

2020 National List of Major Freight Highway Bottlenecks and Congested Corridors Federal Highway Administration (FHWA) Freight Mobility Trends: Truck Hours of Delay

The following table lists the top Interstate bottlenecks and congested corridors in the U.S. based upon Annual Truck Hours of Delay per Mile from 2020. The U.S. Federal Highway Administration (FHWA) used the Freight Mobility Trends (FMT) tool with data from the National Performance Management Research Data Set (NPMRDS) (<https://npmrds.ritis.org>) to develop the list.

Annual Truck Hours of Delay per Mile is calculated for each Interstate segment using the 2020 NPMRDS travel time data as follows:

- Delay is calculated for each 15-minute time period as the difference between actual travel time and reference travel time. Reference travel time is based on 85th percentile speed during off-peak and overnight time periods.
- Delay for each 15-minute time period is multiplied by 15-minute truck volumes. Truck volumes are estimated from Annual Average Daily Truck Traffic (AADTT) using typical time-of-day traffic volume profiles. Delay for each 15-minute time period is aggregated to get Annual Truck Hours of Delay.
- The total number of truck hours of delay is then divided by the segment length to get total truck hours of delay per mile, allowing for the comparison of all roadway sections across the National Highway System (NHS).

The above analysis has been conducted for 2017 through 2020 to compare trends in congestion and delay. The use of delay per mile for assessing bottlenecks is a consistent measure that allows for comparing performance over the entire Interstate system from year to year and across all States. Annual Truck Hours of Delay are quantified along corridors, as opposed to individual points, to consider the full delay that a truck would experience driving along a congested corridor.

The segment data for Annual Truck Hours of Delay was used as a starting point and was validated against other data sources. The top bottleneck locations were compared with the bottlenecks identified by States in their State Freight Plan and 2018 and 2020 Transportation Performance Management Performance Reports. Finally, the FHWA Office of Operations' Office of Freight Management and Operations coordinated the locations with the FHWA Division Offices and State departments of transportation (DOTs) for review and comment.

Table 1 lists the Route, Urban Area, and State ranked by 2020 Truck Hours of Delay per Mile.

- Annual Truck Hours of Delay per Mile is determined at the most congested segment of the corridor. Information is provided for AADTT, Annual Truck Hours of Delay, Planning Time Index (PTI), Buffer Index (BI), Travel Time Index (TTI), and Travel Reliability Index (TRI) is provided for the most congested segment of the corridor.
- Total Corridor Congestion Cost is calculated for the full extent of delay along the congested corridor, which may include multiple segments.

**Table 1. National List of Major Freight Highway Bottlenecks and Congested Corridors
Based Upon Truck Hours of Delay per Mile, 2020 NPMRDS**

2020 Rank	2019 Rank	Road	Urban Area	State	Generalized Bottleneck Location		Bottleneck Segment with Greatest Delay								Total Congestion Cost of Full Corridor (\$/year)
					Limits of Primary Bottleneck Corridor	Corridor Length (Miles)	AADTT (Trucks)	Delay (Hours)	Delay per Mile	Change from 2019	PTI	BI	TTI	TRI	
1	1	I-95/I-295	New York-Newark	NY/NJ	I-278/I-678 to NJ side of GW Bridge/SR-4	8.2	19,904	234,370	183,109	-30%	8.66	226%	2.65	1.66	\$60,862,576
2	2	I-90/I-94	Chicago	IL	I-94N to I-55	10.5	12,346	126,718	69,266	-51%	5.97	186%	2.05	1.60	\$39,388,090
3	10	I-278	New York-Newark	NY	I-95/I-678 to Grand Central Pkwy.; and SR-27 Prospect Expy. to SR-29 Queens Blvd.	7.7 9.2	13,842	541,710	67,503	-24%	5.41	177%	1.92	1.72	\$107,226,782
4	6	I-678	New York-Newark	NY	I-495 to Belt Parkway; and I-295/I-95 to south end Bronx-Whitestone Bridge	5.8 2.9	14,356	90,053	67,177	-33%	6.08	217%	1.92	2.11	\$19,834,950
5	16	I-495	New York-Newark	NY	Little Neck Parkway to Queens Midtown Tunnel	14.3	19,030	167,893	46,377	-35%	3.15	105%	1.47	1.61	\$73,483,130
6	20	I-87	New York-Newark	NY	I-278 to 230th Street	5.9	11,496	113,682	44,289	-32%	5.87	210%	1.86	2.36	\$23,666,057
7	50	I-75	Chattanooga	TN	At I-24	1.6	22,912	68,517	43,998	8%	3.17	115%	1.43	1.46	\$5,440,999
8	-	I-35	Waco	TX	At 5 th Street	1.4	26,742	60,431	43,287	-32%	2.50	81%	1.37	1.95	\$20,107,086
9	4	I-35	Austin	TX	US 290 N to Ben White Blvd/SH 71	7.9	18,982	87,157	41,852	-62%	4.74	175%	1.70	2.25	\$50,933,236

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10	12	I-10	Los Angeles-Long Beach-Anaheim	CA	20th Street to I-5; And at I-605	15.3 6.0	13,082	103,007	41,130	-53%	5.30	181%	1.86	1.84	\$65,058,852
11	14	I-45	Houston	TX	US-90 to I-69	4.2	12,264	64,657	39,684	-53%	4.06	125%	1.75	1.52	\$37,320,233
12	5	I-610	Houston	TX	I-69 to I-10 and At I-45	4.1 2.1	16,284	45,396	38,509	-63%	3.55	143%	1.45	2.16	\$30,430,274
13	82	I-35W	Dallas-Fort Worth-Arlington	TX	At I-30	1.2	13,532	70,787	37,995	52%	4.02	129%	1.74	1.45	\$10,085,773
14	11	I-24	Nashville-Davidson	TN	US-41 to SR-155	5.8	25,954	100,495	37,683	-57%	2.82	113%	1.31	1.83	\$27,255,669
15	26	I-10	Baton Rouge	LA	I-110 to SR-1	2.2	21,916	79,576	36,968	-36%	3.35	147%	1.35	2.94	\$18,806,906
16	8	I-290	Chicago	IL	I-90/I-94 to I-294	13.5	16,470	59,893	35,003	-63%	3.33	136%	1.40	2.09	\$30,201,406
17	18	I-5	Los Angeles-Long Beach-Anaheim	CA	SR-134 Ventura Fwy. to I-605	19.8	10,268	103,481	34,553	-50%	4.80	145%	1.92	1.70	\$49,766,987
18	7	I-405	Los Angeles-Long Beach-Anaheim	CA	At SR-73 and SR-2 Santa Monica Blvd to SR-42 Manchester Blvd	2.5 7.5	13,082	124,105	33,532	-65%	4.93	211%	1.58	2.86	\$58,755,827
19	33	I-30	Little Rock	AR	I-630 to I-40	2.9	40,500	62,015	33,062	-36%	1.52	30%	1.18	1.25	\$8,219,699
20	37	I-95	Washington	VA	SR-123 to SR-286	6.3	17,758	224,407	32,764	-33%	3.26	119%	1.41	1.83	\$29,433,824
21	36	I-270	Denver-Aurora	CO	I-25 to I-70	5.8	11,028	98,322	30,700	-39%	4.09	157%	1.58	2.07	\$9,298,149
22	9	I-69/ US-59	Houston	TX	SR-527 to I 10	4.4	9,284	32,014	29,879	-66%	6.21	253%	1.76	3.62	\$19,917,616
23	34	I-80	San Francisco-Oakland	CA	US-101 to Bay Bridge; And at I-580	10.7	5,318	52,639	29,708	-42%	7.36	257%	1.99	1.90	\$18,096,301
24	22	I-75/ I-85	Atlanta	GA	I-20 to I-75/I-85 split	4.2	16,616	19,889	29,150	-54%	5.00	195%	1.69	2.75	\$10,569,277
25	43	I-80/ I-94	Chicago	IL	I-294 to I-94	4.8	41,800	101,368	29,068	-38%	2.05	75%	1.18	1.92	\$6,186,898
26	27	I-25	Denver-Aurora	CO	I-70 to University Blvd	8.7	14,208	46,921	28,475	-49%	3.40	134%	1.45	2.00	\$27,293,667
27	45	I-71/ I-75	Cincinnati	KY/OH	I-275 to Western Hills	9.2	21,038	166,424	28,397	-36%	2.70	100%	1.32	1.99	\$25,081,187

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					Limits of Primary Bottleneck Corridor	Corridor Length (Miles)	AADTT (Trucks)	Delay (Hours)	Delay per Mile	Change from 2019	PTI	BI	TTI	TRI	
28	68	I-30	Dallas-Fort Worth-Arlington	TX	I-35 to Grand Ave.	4	17,528	100,720	27,704	-12%	3.05	120%	1.38	1.99	\$19,267,107
29	-	I-24/I-65	Nashville-Davidson	TN	I-65 to I-24	1.8	26,112	48,517	27,662	-14%	2.38	90%	1.25	2.01	\$2,961,165
30	32	I-70	Denver-Aurora	CO	I-25 to I-270	4.8	12,566	64,712	27,654	-48%	3.40	135%	1.45	2.19	\$13,540,489
31	-	I-80/I-94	Chicago	IN	I-65 to US 41	9	46,002	41,471	27,648	-57%	1.61	43%	1.12	1.49	\$31,420,056
32	28	I-5	Portland	OR	Columbia River to Terwilliger Blvd	10.5	12,264	72,756	27,387	-50%	4.20	196%	1.40	3.55	\$23,353,128
33	78	I-95	Bridgeport-Stamford	CT	At US-1 in Fairfield; and At US-1 in Stamford	1.5 1.8	20,046	48,416	26,609	-2%	3.17	123%	1.38	2.29	\$49,051,842
34	19	I-76	Philadelphia	PA	University Ave to US-1	6.2	7,134	86,555	26,000	-61%	4.64	129%	1.80	1.65	\$23,081,385
35	13	I-710	Los Angeles-Long Beach-Anaheim	CA	Cesar Chavez Ave. to Atlantic Blvd.	3	10,874	34,873	25,518	-70%	3.51	135%	1.47	2.32	\$20,079,146
36	30	I-285	Atlanta	GA	East/ SR-400 to US-78; and West/ I-20 to Northside Dr	11.7 11.2	12,420	40,984	25,225	-53%	3.61	150%	1.44	1.97	\$67,144,527
37	31	I-495	Washington	MD	I-66 (VA) to I-95 (MD)	19.5	19,358	130,868	25,171	-53%	2.42	91%	1.26	1.96	\$42,907,765
38	17	I-5	Seattle	WA	I-90 to 85th St; and SR-18 to Port of Tacoma Rd	9.6 7.1	14,026	50,047	25,096	-64%	3.32	130%	1.41	1.93	\$30,737,968
39	21	I-105	Los Angeles-Long Beach-Anaheim	CA	I-405 to Long Beach Blvd	13.7	10,874	50,701	25,023	-61%	3.50	114%	1.54	1.48	\$24,741,563
40	51	I-676	Philadelphia	PA	I-76 to I-95	2.2	7,666	57,491	24,254	-40%	4.31	127%	1.87	1.47	\$5,486,314
41	56	I-35E	Dallas-Fort Worth-Arlington	TX	I-30 to John W. Carpenter/SH 183	2.8	14,976	55,930	23,363	-38%	2.75	103%	1.35	1.81	\$13,369,641
42	15	I-680	San Francisco-Oakland	CA	SR-262 to SR-238	4.3	12,476	61,568	23,180	-71%	3.80	165%	1.43	2.82	\$4,366,568
43	63	I-94	Chicago	IL	I-90/94 to US-14	2.3	16,000	74,921	22,285	-34%	2.70	105%	1.32	1.88	\$7,415,369
44	84	I-75	Atlanta	GA	I-85 to Moores Mill Rd	3.3	18,194	26,816	21,651	-9%	3.24	155%	1.27	3.00	\$11,798,954
45	29	I-55	Chicago	IL	I-94 to SR-171	10	11,800	94,901	21,627	-60%	3.29	125%	1.42	2.34	\$25,564,476

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46	3	I-605	Los Angeles-Long Beach-Anaheim	CA	I-5 to SR-60	6.5	12,802	88,753	21,146	-85%	2.76	90%	1.38	1.48	\$14,120,562
47	57	I-635	Dallas-Fort Worth-Arlington	TX	I-35 to SR-78	14	19,250	27,812	20,637	-44%	2.32	82%	1.27	1.81	\$30,709,177
48	59	I-95	Philadelphia	PA	At I-676	2	10,142	36,568	20,230	-43%	2.83	97%	1.41	1.83	\$6,557,444
49	23	I-10	New Orleans	LA	SR-49 to I-610 to and at Pontchartrain Expy.	7.5 3.9	11,336	30,154	19,794	-68%	4.10	156%	1.59	2.07	\$21,417,020
50	49	I-405	Seattle	WA	I-90 to SR-520	3.7	10,630	86,763	19,469	-52%	3.99	155%	1.51	2.52	\$6,969,360
51	44	I-695	Baltimore	MD	I-95 to I-795	10.1	22,036	20,387	19,334	-58%	1.77	48%	1.20	1.43	\$17,310,587
52	65	I-24	Chattanooga	TN	I-75 to US-41	3.5	23,472	78,874	19,014	-41%	2.11	72%	1.22	1.84	\$11,710,215
53		I-80/I-294	Chicago	IL	I-94 to I-294	6.5	36,606	122,649	18,812	-43%	1.44	27%	1.13	1.35	\$7,485,719
54	62	I-75	Cincinnati	OH	SR-562 to SR-126	3	17,814	77,364	17,850	-48%	2.14	58%	1.22	1.77	\$10,991,102
55	80	I-95	New Haven	CT	I-91 to SR-10	1.8	19,460	32,444	17,765	-34%	1.92	58%	1.21	1.67	\$1,980,159
56	94	I-580	Livermore	CA	I-205 to First Street	7.1	14,928	124,122	17,470	-17%	2.23	75%	1.25	1.70	\$7,575,595
57	-	I-435	Kansas City	MO	At US-24	3.7	11,774	64,358	17,276	-15%	3.08	114%	1.36	1.96	\$3,927,996
58	64	I-880	San Jose	CA	At I-980; and At US-101	2.5 5.8	9,722	35,101	17,228	-48%	1.64	31%	1.20	1.19	\$23,143,890
59	24	I-10	Lake Charles	LA	At I-210	9.3	29,022	158,359	17,063	-72%	1.45	25%	1.14	1.30	\$9,665,120
60	58	I-95	Baltimore	MD	I-395 to I-895	4.2	18,224	49,913	16,920	-53%	1.76	32%	1.32	1.18	\$11,109,218
61	40	I-15	Riverside-San Bernardino	CA	At SR-91	2.2	9,934	36,713	16,775	-65%	3.13	129%	1.35	2.42	\$4,899,917
62	55	I-85	Atlanta	GA	I-75 to SR 13/141; and I-285 to SR-378	2.8 6.6	8,182	52,475	16,670	-56%	4.79	170%	1.74	2.44	\$15,354,291
63	-	I-15	Los Angeles-Long Beach-Anaheim	CA	At I-10	3.2	11,680	53,013	16,622	-65%	2.69	107%	1.28	1.89	\$5,156,032
64	35	I-10	Houston	TX	I-69 to I-45	2.1	17,356	30,461	16,164	-68%	2.17	73%	1.25	1.84	\$16,242,350

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65	38	I-110	Los Angeles-Long Beach-Anaheim	CA	I-10 to SR-42 Stauson Ave.	3.4	12,102	49,700	16,149	-50%	3.23	107%	1.49	2.05	\$6,755,652
66	79	I-24/I-40	Nashville-Davidson	TN	I-24 to I-65	3.0	11,300	26,825	16,073	-53%	2.89	119%	1.32	2.21	\$1,637,217
67	41	I-15	Salt Lake City-West Valley City	UT	At I-215 (SR-173 to SR-48)	2.4	45,478	49,192	15,967	-74%	1.38	26%	1.09	1.25	\$15,490,214
68	25	I-210	Los Angeles-Long Beach-Anaheim	CA	SR-39/164 Azusa Ave to SR-19 Rosemead Blvd	10	12,464	114,186	15,682	-74%	2.53	103%	1.24	2.16	\$22,869,600
69	61	I-215	Riverside-San Bernardino	CA	I-10 to SR-80	5.9	11,026	161,553	15,328	-56%	2.44	74%	1.32	1.37	\$17,321,952
70	88	I-15	Las Vegas-Henderson	NV	I-515 to Tropicana Ave	5.5	18,936	72,397	15,251	-31%	1.94	61%	1.19	1.64	\$11,710,310
71	48	I-294	Chicago	IL	At I-290; and At I-90	6.1 3.9	30,570	46,549	15,223	-64%	1.68	48%	1.14	1.56	\$10,821,997
72	95	I-95/I-495	Washington	MD	At SR-200	1.4	20,722	20,781	15,067	-43%	1.27	16%	1.10	1.11	\$2,188,838
73	77	I-93	Boston	MA	At I-90; and At SR-3	5.0; 5.5	10,180	53,981	14,864	-46%	2.83	99%	1.40	1.69	\$9,853,317
74	-	I-580	Concord	CA	At I-680	1.1	10,738	15,761	14,338	-71%	3.32	152%	1.32	2.57	\$4,083,645
75	-	I-12	Baton Rouge	LA	At I-10	3.1	18,918	44,658	14,285	-39%	1.24	8%	1.15	1.15	\$3,867,734
76	69	I-376	Pittsburgh	PA	Fort Pitt Bridge to Squirrel Hill	4.5	5,108	22,636	14,043	-55%	4.10	176%	1.47	2.96	\$1,381,546
77	-	I-20	Atlanta	GA	I-285 to SR-6	6.0	11,494	76,838	12,908	-33%	2.14	67%	1.26	1.51	\$4,689,687
78	-	I-820	Dallas-Fort Worth-Arlington	TX	At I-35W	3.0	7,742	38,359	12,898	178%	2.83	88%	1.44	1.35	\$2,341,166
79	-	I-40	Memphis	AR	At I-55		19,840	36,706	12,824	420%	1.15	-5%	1.20	1.08	\$2,240,291
80	70	I-10	Riverside-San Bernardino	CA	At I-215	1.6	13,934	108,455	12,797	-59%	1.96	64%	1.18	1.57	\$8,266,256
81	81	I-78	New York-Newark	NJ	US-22 to SR-440	5.2	11,644	16,557	12,609	-52%	1.94	39%	1.40	1.18	\$3,703,807
82	71	I-84	Waterbury	CT	At Union Street	1.7	8,568	21,377	12,597	33%	2.67	89%	1.34	1.61	\$1,304,699

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83	-	I-39/I-90	Rockford	IL	I-90 to US-20	1.7	14,410	21,740	12,518	613%	1.70	44%	1.18	1.56	\$1,326,872
84	-	I-70	St. Louis	MO	I-270 to SR-94	4.2	18,230	51,513	12,403	-34%	1.82	55%	1.14	1.60	\$4,266,608
85	60	I-270	St. Louis	MO	I-64 to SR 100	3.5	23,506	61,047	11,897	-66%	1.33	17%	1.13	1.20	\$14,876,697
86	46	I-90	Chicago	IL	I-90/94 to I-294	6.7	5,588	29,541	11,894	-73%	3.99	168%	1.49	2.36	\$5,945,087
87	-	I-4	Orlando	FL	SR-423 to SR-414	9.9	12,024	116,538	11,820	-15%	2.03	58%	1.25	1.49	\$7,112,630
88	99	I-40	Knoxville	TN	At I-140	2.3	22,756	70,375	11,557	-42%	1.47	31%	1.12	1.36	\$5,368,433
89	87	I-270	Washington	MD	At I-495	1.5	18,740	62,906	11,457	-49%	1.63	34%	1.21	1.19	\$13,506,493
90	47	I-64	St. Louis	MO	Market St to I-70 (over Mississippi River)	5	18,794	25,345	11,358	-73%	1.43	23%	1.16	1.21	\$1,546,872
91	91	I-4	Tampa-St. Petersburg	FL	I-275 to US 41/50 th	3.5	12,364	65,590	11,354	-47%	2.00	52%	1.24	1.26	\$4,003,162
92	98	I-65	Nashville-Davidson	TN	I-40 to I-440	1.9	9,996	28,438	11,317	-44%	3.31	152%	1.31	2.88	\$8,004,319
93	-	I-225	Denver-Aurora	CO	At Colfax Ave	1.8	11,616	20,561	11,212	-41%	2.34	90%	1.23	1.91	\$1,254,909
94	90	I-95	Miami	FL	South of Florida Turnpike to SR 824	8	8,168	59,704	11,078	-49%	3.10	104%	1.47	1.67	\$11,883,540
95	76	I-95	Fredericksburg	VA	US-17 to Russell Rd	14.5	20,630	15,603	11,012	-61%	1.37	23%	1.09	1.28	\$952,295
96		I-35	Kansas City	KS	US-69 to US-169	2.1	13,532	22,739	10,854	-20%	1.79	45%	1.20	1.52	\$1,387,832
97	42	I-15	Murrieta-Temecula-Meniffee	CA	At SR-79		6,444	68,296	10,836	-44%	3.19	133%	1.37	2.45	\$4,168,328
98	-	I-20	Dallas-Fort Worth-Arlington	TX	At SR-360		24,334	62,859	10,827	-39%	1.42	26%	1.11	1.26	\$7,328,494
99	-	I-295	New York-Newark	NY	I-495 to Cross Island Pkwy	3.4	13,182	36,627	10,775	-38%	1.65	37%	1.18	1.31	\$2,235,432
100	-	I-75	Toledo	OH	I-475 to South Ave	3.9	30,210	42,405	10,753	25	1.19	8%	1.10	1.08	\$3,530,697

Information is provided in the table for the primary bottleneck corridor, the bottleneck segment with the greatest delay, and congestion costs for all congested segments with the urbanized area.

- **Generalized Bottleneck Location:** Extent of congestion the primary bottleneck on the corridor, estimated based upon review of corridor congestion scans in the NPMRDS and review of State Freight Plans. For major congested corridors, this may include multiple contiguous bottlenecks. For corridors with multiple distinct bottleneck locations, two corridors will be noted. These locations have been further refined based upon review of 2020 NPMRDS data and State 2020 Performance Reports.
- **Bottleneck Segment with Greatest Delay:** The following information is provided for the segment along the corridor with the greatest truck hours of delay per mile:
 - **AADTT (Trucks):** NPMRDS total single unit and combination trucks conflated from Highway Performance Monitoring System (HPMS). Note, the prior year HPMS data is conflated to the NPMRDS at the beginning of each year. Therefore the 2020 NPMRDS shows traffic counts that were taken in 2018.
 - **Delay per Mile:** Annual Truck Hours of Delay determined as the difference between actual travel time and reference travel time (“free-flow” travel time), multiplied by truck volumes for the segment with the greatest delay. Annual Truck Hours of Delay is divided by the segment length to provide the Delay per Mile. For larger bottlenecks that span multiple roadway segments, delay is provided for the most congested segment and direction of the bottleneck, not the full corridor.
 - **Change from 2019:** The percent change in Annual Truck Hours of Delay per Mile from 2019 to 2020.
 - **PTI:** Ratio of the 95th percentile travel time to the reference travel time (“free-flow” travel time), computed during the AM and PM peak periods.
 - **BI:** Represents the extra time (or time cushion) that travelers must add to their average travel time when planning trips to ensure on-time arrival.
 - **TTI:** Ratio of the peak-period travel time to the reference travel time (“free-flow” travel time), computed for the AM and PM peak periods.
 - **TRI:** Ratio of the 95th percentile travel time to the 50th percentile travel time during five different time periods of the day. Calculated similar to the MAP-21 performance measure for Truck Travel Time Reliability (TTTR), however, results will differ from the NPMRDS TTTR due to route segmentation.
- **Total Congestion Cost of Full Corridor (\$/year):** Calculated for the full extent of delay along the congested corridor as a function of both the time and fuel used while the truck is in congested traffic, factoring costs of personnel, commercial vehicle operation, and wasted fuel. For major bottlenecks with long congestion queues, this will include multiple roadway segments. For major congested corridors, the congestion cost will include the full cost of congestion along the corridor through the entire urban area, which may include multiple bottlenecks. This may include delay at other congested segments beyond the primary bottleneck in the urban area.

Changes Between 2019 and 2020

There was an overall large reduction in truck delay between 2019 and 2020 due to reduced travel during the COVID-19 global pandemic. Nationwide, there was a reduction in total truck delay on the Interstate system of 21 percent between 2019 and 2020. For the top 100 bottlenecks, which represent some of the most congested corridors in major metropolitan areas, there was reduction in total truck delay of 45 percent.

Based upon a comparison of truck hours of delay per mile, the following bottlenecks saw the greatest relative percent change (increase or decrease) in delay between 2019 and 2020. Those locations that saw an increase in delay in 2020 are mostly attributed to major construction projects and work zones along the corridors. Any changes due to capacity or operational improvements will show up in subsequent year analyses.

The following bottlenecks saw the greatest percent increase in delay from 2019. Increased delay is largely associated with major roadwork.

Table 2. Greatest Increase in Delay Between 2019 and 2020

Road	Urban Area	State	Increase in Delay Per Mile from 2019	
			Hours	Percent
I-39/I-90	Rockford	IL	10,762	613%
I-40	Memphis	AR	10,356	420%
I-820	Dallas-Fort Worth	TX	8,258	178%
I-80	Rural	CA	9,450	134%
I-35W	Dallas	TX	13,042	52%
I-84	Waterbury	CT	3,148	33%
I-75	Chattanooga	TN	3,251	8%

The following bottlenecks saw the greatest percent decrease in delay from 2019:

Table 3. Greatest Decrease in Delay Between 2019 and 2020

Road	Urban Area	State	Decrease in Delay Per Mile from 2019	
			Hours	Percent
I-605	Los Angeles	CA	(118,631)	-85%
I-10	Phoenix	AZ	(38,766)	-80%
I-15	Salt Lake City	UT	(45,637)	-74%
I-210	Los Angeles	CA	(44,732)	-74%
I-64	St. Louis	MO	(31,413)	-73%
I-35	San Antonio	TX	(28,629)	-73%
I-90	Chicago	IL	(31,451)	-73%
I-680	San Francisco	CA	(58,060)	-71%
I-40	Albuquerque	NM	(22,682)	-71%
I-580	Concord	CA	(34,333)	-71%

Based upon changes to truck hours of delay per mile, the following bottlenecks saw a relative increase in delay, moving the locations to the top 100 bottlenecks, or a relative decrease in delay, dropping the locations below the top 100 bottlenecks.

The following bottlenecks were added to the list in 2020:

Table 4. Locations Added to Top 100 Between 2019 and 2020

Road	Urban Area	State
I-35	Waco	TX
I-24/I-65	Nashville-Davidson	TN
I-80/I-94	Chicago	IN
I-80/I-294	Chicago	IL
I-435	Kansas City	MO
I-15	Los Angeles-Long Beach-Anaheim	CA
I-580	Concord	CA
I-12	Baton Rouge	LA
I-20	Atlanta	GA
I-820	Dallas-Fort Worth-Arlington	TX
I-40	Memphis	AR
I-39/I-90	Rockford	IL
I-70	St. Louis	MO
I-4	Orlando	FL
I-225	Denver-Aurora	CO
I-35	Kansas City	KS
I-20	Dallas-Fort Worth-Arlington	TX
I-295	New York-Newark	NY
I-75	Toledo	OH

The following bottlenecks from 2019 dropped off the list in 2020:

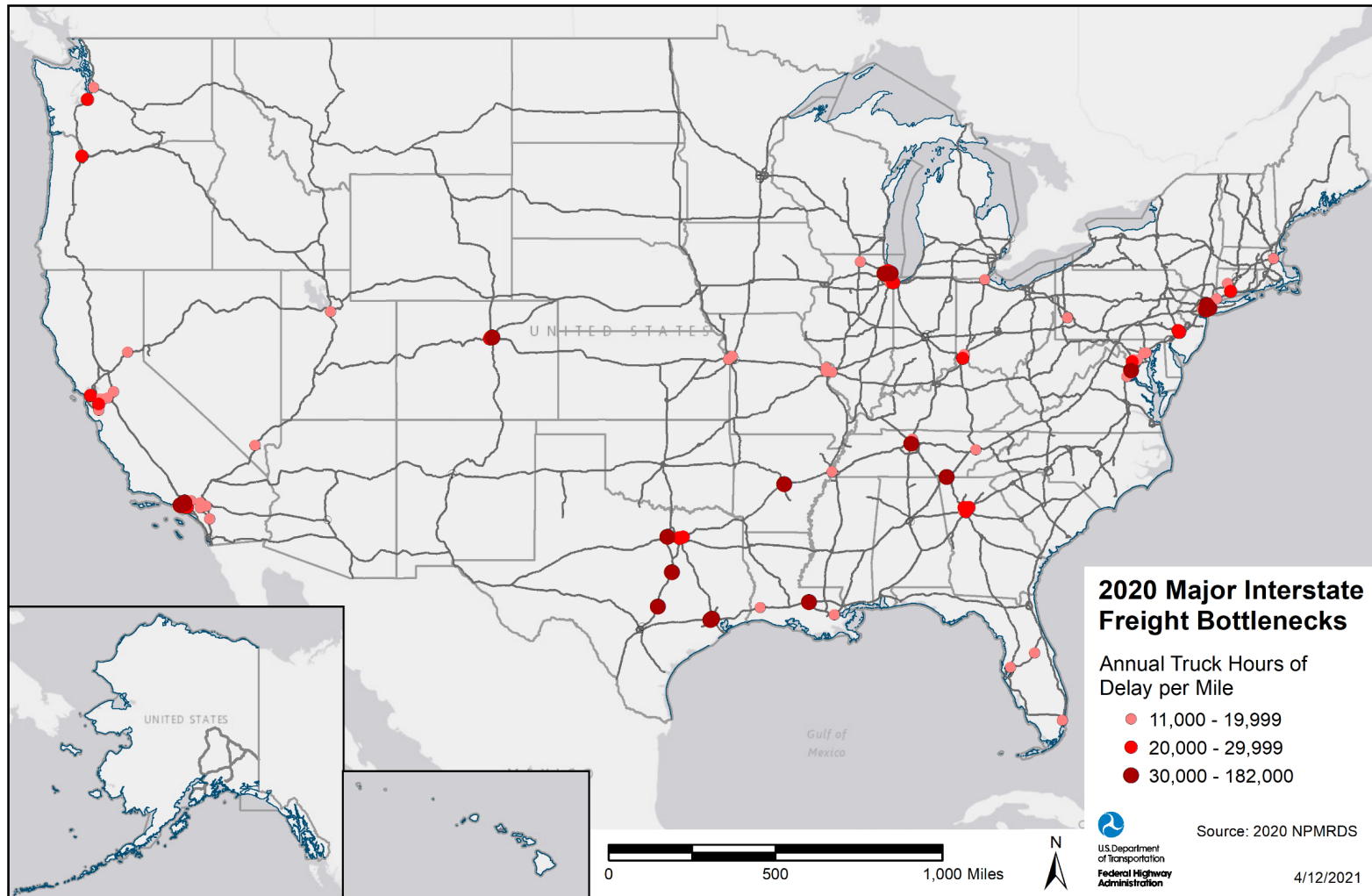
Table 5. Locations Removed from Top 100 Between 2019 and 2020

Road	Urban Area	State
I-20/I-59	Birmingham	AL
I-10	Phoenix	AZ
I-805	San Diego	CA
I-238	San Francisco	CA
I-395	Washington	DC/ VA
I-95	Wilmington	DE
I-65	Indianapolis	IN
I-95	Boston	MA
I-494	Minneapolis	MN
I-94	Minneapolis	MN
I-670	Kansas City	MO
I-280	New York	NJ
I-40	Albuquerque	NM
I-71	Columbus	OH
I-205	Portland	OR
I-405	Portland	OR
I-84	Portland	OR
I-35	San Antonio	TX
I-15	Ogden	UT

Mapped Locations

The following map shows the top Interstate bottlenecks in the U.S. as listed in table 1 based on Annual Truck Hours of Delay per Mile for 2020.

Map 1. Major Interstate Highway Freight Bottlenecks Based on Annual Truck Hours of Delay per Mile, 2020 NPMRDS



Other Bottlenecks

The analysis in this report uses delay per mile for assessing bottlenecks to allow for comparison over the entire Interstate system across all States. Individual State DOTs and Metropolitan Planning Organizations (MPOs) use a range of bottleneck identification methods based upon their freight plan development process and local traffic characteristics, infrastructure constraints, and impediments to efficient freight movement.

There is a range of methods for measuring congestion, delay, and reliability. Reliability is another factor that is important to the freight industry and can be measured with metrics such as the Truck Travel Time Reliability national performance measure or some of the other indices listed in Table 1.

In addition to congestion-based delay, some truck freight bottlenecks can be attributed to infrastructure restrictions that uniquely impact trucks, such as bridges with weight or clearance restrictions; steep grades; frequent adverse weather; or constraints at facilities, such as ports, intermodal rail facilities, and border crossings.

Individual State Freight Plans should be reviewed for additional information on the various types of freight bottlenecks.