 South Carolina	-6.1%
31	20 Kentucky	-6.2%
28	21 Maine	-6.4%
28	21 Ohio	-6.4%
28	21 Virginia	-6.4%
27	24 New Hampshire	-6.7%
26	25 Arizona	-6.8%
24	26 Georgia	-7.0%
24	26 West Virginia	-7.0%
21	28 Connecticut	-7.2%
21	28 North Dakota	-7.2%
21	28 Texas	-7.2%
20	31 Colorado	-7.3%
19	32 Florida	-7.9%
18	33 Minnesota	-8.0%
17	34 Maryland	-8.1%
16	35 Illinois	-8.2%
15	36 Washington	-8.3%
13	37 Pennsylvania	-8.4%
13	37 Vermont	-8.4%
12	39 Oregon	-8.5%
11	40 Michigan	-8.8%
10	41 New Mexico	-8.9%
9	42 New Jersey	-9.0%
8	43 Rhode Island	-9.1%
7	44 Louisiana	-9.4%
6	45 Alaska	-10.1%
5	46 Massachusetts	-10.6%
4	47 California	-10.9%
3	48 New York	-11.5%
2	49 Nevada	-14.0%
1	50 Hawaii	-23.3%
	District of Columbia	-9.7%

December 2021 Job Level to ARIMA Model Forecast Percent Difference		
	United States	-7.8%
49	1 Idaho	-2.0%
49	1 Utah	-2.0%
48	3 Montana	-2.9%
47	4 South Dakota	-3.2%
45	5 Mississippi	-3.6%
45	5 Wyoming	-3.6%
44	7 Arkansas	-3.8%
43	8 Alabama	-3.9%
42	9 Nebraska	-4.1%
41	10 Tennessee	-4.2%
40	11 North Carolina	-4.3%
39	12 Oklahoma	-4.4%
37	13 Indiana	-4.9%
37	13 South Carolina	-4.9%
36	15 Iowa	-5.0%
35	16 Missouri	-5.1%
34	17 Maine	-5.3%
33	18 Kansas	-5.4%
32	19 Delaware	-5.5%
30	20 Georgia	-5.6%
30	20 Wisconsin	-5.6%
28	22 Arizona	-5.8%
28	22 Virginia	-5.8%
27	24 West Virginia	-5.9%
26	25 Ohio	-6.0%
25	26 Alaska	-6.1%
24	27 Kentucky	-6.2%
23	28 Texas	-6.3%
22	29 Florida	-6.8%
21	30 Connecticut	-7.1%
20	31 North Dakota	-7.2%
18	32 Maryland	-7.4%
18	32 New Hampshire	-7.4%
17	34 Louisiana	-7.6%
16	35 Colorado	-7.9%
15	36 Illinois	-8.3%
14	37 New Jersey	-8.4%
13	38 Pennsylvania	-8.6%
12	39 Washington	-8.8%
11	40 Minnesota	-8.9%
10	41 Rhode Island	-9.1%
9	42 Oregon	-9.3%
8	43 Michigan	-9.5%
7	44 Massachusetts	-9.6%
6	45 Vermont	-9.7%
5	46 New Mexico	-9.8%
4	47 California	-10.5%
3	48 New York	-11.3%
2	49 Nevada	-12.5%
1	50 Hawaii	-17.5%
	District of Columbia	-10.2%

## Percent Below ARIMA Model Forecast of Pre-Pandemic Job Growth

March 2021 Job Level to ARIMA			June 2021 Job Level to ARIMA			September 2021 Job Level to ARIMA		
	Model Forecast	Percent Difference		Model Forecast	Percent Difference		Model Forecast	Percent Difference
	United States	-6.9%		United States	-6.5%		United States	-5.8%
50	1 Idaho	-1.1%	50	1 Utah	-0.6%	50	1 Idaho	-0.5%
49	2 Utah	-1.3%	49	2 Idaho	-0.8%	49	2 Montana	-0.7%
48	3 Montana	-1.7%	48	3 Montana	-1.1%	48	3 Utah	-1.0%
47	4 South Dakota	-2.4%	47	4 South Dakota	-2.0%	47	4 South Dakota	-1.6%
46	5 Arkansas	-2.8%	46	5 Wyoming	-2.5%	46	5 Arkansas	-2.3%
45	6 Wyoming	-3.0%	44	6 Arkansas	-2.8%	45	6 Wyoming	-2.4%
44	7 Mississippi	-3.6%	44	6 North Carolina	-2.8%	43	7 Mississippi	-2.9%
43	8 Alabama	-3.8%	43	8 Tennessee	-3.4%	43	7 North Carolina	-2.9%
42	9 Nebraska	-3.9%	41	9 Alabama	-3.7%	42	9 Indiana	-3.6%
41	10 North Carolina	-4.0%	41	9 Mississippi	-3.7%	40	10 Florida	-3.8%
40	11 Maine	-4.1%	39	11 Nebraska	-3.8%	40	10 Tennessee	-3.8%
39	12 Oklahoma	-4.2%	39	11 Oklahoma	-3.8%	36	12 Alabama	-3.9%
37	13 Kentucky	-4.3%	38	13 Indiana	-4.1%	36	12 Maine	-3.9%
37	13 Tennessee	-4.3%	37	14 Missouri	-4.2%	36	12 Missouri	-3.9%
35	15 Indiana	-4.4%	36	15 Maine	-4.3%	36	12 Nebraska	-3.9%
35	15 Iowa	-4.4%	35	16 Arizona	-4.5%	32	16 Arizona	-4.1%
33	17 Missouri	-4.6%	33	17 Kansas	-4.6%	32	16 Georgia	-4.1%
33	17 South Carolina	-4.6%	33	17 Wisconsin	-4.6%	32	16 Oklahoma	-4.1%
32	19 West Virginia	-4.7%	30	19 Georgia	-4.7%	32	16 Texas	-4.1%
31	20 Kansas	-4.9%	30	19 Iowa	-4.7%	31	20 Iowa	-4.3%
30	21 Wisconsin	-5.0%	30	19 Kentucky	-4.7%	30	21 Kentucky	-4.4%
29	22 Arizona	-5.1%	27	22 Florida	-4.8%	29	22 New Hampshire	-4.5%
27	23 Delaware	-5.3%	27	22 South Carolina	-4.8%	28	23 Wisconsin	-4.6%
27	23 Georgia	-5.3%	27	22 West Virginia	-4.8%	26	24 South Carolina	-4.7%
26	25 Ohio	-5.4%	26	25 Texas	-5.0%	26	24 West Virginia	-4.7%
24	26 Alaska	-5.5%	25	26 New Hampshire	-5.1%	25	26 Connecticut	-4.8%
24	26 Virginia	-5.5%	22	27 Colorado	-5.3%	23	27 Kansas	-4.9%
23	28 New Hampshire	-5.8%	22	27 Delaware	-5.3%	23	27 Virginia	-4.9%
22	29 Texas	-5.9%	22	27 Ohio	-5.3%	22	29 Colorado	-5.0%
21	30 Florida	-6.0%	21	30 Connecticut	-5.4%	21	30 Ohio	-5.2%
20	31 Connecticut	-6.1%	20	31 Virginia	-5.5%	20	31 New Jersey	-5.3%
19	32 Colorado	-6.2%	19	32 North Dakota	-6.1%	19	32 Delaware	-5.5%
18	33 North Dakota	-6.5%	18	33 Rhode Island	-6.3%	18	33 Rhode Island	-5.6%
16	34 Maryland	-6.7%	17	34 New Jersey	-6.5%	17	34 Alaska	-5.7%
16	34 Minnesota	-6.7%	14	35 Illinois	-6.6%	16	35 Illinois	-5.8%
15	36 Illinois	-6.9%	14	35 Maryland	-6.6%	14	36 Maryland	-5.9%
14	37 Pennsylvania	-7.1%	14	35 Minnesota	-6.6%	14	36 North Dakota	-5.9%
12	38 Louisiana	-7.2%	13	38 Pennsylvania	-6.7%	13	38 New Mexico	-6.0%
12	38 Rhode Island	-7.2%	11	39 Louisiana	-6.9%	12	39 Michigan	-6.2%
10	40 Michigan	-7.4%	11	39 Vermont	-6.9%	9	40 Oregon	-6.3%
10	40 New Jersey	-7.4%	10	41 Michigan	-7.0%	9	40 Pennsylvania	-6.3%
9	42 Oregon	-7.7%	9	42 Washington	-7.2%	9	40 Washington	-6.3%
8	43 Washington	-7.9%	8	43 Alaska	-7.3%	7	43 Minnesota	-6.6%
6	44 New Mexico	-8.2%	7	44 New Mexico	-7.4%	7	43 Vermont	-6.6%
6	44 Vermont	-8.2%	6	45 Oregon	-7.6%	4	45 California	-7.2%
5	46 Massachusetts	-8.5%	5	46 Massachusetts	-7.9%	4	45 Massachusetts	-7.2%
4	47 California	-9.5%	4	47 California	-8.2%	4	45 Nevada	-7.2%
3	48 New York	-10.6%	3	48 Nevada	-8.9%	3	48 Louisiana	-8.4%
2	49 Nevada	-11.2%	2	49 New York	-10.1%	2	49 New York	-9.2%
1	50 Hawaii	-15.8%	1	50 Hawaii	-12.4%	1	50 Hawaii	-11.8%
	District of Columbia	-10.5%		District of Columbia	-9.5%		District of Columbia	-8.5%

## Percent Off ARIMA Forecast of Pre-Pandemic Job Growth

December 2021 Job Level to ARIMA			February 2022 Job Level to ARIMA			March 2022 (P) Job Level to ARIMA		
	Model	Forecast Percent Difference		Model	Forecast Percent Difference		Model	Forecast Percent Difference
	United States	-5.0%		United States	-4.4%		United States	-4.2%
50	1 Montana	0.3%	50	1 Montana	0.5%	50	1 Montana	0.5%
48	2 Idaho	-0.5%	48	2 Utah	0.1%	49	2 Utah	-0.2%
48	2 Utah	-0.5%	48	2 Wyoming	0.1%	48	3 Wyoming	-0.3%
47	4 Wyoming	-0.9%	47	4 Idaho	-0.1%	47	4 Idaho	-0.4%
46	5 Arkansas	-1.3%	46	5 Arkansas	-1.2%	45	5 Arkansas	-1.3%
44	6 Mississippi	-1.9%	45	6 Mississippi	-1.5%	45	5 South Dakota	-1.3%
44	6 South Dakota	-1.9%	44	7 South Dakota	-1.8%	44	7 North Carolina	-1.7%
43	8 Indiana	-2.3%	42	8 Indiana	-2.0%	42	8 Indiana	-1.8%
42	9 North Carolina	-2.5%	42	8 North Carolina	-2.0%	42	8 Mississippi	-1.8%
41	10 Tennessee	-2.7%	41	10 Tennessee	-2.2%	41	10 Maine	-1.9%
40	11 Texas	-3.0%	40	11 Georgia	-2.3%	40	11 Tennessee	-2.1%
38	12 Georgia	-3.1%	38	12 Maine	-2.4%	39	12 Georgia	-2.2%
38	12 Missouri	-3.1%	38	12 Texas	-2.4%	38	13 Texas	-2.4%
36	14 Florida	-3.3%	37	14 Nebraska	-2.6%	36	14 Missouri	-2.7%
36	14 Maine	-3.3%	35	15 Florida	-2.7%	36	14 Nebraska	-2.7%
35	16 West Virginia	-3.4%	35	15 Missouri	-2.7%	34	16 Florida	-2.8%
34	17 Kentucky	-3.5%	34	17 Oklahoma	-2.9%	34	16 Oklahoma	-2.8%
31	18 Alabama	-3.6%	31	18 Iowa	-3.0%	32	18 Kentucky	-3.0%
31	18 Alaska	-3.6%	31	18 Kentucky	-3.0%	32	18 West Virginia	-3.0%
31	18 Iowa	-3.6%	31	18 West Virginia	-3.0%	31	20 Iowa	-3.1%
30	21 Oklahoma	-3.7%	30	21 Alabama	-3.2%	29	21 Alabama	-3.2%
29	22 Nebraska	-3.8%	29	22 South Carolina	-3.3%	29	21 New Hampshire	-3.2%
28	23 Arizona	-3.9%	26	23 Arizona	-3.6%	28	23 New Jersey	-3.3%
26	24 Connecticut	-4.1%	26	23 New Hampshire	-3.6%	27	24 Connecticut	-3.6%
26	24 New Hampshire	-4.1%	26	23 New Jersey	-3.6%	25	25 New Mexico	-3.7%
24	26 Colorado	-4.2%	25	26 Wisconsin	-3.7%	25	25 South Carolina	-3.7%
24	26 South Carolina	-4.2%	23	27 Colorado	-3.8%	22	27 Colorado	-3.8%
23	28 Virginia	-4.3%	23	27 Connecticut	-3.8%	22	27 Illinois	-3.8%
22	29 New Jersey	-4.4%	21	29 Alaska	-3.9%	22	27 Wisconsin	-3.8%
20	30 Illinois	-4.5%	21	29 Virginia	-3.9%	20	30 Arizona	-3.9%
20	30 Wisconsin	-4.5%	18	31 Illinois	-4.0%	20	30 Virginia	-3.9%
19	32 New Mexico	-4.8%	18	31 Kansas	-4.0%	19	32 Alaska	-4.0%
16	33 Delaware	-4.9%	18	31 New Mexico	-4.0%	18	33 Kansas	-4.2%
16	33 Maryland	-4.9%	17	34 North Dakota	-4.4%	16	34 Michigan	-4.3%
16	33 North Dakota	-4.9%	16	35 Ohio	-4.5%	16	34 Ohio	-4.3%
14	36 Kansas	-5.0%	14	36 Delaware	-4.6%	15	36 Delaware	-4.4%
14	36 Michigan	-5.0%	14	36 Michigan	-4.6%	14	37 North Dakota	-4.5%
12	38 Ohio	-5.2%	12	38 Maryland	-4.7%	12	38 Maryland	-4.6%
12	38 Rhode Island	-5.2%	12	38 Rhode Island	-4.7%	12	38 Pennsylvania	-4.6%
11	40 Pennsylvania	-5.5%	11	40 Pennsylvania	-4.8%	11	40 Rhode Island	-4.7%
9	41 Louisiana	-5.7%	9	41 Vermont	-5.2%	10	41 Massachusetts	-4.9%
9	41 Washington	-5.7%	9	41 Washington	-5.2%	9	42 Washington	-5.1%
8	43 Vermont	-5.8%	6	43 Louisiana	-5.4%	7	43 Oregon	-5.3%
7	44 Oregon	-5.9%	6	43 Massachusetts	-5.4%	7	43 Vermont	-5.3%
6	45 Massachusetts	-6.0%	6	43 Oregon	-5.4%	6	45 Louisiana	-5.4%
5	46 Nevada	-6.1%	5	46 Nevada	-5.7%	5	46 Nevada	-5.6%
4	47 Minnesota	-6.4%	4	47 California	-5.9%	3	47 California	-5.7%
3	48 California	-6.6%	3	48 Minnesota	-6.0%	3	47 Minnesota	-5.7%
2	49 New York	-7.8%	2	49 New York	-7.5%	2	49 New York	-7.3%
1	50 Hawaii	-11.7%	1	50 Hawaii	-11.3%	1	50 Hawaii	-11.5%
	District of Columbia	-7.2%		District of Columbia	-7.3%		District of Columl	-7.2%



## Summary of Key Regression Statistics for Nonfarm Employment

Officially released in December 2021, the Georgia Center for Opportunity published a multiple-regression analysis of employment versus the severity of governmental actions in shutting down their economies, such as forced business closures, stay-at-home orders, gatherings restrictions, and forced school closures. In addition, the study ran bivariate regressions of governmental restrictions with COVID confirmed cases, COVID hospitalizations, and COVID deaths.

The results showed statistically significant evidence that the severity of governmental actions was negatively associated with employment 12 months and 15 months after the initiation of the pandemic (i.e., March 2020). Likewise, the proportion of the tourism and related industries to the overall size of the states' economies and the population densities also were found to be significant factors associated with employment. The prevalence of COVID-19 cases had a possible but questionable association.

For the bivariate analyses, COVID cases showed a statistically significant association with the severity of governmental actions. However, no such association was found for either COVID hospitalizations or COVID deaths.

The table below summarizes some of the key statistics and findings. The study used two metrics to measure the severity of governmental actions: the Government Severity Index and the Abridged Oxford Stringency Index.

Description	Government Severity Index		Abridged Oxford Stringency Index	
	March 2021	June 2021	March 2021	June 2021
<b>Government response statistics per regression analyses with alpha = 0.2 and HC3:</b>				
t-statistic	-2.25	-1.58	-4.96	-4.55
p-value	2.93E-02	1.22E-01	1.01E-05	3.87E-05
marginal effects	-0.007	-0.005	-0.013	-0.012
<b>Linear equation statistics per the same regression analyses:</b>				
multiple R	0.770	0.704	0.815	0.769
R square	0.593	0.495	0.665	0.592
Adjusted R square	0.557	0.450	0.643	0.565
Other factors in linear equation	Tourism Proportion Population Density Covid Prevalence		Tourism Proportion Population Density	

## Severity of Governmental Actions: March 1, 2020 through March 31, 2021

State	Government Severity Index			Abridged Oxford Stringency Index			Average Rank of Both Indexes
	Total Score	Average Daily Score	Rank	Total Score	Average Daily Score	Rank	
Washington	32,145	81.2	1	19,731	49.8	14	7.5
Hawaii	30,555	77.2	2	26,250	66.3	2	2
New York	29,350	74.1	3	25,508	64.4	3	3
Colorado	28,870	72.9	4	16,897	42.7	25	14.5
California	27,772	70.1	5	22,080	55.8	7	6
Illinois	27,721	70.0	6	18,499	46.7	18	12
New Mexico	26,840	67.8	7	26,593	67.2	1	4
Texas	26,762	67.6	8	17,040	43.0	24	16
Michigan	26,100	65.9	9	17,928	45.3	21	15
Connecticut	25,818	65.2	10	21,887	55.3	8	9
Maryland	25,803	65.2	11	20,136	50.8	11	11
Vermont	25,016	63.2	12	22,306	56.3	5	8.5
New Jersey	24,810	62.7	13	17,788	44.9	22	17.5
Minnesota	24,758	62.5	14	19,141	48.3	17	15.5
Massachusetts	24,648	62.2	15	21,680	54.7	9	12
Kentucky	23,713	59.9	16	19,883	50.2	13	14.5
Arkansas	23,603	59.6	17	14,501	36.6	39	28
Maine	23,441	59.2	18	22,204	56.1	6	12
North Carolina	22,878	57.8	19	20,296	51.3	10	14.5
Nevada	22,844	57.7	20	14,942	37.7	36	28
Louisiana	22,257	56.2	21	16,875	42.6	26	23.5
Pennsylvania	22,249	56.2	22	17,111	43.2	23	22.5
West Virginia	21,880	55.3	23	18,024	45.5	20	21.5
Arizona	21,448	54.2	24	13,498	34.1	44	34
Wisconsin	21,364	53.9	25	14,750	37.2	37	31
Florida	21,349	53.9	26	15,764	39.8	29	27.5
Mississippi	21,067	53.2	27	13,642	34.5	41	34
Alabama	20,913	52.8	28	11,219	28.3	45	36.5
Virginia	20,698	52.3	29	16,498	41.7	27	28
South Carolina	20,461	51.7	30	13,596	34.3	43	36.5
Delaware	20,459	51.7	31	19,968	50.4	12	21.5
Georgia	18,821	47.5	32	15,375	38.8	32	32
Idaho	18,725	47.3	33	15,033	38.0	35	34
Oregon	18,683	47.2	34	19,223	48.5	16	25
Rhode Island	18,539	46.8	35	23,325	58.9	4	19.5
Utah	18,528	46.8	36	10,282	26.0	47	41.5
Kansas	18,454	46.6	37	15,406	38.9	31	34
Indiana	18,114	45.7	38	14,691	37.1	38	38
Montana	17,409	44.0	39	15,336	38.7	33	36
New Hampshire	15,405	38.9	40	16,024	40.5	28	34
Wyoming	14,580	36.8	41	15,076	38.1	34	37.5
Alaska	13,219	33.4	42	18,389	46.4	19	30.5
Oklahoma	11,570	29.2	43	10,950	27.7	46	44.5
Tennessee	9,838	24.8	44	15,629	39.5	30	37
Missouri	9,155	23.1	45	14,416	36.4	40	42.5
Nebraska	8,574	21.7	46	13,605	34.4	42	44
Iowa	6,208	15.7	47	8,585	21.7	49	48
North Dakota	4,580	11.6	48	8,694	22.0	48	48
South Dakota	3,480	8.8	49	4,756	12.0	50	49.5
Ohio	2,280	5.8	50	19,592	49.5	15	32.5

## Economic Impact per the Multiple Regression Analyses

Marginal effect is the metric used to determine the associated economic impact of governmental actions on employment. This is a relative metric calculating the expected change in employment due to a change in severity of governmental actions within the range of the regression analyses. The impact is measured per each standard deviation ( $\sigma$ ) in the severity score based on the ARIMA Model forecast, not the pre-pandemic employment in February 2020. Note that a two standard deviation movement would result in double the effect.

Month of ARIMA Model Forecast =>	March 2021		June 2021	
	Marginal Effect =>	0.7%	1.3%	0.5%
Area	Impact on jobs per each $\sigma$			
United States	1,086,069	2,016,985	778,753	1,869,007
Alabama	14,781	27,450	10,586	25,406
Alaska	2,302	4,274	1,644	3,944
Arizona	21,545	40,013	15,485	37,164
Arkansas	9,171	17,033	6,571	15,770
California	126,474	234,880	90,810	217,944
Colorado	20,185	37,486	14,494	34,784
Connecticut	11,913	22,123	8,518	20,442
Delaware	3,310	6,146	2,370	5,688
Florida	65,041	120,791	46,715	112,115
Georgia	33,308	61,858	23,901	57,362
Hawaii	4,689	8,709	3,360	8,063
Idaho	5,571	10,345	4,004	9,608
Illinois	43,282	80,382	30,977	74,345
Indiana	22,390	41,581	16,032	38,477
Iowa	11,218	20,833	8,028	19,266
Kansas	10,081	18,723	7,215	17,315
Kentucky	13,843	25,709	9,913	23,791
Louisiana	14,025	26,047	10,033	24,079
Maine	4,521	8,397	3,236	7,766
Maryland	19,662	36,514	14,077	33,784
Massachusetts	26,508	49,230	19,002	45,605
Michigan	31,403	58,321	22,474	53,936
Minnesota	21,222	39,412	15,199	36,476
Mississippi	8,199	15,227	5,868	14,082
Missouri	20,707	38,455	14,825	35,579

Month of ARIMA Model Forecast =>	March 2021		June 2021	
	Marginal Effect =>	0.7%	1.3%	0.5%
Area	Impact on jobs per each $\sigma$			
Montana	3,472	6,448	2,488	5,970
Nebraska	7,305	13,566	5,233	12,558
Nevada	10,403	19,321	7,480	17,951
New Hampshire	4,868	9,040	3,486	8,366
New Jersey	29,914	55,554	21,423	51,414
New Mexico	6,094	11,317	4,362	10,469
New York	69,861	129,743	50,071	120,170
North Carolina	32,998	61,282	23,673	56,814
North Dakota	3,091	5,741	2,214	5,312
Ohio	39,610	73,561	28,360	68,063
Oklahoma	11,960	22,212	8,556	20,533
Oregon	14,057	26,105	10,085	24,204
Pennsylvania	42,990	79,838	30,768	73,842
Rhode Island	3,579	6,647	2,562	6,149
South Carolina	15,654	29,072	11,234	26,960
South Dakota	3,132	5,816	2,243	5,382
Tennessee	22,481	41,751	16,132	38,717
Texas	92,787	172,319	66,618	159,883
Utah	11,297	20,981	8,122	19,492
Vermont	2,206	4,096	1,578	3,786
Virginia	28,977	53,814	20,755	49,812
Washington	25,125	46,661	18,036	43,285
West Virginia	5,028	9,338	3,593	8,622
Wisconsin	21,118	39,220	15,118	36,282
Wyoming	1,996	3,706	1,425	3,420
District of Columbia	5,698	10,582	4,082	9,797

## Full Report

The full report of the study is available at <https://georgiaopportunity.org/state-pandemic-response-impact-on-work-opportunity>.

## Statistical Package

The regression analyses and the ARIMA Model forecasting used in the study were generated using the Real Statistics Resource Pack software (Release 7.6). Copyright (2013 – 2021) Charles Zaiontz: [www.real-statistics.com](http://www.real-statistics.com)."