

COVID-19 Statistical Review

Today's Analysis: Data from October 05, 2020

On Sunday, cases were up significantly WOW, with deaths up modestly. With the nation testing a million people per day, the case numbers will stay high.

The death numbers are less clear. From the first chart on Exhibit 4, we can see the latest weekly death numbers for the whole country compared to those from Group One. Group One has the mature contagion and achieved something close to noise levels back in August and has stayed there since. That sets an encouraging example for the whole country, still struggling with the contagion as it slowly makes its way across our 3.8 million square miles of territory. It went across Western Europe's .4 million square miles quickly, as it did the same thing in the compact Northeast States beginning a month later. Europe is also at low levels of deaths, 211 per day.

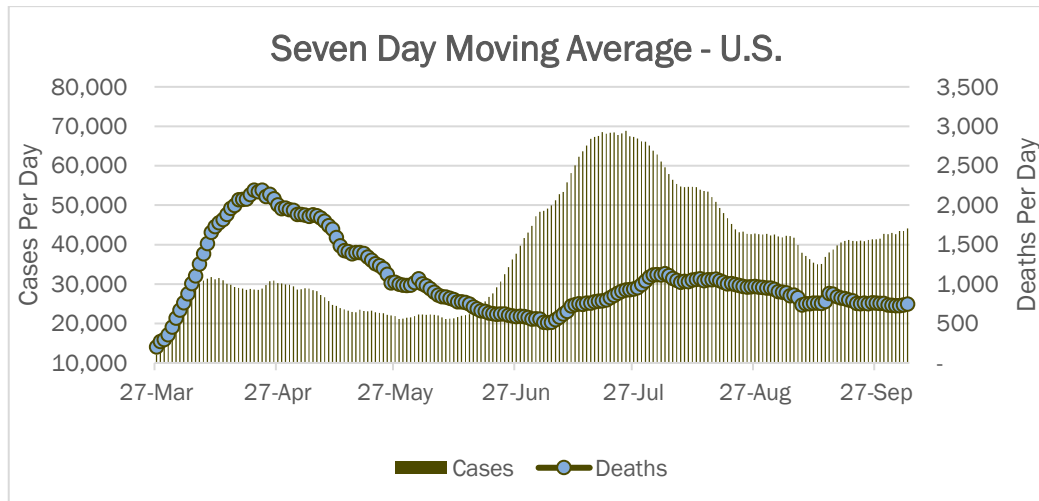
These stats raise two questions. First, how long will it take use to reach noise levels (herd immunity) with respect to deaths? It took Europe six months on that small territory. We are in our ninth month, with perhaps three to six months to go due to our larger size. It simply will take that long for the bug to cover our large land area. Again, we have no evidence that we can prevent that. So we wait.

The second question is: how much further will we drop? The second chart answers that with respect to the standards set by Europe and Group One. We are less than halfway there by either standard. We are looking for a U.S. daily death number less than 350; we hope closer to 200. The number for today of 421 looks pretty good until one remembers that Sunday is a low day for stats. The weekly average is currently 742.

Such numbers leave us with a better understanding of the nature of this contagion. It is not near as bad as some originally thought, but it does have great geographic spread, in part perhaps from its intrinsic makeup and certainly due to the high interconnectedness of the modern world. Again, it will take time before it visits the whole country. The 1918 flu took two years, but was well past its peak within one. Moreover, the much higher interconnectedness today should speed that process up. Using this analysis, an arrival at noise level by the end of next March would push the current death count to around 300,000. One hopes the emergence of better medical tools and more precise record keeping will reduce that exposure. Until, however, that occurs, we had best learn to live with this threat – without extending the unfortunate and discredited restrictions of human interactions we have imposed on ourselves for another nine to sixteen months. We seem to be on the way to a more normal society as people learn that they can resume their accustomed interaction without getting sick. They learned the same thing in 1919 in a nation without the medical safety net we enjoy in 2020..

Noel Perry, Principal
717-673-2998
transportguy@earthlink.net

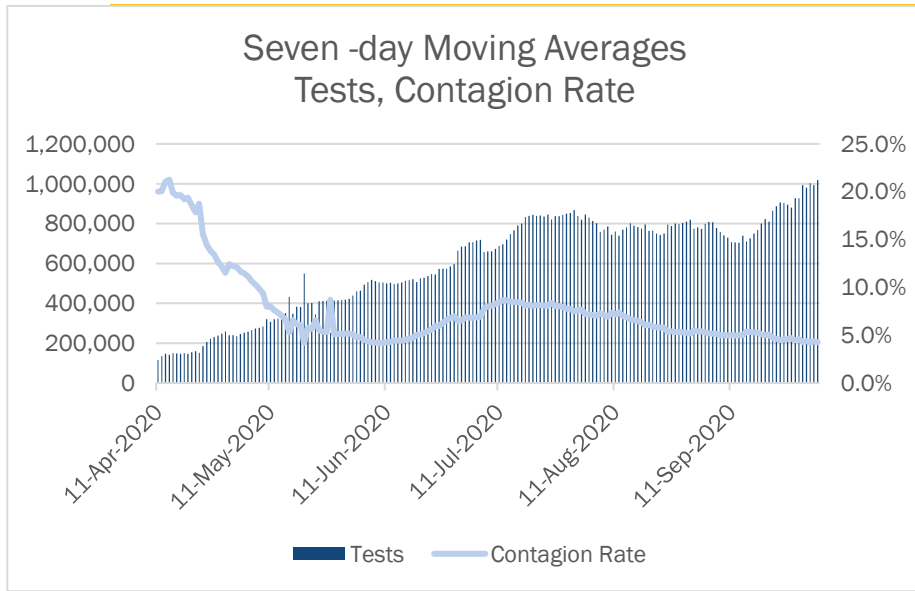
Exhibit 1



Country	Status	Cases	Deaths	Death Rate	Pop per case	Pop per death	Daily Max Cases	New Cases Latest Day	Daily Max Deaths	New Deaths Latest Day	Change In New Case Count Latest	Change In New Case Count From Week Before	Change in New Death Count Latest Day	Change in New Death Count From Week Ago
China	Recovery	85,470	4,634	5.4%	16,949	333,333	6,000	20	150	-	4	(1)	0	0
S. Korea	Recovery	24,164	422	1.7%	2,123	125,000	851	73	9	1	9	23	0	-4
Italy	Recovery	327,586	36,002	11.0%	185	1,678	6,557	2,257	919	16	(321)	763	-2	0
Iran	Falling	475,674	27,192	5.7%	177	3,096	3,521	3,902	235	235	249	390	24	45
Germany	Recovery	304,657	9,616	3.2%	275	8,696	6,933	3,086	333	14	1,543	806	9	3
France	Recovery?	624,274	32,299	5.2%	105	2,020	14,412	5,084	1,809	69	(7,481)	1,014	37	-12
UK	Recovery	515,571	42,369	8.2%	132	1,605	8,681	12,594	980	19	4,612	8,550	-14	6
Norway	Recovery	14,605	275	1.9%	372	19,608	399	148	16	-	53	58	0	-4
Netherlands	Recovery?	140,471	6,461	4.6%	122	2,653	2,713	4,579	234	7	576	1,665	2	1
Sweden	Recovery?	94,283	5,895	6.3%	107	1,715	2,214	-	185	-	-	-	0	0
USA	Falling	7,679,644	215,032	2.8%	43	1,541	61,690	41,576	2,804	421	7,510	4,158	89	66
Spain	Recovery	852,838	32,225	3.8%	55	1,451	11,291	2,099	961	46	2,092	(326)	46	-13
Switzerland	Recovery	55,932	2,078	3.7%	155	4,167	1,321	1,548	75	1	1,548	766	0	0
Belgium	Recovery?	130,235	10,064	7.7%	89	1,153	2,454	2,612	496	20	(777)	1,236	13	14
Denmark	Recovery?	30,057	659	2.2%	193	8,772	453	377	22	1	(1)	(58)	-3	1
Austria	Recovery	48,896	818	1.7%	184	10,989	1,321	750	30	5	36	194	1	2
Canada	Recovery	168,960	9,504	5.6%	224	3,984	1,920	2,804	222	23	1,119	628	4	13
Ireland	Recovery	38,549	1,810	4.7%	-	2,740	1,515	517	220	-	153	130	0	0
Portugal	Recovery	79,885	2,018	2.5%	128	5,051	1,516	734	37	13	(170)	309	3	9
Australia	Recovery	27,149	894	3.3%	943	28,571	534	13	41	-	(2)	9	-1	-3
Brazil	Recovery?	4,940,499	146,773	3.0%	43	1,451	70,869	25,210	1,554	398	16,754	9,192	34	13
Malaysia	Recovery	12,813	137	1.1%	2,532	250,000	235	432	8	-	139	317	0	0
Mexico	Falling	761,665	79,088	10.4%	170	1,634	8,458	3,712	1,092	208	(1,151)	(174)	-180	21
Singapore	Recovery	57,819	27	0.0%	101	200,000	1,426	7	2	-	(5)	(8)	0	0
North America	Falling	8,610,269	303,624	3.5%	58	1,642	86,966	48,092	2,974	652	7,478	4,612	(87)	100
Western Europe	Recovery	3,257,839	182,589	5.6%	123	2,203	35,453	36,385	4,450	211	1,870	15,107	92	7
Other	Rising	23,827,298	559,679	2.3%	288	12,280	220,687	179,731	4,338	3,387	5,336	14,779	232	314
World	Rising	35,695,406	1,045,892	2.9%	218	7,452	306,439	264,208	7,960	4,250	14,684	34,498	237	421

Source: Worldometer.com, Transport Futures

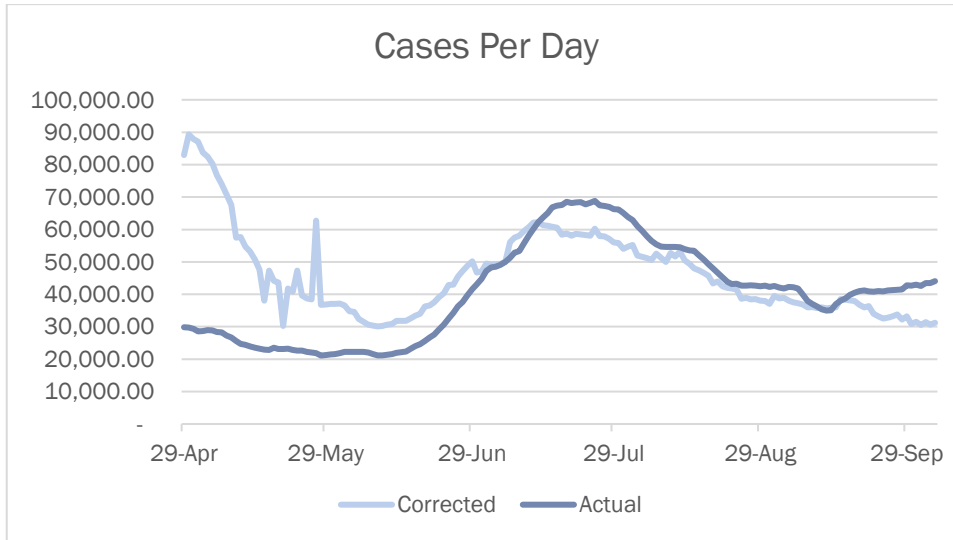
Exhibit 2



	Hot Spot Group	Total Cases	Max New Cases/Day Since 21 April	New Cases Latest Day	Change in New Cases/Day	Change In Cases/Day Since Week Ago	Change In Cases/Day Since Max	Total Deaths	Max New Deaths/Day Since 21 April	New Deaths Latest Day	Change In New Deaths/Day	Change In Deaths/Day Since Week Ago	Change In Deaths/Day Since Max	Cases/M	Deaths/Million	Population
USA Total	All	7,679,644	78,009	41,576	7,510	4,158	-47%	215,032	2,804	423	90	68	-85%	23,201	650	331,004,361
Hot-Spot Group 1	1	1,435,320	21,922	5,416	458	725	-75%	83,878	1,830	73	4	19	-96%	21,422	1,131	67,002,431
Hot-Spot Group 2	2	3,725,951	50,036	15,667	3,160	3,511	-69%	74,235	1,063	192	38	43	-82%	28,306	557	131,632,800
Hot-Spot Group 3	3	1,457,239	15,444	12,025	3,829	(16)	-22%	36,946	477	100	44	7	-79%	21,730	504	67,059,786
Hot-Spot Group 4	4	1,061,134	11,535	8,468	63	(62)	-27%	19,973	272	58	4	(1)	-79%	14,916	264	71,140,342
New York	1	500,415	10,868	1,154	(73)	158	-89%	33,318	764	18	8	4	-98%	25,724	1,713	19,453,968
New Jersey	1	212,564	4,160	750	153	23	-82%	16,261	458	3	(1)	(1)	-99%	23,931	1,831	8,882,395
Massachusetts	1	135,462	4,946	515	(129)	85	-90%	9,530	252	20	17	9	-92%	19,654	1,383	6,892,405
Pennsylvania	1	169,127	3,096	964	2	89	-69%	8,308	294	13	(4)	12	-96%	13,211	649	12,801,381
Louisiana	1	168,512	3,840	218	(675)	(22)	-94%	5,586	126	9	(23)	(6)	-93%	36,249	1,202	4,648,783
Connecticut	1	59,120	2,109	823	823	263	-61%	4,517	125	4	4	2	-97%	16,582	1,267	3,565,242
Maryland	1	127,791	1,730	501	30	24	-71%	3,961	77	3	2	-	-96%	21,138	655	6,045,713
Rhode Island	1	25,419	443	343	343	100	-23%	1,121	27	3	3	-	-89%	23,995	1,058	1,059,367
District Of Columbia	1	15,547	335	28	(18)	14	-92%	631	19	-	(2)	-	-100%	22,029	894	705,739
Delaware	1	21,363	458	120	2	(9)	-74%	645	69	-	-	(1)	-100%	21,939	662	973,792
California	2	835,971	12,137	3,123	94	(43)	-74%	16,178	197	31	5	(3)	-84%	21,157	409	39,511,060
Florida	2	717,874	15,300	1,415	(453)	677	-91%	14,722	276	44	6	34	-84%	33,424	685	21,477,832
Texas	2	809,560	12,235	3,819	1,508	(266)	-69%	16,564	322	59	34	(3)	-82%	27,920	571	28,995,746
Georgia	2	323,714	4,813	789	(58)	193	-84%	7,192	122	30	2	15	-75%	30,489	677	10,617,138
Tennessee	2	203,699	3,140	2,489	874	1,752	-21%	2,597	45	20	3	8	-56%	29,828	380	6,829,015
North Carolina	2	219,754	2,588	2,258	1,648	1,390	-13%	3,637	63	3	(2)	(1)	-95%	20,953	347	10,487,897
Alabama	2	159,713	2,452	544	(245)	(118)	-78%	2,559	47	1	1	1	-98%	32,573	522	4,903,192
Arizona	2	221,070	4,877	316	(39)	43	-94%	5,707	172	1	-	-	-99%	30,372	784	7,278,621
Nevada	2	82,437	1,447	337	(55)	(126)	-77%	1,623	38	-	(3)	-	-100%	26,764	527	3,080,195
South Carolina	2	152,159	2,374	577	(114)	9	-76%	3,456	80	3	(8)	(8)	-96%	29,553	671	5,148,707

Source: Worldometer.com, Transport Futures

Exhibit 3



	Hot Spot Group	Total Cases	Max New Cases/Day Since 21 April	New Cases Latest Day	Change in New Cases/Day	Change In Cases/Day Since Week Ago	Change In Cases/Day Since Max	Total Deaths	Max New Deaths/Day Since 21 April	New Deaths Latest Day	Change In New Deaths/Day	Change In Deaths/Day Since Week Ago	Change In Deaths/Day Since Max	Cases/M	Deaths/Million	Population
Ohio	3	160,030	1,720	1,071	129	137	-38%	4,936	138	6	6	2	-96%	13,691	422	11,689,615
Washington	3	94,094	1,209	879	652	79	-27%	2,160	32	16	16	13	-50%	12,357	284	7,615,063
Mississippi	3	100,703	1,775	215	(106)	25	-88%	3,013	58	-	(2)	(2)	-100%	33,837	1,012	2,976,189
Illinois	3	306,133	5,594	1,853	400	144	-67%	9,054	191	14	(3)	1	-93%	24,159	714	12,671,873
Michigan	3	142,726	1,455	1,455	1,455	126	0%	7,139	232	15	15	8	-94%	14,291	715	9,987,209
Missouri	3	138,432	3,023	943	(84)	19	-69%	2,307	39	-	(4)	(14)	-100%	22,555	376	6,137,553
Wisconsin	3	134,359	2,892	1,696	(169)	(30)	-41%	1,381	21	4	(1)	2	-81%	23,076	237	5,822,701
Utah	3	78,723	1,411	1,105	(288)	278	-22%	482	15	4	2	4	-73%	24,555	150	3,205,934
Arkansas	3	87,430	1,124	417	(71)	(390)	-63%	1,447	23	22	4	1	-4%	28,971	479	3,017,747
Other	3	214,609	4,588	2,391	1,911	(404)	-48%	5,027	186	19	11	(8)	-90%	23,201	650	8,241,190
Indiana	4	125,976	1,660	830	(257)	(42)	-50%	3,681	119	7	2	(4)	-94%	18,712	547	6,732,546
Colorado	4	73,537	994	461	(60)	50	-54%	2,069	122	1	(7)	(2)	-99%	12,770	359	5,758,981
Virginia	4	152,557	2,015	687	(380)	238	-66%	3,276	45	3	-	(10)	-93%	17,873	384	8,535,562
Iowa	4	92,996	2,574	403	(225)	(58)	-84%	1,392	21	9	4	3	-57%	29,475	441	3,155,131
Kentucky	4	73,158	1,274	541	(75)	93	-58%	1,214	17	5	1	-	-71%	16,375	272	4,467,477
Oklahoma	4	91,982	1,714	665	96	(196)	-61%	1,055	21	3	2	2	-86%	23,246	267	3,956,946
Minnesota	4	104,799	1,177	973	(66)	69	-17%	2,136	39	3	(4)	(4)	-92%	18,583	379	5,639,743
Kansas	4	63,580	1,410	1,270	1,270	(301)	-10%	706	26	8	8	7	-69%	21,824	242	2,913,351
New Mexico	4	30,632	460	155	(26)	14	-66%	894	12	2	-	(1)	-83%	14,609	426	2,096,906
Oregon	4	35,049	449	279	20	105	-38%	572	14	-	(1)	-	-100%	8,310	136	4,218,066
Idaho	4	44,422	727	458	196	36	-37%	487	14	5	3	5	-64%	24,858	273	1,787,063
South Dakota	4	24,598	747	180	(252)	(17)	-76%	248	8	-	-	-	-100%	27,805	280	884,627
Nebraska	4	48,259	792	452	48	(63)	-43%	503	21	2	(2)	-	-90%	24,948	260	1,934,391
New Hampshire	4	8,680	217	35	(13)	(1)	-84%	444	19	1	-	1	-95%	6,384	327	1,359,843
West Virginia	4	16,742	283	114	(46)	(50)	-60%	361	11	3	2	-	-73%	9,342	201	1,792,229
Maine	4	5,545	76	26	(7)	14	-66%	142	5	-	-	-	-100%	4,125	106	1,344,330
Vermont	4	1,817	17	32	25	29	88%	58	3	-	-	-	-100%	2,912	93	624,007
North Dakota	4	23,862	507	312	(104)	53	-38%	277	10	3	-	-	-70%	31,312	363	762,045
Hawaii	4	12,854	354	50	(20)	(37)	-86%	157	11	-	(6)	-	-100%	9,079	111	1,415,828
Wyoming	4	6,629	151	125	(14)	4	-17%	53	4	-	-	-	-100%	11,454	92	578,769
Montana	4	14,847	501	212	(67)	(94)	-58%	190	10	3	2	2	-70%	13,892	178	1,068,733
Alaska	4	8,613	1,453	208	20	92	-86%	58	5	-	-	-	-100%	11,774	79	731,588

Source: Worldometer.com, Transport Futures

Exhibit 4.

