

COVID-19 Statistical Review

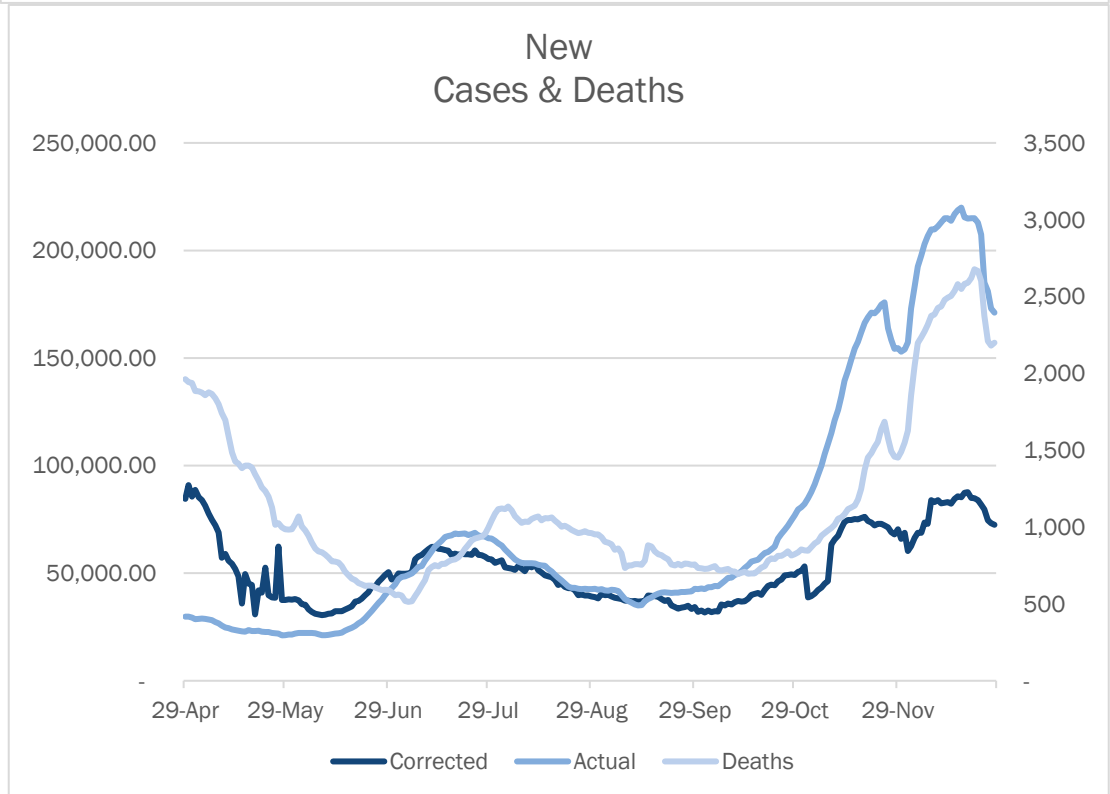
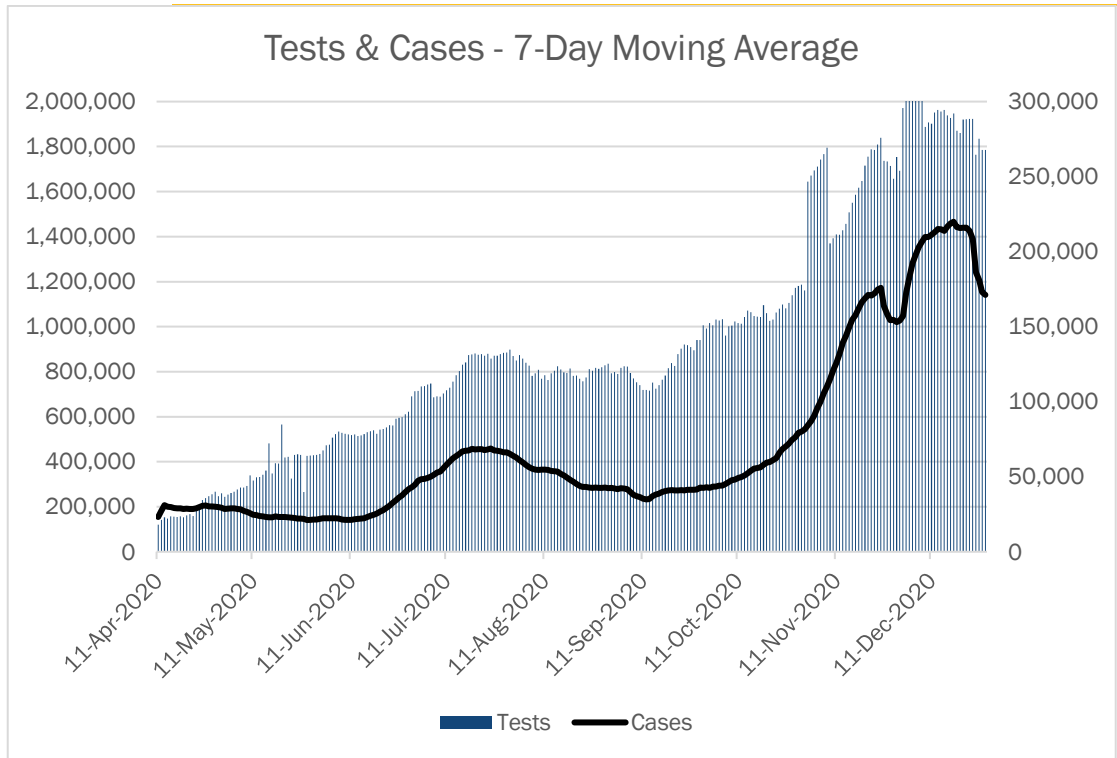
Today's Analysis: Data from December 28, 2020

On Monday, we see the first signs of a short-lived return to statistical normality. Note, however, that the corrected case numbers continue their downward movement even if the deaths numbers show a bit of makeup for the holiday weekend.

Tonight I had an in-restaurant dinner in a local place despite the PA Governor's orders forbidding table service. Whatever you think of my risk tolerance, note that we had to wait 25 minutes for a table. I mention this to document a growing tolerance for this contagion's risk and the equally growing resistance to closure orders. I know of at least six local restaurants that are open for indoor dining. The state-wide count is approaching 400.

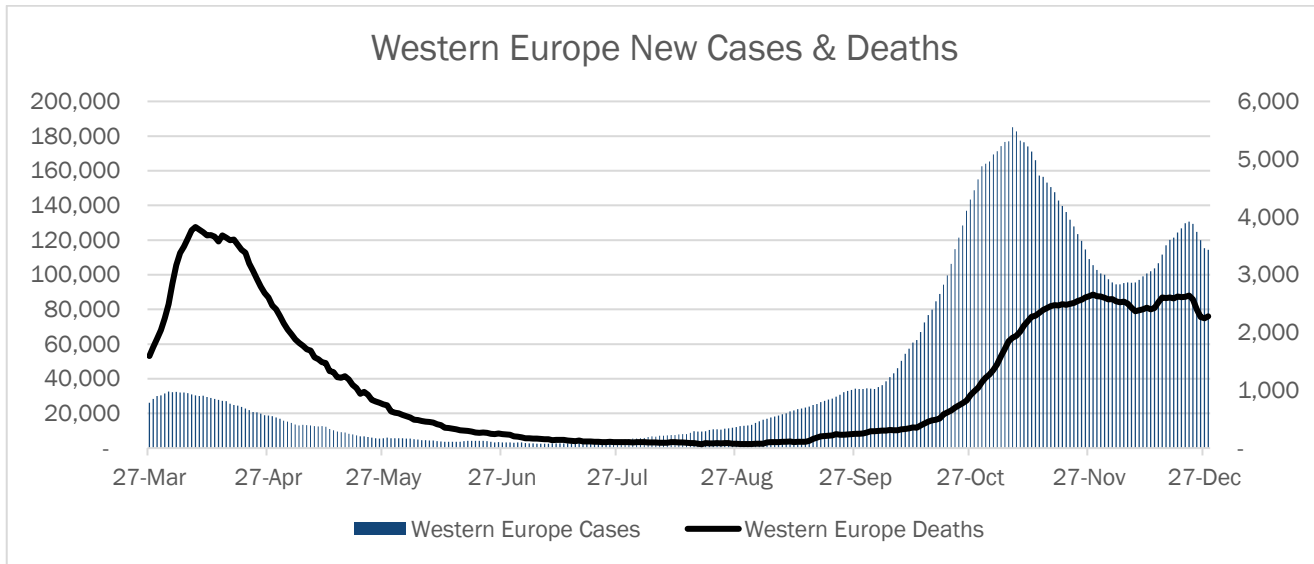
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Exhibit 1



Source: Worldometer.com, [Transport Futures](http://TransportFutures.net)

Exhibit 2.



Country	Status	Cases	Deaths	Death Rate	Pop per case	Pop per death	Daly 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	86,976	4,634	5.3%	16,667	333,333	127	21	9	-	(1)	(2)	0	0
S. Korea	Recovery	57,680	819	1.4%	889	62,500	1,132	808	24	11	(162)	(118)	-4	-13
Italy	Falling	2,056,277	72,370	3.5%	29	835	40,902	8,585	993	445	(328)	(2,287)	140	30
Iran	Falling	1,206,373	54,814	4.5%	70	1,541	14,051	5,908	486	121	406	(243)	2	-70
Germany	Rising	1,670,194	31,176	1.9%	50	2,688	31,553	14,872	944	674	2,719	(4,461)	329	141
France	Falling	2,562,646	63,109	2.5%	25	1,035	86,852	2,960	1,495	363	(5,862)	(2,837)	190	12
UK	Rising	2,329,730	71,109	3.1%	29	957	41,385	41,385	980	357	10,884	8,021	41	142
Norway	Falling	47,585	429	0.9%	114	12,658	717	526	21	8	145	95	8	7
Netherlands	Falling	770,400	11,042	1.4%	22	1,553	13,032	7,415	234	44	(1,665)	(3,753)	16	16
Sweden	Falling	396,048	8,279	2.1%	26	1,224	22,319	-	185	-	-	-	0	0
USA	Falling	19,781,624	343,182	1.7%	17	967	101,461	186,296	3,486	1,966	58,556	(13,813)	751	125
Spain	Falling	1,894,072	50,122	2.6%	25	933	25,595	8,134	961	76	8,134	631	76	-36
Switzerland	Falling	438,284	7,362	1.7%	20	1,179	21,926	10,087	169	152	10,087	85	135	-7
Belgium	Falling	638,877	19,200	3.0%	18	605	23,921	847	496	42	63	(1,323)	-27	-39
Denmark	Falling	155,826	1,204	0.8%	37	4,808	4,508	2,479	26	30	299	(719)	9	12
Austria	Falling	353,484	5,931	1.7%	26	1,522	9,586	1,592	218	50	184	73	12	-34
Canada	Falling	555,207	15,121	2.7%	68	2,506	10,404	3,187	222	158	(7,217)	(4,332)	-5	54
Ireland	Falling	86,894	2,205	2.5%	-	2,252	1,515	765	220	1	30	40	-3	1
Portugal	Falling	396,666	6,677	1.7%	26	1,524	7,497	2,093	98	58	516	(6)	-5	1
Australia	Recovery	28,337	909	3.2%	905	28,571	721	25	59	1	10	(1)	1	1
Brazil	Falling	7,506,890	191,641	2.6%	28	1,114	70,869	22,605	1,554	495	4,126	(3,016)	164	-54
Malaysia	Recovery	106,690	455	0.4%	305	71,429	2,335	1,594	12	3	398	(424)	2	2
Mexico	Falling	1,383,434	122,426	8.8%	94	1,058	12,511	6,217	1,092	400	1,243	(653)	211	74
Singapore	Recovery	58,529	29	0.0%	100	200,000	1,426	5	2	-	-	(5)	0	0
North America	Falling	21,720,265	480,729	2.2%	23	1,039	273,187	195,700	4,470	2,524	52,582	(18,798)	957	253
Western Europe	Inflection	13,796,983	350,215	2.5%	29	1,149	213,359	101,740	4,450	2,300	25,206	(6,441)	921	246
Other	Falling	46,144,436	950,021	2.1%	149	7,234	332,999	189,833	7,169	4,281	(617)	(21,707)	186	(293)
World	Falling	81,661,684	1,780,965	2.2%	95	4,376	721,359	487,273	13,446	9,105	77,171	(46,946)	2,064	206

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
USA Total	All	19,781,624	86,293	186,296	58,556	(13,813)	116%	343,182	3,023	1,966	751	125	-35%	59,763	1,037	331,004,361
Hot-Spot Group 1	1	3,344,887	45,315	37,823	14,123	2,084	-17%	106,032	1,830	535	116	15	-71%	48,447	1,462	67,002,431
Hot-Spot Group 2	2	8,288,834	131,479	92,418	27,078	(10,992)	-30%	118,324	1,277	664	363	36	-48%	60,843	910	131,632,800
Hot-Spot Group 3	3	4,463,561	63,150	30,017	12,095	(2,675)	-52%	71,248	1,008	479	193	85	-52%	65,295	957	67,059,786
Hot-Spot Group 4	4	3,684,342	52,356	26,038	5,260	(2,230)	-50%	47,578	915	288	79	(11)	-69%	50,759	748	71,140,342
New York	1	972,951	12,484	11,082	3,300	1,314	-11%	37,518	764	169	52	(10)	-78%	50,014	1,929	19,453,968
New Jersey	1	475,165	7,126	4,961	2,944	872	-30%	18,805	458	39	20	13	-91%	53,496	2,117	8,882,395
Massachusetts	1	356,934	6,675	4,198	1,064	355	-37%	12,158	252	48	(52)	6	-81%	51,786	1,764	6,892,405
Pennsylvania	1	619,483	13,318	5,091	381	(3,974)	-62%	15,160	294	85	(39)	26	-71%	48,390	1,184	12,801,381
Louisiana	1	300,539	5,326	817	(2,406)	(299)	-85%	7,336	126	45	26	(20)	-64%	64,649	1,578	4,648,783
Connecticut	1	181,200	8,457	8,457	8,457	3,862	0%	5,904	125	113	113	18	-10%	50,823	1,656	3,565,242
Maryland	1	269,183	3,792	1,985	227	(280)	-48%	5,740	77	28	(4)	5	-64%	44,525	949	6,045,713
Rhode Island	1	85,602	1,717	661	661	242	-62%	1,742	27	4	4	(13)	-85%	80,805	1,644	1,059,367
District Of Columbia	1	28,342	492	140	(352)	1	-72%	771	19	3	(3)	(2)	-84%	40,159	1,092	705,739
Delaware	1	55,488	1,058	431	(153)	(9)	-59%	898	69	1	(1)	(8)	-99%	56,983	922	973,792
California	2	2,199,568	61,569	38,705	15,849	(4,397)	-37%	24,530	407	245	224	-	-40%	55,668	621	39,511,060
Florida	2	1,280,177	15,300	8,198	807	(2,817)	-46%	21,309	276	96	18	(14)	-65%	59,605	992	21,477,832
Texas	2	1,715,594	21,353	18,880	5,993	1,871	-12%	27,313	322	126	68	(16)	-61%	59,167	942	28,995,746
Georgia	2	636,240	9,079	3,941	430	421	-57%	10,696	122	7	3	(9)	-94%	59,924	1,007	10,617,138
Tennessee	2	567,792	11,410	3,712	524	(6,179)	-67%	6,588	177	76	7	11	-57%	83,142	965	6,829,015
North Carolina	2	520,716	8,444	3,888	990	(591)	-54%	6,561	166	12	(11)	(4)	-93%	49,648	626	10,487,897
Alabama	2	347,897	5,348	2,269	99	(111)	-58%	4,712	81	21	15	21	-74%	70,953	961	4,903,192
Arizona	2	504,423	11,806	10,086	8,790	2,338	0%	8,469	172	42	39	41	-76%	69,301	1,164	7,278,621
Nevada	2	218,377	3,772	868	(988)	(1,071)	-77%	2,973	57	21	13	15	-63%	70,898	965	3,080,195
South Carolina	2	298,050	4,302	1,871	(5,416)	(456)	-57%	5,173	81	18	(13)	(9)	-78%	57,888	1,005	5,148,707

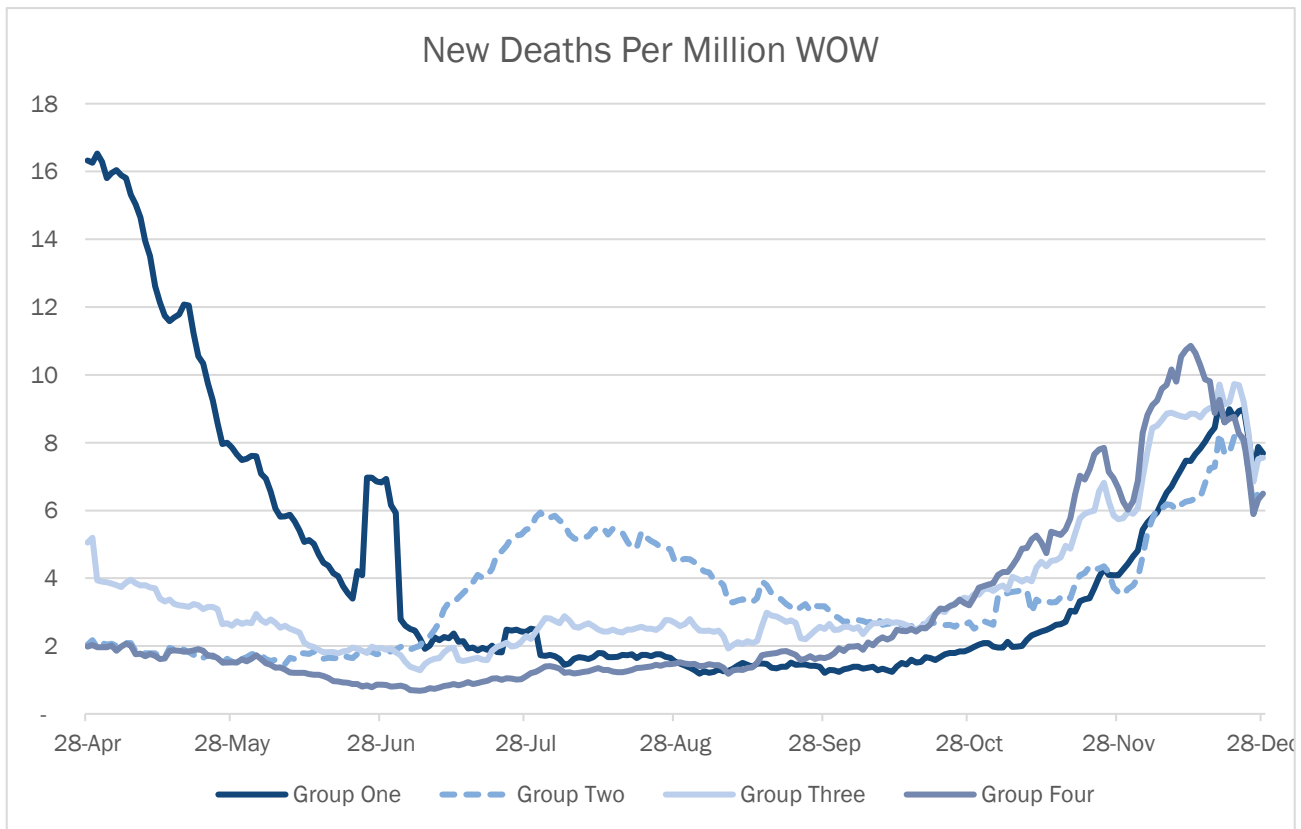
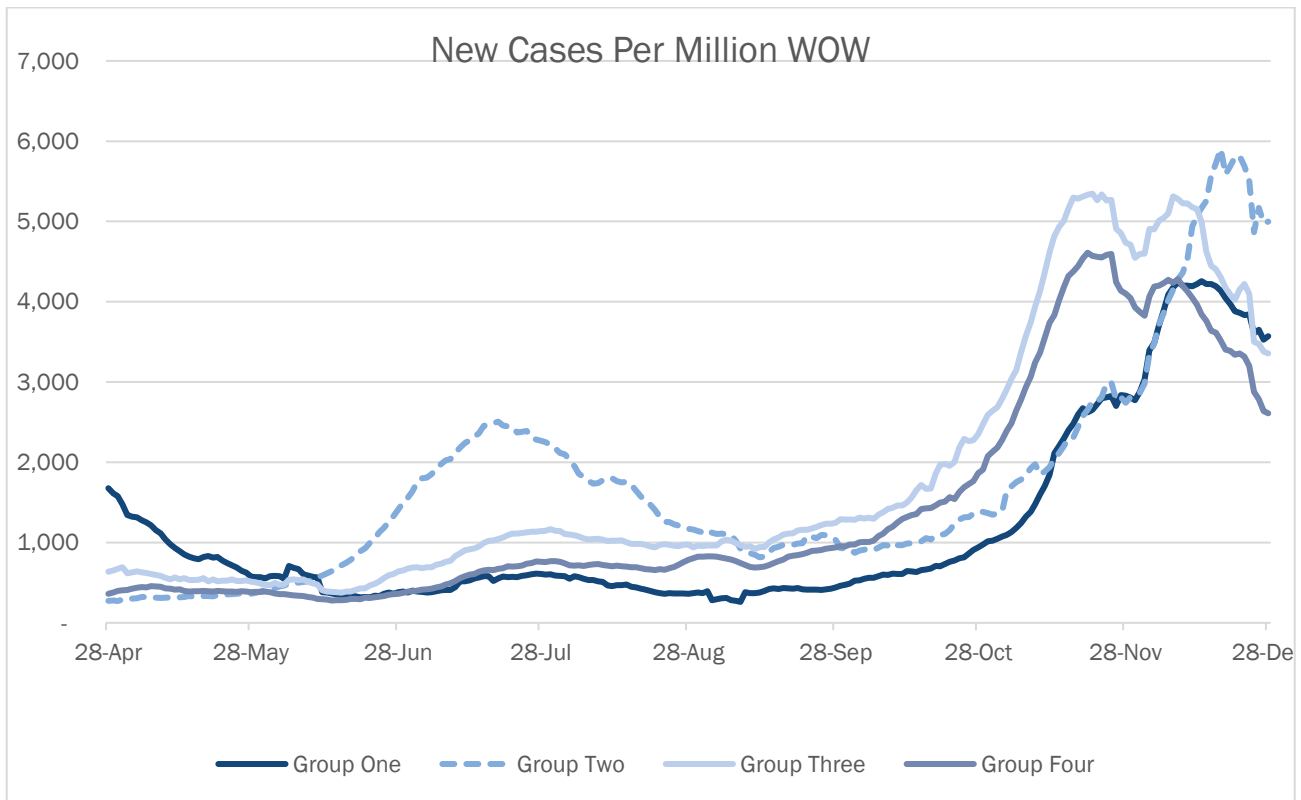
Source: Worldometer.com, Transport Futures

Exhibit 4.

	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	675,044	12,720	4,519	(1,338)	(2,029)	-64%	8,573	138	62	27	(5)	-55%	57,750	733	11,689,615
Washington	3	242,495	6,615	2,812	2,683	(1,191)	-57%	3,396	53	30	30	11	-43%	31,845	446	7,615,063
Mississippi	3	208,089	2,746	1,701	336	534	-38%	4,634	79	28	(13)	26	-65%	69,919	1,557	2,976,189
Illinois	3	942,362	15,415	4,453	686	(246)	-71%	17,470	235	134	22	14	-43%	74,367	1,379	12,671,873
Michigan	3	519,876	10,140	1,931	1,931	(853)	-81%	12,754	275	64	64	(15)	-77%	52,056	1,277	9,987,209
Missouri	3	409,966	6,539	1,801	1,801	(1,208)	-72%	5,832	174	28	28	13	-84%	66,798	950	6,137,553
Wisconsin	3	472,153	7,989	1,335	(952)	(100)	-83%	4,711	92	19	10	11	-79%	81,092	809	5,822,701
Utah	3	266,590	4,588	1,716	920	(103)	-63%	1,219	30	5	3	(1)	-83%	83,155	380	3,205,934
Arkansas	3	216,528	3,204	1,651	743	194	-48%	3,537	55	55	14	(3)	0%	71,750	1,172	3,017,747
Other	3	510,458	10,048	8,098	5,287	2,327	-19%	9,122	186	54	8	34	-71%	59,763	1,037	2,764,129
Indiana	4	496,306	8,460	2,465	645	(1,400)	-71%	7,886	143	43	1	9	-70%	73,721	1,171	6,732,546
Colorado	4	326,668	6,439	1,650	251	(496)	-74%	4,631	267	21	3	11	-92%	56,726	804	5,758,981
Virginia	4	336,175	4,782	2,599	(1,400)	(1,443)	-46%	4,861	56	7	(7)	3	-88%	39,385	570	8,535,562
Iowa	4	275,886	5,451	903	325	29	-83%	3,745	102	-	(1)	-	-100%	87,442	1,187	3,155,131
Kentucky	4	258,517	4,314	1,454	(46)	(522)	-66%	2,563	37	8	(13)	(7)	-78%	57,864	574	4,467,477
Oklahoma	4	282,587	4,827	3,448	817	852	-29%	2,383	45	13	-	7	-71%	71,415	602	3,956,946
Minnesota	4	410,138	8,946	1,077	(1,439)	(915)	-88%	5,219	101	13	(27)	(9)	-87%	72,724	925	5,639,743
Kansas	4	218,104	7,002	5,890	5,890	1,985	-16%	2,548	144	41	41	(66)	-72%	74,865	875	2,913,351
New Mexico	4	138,659	3,665	691	(51)	(124)	-81%	2,380	48	34	4	25	-29%	66,128	1,135	2,096,906
Oregon	4	110,545	1,806	820	(579)	(5)	-55%	1,433	53	6	1	-	-89%	26,210	340	4,218,066
Idaho	4	137,010	2,298	795	367	(122)	-65%	1,377	35	23	23	2	-34%	76,668	771	1,787,063
South Dakota	4	97,657	2,020	267	(160)	(80)	-87%	1,446	54	-	-	(20)	-100%	110,389	1,635	884,627
Nebraska	4	162,849	3,440	875	238	154	-75%	1,587	31	19	19	(6)	-39%	84,185	820	1,934,391
New Hampshire	4	41,670	1,187	861	(15)	15	-27%	715	21	7	-	7	-67%	30,646	526	1,359,843
West Virginia	4	81,436	1,636	726	193	(269)	-56%	1,263	34	9	8	8	-74%	45,440	705	1,792,229
Maine	4	22,319	2,456	439	106	100	-82%	326	20	3	(1)	2	-85%	16,604	243	1,344,330
Vermont	4	7,120	181	91	28	-	-50%	129	6	2	(4)	2	-67%	11,410	207	624,007
North Dakota	4	91,559	2,270	93	(18)	11	-96%	1,270	37	4	2	2	-89%	120,146	1,667	762,045
Hawaii	4	21,028	354	45	(50)	(89)	-87%	285	11	-	-	-	-100%	14,852	201	1,415,828
Wyoming	4	43,704	1,260	504	450	48	-60%	405	32	32	32	32	0%	75,513	700	578,769
Montana	4	79,999	1,642	219	(128)	65	-87%	927	37	3	(2)	(13)	-92%	74,851	867	1,068,733
Alaska	4	44,406	1,453	126	(164)	(24)	-91%	199	18	-	-	-	-100%	60,702	272	731,588

Source: Worldometer.com, Transport Futures

Exhibit 5



Source: Worldometer.com, Transport Future