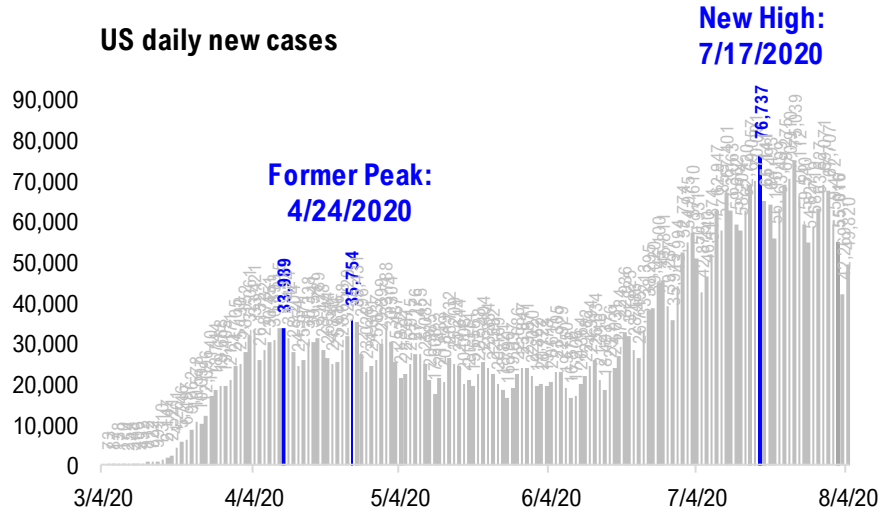


FSInsight Daily COVID-19 Chartbook

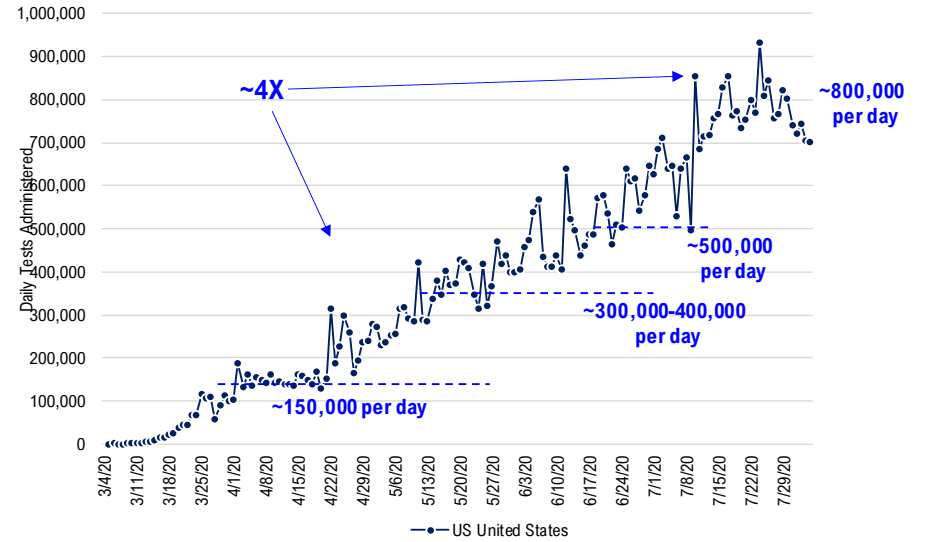


#1: USA COVID-19 Situation at a Glance...

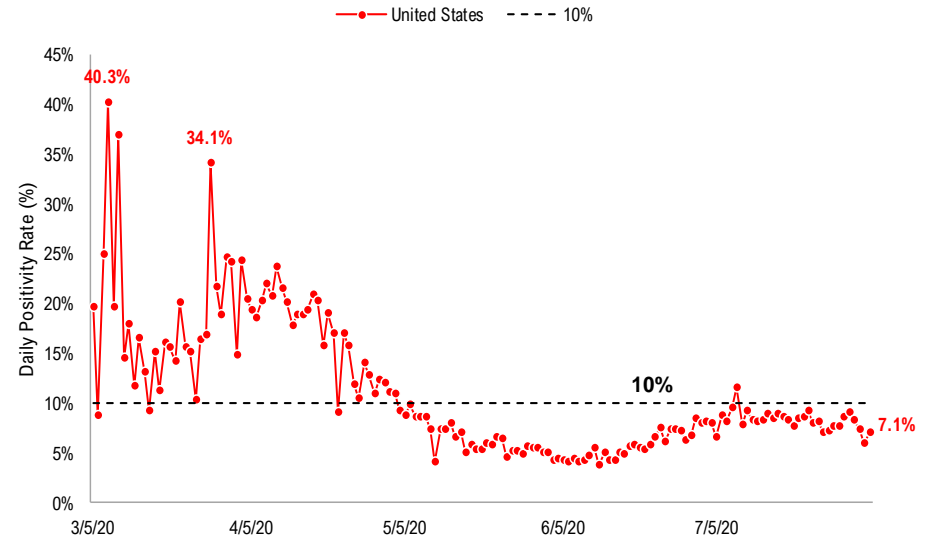
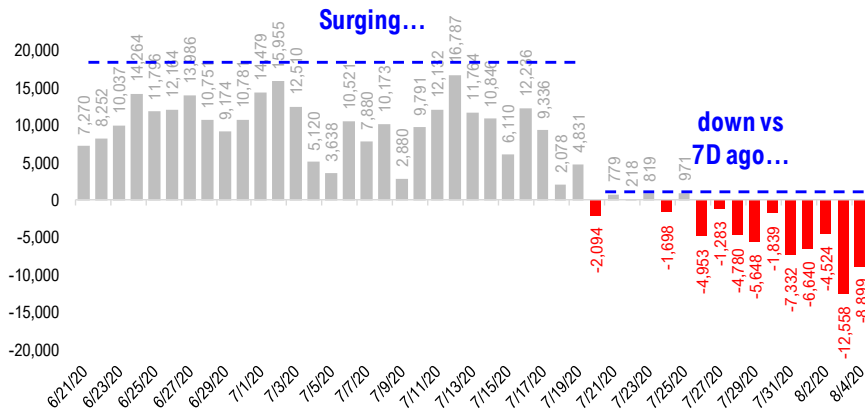
US daily new cases



USA total COVID-19 tests administered



US daily new cases rolling 7D delta - past 6 weeks



#2: USA State COVID-19 Situation at a Glance...

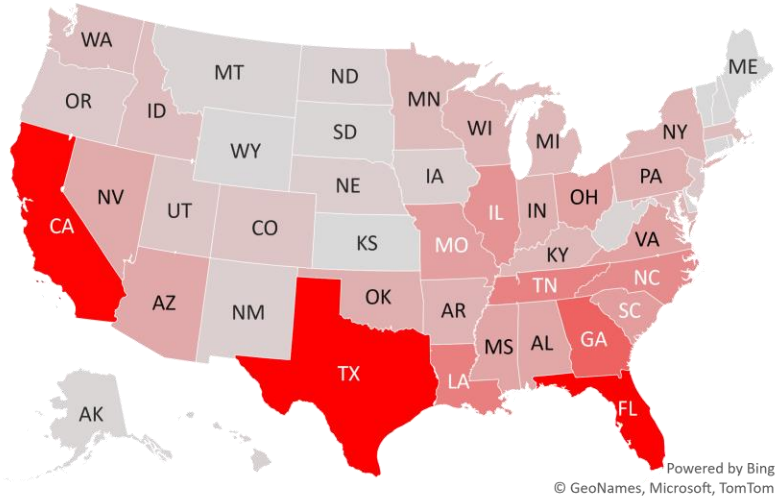
	% US Pop	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents		Since Peak	
		8/4/20	7D Delta	8/4/20	7D Delta	# Days	% Decline in Daily Cases
United States	100%	49,820	-8,899	149	-26	18	-32%
States:							
1 Texas	8.7%	9,167	+825	238	+26	18	-43%
2 Florida	6.5%	5,446	-3,784	269	-158	22	-55%
3 California	11.9%	4,526	-1,474	163	-16	11	-44%
4 Georgia	3.2%	2,513	-1,696	249	-61	10	-38%
5 Louisiana	1.4%	1,874	+753	462	-62	14	-19%
6 Tennessee	2.1%	1,805	-750	208	-195	7	-48%
7 North Carolina	3.2%	1,629	-120	136	-23	17	-36%
8 Illinois	3.8%	1,471	+395	111	+10	82	-53%
9 South Carolina	1.6%	1,239	-453	232	-33	23	-40%
10 Missouri	1.8%	1,193	-580	153	-70	5	-51%
11 Virginia	2.6%	1,145	+223	135	+3	69	-14%
12 Ohio	3.5%	1,143	-177	86	-8	4	-35%
13 Mississippi	0.9%	1,074	-268	260	-99	5	-50%
14 Alabama	1.5%	1,041	-210	296	+8	10	-31%
15 Arizona	2.2%	1,008	-1,099	160	-109	33	-73%
16 Nevada	0.9%	980	-125	336	-2	17	-23%
17 Oklahoma	1.2%	861	-228	146	-165	7	-53%
18 Pennsylvania	3.9%	854	-266	54	-18	116	-62%
19 Indiana	2.0%	822	+51	106	-1	10	-25%
20 Arkansas	0.9%	784	+50	244	+1	10	-19%
21 New York	5.9%	746	+212	31	+2	116	-94%
22 Wisconsin	1.8%	728	-34	118	-15	10	-32%
23 Maryland	1.8%	710	+62	137	+1	75	-34%
24 Kentucky	1.3%	689	+164	110	+8	10	-34%
25 Michigan	3.0%	664	-5	57	-17	102	-54%
26 Minnesota	1.7%	602	+124	117	-1	9	-19%
27 Idaho	0.5%	559	+31	209	-51	18	-45%
28 Massachusetts	2.1%	546	+290	56	+12	101	-89%

	% US Pop	Sorted Daily Cases		Daily Cases (3D avg) per 1mm residents		Since Peak	
		8/4/20	7D Delta	8/4/20	7D Delta	# Days	% Decline in Daily Cases
United States	100%	49,820	-8,899	149	-26	18	-32%
States:							
29 Washington	2.3%	542	-144	127	+18	20	-6%
30 Colorado	1.7%	426	-323	65	-23	100	-48%
31 Utah	1.0%	378	-68	125	-3	17	-51%
32 New Jersey	2.7%	356	-127	35	-19	121	-92%
33 Oregon	1.3%	333	+5	70	-5	3	-20%
34 Puerto Rico	1.0%	300	+131	91	+34	1	-22%
35 Nebraska	0.6%	222	-36	136	+4	94	-49%
36 New Mexico	0.6%	210	-79	86	-73	6	-50%
37 Iowa	1.0%	201	-22	113	-4	24	-50%
38 North Dakota	0.2%	148	-7	145	-32	11	-19%
39 Rhode Island	0.3%	144	-66	116	+8	101	-71%
40 Hawaii	0.4%	144	+99	93	+61	0	0%
41 District of Columbia	0.2%	85	-2	91	-17	93	-72%
42 Montana	0.3%	82	-12	73	+3	4	-52%
43 Delaware	0.3%	82	+12	89	-14	98	-74%
44 West Virginia	0.5%	78	-41	59	-7	25	-39%
45 South Dakota	0.3%	59	+11	80	+9	87	-65%
46 Alaska	0.2%	53	-54	118	-61	2	-36%
47 Connecticut	1.1%	48	-46	28	-0	104	-93%
48 Wyoming	0.2%	36	-33	66	-16	97	-34%
49 New Hampshire	0.4%	33	-26	20	-1	94	-79%
50 U.S. Virgin Islands	0.0%	24	+13	131	+59	20	-32%
51 Guam	0.0%	7	+4	16	-8	45	-76%
52 Vermont	0.2%	5	+2	5	+1	121	-94%
53 Maine	0.4%	5	-1	9	-2	74	-82%
54 Northern Mariana Islands	0.0%	0	+0	23	+18	123	-33%
55 Kansas	0.9%	0	+0	122	+0	20	-54%
56 American Samoa	0.0%	0	+0	0	+0	-	-

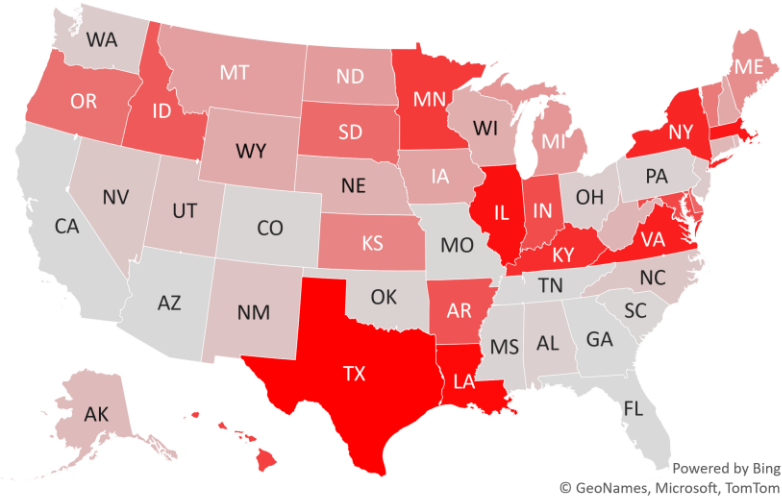
* 1,741 backlog cases were removed from Louisiana's stats for August 4th.
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

#3: USA COVID-19 Heat Map...

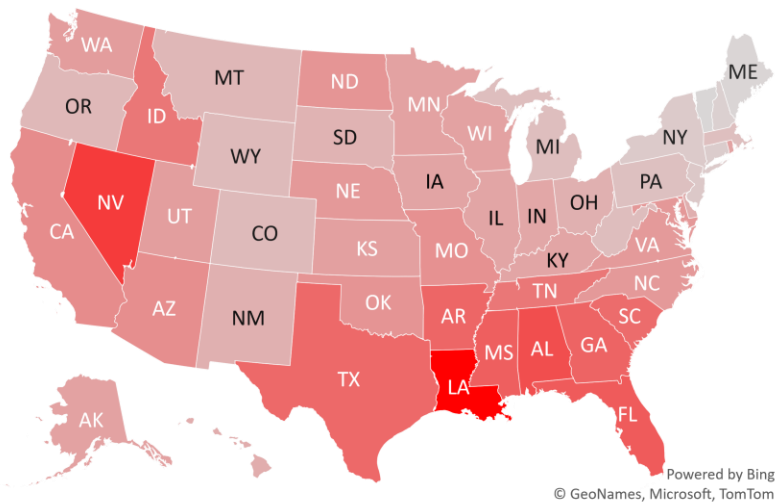
Daily Case Increases



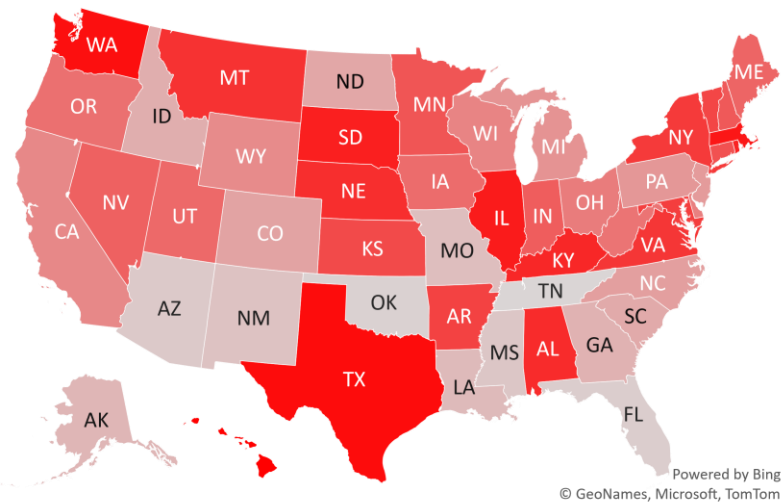
7D Delta in Daily New Cases



Daily Case Increases per 1mm Resident (3D Avg)



7D Delta in Daily New Cases per 1mm (3D Avg)



* 1,741 backlog cases were removed from Louisiana's stats for August 4th.

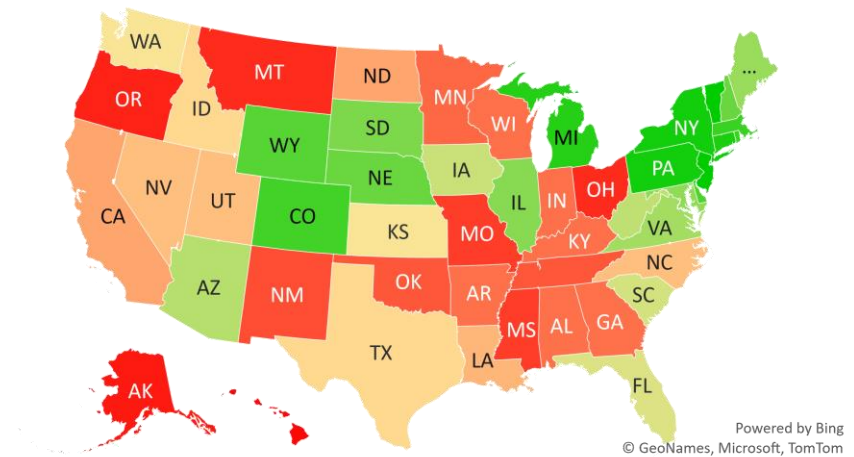
#4: # of Days since Daily Case Peaked by States...

Days since Daily Cases (3D Avg) Peak (as of 8/4)

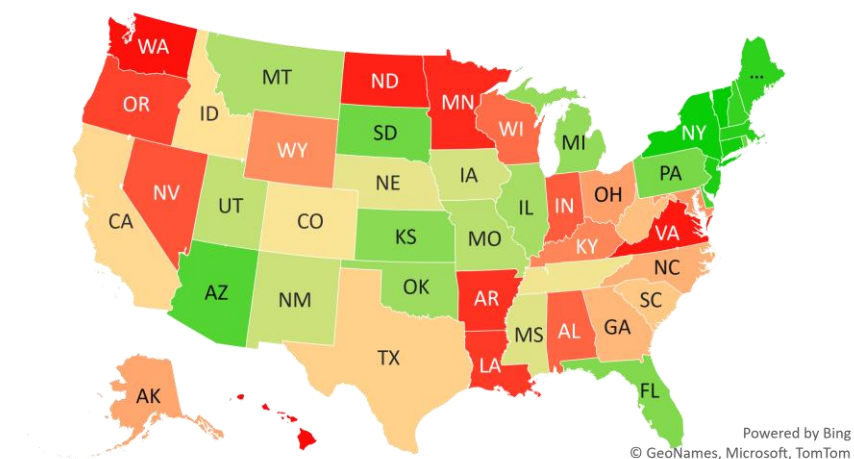
	Sorted			
	Peak Date	8/4/20	% off the Peak	% US Pop
United States	7/17/20	18	-32%	100%
States:				
Northern Mariana	4/3/20	123	-33%	0.0%
Vermont	4/5/20	121	-94%	0.2%
New Jersey	4/5/20	121	-92%	2.7%
Pennsylvania	4/10/20	116	-62%	3.9%
New York	4/10/20	116	-94%	5.9%
Connecticut	4/22/20	104	-93%	1.1%
Michigan	4/24/20	102	-54%	3.0%
Rhode Island	4/25/20	101	-71%	0.3%
Massachusetts	4/25/20	101	-89%	2.1%
Colorado	4/26/20	100	-48%	1.7%
Delaware	4/28/20	98	-74%	0.3%
Wyoming	4/29/20	97	-34%	0.2%
New Hampshire	5/2/20	94	-79%	0.4%
Nebraska	5/2/20	94	-49%	0.6%
District of Columbia	5/3/20	93	-72%	0.2%
South Dakota	5/9/20	87	-65%	0.3%
Illinois	5/14/20	82	-53%	3.8%
Maryland	5/21/20	75	-34%	1.8%
Maine	5/22/20	74	-82%	0.4%
Virginia	5/27/20	69	-14%	2.6%
Guam	6/20/20	45	-76%	0.0%
Arizona	7/2/20	33	-73%	2.2%
West Virginia	7/10/20	25	-39%	0.5%
Iowa	7/11/20	24	-50%	1.0%
South Carolina	7/12/20	23	-40%	1.6%
Florida	7/13/20	22	-55%	6.5%
Washington	7/15/20	20	-6%	2.3%
U.S. Virgin Islands	7/15/20	20	-32%	0.0%

	Sorted			
	Peak Date	8/4/20	% off the Peak	% US Pop
United States	7/17/20	18	-32%	100%
States:				
Kansas	7/15/20	20	-54%	0.9%
Texas	7/17/20	18	-43%	8.7%
Idaho	7/17/20	18	-45%	0.5%
Utah	7/18/20	17	-51%	1.0%
Nevada	7/18/20	17	-23%	0.9%
North Carolina	7/18/20	17	-36%	3.2%
Louisiana	7/21/20	14	-19%	1.4%
North Dakota	7/24/20	11	-19%	0.2%
California	7/24/20	11	-44%	11.9%
Wisconsin	7/25/20	10	-32%	1.8%
Kentucky	7/25/20	10	-34%	1.3%
Indiana	7/25/20	10	-25%	2.0%
Georgia	7/25/20	10	-38%	3.2%
Arkansas	7/25/20	10	-19%	0.9%
Alabama	7/25/20	10	-31%	1.5%
Minnesota	7/26/20	9	-19%	1.7%
Tennessee	7/28/20	7	-48%	2.1%
Oklahoma	7/28/20	7	-53%	1.2%
New Mexico	7/29/20	6	-50%	0.6%
Mississippi	7/30/20	5	-50%	0.9%
Missouri	7/30/20	5	-51%	1.8%
Ohio	7/31/20	4	-35%	3.5%
Montana	7/31/20	4	-52%	0.3%
Oregon	8/1/20	3	-20%	1.3%
Alaska	8/2/20	2	-36%	0.2%
Puerto Rico	8/3/20	1	-22%	1.0%
Hawaii	8/4/20	0	0%	0.4%

Days since Daily Case Peak: Greener = More Days



Daily Cases % off the Peak: Greener = Larger Decline



* 1,741 backlog cases were removed from Louisiana's stats for August 4th.
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

#5: US New Cases by States... (sorted by today's new cases)

Sorted
Last 3-day trend growth rates

	8/2/20	8/3/20	8/4/20	
United States	55,016	42,269	49,820	+7,551
States:				
1 Texas	6,226	5,303	9,167	<--higher
2 Florida	7,104	4,752	5,446	
3 California	9,032	5,739	4,526	
4 Georgia	3,165	2,258	2,513	
5 Louisiana	3,467	1,099	1,874	
6 Tennessee	1,443	1,009	1,805	<--higher
7 North Carolina	1,341	1,313	1,629	<--higher
8 Illinois	1,467	1,298	1,471	
9 South Carolina	1,189	1,163	1,239	
10 Missouri	582	1,047	1,193	
11 Virginia	981	1,324	1,145	
12 Ohio	944	932	1,143	<--higher
13 Mississippi	672	572	1,074	<--higher
14 Alabama	2,095	1,217	1,041	
15 Arizona	1,465	1,030	1,008	
16 Nevada	1,131	994	980	
17 Oklahoma	494	377	861	<--higher
18 Pennsylvania	654	565	854	<--higher
19 Indiana	735	576	822	
20 Arkansas	637	787	784	
21 New York	531	545	746	<--higher
22 Wisconsin	922	404	728	
23 Maryland	909	870	710	
24 Kentucky	462	323	689	<--higher
25 Michigan	426	604	664	
26 Minnesota	750	622	602	
27 Idaho	230	331	559	<--higher
28 Massachusetts	418	199	546	<--higher

Sorted
Last 3-day trend growth rates

	8/2/20	8/3/20	8/4/20	
United States	55,016	42,269	49,820	+7,551
States:				
29 Washington	1,738	632	542	
30 Colorado	449	252	426	
31 Utah	473	354	378	
32 New Jersey	321	264	356	
33 Oregon	277	272	333	<--higher
34 Puerto Rico	292	278	300	
35 Nebraska	311	254	222	
36 New Mexico	220	114	210	
37 Iowa	516	349	201	
38 North Dakota	58	125	148	
39 Rhode Island	171	53	144	
40 Hawaii	45	205	144	
41 District of Columbia	69	39	85	<--higher
42 Montana	92	60	82	
43 Delaware	72	106	82	
44 West Virginia	119	119	78	
45 South Dakota	88	65	59	
46 Alaska	144	61	53	
47 Connecticut	0	252	48	
48 Wyoming	39	40	36	
49 New Hampshire	21	26	33	<--higher
50 U.S. Virgin Islands	0	18	24	
51 Guam	0	1	7	
52 Vermont	5	0	5	
53 Maine	21	12	5	
54 Northern Mariana Islands	3	1	0	
55 Kansas	0	1,064	0	
56 American Samoa	0	0	0	

* 1,741 backlog cases were removed from Louisiana's stats for August 4th.

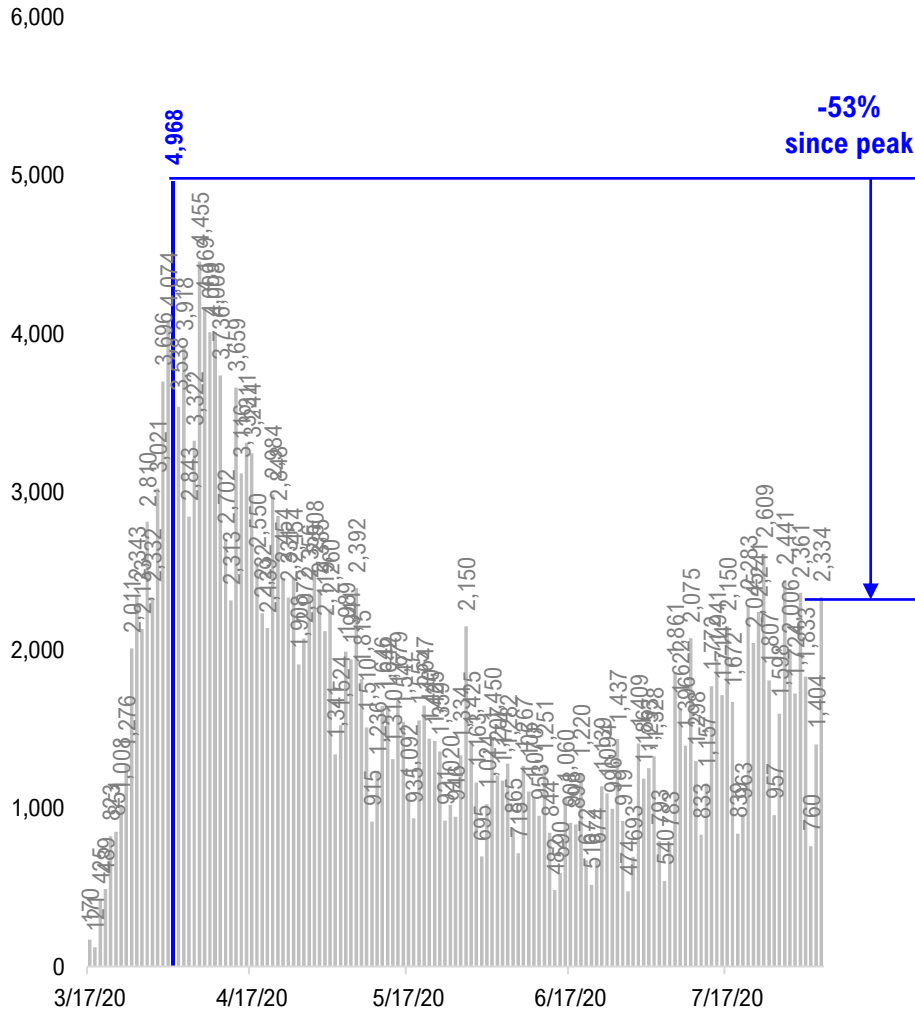
<--higher – if the state has 20% or more daily cases than prior two days...

Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

#6: US Daily Hospitalizations...(aggregated by data type)

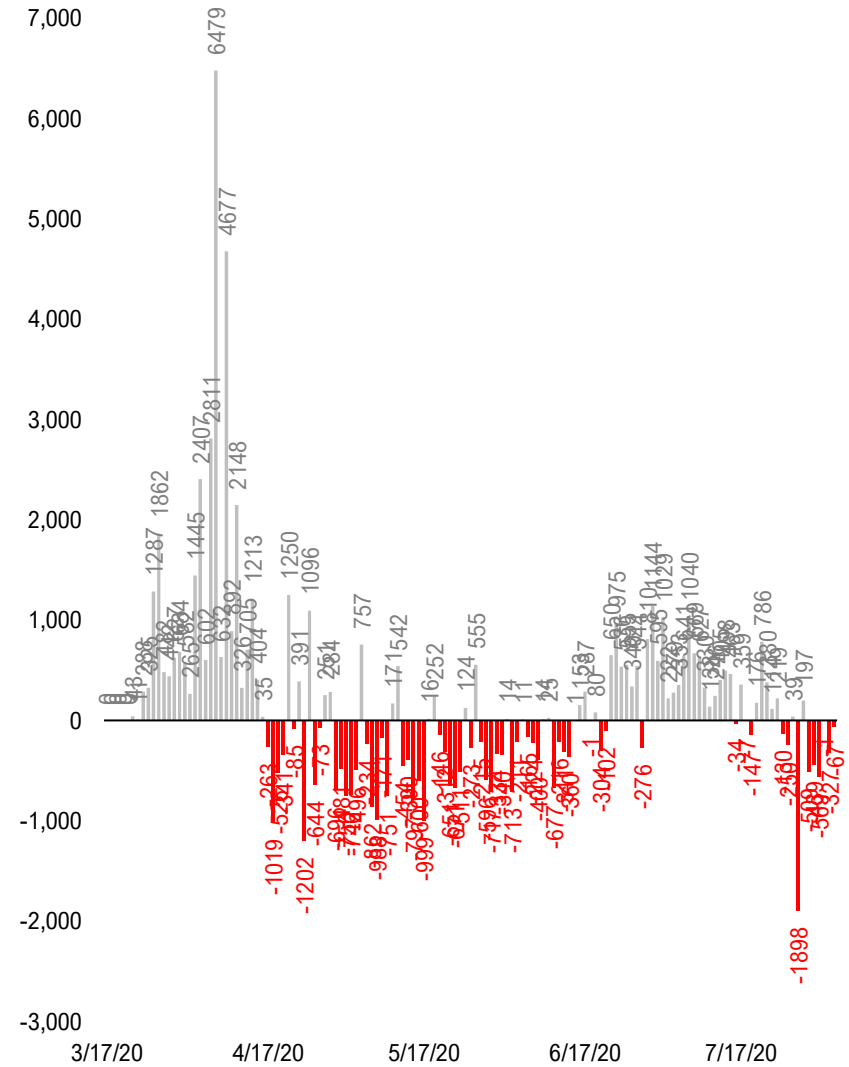
US Gross Hospitalizations

(Composite of 33 states that report "gross hospitalizations")



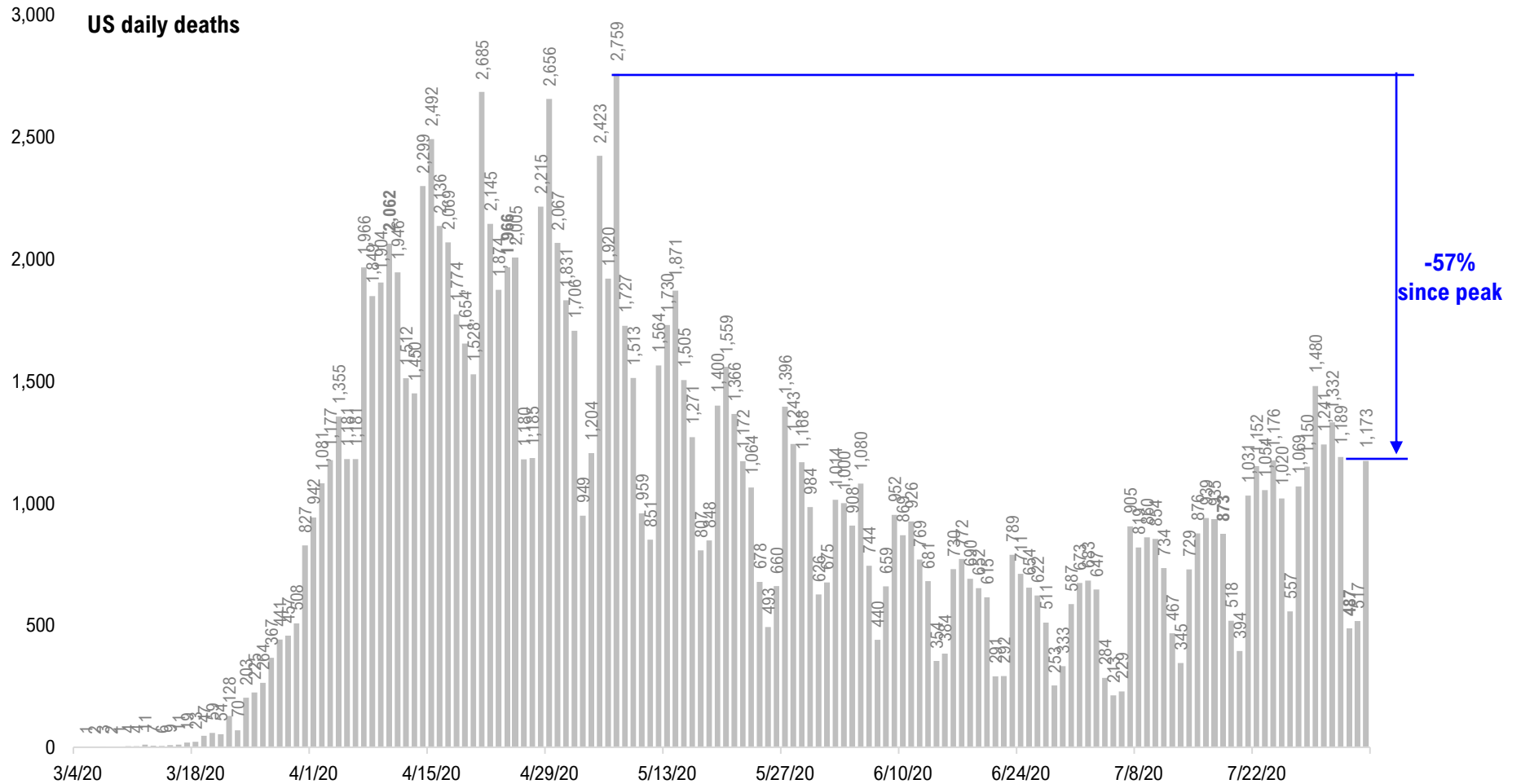
US Net Hospitalizations

(Composite of 18 states that report "net/current hospitalizations")



#7: US Daily New Fatalities...

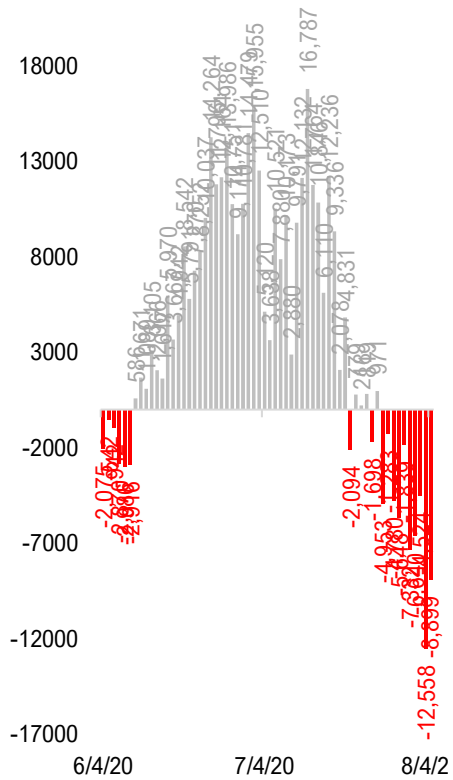
US daily COVID-19 Fatalities



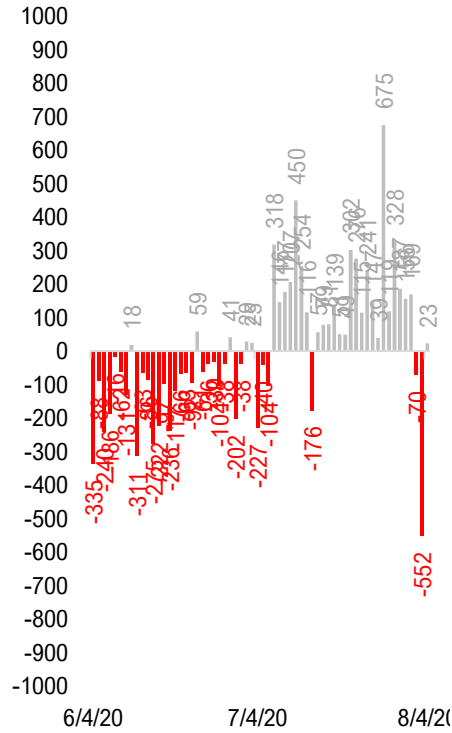
Source: Fundstrat, COVID-19 Tracking Project, State Department of Health

#8: Rolling 7-Day Change in the Key Metrics... (Past 8 Weeks)

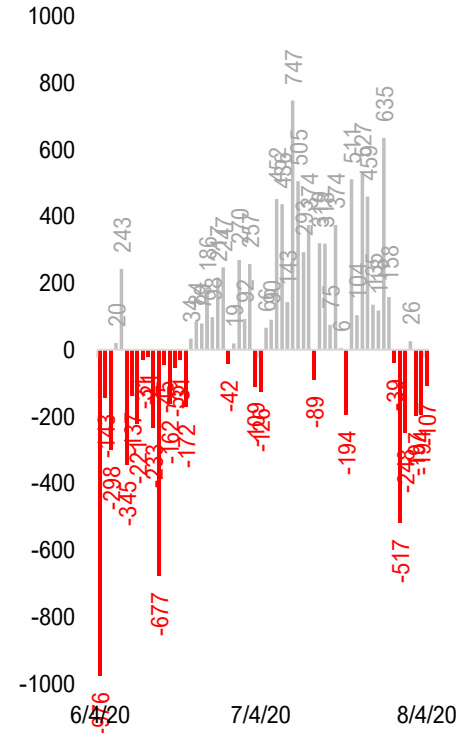
Daily New Cases



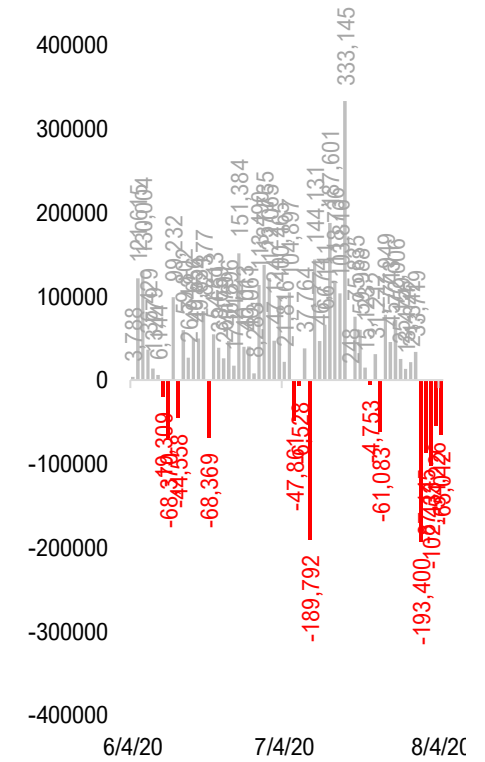
Daily Deaths



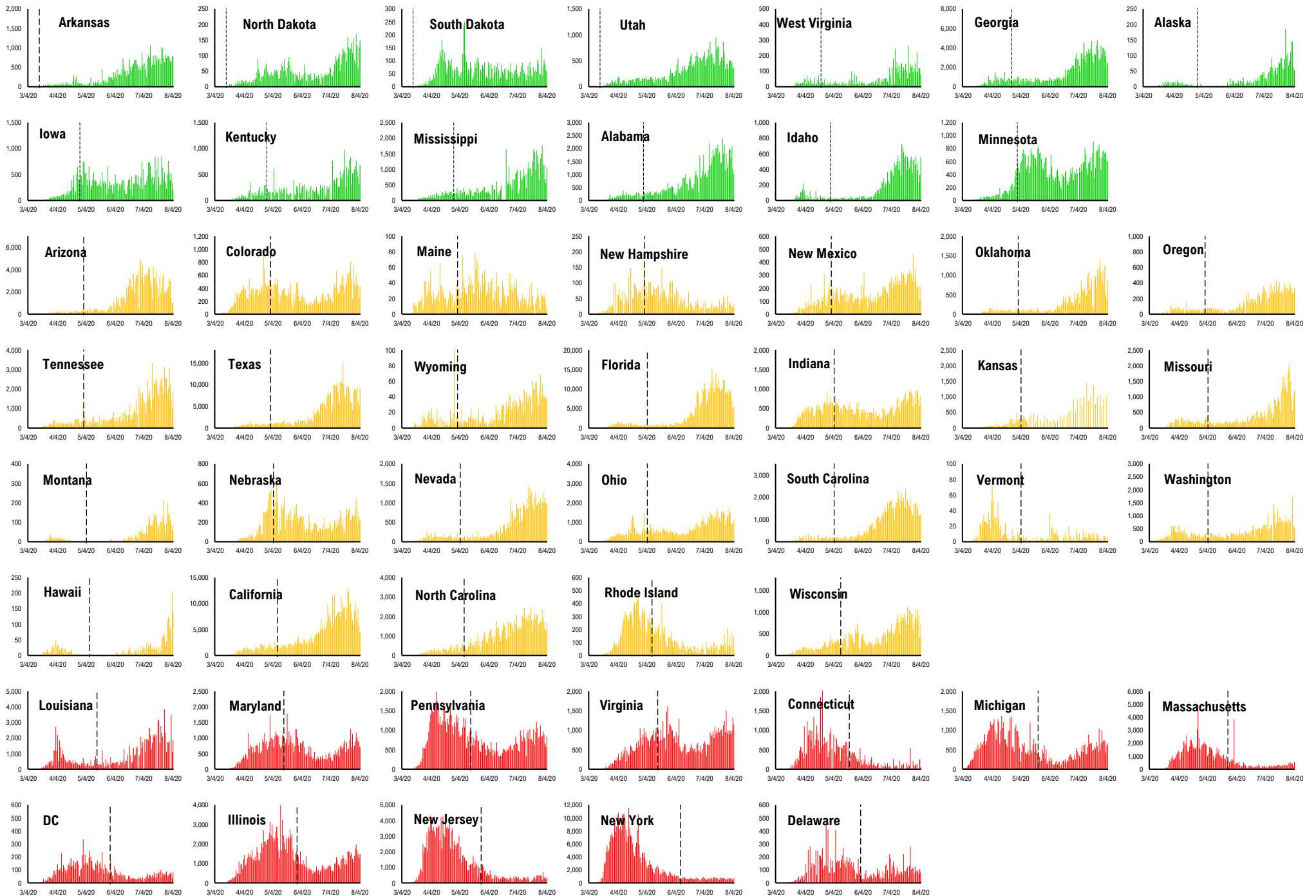
Daily New Gross hospitalization (aggregate of 33 states)



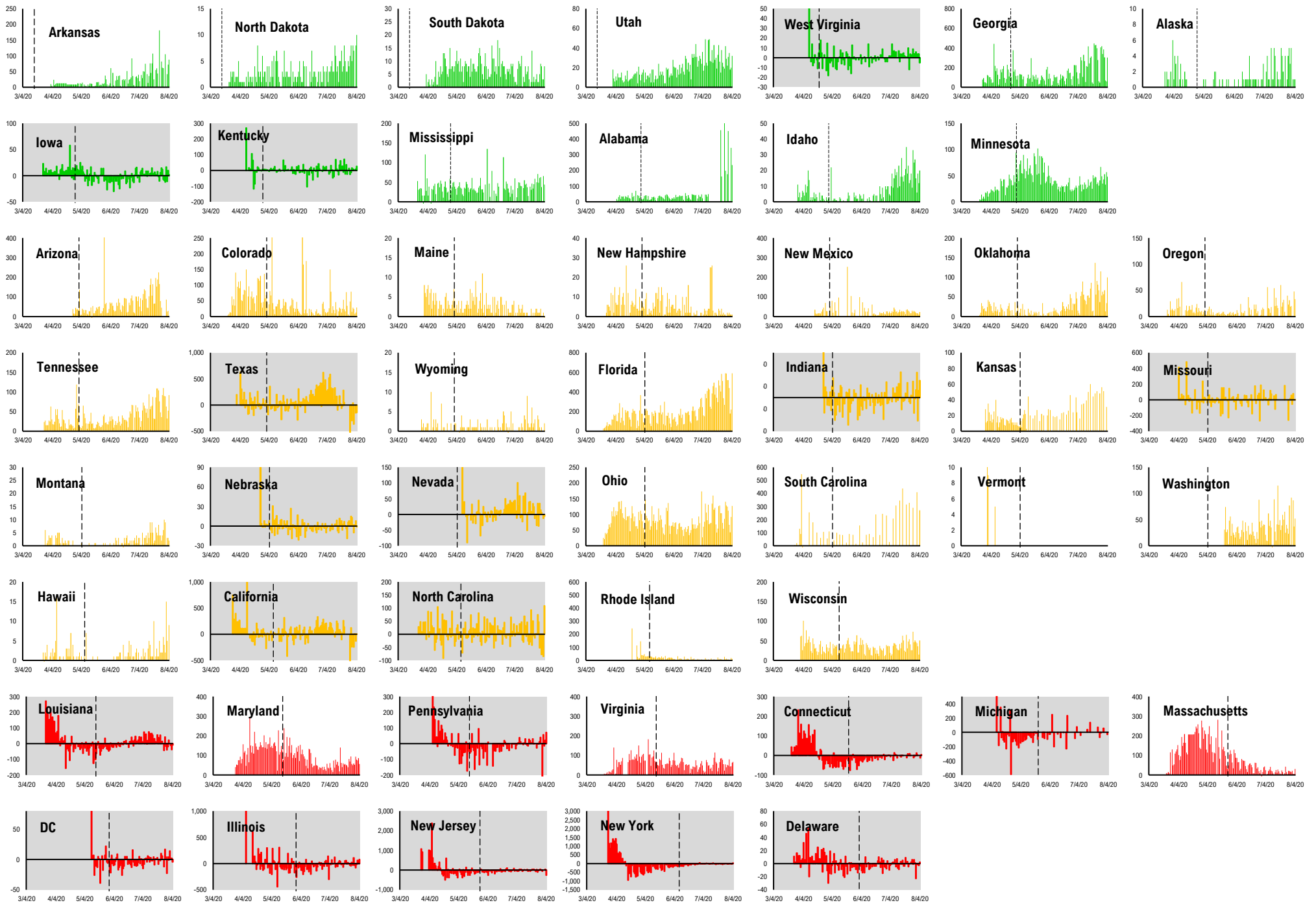
Daily Tests



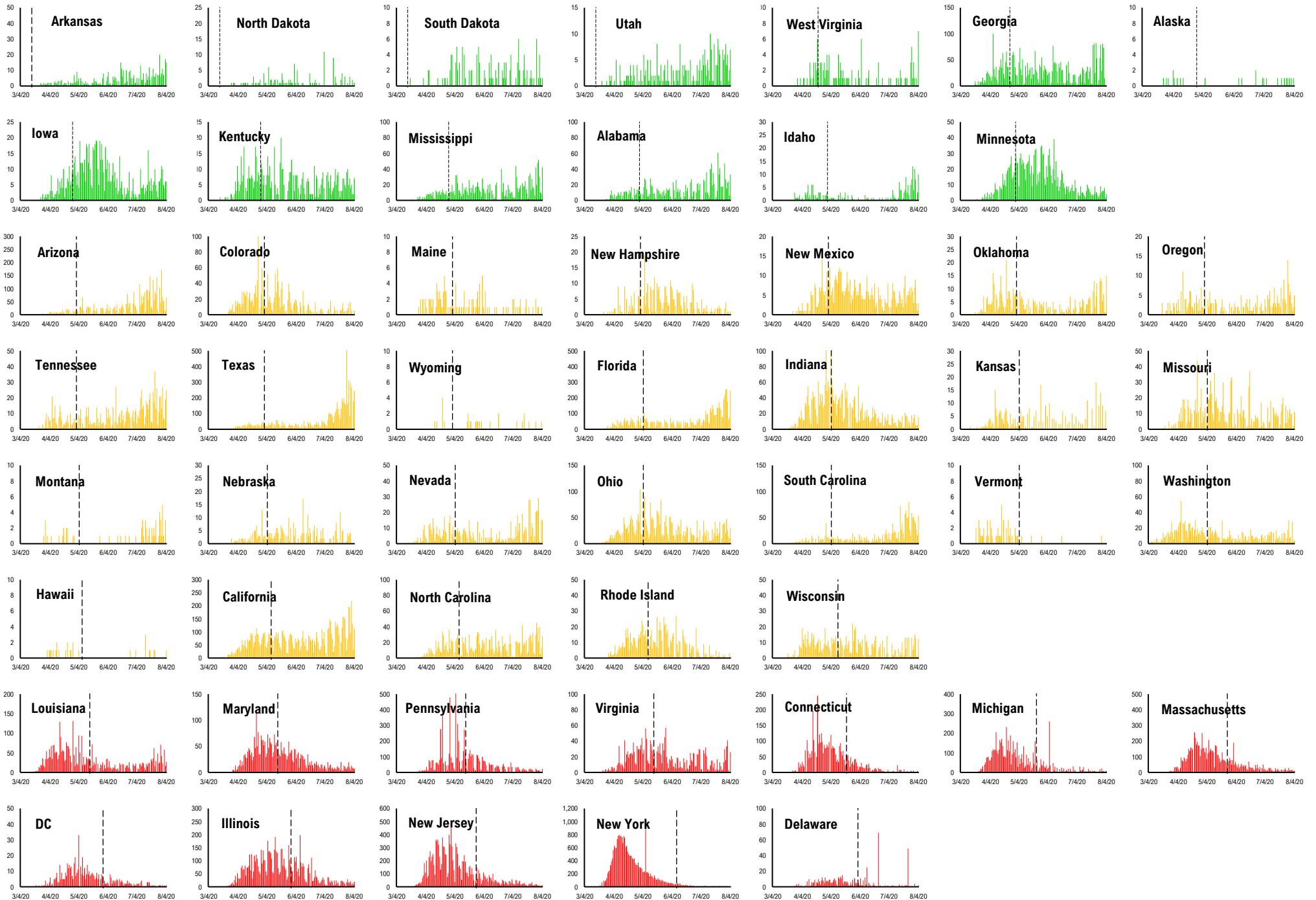
#9: Daily New Cases by States... (sorted by "open" date)



#10: Daily Hospitalizations by States... (sorted by "open" date)



#11: Daily New Deaths by States... (sorted by "open" date)



#12: State COVID-19 situation by Reopen Date...

Daily Cases

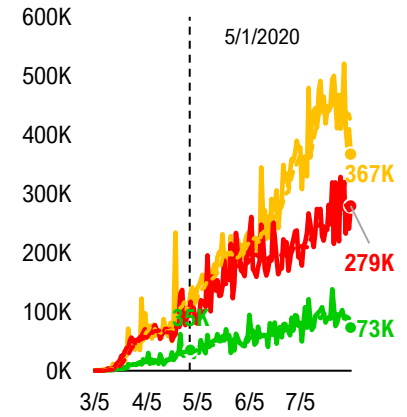
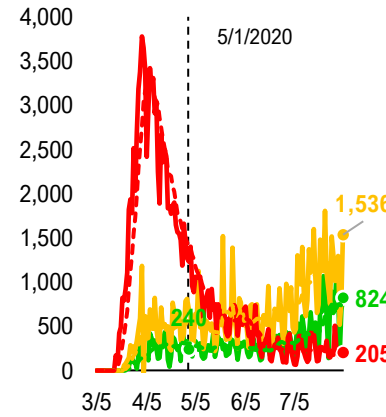
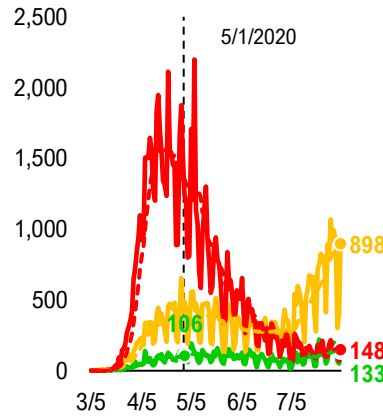
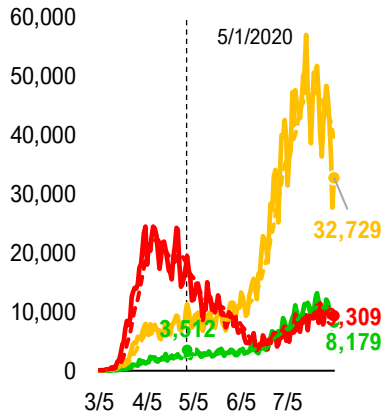
Daily Deaths

Daily Hospitalization

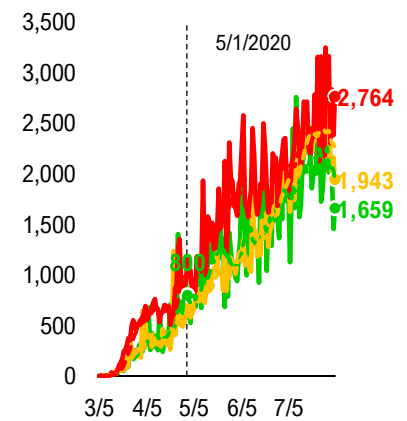
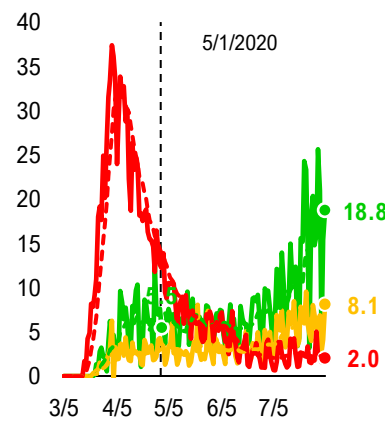
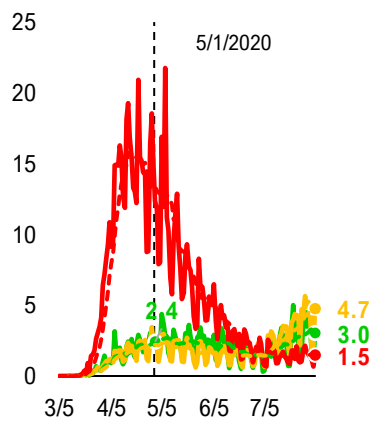
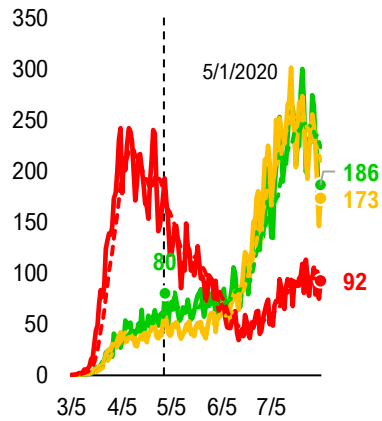
Daily Testing

— States Open Before 5/1 — States Open between 5/1 and 5/11 — States Open after 5/11

Composite Daily Aggregate

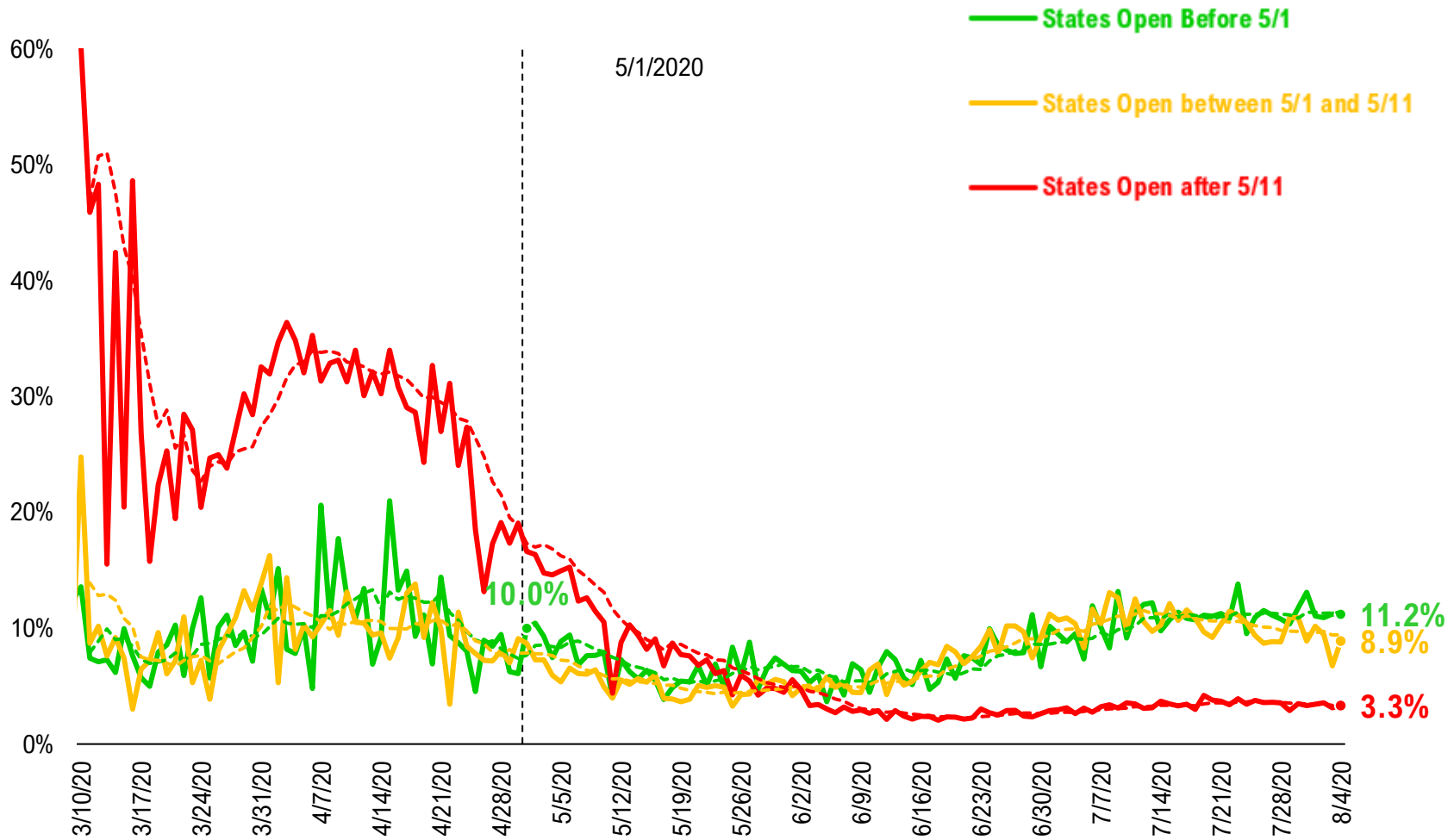


Composite Daily Aggregate Per 1mm Pop

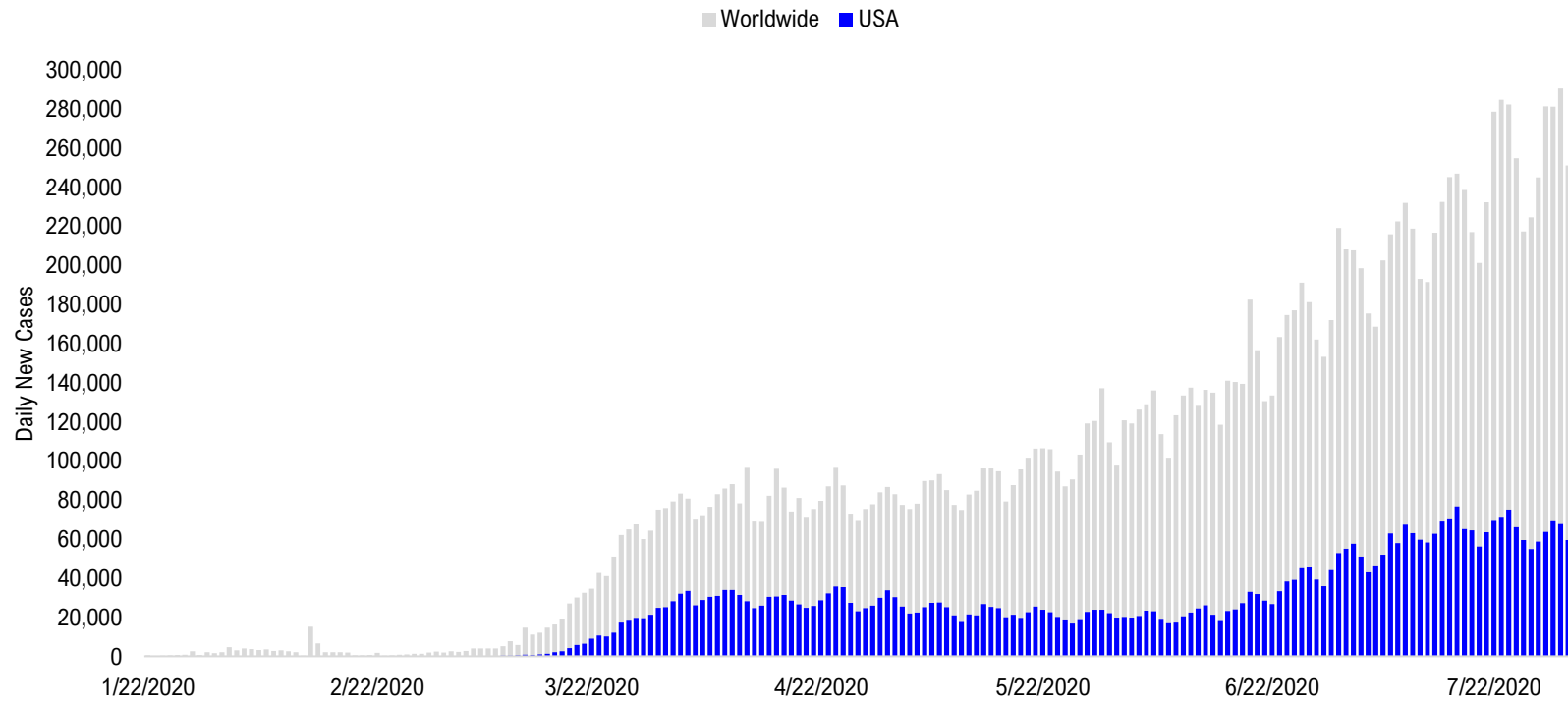


#13: State COVID-19 Daily Positivity Rate by Reopen Date...

Composite Daily Positivity Rate



#14: Global COVID-19 Situation at a Glance...



3/20/2020 4/3/2020 4/17/2020 5/1/2020 5/15/2020 5/29/2020 6/12/2020 6/26/2020 7/10/2020 7/24/2020 8/3/2020

Europe 18,086	Europe 39,667	Europe 40,604	US + Canada 31,572	US + Canada 25,443	Latin America 42,759	Latin America 51,123	Latin America 68,227	Latin America 73,176	Latin America 97,008	Latin America 69,729
US + Canada 4,331	US + Canada 29,751	US + Canada 32,649	Europe 25,383	Latin America 25,394	US + Canada 22,796	US + Canada 22,798	US + Canada 41,092	US + Canada 63,055	US + Canada 72,289	Pakistan + India + Bangladesh 55,451
Asia ex- India+Pakistan 602	Latin America 2,723	Latin America 6,026	Latin America 13,595	Europe 22,139	Europe 19,027	Pakistan + India + Bangladesh 18,309	Pakistan + India + Bangladesh 24,668	Pakistan + India + Bangladesh 32,386	Pakistan + India + Bangladesh 52,184	US + Canada 52,483
Latin America 560	Asia ex- India+Pakistan 1,433	Asia ex- India+Pakistan 2,264	Pakistan + India + Bangladesh 3,762	Pakistan + India + Bangladesh 6,133	Pakistan + India + Bangladesh 12,032	Europe 18,047	Europe 17,928	Africa 17,127	Africa 20,063	Europe 17,824
Pakistan + India + Bangladesh 181	Africa 711	Pakistan + India + Bangladesh 1,649	Asia ex- India+Pakistan 2,022	Africa 2,942	Africa 5,307	Africa 7,322	Africa 11,684	Europe 16,305	Europe 18,783	Africa 13,445
Africa 162	Pakistan + India + Bangladesh 627	Africa 1,176	Africa 1,926	Asia ex- India+Pakistan 2,033	Asia ex- India+Pakistan 2,762	Asia ex- India+Pakistan 3,064	Asia ex- India+Pakistan 3,866	Asia ex- India+Pakistan 7,373	Asia ex- India+Pakistan 8,636	Asia ex- India+Pakistan 10,588

Disclosures

This research is for the clients of FS Insight only. For important disclosures and rating histories regarding sectors or companies that are the subject of this report, please contact your sales representative or FS Insight at 150 East 52nd Street, New York, NY, 10022 USA.

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Thomas J. Lee, the research analyst denoted by an “AC” on the cover of this report, hereby certifies that all of the views expressed in this report accurately reflect his personal views, which have not been influenced by considerations of the firm’s business or client relationships.

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Positive (+): The analyst expects the performance of his industry/sector coverage universe over the next 6-18 months to be attractive vs. the relevant broad market benchmark, being the S&P 500 for North America.

Neutral (N): The analyst expects the performance of his or her industry/sector coverage universe over the next 6-18 months to be in line with the relevant broad market benchmark, being the S&P 500 for North America.

Negative (-): The analyst expects his or her industry coverage universe over the next 6-18 months to underperform vs. the relevant broad market benchmark, being the S&P 500 for North America.

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