

COVID-19 Statistical Review

Today's Analysis: Data from November 17, 2020

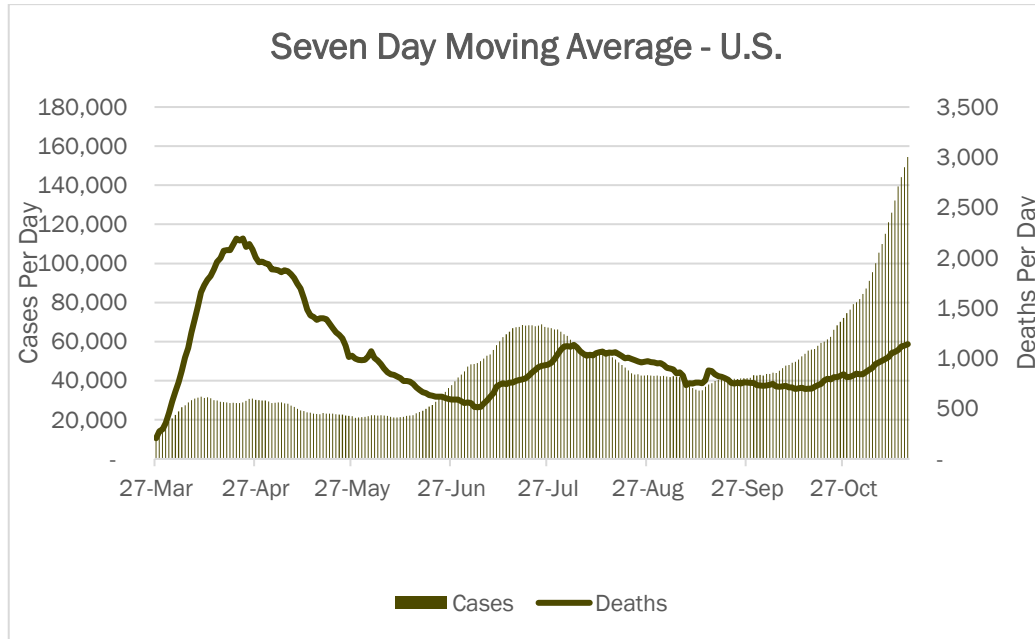
Tuesday was a bad day for deaths, as we are in the two-week lag period for the rapid rise in new cases. We will probably be getting bad news on deaths for ten days or more.

However, there is good news on the case side. Europe is definitely past the inflection point for new cases. We know now that the fall surge will eventually pass. Again, Europe is about a month ahead of the U.S.

Second, when corrected for the large increase in cases, the count of new cases per day is now the same as three days ago (see the circle in the first graph of Exhibit 4). That is the first sign of a possible inflection. The second-derivative chart has been predicting that. I am hopeful that the prediction will come true.

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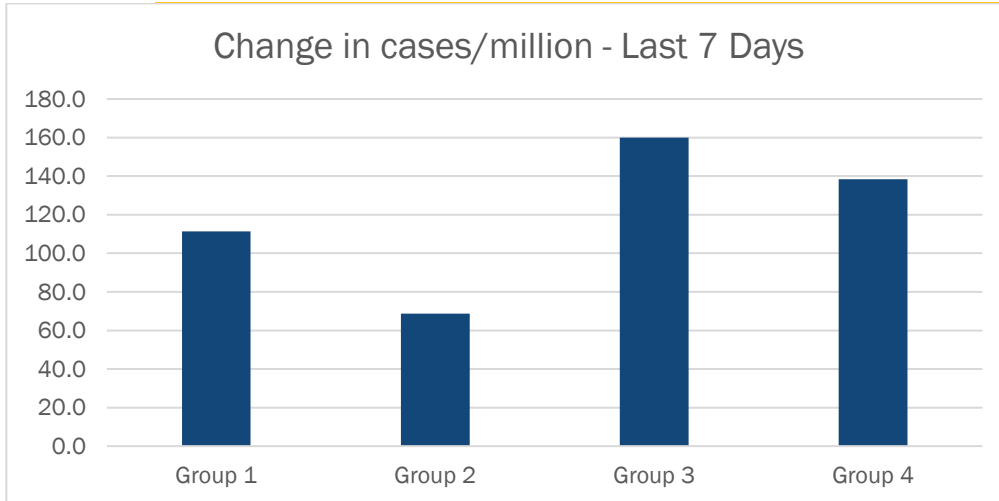
Exhibit 1



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 Day	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	86,361	4,634	5.4%	16,667	333,333	127	15	9	-	7	(7)	0	0
S. Korea	Recovery	28,998	494	1.7%	1,770	100,000	441	229	9	-	6	129	-1	-5
Italy	Falling	1,238,072	46,464	3.8%	49	1,300	40,902	32,191	919	731	4,837	(2,907)	227	151
Iran	Falling	788,473	42,461	5.4%	107	1,988	13,352	13,352	461	482	299	3,013	-4	29
Germany	Falling	833,732	13,248	1.6%	101	6,329	23,462	16,206	357	357	1,624	(462)	158	154
France	Falling	2,036,755	46,273	2.3%	32	1,412	86,852	14,524	1,495	625	5,118	(7,656)	119	-232
UK	Falling	1,410,732	52,745	3.7%	48	1,290	33,470	20,051	980	598	(1,312)	(361)	385	66
Norway	Falling	30,114	298	1.0%	181	18,182	717	600	16	4	52	38	4	4
Netherlands	Falling	457,003	8,616	1.9%	38	1,992	11,119	4,302	234	86	(528)	(365)	42	-12
Sweden	Falling	192,439	6,225	3.2%	53	1,626	3,180	-	185	11	15,084	(695)	11	-1
USA	Rising	11,695,711	254,255	2.2%	28	1,305	101,461	157,261	2,804	1,615	(4,808)	21,687	876	270
Spain	Falling	1,535,058	41,688	2.7%	30	1,122	25,595	13,159	961	435	401	(4,236)	279	24
Switzerland	Falling	274,534	3,664	1.3%	32	2,370	21,926	4,560	167	128	(8,279)	(1,420)	-39	17
Belgium	Falling	537,871	14,616	2.7%	22	794	23,921	1,932	496	195	(2,727)	(461)	77	34
Denmark	Falling	64,551	768	1.2%	90	7,576	1,427	1,220	22	4	25	154	0	1
Austria	Falling	214,597	1,945	0.9%	42	4,651	9,586	5,984	83	58	1,327	(136)	0	13
Canada	Falling	306,468	11,086	3.6%	124	3,413	6,115	4,276	222	59	(1,839)	(26)	-15	-9
Ireland	Falling	68,686	1,995	2.9%	-	2,488	1,515	330	220	11	(123)	100	6	-4
Portugal	Falling	230,124	3,553	1.5%	44	2,865	7,497	4,452	78	81	456	635	-10	19
Australia	Recovery	27,760	907	3.3%	923	28,571	651	10	59	-	(12)	-	0	0
Brazil	Rising	5,911,758	166,743	2.8%	36	1,279	70,869	35,018	1,554	676	21,371	9,501	420	472
Malaysia	Recovery	49,730	318	0.6%	654	100,000	1,755	1,210	8	5	107	341	1	-1
Mexico	Falling	1,009,396	98,861	9.8%	128	1,309	9,556	2,874	1,092	319	(395)	(2,086)	36	121
Singapore	Recovery	58,130	28	0.0%	101	200,000	1,426	6	2	-	1	(3)	0	0
North America	Rising	13,011,575	364,202	2.8%	38	1,370	193,926	164,411	2,974	1,993	(7,122)	19,575	897	382
Western Europe	Falling	9,124,268	242,098	2.7%	44	1,662	208,662	119,511	4,450	3,324	15,955	(17,772)	1,253	234
Other	Rising	33,798,865	736,642	2.2%	203	9,330	297,041	262,740	8,566	5,185	33,262	2,765	1,047	700
World	Rising	55,934,708	1,342,942	2.4%	139	5,804	656,481	546,662	10,502	#####	42,095	4,568	3,197	1,316

Source: Worldometer.com, Transport Futures

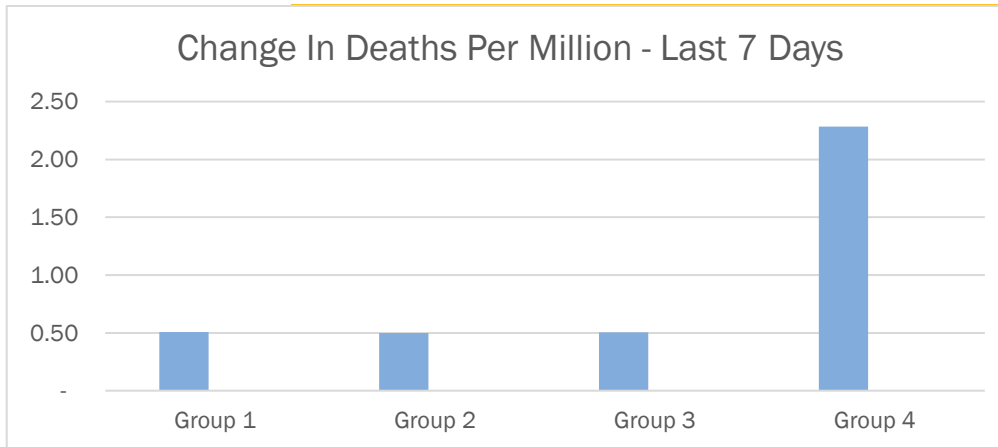
Exhibit 2



	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	11,695,711	86,293	157,261	(4,888)	21,687	82%	254,255	2,804	1,615	876	270	-42%	35,334	768	331,004,361
Hot-Spot Group 1	1	1,938,488	26,964	25,232	1,480	5,279	-6%	88,551	1,830	187	71	20	-90%	28,932	1,216	67,002,431
Hot-Spot Group 2	2	4,958,762	50,036	43,578	(1,253)	1,968	-13%	89,883	1,063	486	243	(28)	-54%	37,671	686	131,632,800
Hot-Spot Group 3	3	2,680,469	61,830	50,883	3,426	8,854	-18%	47,425	477	541	326	155	13%	39,971	658	67,059,786
Hot-Spot Group 4	4	2,117,992	47,569	37,568	(8,541)	5,586	-21%	28,396	336	401	236	123	19%	29,772	427	71,140,342
New York	1	606,624	10,868	5,167	1,104	1,212	-52%	34,058	764	25	(11)	(1)	-97%	31,183	1,751	19,453,968
New Jersey	1	292,057	4,251	4,140	705	(111)	-3%	16,746	458	38	24	16	-92%	32,881	1,885	8,882,395
Massachusetts	1	192,964	4,946	2,525	361	371	-49%	10,360	252	20	9	(1)	-92%	27,996	1,503	6,892,405
Pennsylvania	1	280,978	6,214	5,721	(493)	1,399	-8%	9,448	294	38	24	(20)	-87%	21,948	738	12,801,381
Louisiana	1	207,685	3,840	2,626	2,080	1,296	-32%	6,156	126	17	10	7	-87%	44,675	1,324	4,648,783
Connecticut	1	94,986	4,639	1,702	(2,937)	178	-63%	4,771	125	12	(10)	3	-90%	26,642	1,338	3,565,242
Maryland	1	169,805	2,321	2,149	423	811	-7%	4,335	77	26	19	14	-66%	28,087	717	6,045,713
Rhode Island	1	44,528	988	605	124	(184)	-39%	1,278	27	8	3	4	-70%	42,033	1,206	1,059,367
District Of Columbia	1	19,309	335	245	158	159	-27%	660	19	-	-	(2)	-100%	27,360	935	705,739
Delaware	1	29,552	470	352	(45)	148	-25%	739	69	3	3	-	-96%	30,348	759	973,792
California	2	1,053,293	12,137	8,397	(2,812)	45	-31%	18,333	197	30	(9)	(35)	-85%	26,657	464	39,511,060
Florida	2	897,323	15,300	7,459	2,796	3,106	-51%	17,647	276	86	48	12	-69%	41,779	822	21,477,832
Texas	2	1,116,913	12,461	10,678	(1,201)	(1,534)	-14%	20,335	322	117	39	(6)	-64%	38,520	701	28,995,746
Georgia	2	430,571	4,813	4,335	3,088	16	-10%	9,008	122	41	31	(12)	-66%	40,553	848	10,617,138
Tennessee	2	320,729	7,951	1,841	(6,110)	(138)	-77%	3,995	89	72	42	10	-19%	46,965	585	6,829,015
North Carolina	2	317,495	3,885	3,288	1,316	706	-15%	4,852	67	38	30	(7)	-43%	30,272	463	10,487,897
Alabama	2	220,848	2,980	1,616	206	(94)	-46%	3,301	81	52	51	16	-36%	45,042	673	4,903,192
Arizona	2	279,896	4,877	2,984	1,508	(450)	-39%	6,312	172	10	10	(18)	-94%	38,454	867	7,278,621
Nevada	2	123,794	2,269	1,697	(217)	375	-25%	1,944	38	27	19	20	-29%	40,191	631	3,080,195
South Carolina	2	197,900	2,374	1,283	173	(64)	-46%	4,156	80	13	(18)	(8)	-84%	38,437	807	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	312,443	8,057	7,079	(189)	571	-12%	5,772	138	30	10	7	-78%	26,729	494	11,689,615
Washington	3	139,453	3,189	2,215	(974)	709	-31%	2,583	32	25	23	8	-22%	18,313	339	7,615,063
Mississippi	3	135,803	1,775	905	316	(28)	-49%	3,581	58	36	34	(1)	-38%	45,630	1,203	2,976,189
Illinois	3	597,849	15,415	12,601	969	(22)	-18%	11,317	197	113	71	31	-43%	47,179	893	12,671,873
Michigan	3	296,840	9,179	7,886	1,505	942	-14%	8,511	232	80	25	(4)	-66%	29,723	852	9,987,209
Missouri	3	261,756	6,539	5,630	957	5,630	-14%	3,598	77	56	48	56	-27%	42,649	586	6,137,553
Wisconsin	3	323,848	7,497	7,090	2,701	17	-5%	2,741	92	92	80	26	0%	55,621	471	5,822,701
Utah	3	158,957	3,919	3,178	1,207	661	-19%	732	17	9	4	(2)	-47%	49,582	228	3,205,934
Arkansas	3	135,902	2,312	1,554	246	130	-33%	2,245	33	20	(22)	16	-39%	45,033	744	3,017,747
Other	3	317,618	7,246	2,745	(3,312)	244	-62%	6,345	186	80	53	18	-57%	35,334	768	8,241,190
Indiana	4	262,207	8,322	5,463	316	634	-34%	5,025	119	89	63	22	-25%	38,948	746	6,732,546
Colorado	4	172,044	6,439	4,331	35	441	-33%	2,608	122	30	(2)	11	-75%	29,875	453	5,758,981
Virginia	4	206,762	2,677	2,125	(552)	690	-21%	3,835	45	29	23	16	-36%	24,224	449	8,535,562
Iowa	4	191,437	5,451	3,039	(170)	(864)	-44%	2,028	37	37	31	14	0%	60,676	643	3,155,131
Kentucky	4	142,008	3,293	2,911	1,400	832	-12%	1,697	33	33	30	19	0%	31,786	380	4,467,477
Oklahoma	4	158,408	3,923	1,551	(1,178)	(151)	-60%	1,544	23	6	(4)	(1)	-74%	40,033	390	3,956,946
Minnesota	4	236,949	8,689	5,931	(1,506)	1,038	-32%	2,999	58	26	14	3	-55%	42,015	532	5,639,743
Kansas	4	124,587	6,868	522	(6,346)	274	-92%	1,266	34	-	(10)	-	-100%	42,765	435	2,913,351
New Mexico	4	67,559	1,742	2,105	852	847	21%	1,264	28	28	7	14	0%	32,220	603	2,096,906
Oregon	4	58,570	1,109	924	158	170	-17%	778	14	13	9	10	-7%	13,887	184	4,218,066
Idaho	4	85,125	1,781	1,781	682	580	0%	798	35	35	31	19	0%	47,634	447	1,787,063
South Dakota	4	67,284	2,020	1,006	109	(17)	-50%	644	53	-	-	(3)	-100%	76,056	728	884,627
Nebraska	4	101,601	3,440	-	(3,440)	-	-100%	797	27	-	(18)	-	-100%	52,523	412	1,934,391
New Hampshire	4	15,303	459	274	(84)	54	-40%	502	19	2	1	2	-89%	11,255	369	1,359,843
West Virginia	4	35,324	1,153	864	63	353	-25%	598	16	13	10	(3)	-19%	19,710	334	1,792,229
Maine	4	9,363	2,456	246	73	74	-90%	166	5	1	1	(2)	-80%	6,965	123	1,344,330
Vermont	4	3,104	119	96	(23)	49	-19%	59	3	-	-	-	-100%	4,974	95	624,007
North Dakota	4	65,967	2,270	1,082	(7)	198	-52%	769	30	26	19	(4)	-13%	86,564	1,009	762,045
Hawaii	4	16,665	354	52	(42)	(26)	-85%	222	11	-	-	(1)	-100%	11,770	157	1,415,828
Wyoming	4	24,453	1,260	1,260	561	28	0%	155	17	11	11	(2)	-35%	42,251	268	578,769
Montana	4	49,398	1,642	1,371	502	273	-17%	543	37	21	19	16	-43%	46,219	508	1,068,733
Alaska	4	23,874	1,453	634	56	109	-56%	99	6	1	1	(7)	-83%	32,635	135	731,588

Exhibit 4

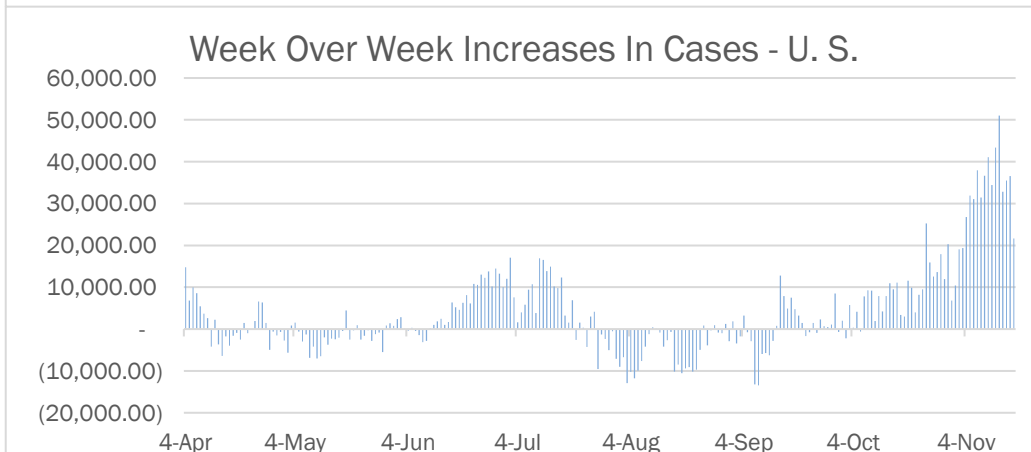
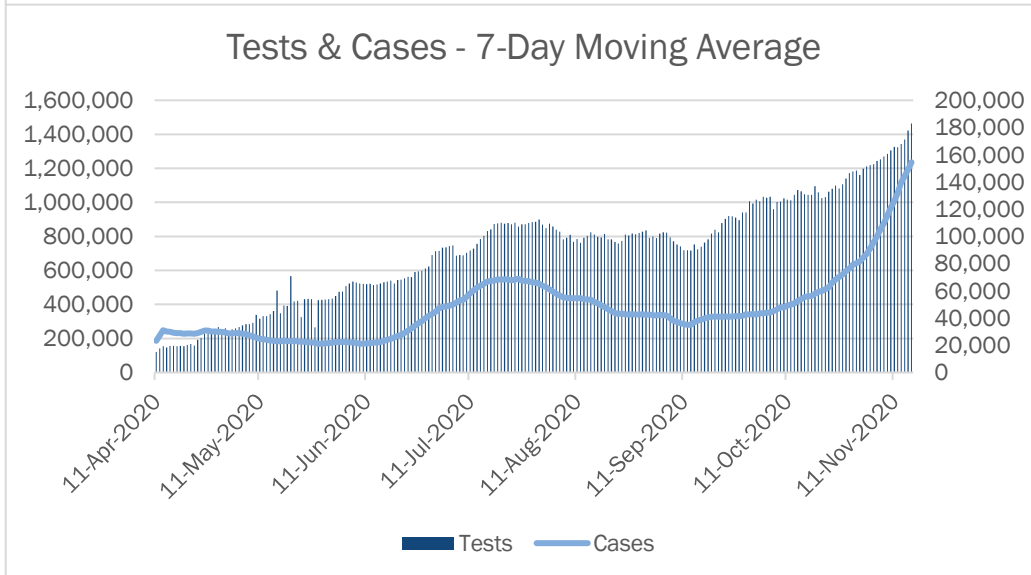
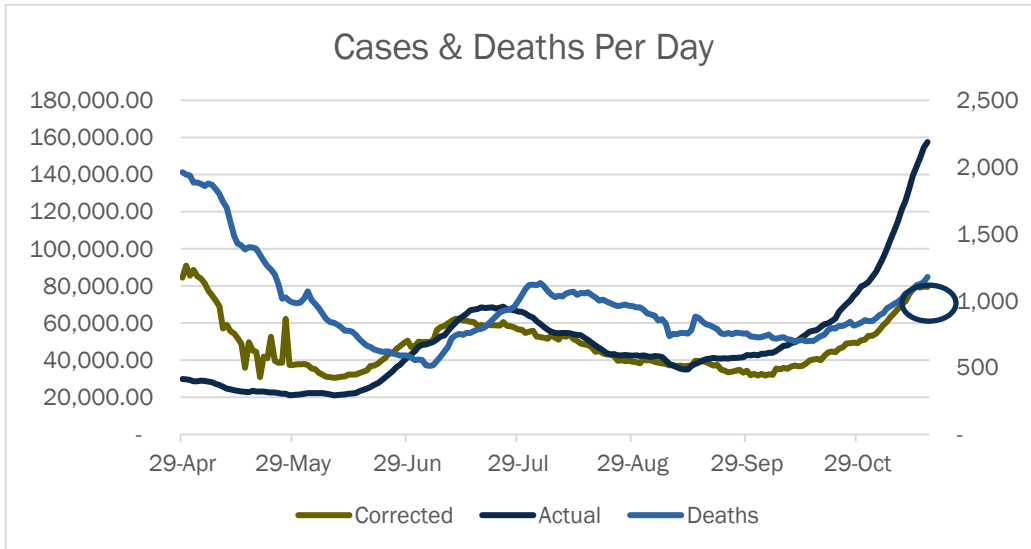
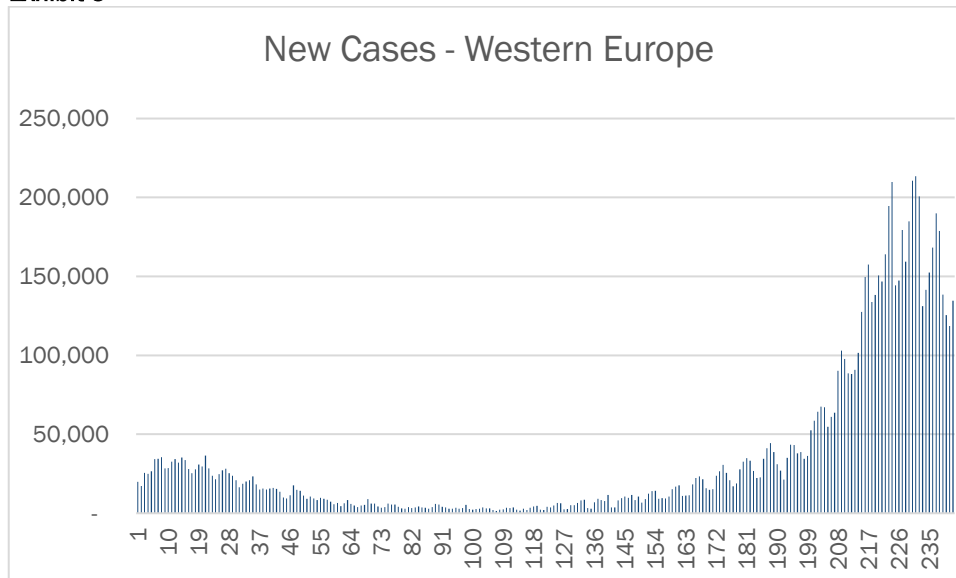


Exhibit 5



Source: *Worldometer.com, Transport Futures*
