



ROOSEVELT BOULEVARD AUTOMATED SPEED CAMERA ANNUAL REPORT

April 2022

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Executive Summary

The Speed Camera Program in the City of Philadelphia was launched on June 1, 2020, through a partnership between the City, the Philadelphia Parking Authority, and the Pennsylvania Department of Transportation.

The Speed Camera Program is authorized to operate in Philadelphia only on U.S. Route 1 (Roosevelt Boulevard) between Ninth Street and the Philadelphia County line shared with Bucks County. At the time of this report, crash and accident data through 2021 is not available from PennDOT. When that information is available an addendum to this report will be filed.

We do know that when Speed Cameras were first installed in Philadelphia, incidents of speeding, including excessive speeding, were rampant. For example, while Roosevelt Boulevard has posted speed limits of 40 MPH or 45 MPH, it was not uncommon to clock speeds double those limits, even as high as 138 MPH. Since implementation of the Speed Camera Program, speeding violations at monitored locations have decreased by 91.4% as of November 2021. We believe these facts alone confirms that the Program works as intended and will ultimately save lives where installed, if it has not done so already.

Currently, two new locations: 700 West Roosevelt Boulevard; and 5000 Roosevelt Boulevard are in the process of being included in the Speed Camera Program. The Program is very popular and many requests have been received to expand it to other areas of the City. Elected officials have made several suggestions, including: Kelly Drive, Lincoln Drive, Delaware Avenue, and Torresdale Avenue.

Governor Wolf announced in December that funds collected from the Speed Camera Program and from a similar program administered by PennDOT in work zones will help fund over \$22.1 million in safety projects, which included many projects in Philadelphia. While revenue is not the goal of these programs it is a peripheral benefit which only further advances highway safety in the Commonwealth.

We must note that the continuing viability of the Speed Camera Program in Philadelphia is in doubt because due to a 2023 sunset provision in the enabling legislation. Because the Speed Camera Program has made tremendous headway in accomplishing its goals and is such a critical part of the City's Vision Zero initiative, the Authority believes that the Program should be made permanent and not limited to just Roosevelt Boulevard.

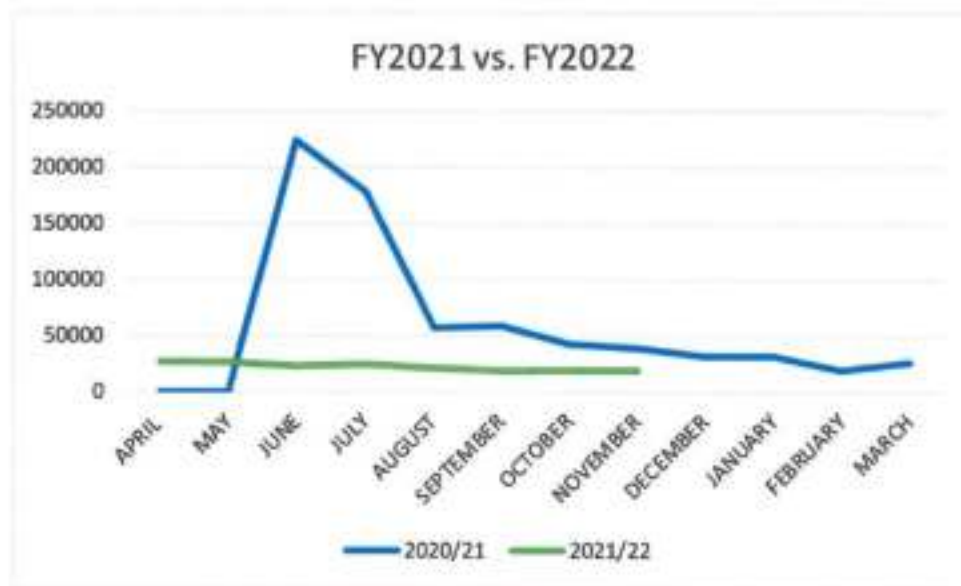
Respectfully Submitted,



Corinne O'Connor
Deputy Executive Director

Violations by Comparison

Violations have continued to decline since last year. In the past year both the number of violations and the speeds recorded have reduced. For Fiscal year 2021 (April 2020 to March 2021) 708,103 warnings/violations were issued. For Fiscal year 2022, the violations reduced to 180,559 through November 2021. December 2021 through February 2022 are still being processed so complete numbers are not yet available.



Violations Issued In FY2022

MONTH	AVERAGE TRAFFIC SPEED	AVERAGE ISSUED SPEED	VEHICLES GOING OVER 100 MPH	VIOLATIONS ISSUED	AVERAGE VIOLATIONS PER DAY
APRIL 2021	32.29	56.6	15	26,799	893
MAY 2021	32.35	56.6	7	26,286	848
JUNE 2021	31.89	56.6	4	22,614	754
JULY 2021	32.45	56.5	6	25,141	811
AUGUST 2021	31.91	56.5	4	21,617	697
SEPTEMBER 2021	31.73	56.6	1	19,059	635
OCTOBER 2021	32.24	56.5	7	19,773	638
NOVEMBER 2021	32.41	56.4	3	19,270	642
DECEMBER 2021	32.70	56.4*	3	18,386*	593*
JANUARY 2022	32.93	56.2*	11	15,283*	493*
FEBRUARY 2022	32.31	56.4*	1	8,939*	319*
TOTAL				223,157 *	610 *

*As of Feb. 28th, 2022

Comparison of FY2021 to FY2022

	AVERAGE TRAFFIC SPEED 2020/21	AVERAGE TRAFFIC SPEED 2021/22	AVERAGE ISSUED SPEED 2020/21	AVERAGE ISSUED SPEED 2021/22	VEHICLES OVER 100 MPH 2020/21	VEHICLES OVER 100 MPH 2021/22	VIOLATIONS ISSUED 2020/21	VIOLATIONS ISSUED 2021/22
APRIL 2020/21	NA	32.29	NA	56.6	NA	15	NA	26,799
MAY 2020/21	NA	32.35	NA	56.6	NA	7	NA	26,286
JUNE 2020/21	35.05	31.89	57.4	56.6	39	4	224,206 *Warnings	22,614
JULY 2020/21	34.26	32.45	57.2	56.5	36	6	178,153 *Warnings	25,141
AUGUST 2020/21	33.03	31.91	56.8	56.5	11	4	56,872	21,617
SEPTEMBER 2020/21	32.89	31.73	56.8	56.6	11	1	58,639	19,059
OCTOBER 2020/21	32.65	32.24	56.5	56.5	10	7	42,157	19,773
NOVEMBER 2020/21	32.57	32.41	56.5	56.4	8	3	38,660	19,270
DECEMBER 2020/21	32.38	32.70	56.4	56.4*	9	3	31,963	18,386*
JANUARY 2021/22	32.74	32.93	56.4	56.2*	6	11	31,323	15,283*
FEBRUARY 2021/22	31.96	32.31	56.4	56.4*	7	1	18,708	8,939*
MARCH 2021/2022	32.29	NA	56.6	NA	5	NA	27,422	Not available
TOTAL							708,103	223,167

* As of Feb. 28th, 2022

Covid-19 continues to impact the economy and lives of citizens. In the past year, we have seen businesses and workplaces reopen. Traffic volume over the duration of the program had increased once quarantine restrictions were lifted after June 2020, but declined in the winter of 2020 when the Covid cases increased, then increasing again in the summer of 2021. The impact Covid-19 has had on driving behaviors is unclear. The National Highway Safety Administration, part of the U.S. Department of Transportation, state in their October 2021 article that prior to March, approximately 19% of the population stayed home on a daily basis. As of May and June of 2021, 23% of the population continued to stay home on a daily basis. The research also noted an increase of risky driving behavior which includes speeding, an increase in average speed and excessive speeds, and driving under the influence. The full report is located in Appendix D.

Traffic volume increased from June of 2020 to December 2021. However, the number of violations have decreased. Data obtained from PennDOT shows that from 2019 to 2020 serious crashes have also decreased as well as accidents involving pedestrians, but fatalities have increased which further demonstrates the risky driving behavior observed since the pandemic began.

	TRAFFIC VOLUME	AVERAGE TRAFFIC VOLUME PER DAY	WARNINGS/ VIOLATIONS ISSUED	AVERAGE WARNINGS/VIOLATIONS ISSUED PER DAY	PERCENTAGE OF TRAFFIC VOLUME ISSUED A CITATION
JUNE 2020	13,499,939	449,997.97	224,206	7,473.53	1.66%
JULY 2020	14,838,363	478,656.87	178,153	5746.87	1.20%
AUGUST 2020	14,354,678	463,054.13	56,872	1834.58	.40%
SEPTEMBER 2020	13,736,081	457,869.37	58,639	1954.63	.43%
OCTOBER 2020	14,428,780	465,444.52	42,157	1,359.90	.28%
NOVEMBER 2020	13,011,389	433,712.97	38,660	1,288.67	.30%
DECEMBER 2020	12,655,870	408,253.87	31,963	1,031.06	.25%
JANUARY 2021	12,541,852	404,575.87	31,323	1,010.42	.25%
FEBRUARY 2021	11,097,433	396,336.89	18,708	668	.17%
MARCH 2021	14,478,083	467,034.94	27,422	884.58	.19%
APRIL 2021	14,291,148	476,371.6	26,799	893.30	.19%
MAY 2021	15,013,698	484,312.87	26,286	847.94	.18%
JUNE 2021	14,586,280	486,209.33	22,614	753.8	.16%
JULY 2021	15,202,988	490,418.97	25,141	811	.17%
AUGUST 2021	14,903,339	480,752.87	21,617	697.32	.15%
SEPTEMBER 2021	14,954,277	498,475.90	19,059	635.3	.13%
OCTOBER 2021	15,156,815	488,929.52	19,773	637.84	.13%
NOVEMBER 2021	14,283,029	476,100.97	19,270	642.33	.13%
DECEMBER 2021	14,247,256	459,588.90	18,386*	593.10*	.13%*
JANUARY 2022	12,509,117	403,519.90	15,283*	493*	.12%*
FEBRUARY 2022	12,949,032	462,465.43	8,939*	319.25*	.07%*
TOTAL	292,739,448		931,270*		

*As of Feb. 28th, 2022

Collection of Revenue & Hearings Requested

Collection of fines have been consistent. As the citation ages, additional notices are issued to the citizen with the addition of late fees, then the citation is assigned to debt collections, where further contact with the citizen is made to collect the outstanding fine. In addition to notices, if a violation remains in an unpaid status, the plate has the potential in being placed in boot eligibility status if the vehicle has three or more unpaid parking, red light or speed violations.

MONTH	PAID	PARTIAL PAID	UNPAID	HEARINGS REQUESTED
MARCH 2021	19,143	361	7,909	345
APRIL 2021	17,888	328	8,581	376
MAY 2021	17,059	401	8,824	371
JUNE 2021	14,139	298	8,177	382
JULY 2021	15,074	325	9,736	405
AUGUST 2021	12,899	268	8,447	308
SEPTEMBER 2021	11,134	280	7,643	286
OCTOBER 2021	11,360	252	8,153	327
NOVEMBER 2021	10,567	190	8,498	305
DECEMBER 2021	9,498	196	8,652	275
JANUARY 2022	5,377	30	9,851	195
FEBRUARY 2022	526	0	8,413	7
TOTAL	144,664	2,929	102,884	3,582

* As of Feb. 28th 2022

Expenses of the Speed Camera Program

The camera vendor, Verra Mobility, is paid \$2,995 for each camera. This fee includes the cost of the camera, maintenance of the camera infrastructure, the backend system, staffing to crop and review images, and a customer service department including a walk-in customer service center in Philadelphia. The monthly invoice for all 32 cameras is \$95,840. The vendor reimburses the Authority for signage and poles to support the program.

The total costs to administer the program for the past fiscal year are as follows:

Speed Camera, Financial Snapshot, as of 2/28/22

Fiscal Year 2022	2/28/2022	
Violation Revenue	22,795,765	Violation Revenue (including database fees) less refund amounts
Interest & Misc. Income	2,713	
Total Revenue	\$22,798,478	
Equipment	856,328	Paid to Vera Mobility, the contractor who installs & maintains the cameras and tech support
Program Costs / Collection Fees	1,094,839	Paid to Duncan, PRWT, Harris and Harris, Professional Account Management & TSI for processing and collection services
Philadelphia Police Department	79,402	Police Officer Expenses in the review and approval/rejection of violations
Philadelphia Department of Finance	64,063	The Office of Administrative Review is responsible for the 1st level hearings
Personnel Costs	576,305	Includes current staff and fringe benefits
PPA Support	448,487	The allocated expense for PPA support services HR, Purchasing, IT, Management, Security, Finance and Accounting
Rent Expense	47,384	Allocated rent expense from Red Light Camera Department
Other Expenses	266,686	Auto expense, insurance, printing, misc. expense, office expenses, professional fees and telephone fees
Total Expenses	\$3,433,494	
Net Income for FY22	19,364,984	
Total Payments to Date for FY 22	(16,418,622)	
Revenue Due to State, 2/28/22	\$2,946,362	***

Speed Funding of Safety Project Initiatives

Governor Wolf announced on December 10, 2021 that the Speed Camera Program in Philadelphia and the Automated Work Zone Program administered by PennDOT produced \$22.1 million. These funds will be used for safety grants. The awards include:

- \$6 million for designing intersection modifications identified as 2025 improvements in the Roosevelt Boulevard Route for Change program in the City of Philadelphia, including curb extensions to shorten pedestrian crossing distances, realigned crosswalks, realigned lane configurations and turn lanes, upgrades to traffic signals and timing, changes to traffic movements, and new or upgraded transit shelters and stations;
- \$4 million for safety improvements on Cottman Avenue in the City of Philadelphia between Roosevelt Boulevard and Castor Avenue;
- \$3 million for safety improvements on Castor Avenue which will implement a range of complete streets tools to a 2.3 mile segment of minor arterial roadway in Northeast Philadelphia;
- \$2 million for implementing Business Access and Transit (BAT) lanes (right turn and bus lanes) through pavement markings and signs along Roosevelt Boulevard in the City of Philadelphia;
- \$2 million to develop an alternatives analysis to further the Roosevelt Boulevard Route for Change report concepts in compliance with the National Environmental Policy Act (NEPA);
- \$1.5 million for the Roosevelt Boulevard Parallel Corridor ITS and Emergency Preemption Program which includes design and construction of emergency preemption along corridors as well as make-ready signal upgrades needed for the introduction of red-light running cameras by Philadelphia Parking Authority (PPA) at select intersections on Roosevelt Boulevard corridors in the City of Philadelphia;
- \$1 million for delivering safer, more accessible, and more comfortable bus stops to transit riders along Roosevelt Boulevard in the City of Philadelphia as identified in the Roosevelt Boulevard Route for Change report;
- \$500,000 for improvements to Spring Garden Street between Columbus Boulevard and 23rd Street in the City of Philadelphia, including both streetscape and cartway improvements at 22 intersections; and,
- \$2.1 million to provide technical assistance for the Pennsylvania Automated Work Zone Speed Enforcement (AWZSE) program statewide.

Improving Outcomes along the Boulevard

The Philadelphia Parking Authority and its contractors are in the process of installing two (2) additional camera locations, four cameras at each location. The two (2) new locations were recommended by the Authority based upon data found in last year's report that indicated that certain portions of the Boulevard did not see the same reductions in violations and speeds. The Authority noted that these areas had large stretches without speed cameras. The Office of Transportation, Infrastructure, and Sustainability (OTIS) and PennDOT agreed with these conclusions and approved the new locations.

Cameras will be installed at 700 W. Roosevelt Boulevard, which is between N. 7th and N. 9th Streets. N. 9th street is near the Schuylkill Expressway.

The other site set for speed camera installation is 5000 Roosevelt Boulevard. This location is in between Summerdale and Pratt Streets. This area has is a combination of a residential and commercial community with a large shopping center. It is located on the southern side of Oxford Circle, where there is an underpass. As recent as November 20th, 2021, a vehicle going at a high rate of speed hit the curb and went airborne causing multiple vehicles to be damaged, a PennDOT sign to be hit, which resulted in a loss of life*

* <https://www.nbcphiladelphia.com/news/local/2-dead-including-boy-after-suv-goes-airborne-on-roosevelt-boulevard/3054797>

Ticket issuance

There are three fine levels that are determined by Speed, 11-19 mph, 20-29 mph, and 30 mph and above. The table below indicates a steady decline in the number of violations at each rate of speed over the posted speed limit.

Number of violations and fines issued by speed

	11-19	%	20-29	%	30-39	%	40- 49	%	50+	%	TOTAL
MARCH 2021	24,746	90.24%	2,266	8.26%	327	1.19%	55	.20%	28	.10%	27,422
APRIL 2021	24,210	90.34%	2,177	8.12%	315	1.18%	63	.24%	34	.13%	26,799
MAY 2021	23,687	90.11%	2,221	8.45%	294	1.18%	64	.24%	20	.08%	26,286
JUNE 2021	20,451	90.44%	1,853	8.19%	250	1.10%	51	.23%	9	.04%	22,614
JULY 2021	22,721	90.37%	2,060	8.19%	283	1.13%	53	.21%	24	.10%	25,141
AUGUST 2021	19,721	91.22%	1,645	7.61%	196	.91%	43	.20%	15	.07%	21,620
SEPTEMBER 2021	17,286	90.70%	1,507	7.90%	209	1.10%	46	.24%	11	.06%	19,059
OCTOBER 2021	17,958	90.82%	1,537	7.77%	204	1.03%	55	.28%	19	.10%	19,773
NOVEMBER 2021	17,486	90.74%	1,553	8.06%	184	.95%	39	.20%	8	.04%	19,270
DECEMBER 2021	16,855*	91.67%	1,304*	7.09%	174*	.95%	43*	.23%	10*	.05%	18,386*
JANUARY 2021	13,962*	91.36%	1,110*	1.25%	158*	1.03%	29*	.19%	24*	.16%	15,283*
FEBRUARY 2021	8,198*	91.71%	632*	7.07%	86*	.96%	20*	.22%	3*	.03%	8,939*
TOTAL	227,281*		19,865*		2,680*		561*		205*		250,592*

*As of Feb. 28th, 2022

The violations by out of state drivers also declined.

Out of State Vs. In-State Violation Issuance

MONTH	PA PLATES	NJ PLATES	DE PLATES	OTHER STATE PLATES	NOTICES ISSUED	PHILADELPHIA REGISTERED PLATES	BUCKS COUNTY REGISTERED PLATES
MARCH 2021	23,628	2,282	249	1,263	27,422	15,606	2,563
APRIL 2021	23,093	2,238	290	1,178	26,799	15,566	2,378
MAY 2021	22,620	2,158	302	1,206	26,286	15,433	2,133
JUNE 2021	19,867	1,888	233	626	22,614	13,548	1,962
JULY 2021	22,051	2,105	288	697	25,141	15,205	2,012
AUGUST 2021	18,963	1,791	235	631	21,620	13,059	1,844
SEPTEMBER 2021	16,724	1,641	178	516	19,059	11,360	1,671
OCTOBER 2021	17,221	1,844	190	518	19,773	11,806	1,694
NOVEMBER 2021	16,788	1,747	211	524	19,270	11,590	1,681
DECEMBER 2021	16,063*	1,659*	194*	470*	18,386*	10,923*	1,572*
JANUARY 2022	13,315*	1,370*	186*	412*	15,283*	9,038*	1,298*
FEBRUARY 2022	7,751*	834*	102*	252*	8,939*	5,154*	843*
TOTAL							

* As of Feb. 28th, 2022

Included in the data below are notices issued to license plates that were registered to zip codes in Bucks County that are near the Philadelphia boarder (18940, 18954, 18966, 18974, 19007, 19020, 19021, 19030, 19047, 19053, 19055, and 19067)

Appendix B has a chart demonstrating violations issued by hour per location. Higher speeds occur in the overnight hours.

Crash Data

In appendix C is the current crash and injury data for Roosevelt Boulevard from 9th Street to the Bucks County boarder from 2016 to 2020. Data for 2021 is not available yet. The data obtained from PennDOT shows that overall crashes have decreased whether it be serious or minor when comparing 2019 to 2020. Possible injuries, property damage, and crashes involving pedestrians have also decreased.

Location analysis

Citation issuance has continued to decline compared to the beginning of the program. The Deveraux and Strahle camera locations continue to experience a higher number of violations. F Street has not had numbers fall as fast as Deveraux and currently has a higher issuance rate. With continued assistance from the Philadelphia Police Department, and the installation of new camera locations, violations should still continue to decrease.

Issuance by Camera Location

	BANKS WAY	F STREET	DEVERAUX AVENUE	HARBISON AVENUE	STRAHLE STREET	GRANT AVENUE	RED LION ROAD	SOUTHAMPTON ROAD
DECEMBER 2020	3,803	7,272	9,836	321	1,561	219	3,908	5,043
JANUARY 2021	3,789	7,136	9,549	246	1,557	211	3,694	5,141
FEBRUARY 2021	2,139	3,744	5,675	352	1,009	152	2,389	3,248
MARCH 2021	3,068	5,251	8,415	228	1,494	204	3,730	5,032
APRIL 2021	3,094	5,451	7,605	225	1,622	212	3,802	4,788
MAY 2021	3,231	5,867	7,199	168	1,575	247	3,561	4,438
JUNE 2021	2,938	5,788	4,876	138	1,727	234	2,621	4,294
JULY 2021	3,601	6,293	5,471	234	1,658	186	3,532	4,166
AUGUST 2021	2,923	5,589	3,765	462	1,506	203	3,360	3,809
SEPTEMBER 2021	2,353	4,665	3,587	553	1,264	224	2,978	3,435
OCTOBER 2021	2,356	5,067	4,273	309	1,108	194	2,999	3,467
NOVEMBER 2021	2,740	4,813	4,167	248	1,045	186	3,004	3,067
DECEMBER 2021	2,681*	4,329*	3,951*	225*	1,084*	165*	2,697*	3,222*
JANUARY 2022	2,375*	3,870*	3,410*	249*	843*	148*	2,005*	2,383*
FEBRUARY 2022	1,304*	1,978*	2,011*	89*	573*	68*	1,324*	1,592*
TOTAL	42,395*	77,113*	83,788*	4,047*	19,666*	2,853*	45,636*	57,125*

*As of Feb. 28th, 2022

Appendix A – Violations, Average Speed, Highest Speeds by Camera Location

All numbers are as of February 28th, 2022. Due to the statute of limitations for a violation to be issued, there are still events in the queues that are awaiting DMV information and/or processing. Numbers will be updated with next year's report.

Banks Way

Northbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	585,272	33.06	54.6	82	839
JANUARY 2021	580,987	33.10	54.6	85	762
FEBRUARY 2021	522,178	32.29	54.5	81	459
MARCH 2021	670,089	30.94	54.6	87	461
APRIL 2021	658,423	31.43	54.7	110	536
MAY 2021	698,649	30.52	54.7	102	589
JUNE 2021	690,213	30.13	54.5	74	415
JULY 2021	723,265	31.79	54.5	83	768
AUGUST 2021	725,338	31.20	54.4	76	520
SEPTEMBER 2021	708,883	30.24	54.4	76	425
OCTOBER 2021	729,729	29.77	54.7	101	321
NOVEMBER 2021	685,236	30.81	54.9	78	351
DECEMBER 2021	661,668	31.00	54.9*	81	309*
JANUARY 2022	610,102	31.95	55.2*	87	270*
FEBRUARY 2022	630,198	31.44	54.2*	74	364*
TOTAL	9,880,230				7,389*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	406,125	32.29	55.2	93	830
JANUARY 2021	407,221	32.42	54.9	85	754
FEBRUARY 2021	362,827	31.26	55.0	82	395
MARCH 2021	462,159	31.62	55.0	93	614
APRIL 2021	455,887	31.74	55.2	83	560
MAY 2021	472,966	30.96	55.3	79	567
JUNE 2021	462,780	31.47	55.1	89	732
JULY 2021	471,582	31.36	55.1	82	881
AUGUST 2021	440,651	31.96	55.1	83	709
SEPTEMBER 2021	458,999	31.51	55.1	81	633
OCTOBER 2021	462,585	31.49	55.0	82	693
NOVEMBER 2021	440,741	32.28	55.0	85	703
DECEMBER 2021	441,245	31.77	54.6*	83	621*
JANUARY 2022	390,343	32.60	55.0*	93	633*
FEBRUARY 2022	400,145	31.78	55.4*	80	276*
TOTAL	6,536,256				9,601*

South Bound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	675,379	33.05	54.9	90	1,098
JANUARY 2021	673,870	33.54	54.8	100	1,206
FEBRUARY 2021	590,691	32.47	54.9	95	723
MARCH 2021	743,881	33.16	55.0	89	953
APRIL 2021	712,733	33.0	54.7	79	943
MAY 2021	747,960	33.46	54.8	89	991
JUNE 2021	744,549	33.16	54.9	93	989
JULY 2021	776,615	32.80	55.1	87	922
AUGUST 2021	831,572	32.86	55.2	110	839
SEPTEMBER 2021	803,721	31.98	55.8	92	619
OCTOBER 2021	816,790	32.33	55.5	90	667
NOVEMBER 2021	752,549	31.45	55.5	89	876
DECEMBER 2021	759,257	32.81	54.6*	96	886*
JANUARY 2022	685,355	32.56	54.8*	92	797*
FEBRUARY 2022	695,651	31.86	54.8*	89	338*
TOTAL	11,020,573				12,848*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	422,319	33.14	54.9	84	1,036
JANUARY 2021	417,802	33.60	54.9	92	1,067
FEBRUARY 2021	377,158	33.30	55.4	90	562
MARCH 2021	489,767	33.18	55.0	86	1,040
APRIL 2021	489,156	33.24	55.3	98	1,055
MAY 2021	515,168	33.65	55.1	79	1,084
JUNE 2021	426,666	33.63	54.9	92	802
JULY 2021	527,275	33.22	55.5	103	1,030
AUGUST 2021	538,281	33.15	55.1	103	855
SEPTEMBER 2021	537,704	31.73	55.5	91	676
OCTOBER 2021	541,062	32.20	55.3	94	675
NOVEMBER 2021	505,626	31.49	55.4	88	810
DECEMBER 2021	498,358	32.56	55.3*	91	865*
JANUARY 2022	441,878	32.45	55.1*	87	675*
FEBRUARY 2022	450,863	31.73	54.7*	74	325*
TOTAL	7,179,083				12,557*

F Street

Northbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	595,529	33.48	54.3	84	2,703
JANUARY 2021	596,259	34.18	54.4	88	2,486
FEBRUARY 2021	519,426	32.28	54.4	78	1,249
MARCH 2021	667,037	31.57	54.3	76	1,576
APRIL 2021	660,771	31.86	54.3	92	1,488
MAY 2021	693,213	33.97	54.3	83	1,808
JUNE 2021	703,522	34.67	54.3	86	1,663
JULY 2021	727,541	34.91	54.4	99	2,034
AUGUST 2021	658,875	33.37	54.2	88	1,773
SEPTEMBER 2021	664,667	34.07	54.3	83	1,521
OCTOBER 2021	688,619	33.98	54.1	82	1,653
NOVEMBER 2021	646,524	33.93	54.6	101	1,595
DECEMBER 2021	640,044	34.59	54.1*	94	1,170*
JANUARY 2022	576,582	34.90	54.1*	90	1,053*
FEBRUARY 2022	587,409	34.13	54.1*	82	594*
TOTAL	9,616,018				24,366*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	342,335	32.04	54.9	86	926
JANUARY 2021	335,550	32.51	54.5	75	880
FEBRUARY 2021	300,081	30.97	54.5	74	420
MARCH 2021	397,452	30.77	54.7	76	637
APRIL 2021	427,200	30.90	54.7	73	719
MAY 2021	446,624	31.92	54.7	93	957
JUNE 2021	439,052	32.96	54.6	85	841
JULY 2021	442,179	33.18	54.6	78	975
AUGUST 2021	389,874	32.44	54.6	84	851
SEPTEMBER 2021	402,605	32.18	54.6	82	733
OCTOBER 2021	401,204	32.57	54.5	85	826
NOVEMBER 2021	345,126	32.92	54.5	79	727
DECEMBER 2021	339,838	33.40	54.2*	79	642*
JANUARY 2022	294,763	33.83	54.5*	102	564*
FEBRUARY 2022	295,440	33.07	54.5*	84	323*
TOTAL	5,599,323				11,021*

Southbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	618,137	29.78	54.8	115	2,198
JANUARY 2021	620,300	30.16	55.0	98	2,314
FEBRUARY 2021	548,699	29.30	54.5	87	1,250
MARCH 2021	699,589	29.07	54.8	94	1,744
APRIL 2021	688,093	29.03	54.8	100	1,752
MAY 2021	708,935	29.01	54.6	92	1,785
JUNE 2021	716,260	28.80	54.7	91	1,806
JULY 2021	744,784	28.89	54.6	97	1,702
AUGUST 2021	702,833	29.04	54.4	77	1,498
SEPTEMBER 2021	680,922	28.29	54.6	95	1,258
OCTOBER 2021	704,304	29.01	54.5	91	1,471
NOVEMBER 2021	658,507	29.35	54.3	101	1,359
DECEMBER 2021	648,136	29.80	54.2*	79	1,433*
JANUARY 2022	593,817	30.34	54.6*	98	1,350*
FEBRUARY 2022	601,991	29.36	54.6*	82	642*
TOTAL	9,995,307				23,562*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	327,941	33.24	54.7	82	1,445
JANUARY 2021	328,686	33.56	54.7	81	1,456
FEBRUARY 2021	289,607	32.50	54.7	84	825
MARCH 2021	375,411	32.92	55.0	82	1,294
APRIL 2021	384,001	33.15	54.8	94	1,492
MAY 2021	394,437	33.25	54.8	94	1,317
JUNE 2021	392,503	33.66	54.7	82	1,478
JULY 2021	406,436	33.81	54.8	92	1,582
AUGUST 2021	383,852	33.71	54.5	93	1,457
SEPTEMBER 2021	380,277	32.72	54.6	83	1,153
OCTOBER 2021	356,850	33.43	54.6	83	1,117
NOVEMBER 2021	368,476	33.39	54.6	91	1,131
DECEMBER 2021	358,794	33.67	54.7*	84	1,084*
JANUARY 2022	317,600	33.68	54.7*	99	903*
FEBRUARY 2022	320,183	33.09	54.8*	84	419*
TOTAL	5,385,054				18,164*

Deveraux Avenue

Northbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	433,636	37.95	54.8	100	4,599
JANUARY 2021	437,708	38.23	54.7	108	4,423
FEBRUARY 2021	370,869	36.59	54.7	99	2,788
MARCH 2021	485,417	34.86	55.0	119	3,569
APRIL 2021	470,536	35.24	54.8	98	3,123
MAY 2021	492,419	35.07	55.0	100	2,943
JUNE 2021	491,865	32.23	55.1	101	1,920
JULY 2021	448,876	33.55	54.9	101	2,093
AUGUST 2021	405,613	34.22	54.7	96	2,172
SEPTEMBER 2021	400,416	33.98	54.4	92	1,925
OCTOBER 2021	393,945	33.35	54.4	89	1,274
NOVEMBER 2021	402,344	33.41	54.3	99	1,410
DECEMBER 2021	407,395	33.46	54.2*	86	1,374*
JANUARY 2022	375,376	33.69	54.2*	103	1,236*
FEBRUARY 2022	371,824	35.18	54.0*	85	782*
TOTAL	6,388,239				35,631*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	516,001	33.91	54.5	106	1,996
JANUARY 2021	512,727	34.74	54.6	86	2,134
FEBRUARY 2021	450,590	32.98	54.6	102	1,200
MARCH 2021	565,182	31.33	55.0	95	1,767
APRIL 2021	564,412	31.73	55.0	99	1,741
MAY 2021	590,616	31.56	54.9	88	1,696
JUNE 2021	579,327	29.33	54.8	87	1,260
JULY 2021	519,085	29.61	54.7	87	1,222
AUGUST 2021	565,586	32.44	54.1	79	1,044
SEPTEMBER 2021	589,502	31.45	54.3	93	1,004
OCTOBER 2021	610,797	29.23	54.4	91	1,029
NOVEMBER 2021	560,939	29.69	54.3	85	1,005
DECEMBER 2021	553,317	29.80	54.3*	96	928*
JANUARY 2022	498,822	30.26	54.7*	110	782*
FEBRUARY 2022	503,276	31.28	54.5*	85	461*
TOTAL	8,180,179				19,269*

Southbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	537,231	25.47	55.6	99	1,796
JANUARY 2021	539,828	25.83	55.3	112	1,668
FEBRUARY 2021	476,757	26.38	55.1	95	965
MARCH 2021	638,280	31.52	55.0	94	1,541
APRIL 2021	633,603	31.30	55.2	116	1,284
MAY 2021	659,972	31.43	55.2	119	1,237
JUNE 2021	679,007	31.49	55.1	86	749
JULY 2021	706,671	32.78	54.8	92	983
AUGUST 2021	725,713	25.35	55.5	82	280
SEPTEMBER 2021	707,200	26.31	55.6	106	342
OCTOBER 2021	687,101	32.87	54.9	87	976
NOVEMBER 2021	629,745	33.30	54.5	81	833
DECEMBER 2021	624,543	33.86	54.9*	97	837*
JANUARY 2022	545,805	34.33	54.4*	76	678*
FEBRUARY 2022	549,434	29.29	54.7*	81	397*
TOTAL	9,340,890				14,566*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	395,455	25.57	55.7	87	1,445
JANUARY 2021	391,239	26.01	55.9	97	1,324
FEBRUARY 2021	352,816	26.61	55.6	96	722
MARCH 2021	448,698	32.21	55.0	102	1,538
APRIL 2021	442,747	32.14	55.0	103	1,457
MAY 2021	458,065	33.17	55.1	87	1,323
JUNE 2021	461,159	33.12	54.8	84	945
JULY 2021	481,413	34.18	54.9	82	1,173
AUGUST 2021	466,562	26.90	54.3	92	269
SEPTEMBER 2021	462,381	27.77	54.4	82	316
OCTOBER 2021	449,485	34.50	54.8	94	994
NOVEMBER 2021	432,288	34.59	54.6	87	919
DECEMBER 2021	427,981	34.58	54.8*	87	812*
JANUARY 2022	375,766	34.70	54.7*	91	714*
FEBRUARY 2022	387,694	30.10	54.7*	80	371*
TOTAL	6,433,759				14,322*

Harbison Avenue

Northbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	335,418	23.70	54.0	76	117
JANUARY 2021	330,677	23.47	54.1	80	95
FEBRUARY 2021	294,817	21.96	54.5	71	63
MARCH 2021	396,880	22.35	54.0	67	100
APRIL 2021	394,719	21.22	53.8	63	80
MAY 2021	411,417	20.44	53.7	59	29
JUNE 2021	414,980	19.02	52.3	53	16
JULY 2021	373,473	20.29	53.8	66	36
AUGUST 2021	391,398	23.68	54.0	70	266
SEPTEMBER 2021	405,676	26.63	54.0	68	344
OCTOBER 2021	417,696	26.41	54.1	74	165
NOVEMBER 2021	391,802	26.37	54.1	76	137
DECEMBER 2021	384,713	26.68	53.9*	77	123*
JANUARY 2022	335,914	27.76	53.8*	67	118*
FEBRUARY 2022	356,579	28.44	54.4*	69	43*
TOTAL	5,636,139				1,732*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	374,501	21.53	55.3	73	74
JANUARY 2021	370,843	21.64	55.5	77	62
FEBRUARY 2021	327,465	20.39	54.9	72	22
MARCH 2021	438,297	20.48	54.7	76	38
APRIL 2021	451,935	19.79	53.8	70	38
MAY 2021	486,051	19.13	55.2	68	22
JUNE 2021	488,110	18.01	56.3	64	12
JULY 2021	425,028	18.96	53.1	55	16
AUGUST 2021	472,486	20.81	54.4	71	82
SEPTEMBER 2021	489,226	22.64	54.6	78	126
OCTOBER 2021	506,458	22.49	54.5	68	42
NOVEMBER 2021	412,184	23.01	55.9	98	45
DECEMBER 2021	434,017	23.10	54.3*	62	33*
JANUARY 2022	383,672	24.21	54.3*	73	37*
FEBRUARY 2022	381,808	23.75	54.7*	61	12*
TOTAL	6,442,080				661*

Southbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	396,842	22.18	55.9	101	61
JANUARY 2021	407,813	22.05	56.3	71	44
FEBRUARY 2021	371,266	24.56	54.7	111	113
MARCH 2021	475,296	21.46	54.7	75	42
APRIL 2021	476,318	21.77	56.4	72	52
MAY 2021	521,302	22.21	55.5	71	42
JUNE 2021	541,321	22.02	55.3	73	45
JULY 2021	563,282	21.37	54.4	75	68
AUGUST 2021	539,050	20.51	56.4	67	48
SEPTEMBER 2021	515,150	20.00	55.6	76	36
OCTOBER 2021	503,550	20.71	55.8	85	37
NOVEMBER 2021	451,610	20.48	56.3	67	23
DECEMBER 2021	448,950	20.74	55.6*	66	37*
JANUARY 2022	400,122	21.52	55.3*	71	43*
FEBRUARY 2022	411,395	20.43	53.9*	60	11*
TOTAL	7,023,267				702*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	310,813	24.22	54.4	81	69
JANUARY 2021	307,160	24.25	54.3	86	45
FEBRUARY 2021	276,575	26.17	54.1	68	154
MARCH 2021	355,975	23.85	55.1	70	48
APRIL 2021	354,240	24.35	55.4	71	55
MAY 2021	368,363	25.04	55.0	71	75
JUNE 2021	365,238	25.14	55.5	85	65
JULY 2021	377,265	24.48	55.0	92	114
AUGUST 2021	366,840	23.74	54.0	65	66
SEPTEMBER 2021	370,864	22.70	54.9	76	47
OCTOBER 2021	372,662	23.52	54.9	78	65
NOVEMBER 2021	360,625	22.81	55.1	71	43
DECEMBER 2021	352,314	23.20	55.7*	87	32*
JANUARY 2022	313,518	23.47	55.9*	85	51*
FEBRUARY 2022	327,305	22.69	54.9*	69	23*
TOTAL	5,179,857				952*

Strahle Street**Northbound****Inner Lanes**

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	459,126	37.84	59.4	113	599
JANUARY 2021	462,781	38.53	59.1	85	599
FEBRUARY 2021	408,249	37.95	59.2	89	400
MARCH 2021	544,339	38.44	59.1	111	557
APRIL 2021	478,985	38.91	59.2	117	592
MAY 2021	550,678	38.63	59.6	97	554
JUNE 2021	550,800	38.72	59.4	89	681
JULY 2021	565,620	38.72	59.3	112	686
AUGUST 2021	511,691	38.65	59.1	93	550
SEPTEMBER 2021	565,648	38.41	59.2	89	501
OCTOBER 2021	473,072	38.49	59.1	77	357
NOVEMBER 2021	522,586	37.95	59.1	88	396
DECEMBER 2021	552,347	38.38	59.0*	77	416*
JANUARY 2022	486,439	38.17	58.8*	80	343*
FEBRUARY 2022	512,202	38.29	59.2*	78	229*
TOTAL	7,644,563				7,460*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	325,130	39.19	59.6	96	743
JANUARY 2021	315,592	39.67	59.6	97	776
FEBRUARY 2021	283,888	38.61	60.0	104	468
MARCH 2021	364,142	39.57	59.5	98	743
APRIL 2021	355,166	39.94	59.7	106	846
MAY 2021	365,487	39.97	59.4	85	795
JUNE 2021	357,873	39.98	59.3	91	824
JULY 2021	372,608	39.73	59.3	89	752
AUGUST 2021	361,961	39.91	59.4	98	723
SEPTEMBER 2021	352,162	39.69	59.4	93	609
OCTOBER 2021	371,648	39.64	59.6	85	595
NOVEMBER 2021	356,575	39.23	59.6	83	466
DECEMBER 2021	357,333	39.52	59.3*	89	512*
JANUARY 2022	308,560	39.13	59.6*	101	387*
FEBRUARY 2022	318,696	39.39	59.4*	88	264*
TOTAL	5,167,821				9,503*

Southbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	402,621	24.39	59.8	85	151
JANUARY 2021	400,977	24.12	60.7	96	160
FEBRUARY 2021	359,132	24.18	61.1	92	103
MARCH 2021	460,857	24.00	60.8	100	121
APRIL 2021	452,029	23.70	61.7	100	105
MAY 2021	472,000	23.68	61.0	95	147
JUNE 2021	474,678	23.52	60.6	120	151
JULY 2021	484,035	23.57	60.9	99	137
AUGUST 2021	474,069	23.86	60.0	88	146
SEPTEMBER 2021	473,810	23.72	61.6	93	103
OCTOBER 2021	487,313	23.73	59.9	90	108
NOVEMBER 2021	463,012	23.99	60.0	85	116
DECEMBER 2021	456,952	23.99	59.7*	85	103*
JANUARY 2022	404,956	24.48	60.3*	89	86*
FEBRUARY 2022	415,083	24.27	59.7*	88	49*
TOTAL	6,682,524				1,786*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	332,130	26.08	60.7	106	58
JANUARY 2021	326,929	26.20	61.9	91	62
FEBRUARY 2021	291,795	25.61	63.8	107	38
MARCH 2021	383,089	25.65	60.3	89	73
APRIL 2021	377,869	25.58	61.3	90	79
MAY 2021	392,400	25.83	61.6	103	79
JUNE 2021	386,253	25.60	60.2	85	71
JULY 2021	394,907	25.75	60.2	96	83
AUGUST 2021	390,585	25.80	59.3	85	87
SEPTEMBER 2021	393,711	25.29	60.6	95	51
OCTOBER 2021	405,034	25.29	60.7	96	48
NOVEMBER 2021	383,165	25.78	59.6	73	67
DECEMBER 2021	379,990	25.83	60.5*	80	53*
JANUARY 2022	325,253	26.63	59.7*	82	27*
FEBRUARY 2022	333,424	25.94	59.5*	75	31*
TOTAL	5,496,534				917*

Grant Avenue

Northbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	351,266	26.70	58.4	64	24
JANUARY 2021	344,911	27.31	60.3	77	20
FEBRUARY 2021	309,000	26.60	58.9	67	14
MARCH 2021	402,634	25.87	58.6	63	19
APRIL 2021	391,196	25.81	59.7	73	23
MAY 2021	411,501	25.80	59.4	75	20
JUNE 2021	414,941	25.45	58.5	66	14
JULY 2021	421,972	25.60	59.3	67	24
AUGUST 2021	406,571	25.75	58.9	70	10
SEPTEMBER 2021	416,141	24.94	58.5	64	20
OCTOBER 2021	404,195	25.04	62.5	99	18
NOVEMBER 2021	397,691	25.33	60.3	69	19
DECEMBER 2021	401,046	25.54	58.8*	66	18*
JANUARY 2022	352,627	26.28	63.1*	79	10*
FEBRUARY 2022	380,193	24.83	57.0*	59	5*
TOTAL	5,805,885				258*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	369,739	28.89	59.2	69	51
JANUARY 2021	353,398	29.79	60.5	93	72
FEBRUARY 2021	316,963	29.06	59.7	78	41
MARCH 2021	406,207	28.89	59.6	72	69
APRIL 2021	389,658	29.12	58.9	68	45
MAY 2021	402,653	28.93	59.9	79	55
JUNE 2021	394,496	29.11	59.2	75	62
JULY 2021	411,251	28.92	60.5	88	40
AUGUST 2021	404,913	28.88	59.8	77	53
SEPTEMBER 2021	401,532	28.78	58.8	74	44
OCTOBER 2021	421,445	28.45	59.8	80	51
NOVEMBER 2021	406,641	28.52	60.3	78	44
DECEMBER 2021	412,708	28.47	59.1*	68	50*
JANUARY 2022	356,400	29.46	60.7*	74	37*
FEBRUARY 2022	364,053	28.68	61.2*	76	14*
TOTAL	5,812,057				728*

Southbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	375,392	35.38	60.2	82	71
JANUARY 2021	362,576	36.08	60.8	97	67
FEBRUARY 2021	323,629	35.38	59.3	67	45
MARCH 2021	418,131	36.03	60.0	95	56
APRIL 2021	413,633	36.28	59.4	73	85
MAY 2021	432,303	36.29	60.7	88	92
JUNE 2021	432,987	36.27	59.7	80	87
JULY 2021	433,721	36.09	60.4	76	72
AUGUST 2021	437,437	36.13	60.4	77	76
SEPTEMBER 2021	438,073	36.00	59.4	83	98
OCTOBER 2021	454,843	35.92	61.5	101	69
NOVEMBER 2021	422,889	35.82	59.7	81	69
DECEMBER 2021	424,737	35.74	59.9*	75	53*
JANUARY 2022	359,849	35.74	60.1*	78	56*
FEBRUARY 2022	384,582	35.73	60.0*	70	24*
TOTAL	6,114,782				1,020*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	246,370	35.32	60.1	106	73
JANUARY 2021	246,711	35.83	60.0	78	52
FEBRUARY 2021	229,984	35.01	60.0	77	52
MARCH 2021	282,669	35.78	60.9	76	60
APRIL 2021	277,257	35.91	59.9	75	59
MAY 2021	290,045	35.80	60.5	77	80
JUNE 2021	292,926	35.87	61.6	90	71
JULY 2021	300,680	35.73	59.3	72	50
AUGUST 2021	296,858	35.73	60.8	93	64
SEPTEMBER 2021	297,134	35.61	59.8	72	62
OCTOBER 2021	309,244	35.60	59.7	79	56
NOVEMBER 2021	295,411	35.59	61.0	83	54
DECEMBER 2021	293,090	35.51	60.6*	69	44*
JANUARY 2022	258,422	35.19	59.0*	67	45*
FEBRUARY 2022	272,910	35.20	59.2*	66	25*
TOTAL	4,189,711				847

Red Lion Road**Northbound****Inner Lanes**

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	401,769	39.16	59.5	94	979
JANUARY 2021	392,352	39.64	59.5	119	880
FEBRUARY 2021	348,577	38.77	59.3	82	580
MARCH 2021	454,050	39.29	59.7	106	774
APRIL 2021	440,427	39.25	59.8	138	835
MAY 2021	464,765	39.09	59.8	123	711
JUNE 2021	344,442	39.19	59.6	104	595
JULY 2021	478,058	39.23	59.8	102	754
AUGUST 2021	461,684	39.35	59.6	95	723
SEPTEMBER 2021	462,086	38.89	59.7	89	604
OCTOBER 2021	481,643	38.91	59.1	83	599
NOVEMBER 2021	455,326	39.13	59.0	90	647
DECEMBER 2021	462,479	39.10	59.3*	92	617*
JANUARY 2022	397,488	39.15	59.1*	86	486*
FEBRUARY 2022	415,591	39.11	59.2*	87	299*
TOTAL	6,460,737				10,083*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	239,076	40.03	59.5	90	621
JANUARY 2021	226,261	40.50	59.8	101	570
FEBRUARY 2021	167,481	39.65	59.3	80	340
MARCH 2021	272,219	40.33	59.7	92	606
APRIL 2021	264,896	40.15	59.4	84	573
MAY 2021	273,738	40.09	59.7	95	508
JUNE 2021	208,041	39.97	59.3	85	432
JULY 2021	276,692	40.02	59.5	94	525
AUGUST 2021	274,526	40.05	59.5	95	514
SEPTEMBER 2021	277,247	39.71	59.8	85	441
OCTOBER 2021	292,551	39.72	59.9	111	443
NOVEMBER 2021	278,745	39.94	59.5	88	414
DECEMBER 2021	276,507	40.08	59.5*	107	443*
JANUARY 2022	237,789	39.84	59.3*	116	329*
FEBRUARY 2022	247,377	40.06	59.7*	97	218*
TOTAL	3,813,146				6,977*

Southbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	299,996	42.25	59.5	94	1,487
JANUARY 2021	292,816	42.68	59.3	87	1,441
FEBRUARY 2021	262,807	41.65	59.5	95	933
MARCH 2021	339,792	42.51	59.4	99	1,443
APRIL 2021	333,777	42.50	59.4	106	1,450
MAY 2021	347,526	42.59	59.5	87	1,471
JUNE 2021	244,629	42.55	59.5	89	969
JULY 2021	354,012	42.45	59.4	114	1,376
AUGUST 2021	350,782	42.51	59.5	98	1,374
SEPTEMBER 2021	356,374	42.30	59.4	94	1,242
OCTOBER 2021	368,770	42.29	59.6	107	1,231
NOVEMBER 2021	349,364	42.39	59.3	99	1,237
DECEMBER 2021	350,676	42.28	59.3*	90	1,027*
JANUARY 2022	297,219	42.03	59.1*	89	750*
FEBRUARY 2022	314,628	41.98	59.3*	101	523*
TOTAL	4,863,268				17,954*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	277,786	40.53	59.7	93	821
JANUARY 2021	274,110	40.95	59.5	104	803
FEBRUARY 2021	248,118	39.89	59.5	94	536
MARCH 2021	321,329	40.87	59.3	86	907
APRIL 2021	317,418	40.91	59.7	101	944
MAY 2021	331,777	40.83	59.5	109	871
JUNE 2021	244,023	40.81	59.2	79	625
JULY 2021	335,847	40.80	59.6	98	877
AUGUST 2021	327,862	40.79	59.2	80	749
SEPTEMBER 2021	330,833	40.55	59.6	94	691
OCTOBER 2021	348,183	40.58	59.9	106	726
NOVEMBER 2021	327,854	40.74	59.5	88	706
DECEMBER 2021	322,464	40.71	59.6*	86	642*
JANUARY 2022	259,952	40.45	59.6*	104	440*
FEBRUARY 2022	282,176	40.95	59.4*	82	284*
TOTAL	4,549,732				10,622*

Southampton Road

Northbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	320,171	37.20	59.3	88	956
JANUARY 2021	311,700	37.73	59.1	89	934
FEBRUARY 2021	267,115	37.38	59.2	82	686
MARCH 2021	367,446	37.52	59.0	80	1,015
APRIL 2021	367,478	37.47	59.1	78	1,005
MAY 2021	387,341	37.19	58.9	77	934
JUNE 2021	395,845	37.38	59.2	88	1,071
JULY 2021	398,202	37.24	59.4	91	877
AUGUST 2021	374,034	37.09	59.2	82	919
SEPTEMBER 2021	374,013	36.91	59.6	95	772
OCTOBER 2021	397,015	36.76	59.2	98	724
NOVEMBER 2021	368,103	37.31	59.0	80	702
DECEMBER 2021	367,162	37.44	59.1*	82	697*
JANUARY 2022	308,631	37.43	58.9*	76	456*
FEBRUARY 2022	330,188	37.32	59.1*	75	400*
TOTAL	5,334,444				12,148*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	376,594	39.59	58.9	103	1,600
JANUARY 2021	378,478	39.98	58.9	83	1,694
FEBRUARY 2021	323,733	39.05	59.0	92	1,002
MARCH 2021	457,840	39.23	58.9	86	1,574
APRIL 2021	462,455	39.12	58.8	80	1,499
MAY 2021	487,866	38.67	58.9	86	1,414
JUNE 2021	499,149	38.60	59.0	89	1,389
JULY 2021	497,700	38.94	58.9	95	1,365
AUGUST 2021	495,801	38.77	58.9	81	1,277
SEPTEMBER 2021	499,287	37.85	58.9	91	1,098
OCTOBER 2021	528,631	37.65	58.8	89	1,099
NOVEMBER 2021	488,372	37.91	58.9	107	1,007
DECEMBER 2021	486,347	38.21	58.8*	109	1,042*
JANUARY 2022	407,690	38.49	58.7*	81	799*
FEBRUARY 2022	442,869	37.96	58.9*	99	498*
TOTAL	6,832,812				18357

Southbound

Inner Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	209,127	41.46	59.0	90	1,231
JANUARY 2021	206,494	41.99	59.2	92	1,278
FEBRUARY 2021	182,883	40.88	59.1	102	830
MARCH 2021	243,080	41.89	59.1	97	1,267
APRIL 2021	242,826	42.01	59.1	93	1,262
MAY 2021	252,061	41.92	59.4	99	1,206
JUNE 2021	257,982	41.89	59.2	102	1,078
JULY 2021	259,064	41.90	59.2	111	1,124
AUGUST 2021	251,059	41.87	59.2	102	970
SEPTEMBER 2021	254,666	41.43	59.0	81	895
OCTOBER 2021	265,033	41.50	59.1	86	899
NOVEMBER 2021	250,830	41.15	59.1	84	734
DECEMBER 2021	252,491	41.26	59.1*	87	763*
JANUARY 2022	210,678	41.07	59.2*	115	576*
FEBRUARY 2022	228,852	41.07	58.8*	71	343*
TOTAL	3,567,126				14,456*

Outer Lanes

MONTH	TRAFFIC COUNTS	AVERAGE SPEED	AVERAGE ISSUED SPEED	HIGHEST SPEED CAPTURED	NOTICES ISSUED
DECEMBER 2020	395,643	38.68	59.3	91	1,256
JANUARY 2021	387,096	39.21	59.3	86	1,235
FEBRUARY 2021	342,157	38.14	59.1	80	790
MARCH 2021	450,849	38.97	59.3	97	1,175
APRIL 2021	461,314	38.88	59.2	85	1,022
MAY 2021	485,301	38.64	59.3	108	884
JUNE 2021	490,673	38.36	59.2	90	756
JULY 2021	493,849	38.46	59.1	86	800
AUGUST 2021	478,983	38.41	59.2	102	643
SEPTEMBER 2021	483,367	38.07	59.1	98	670
OCTOBER 2021	505,378	38.10	59.2	100	745
NOVEMBER 2021	472,203	37.89	59.2	85	624
DECEMBER 2021	470,357	38.21	59.2*	86	720*
JANUARY 2022	406,729	38.11	59.2*	84	552*
FEBRUARY 2022	434,013	38.03	59.1*	82	351*
TOTAL	6,757,912				12,164*

Appendix B

Average speeds of vehicles issued notices/violations from June 2020 to February 2022 by location by hour.

LOCATION	12AM HOUR	1AM HOUR	2AM HOUR	3AM HOUR	4AM HOUR	5AM HOUR	6AM HOUR	7AM HOUR	8AM HOUR	9AM HOUR	10AM HOUR	11 AM HOUR
BANKS WAY NORTHBOUND INNER	55	55.4	55.5	55.2	55.5	54.6	54.5	54.5	54.1	54.1	54	54.4
BANKS WAY NORTHBOUND OUTER	55.8	56	55.9	55.9	56.1	55.4	55	54.5	54.5	54.3	54.6	54.6
BANKS WAY SOUTHBOUND INNER	56.2	56.3	56.6	56.2	55	54.5	54.2	54.3	54	54.2	54.2	54.1
BANKS WAY SOUTHBOUND OUTER	56.3	56.6	56.5	55.6	55.3	54.7	54.3	54.5	54.7	54.3	54.3	54.8
F STREET NORTHBOUND INNER	55	55.2	55.2	55	55.1	54.7	54.5	54.2	54.2	54.1	54.3	54.1
F STREET NORTHBOUND OUTER	55.3	55.2	55.3	55.3	54.9	54.7	54.4	54.3	54.4	54.4	54.3	54.3
F STREET SOUTHBOUND INNER	55.5	56	56.2	55.5	55.2	54.6	54.6	54.5	54.4	54.3	54.4	54.5
F STREET SOUTHBOUND OUTER	56	56.3	55.9	55.9	55.3	54.9	54.4	54.4	54.5	54.3	54.6	54.5
DEVEREAUX NORTHBOUND INNER	56.4	56.6	56.5	56.8	56.3	55.7	55.3	55	54.7	54.8	54.8	54.6
DEVEREAUX NORTHBOUND OUTER	55.8	56	55.9	56.1	55.8	54.9	54.4	54.6	54.3	54.3	54.2	54.1
DEVEREAUX SOUTHBOUND INNER	56.5	56.4	57.4	56.7	55.6	55.5	54.4	54.7	54.2	54.5	54.4	54.6
DEVEREAUX SOUTHBOUND OUTER	56.9	56.7	57	56.2	55.9	55	54.1	54.5	54.4	54.6	54.6	54.7
HARBISON NORTHBOUND INNER	55.6	55.4	56.7	55.1	55.4	55.3	54.9	54.3	54.2	53.9	54.3	53.9
HARBISON NORTHBOUND OUTER	55.4	55.9	57.2	55.4	56.9	54.4	54.3	55.3	54.6	54.5	54.5	53.6
HARBISON SOUTHBOUND INNER	55	55.3	56.3	57.6	56.8	54.4	54.2	55.1	54.3	54.2	54.2	54.2
HARBISON SOUTHBOUND OUTER	55.1	56	55.9	55.1	58.6	54.7	55.7	53.6	53.5	55.1	54.5	54.7

LOCATION	12AM HOUR	1AM HOUR	2AM HOUR	3AM HOUR	4AM HOUR	5AM HOUR	6AM HOUR	7AM HOUR	8AM HOUR	9AM HOUR	10AM HOUR	11 AM HOUR
STRAHLE NORTHBOUND INNER	60.3	60.4	61.7	60.6	59.6	59.1	59.3	59.1	58.8	59.3	59	59.1
STRAHLE NORTHBOUND OUTER	60.5	61	60.5	60.5	60.7	60.6	59.6	59.3	58	59.1	59.4	59.2
STRAHLE SOUTHBOUND INNER	65.7	65.6	63.3	60.9	64.2	61.2	60.4	60	60.5	60.7	60.2	60.6
STRAHLE SOUTHBOUND OUTER	64.3	64.1	65.8	64	60	60.6	57.4	59.2	60.3	59.4	60.7	59.4
GRANT NORTHBOUND INNER	61.5	59.9	62.6	56.6	58.5	61.9	58.9	60.6	59.4	58.6	57.4	58.6
GRANT NORTHBOUND OUTER	59.5	60.4	62	61.3	60.1	60.3	59.1	58.2	59.4	58.8	58	58.8
GRANT SOUTHBOUND INNER	61.7	61.5	64.4	60.6	60	58.7	59.5	59.7	60.1	59.7	59.9	58.9
GRANT SOUTHBOUND OUTER	62	60.9	61.7	61.2	60.2	59	57.8	59.5	59.1	59.3	58.8	60
RED LION NORTHBOUND INNER	60.9	60.8	60.9	60.5	60.4	59.6	59.9	59.4	59.4	59.1	59.3	59.2
RED LION NORTHBOUND OUTER	61.1	61.7	61.4	60.1	61	60.2	60	59.3	59.6	58.5	59.1	58.6
RED LION SOUTHBOUND INNER	60.4	61	61.1	60.1	59.8	59.3	59.3	59.2	59.1	58.2	59.3	58.1
RED LION SOUTHBOUND OUTER	61.1	61.7	60.3	59.7	60	60.1	58.4	58.1	59.1	58.9	59.4	59.3
SOUTHAMPTON NORTHBOUND INNER	60.4	60.1	61.6	60.5	61	59.4	59.2	59.3	58.9	58.9	59.1	59
SOUTHAMPTON NORTHBOUND OUTER	60	60.1	60.3	59.4	60.1	59	58.8	58.9	58.8	59	58.8	58.8
SOUTHAMPTON SOUTHBOUND INNER	60.7	60.4	61.4	59.9	59.7	59.5	59.3	59.1	59.1	59	58.1	59
SOUTHAMPTON SOUTHBOUND OUTER	60.5	61.6	60.4	60	59.9	58.2	59.2	59.1	59	59.2	59	59.3
AVG. PER HOUR	58.5	58.6	59	58.1	58.1	57.4	56.9	56.9	56.8	56.8	56.8	56.8

LOCATION	12PM HOUR	1PM HOUR	2 PM HOUR	3PM HOUR	4PM HOUR	5PM HOUR	6PM HOUR	7PM HOUR	8PM HOUR	9PM HOUR	10PM HOUR	11PM HOUR
BANKS WAY NORTHBOUND INNER	54.1	54.1	54.9	54	54.3	55	54.8	54.7	54.6	54.4	54.8	55.2
BANKS WAY NORTHBOUND OUTER	54.5	54.6	54.3	54.1	54.6	54.9	55.4	54.8	55.3	55.2	55.6	55.6
BANKS WAY SOUTHBOUND INNER	54.4	54.3	54.4	54.4	54.4	54.7	54.8	54.9	54.9	55.3	55.3	55.7
BANKS WAY SOUTHBOUND OUTER	54.4	54.7	54.8	54.7	54.8	54.8	54.9	55.1	55.3	55.5	55.7	55.8
F STREET NORTHBOUND INNER	54.1	54	54.2	54.2	54.3	54.4	54.5	54.3	54.4	54.7	54.8	54.8
F STREET NORTHBOUND OUTER	54.4	54.3	54.7	54.8	53.9	54.4	54.5	55	54.8	54.9	54.9	54.9
F STREET SOUTHBOUND INNER	54.5	54.5	54.4	54.4	54.7	54.6	54.8	54.9	55	55	54.8	55.4
F STREET SOUTHBOUND OUTER	54.5	54.5	54.7	54.5	54.5	54.7	54.6	55	55.1	55.3	55.5	55.3
DEVEREAUX NORTHBOUND INNER	54.5	54.4	54.3	54.3	54.4	54.6	54.6	54.9	54.9	55.1	55.4	55.7
DEVEREAUX NORTHBOUND OUTER	54	53.9	53.9	54.1	54.2	54.2	54.3	54.3	54.6	54.6	55	55.6
DEVEREAUX SOUTHBOUND INNER	54.5	54.2	54.4	54.4	54.6	54.6	54.7	54.7	55.3	55.5	55.8	56.3
DEVEREAUX SOUTHBOUND OUTER	54.5	54.7	54.9	54.9	54.7	55	54.9	55.1	55.6	55.8	55.7	56.4
HARRISON NORTHBOUND INNER	53.6	54.5	54.6	54.8	53.8	53.8	54.4	54.5	54.2	54.1	54.5	54.9
HARRISON NORTHBOUND OUTER	54.1	54.1	53.7	54.3	52.9	54.6	55.8	53.6	54.5	54.4	55.4	54.9
HARRISON SOUTHBOUND INNER	55	53.9	54.3	54.3	53.2	55	55.3	55.7	55.2	55.4	56.3	55.8
HARRISON SOUTHBOUND OUTER	54.7	55.3	54.7	54.3	54.2	54.7	55	54.6	55.1	54.9	54.9	55

LOCATION	12PM HOUR	1PM HOUR	2 PM HOUR	3PM HOUR	4PM HOUR	5PM HOUR	6PM HOUR	7PM HOUR	8PM HOUR	9PM HOUR	10PM HOUR	11PM HOUR
STRAHLE NORTHBOUND INNER	59.2	59.3	59.3	59.3	59.2	59.6	59.6	59.3	59.5	59.8	59.7	59.9
STRAHLE NORTHBOUND OUTER	59.2	59.3	59.2	59.2	59.4	59.4	59.8	59.8	60.5	60.6	60.7	60.9
STRAHLE SOUTHBOUND INNER	59.4	59.6	60.1	59.2	60.2	60.4	59.7	60.1	62.4	61.3	62	63.4
STRAHLE SOUTHBOUND OUTER	59.8	59.5	60	60.7	60.7	60.5	62.2	61.4	61.8	64.4	63.2	62.5
BRANT NORTHBOUND INNER	59.8	59.1	58.6	58.1	58.6	60.2	59.1	59.9	58	60.5	61.5	60.5
GRANT NORTHBOUND OUTER	58.5	58.2	58.5	59.3	59	59.5	59.4	59.1	60.4	60	61.8	60.2
GRANT SOUTHBOUND INNER	59.6	59.1	59.8	59.5	59.4	59.8	59.6	60.1	60.5	60	60.4	60.1
GRANT SOUTHBOUND OUTER	58.7	60.5	59.6	59.9	59.6	59.9	59.8	60.2	61.4	60	61.1	61.9
RED LION NORTHBOUND INNER	59.2	59.2	59.1	59.2	59.4	59.4	60.3	59.8	60	60.1	60.4	60.6
RED LION NORTHBOUND OUTER	59.1	59.1	59.3	59.2	59.3	59.5	59.6	59.9	60.3	60.2	60.4	61
RED LION SOUTHBOUND INNER	59.4	59.2	59.4	59.4	59.4	59.6	59.6	59.6	59.9	60.5	60.1	60.4
RED LION SOUTHBOUND OUTER	59.2	59.3	59.5	59.5	59.4	59.6	59.7	59.8	60.1	60.1	60.3	61.3
SOUTHAMPTON NORTHBOUND INNER	59.9	59.1	59.1	59.1	59.1	59.1	59.3	59.3	59.7	59.2	59.9	60
SOUTHAMPTON NORTHBOUND OUTER	58.8	58.7	58.9	58.8	58.8	58.9	59	59.1	59.2	59.2	59.6	59.5
SOUTHAMPTON SOUTHBOUND INNER	59.2	59	59.1	59.2	59.2	59.3	59.4	59.7	58.6	59.9	59.7	60.3
SOUTHAMPTON SOUTHBOUND OUTER	59.1	59.1	59.2	59	59.2	59.2	59.1	59.3	60	60.1	60.4	60.4
AVG. PER HOUR	56.8	56.8	56.9	56.9	56.8	57.1	57.3	57.3	57.6	57.7	58	58.1

PHILADELPHIA - ROOSEVELT BOULEVARD 2016-2020

Date Range: 1/1/2016 to 12/31/2020 *

USER_ID/QUERY_ID:
rfrancisco/ 0620220355002

Area of Interest: (In County 67 On State Route 0001(P) Between Segment 0160 Offset 0 and Segment 0380 Offset 3030) or (In County 67 On State Route 0001(S) Between Segment 0161 Offset 0 and Segment 0381 Offset 3012) or (In County 67 On State Route 3012) or (In County 67 On State Route 9001(P) Between Segment 0160 Offset 0 and Segment 0380 Offset 1573) or (In County 67 On State Route 9001(S) Between Segment 0161 Offset 0 and Segment 0381 Offset 1573)

CRASH SEVERITY LEVEL BY YEAR

	2016	2017	2018	2019	2020	ALL YEARS
	CRASHES	CRASHES	CRASHES	CRASHES	CRASHES	CRASHES
Fatal	14	8	18	7	13	60
Suspected Serious Injury	15	8	17	25	14	79
Suspected Minor Injury	85	57	82	177	138	540
Possible Injury	204	191	140	82	32	629
Injury, Unknown Severity	148	107	107	86	57	507
Unknown If Injury	10	10	15	41	14	90
Property Damage Only	110	88	88	110	91	485
TOTAL	588	449	465	510	360	2370

CRASH DESCRIPTION TYPES BY YEAR

	2016	2017	2018	2019	2020	ALL YEARS
	CRASHES	CRASHES	CRASHES	CRASHES	CRASHES	CRASHES
ANGLE	246	213	203	206	166	1034
HEAD ON	2	1	16	19	9	47
HIT FIXED OBJECT	57	46	42	59	44	248
NON COLLISION	2	4	1	1	3	11
OPP DIRECTION SIDESWIPE	3	5	7	6	5	26
OTHER	0	0	0	1	1	2
PEDESTRIAN	25	26	25	31	19	126
REAR END	169	106	130	123	77	628
SAME DIRECTION SIDESWIPE	62	45	39	61	35	243
UNKNOWN TYPE	0	0	2	3	0	5
TOTAL	588	449	465	510	360	2370

PERSON INJURY SUMMARY BY YEAR

	2016	2017	2018	2019	2020	ALL YEARS
	PERSONS	PERSONS	PERSONS	PERSONS	PERSONS	PERSONS
FATALITIES	16	10	18	8	14	66
SUSPECTED SERIOUS INJURIES	16	10	20	29	18	93
SUSPECTED MINOR INJURIES	115	82	118	281	207	803
POSSIBLE INJURIES	390	304	241	125	60	1120
UNKNOWN SEVERITY	266	183	192	144	90	875
UNKNOWN IF INJURED	63	66	70	71	58	328

* **PLEASE NOTE:** Years which do not appear in the report contain zero crashes for this request.

* Crash information for 2021 is incomplete at the time of this printing. As such, data for 2021 are not included in this report.

IMPORTANT: The information contained in this document is drawn from raw data and should not be interpreted as representing an engineering judgement or determination made by the Department of Transportation as to the type and severity of accidents noted herein.

CDART - PUBLIC REQUEST / PRESS INQUIRY REPORT (01-07)

Print Date: 3/8/2022

CDART - PUBLIC REQUEST / PRESS INQUIRY REPORT (01-07)

NOTES:

- 1 The data available in this application is dynamic and should be used with care. Please take note of the following data alerts:
- 2 2021 and 2022 crash records are incomplete.
Data for 2021 and 2022 is not fully represented in CDART. Crashes will be added for these years as they are made available to the Department. Include these years in queries with caution.
- 3 Complete data years
Complete records of reportable crashes are available in CDART for the following years: 2001 - 2020

REPORT PARAMETERS:

Query ID:	06202203090002
User ID:	rtandisco
Area of Interest:	(In County 67 On State Route 0001(P) Between Segment 0160 Offset 0 and Segment 0380 Offset 3030) or (In County 67 On State Route 0001(S) Between Segment 0161 Offset 0 and Segment 0381 Offset 3012) or (In County 67 On State Route 6001(P) Between Segment 0180 Offset 0 and Segment 0380 Offset 1573) or (In County 67 On State Route 6001(S) Between Segment 0161 Offset 0 and Segment 0381 Offset 1573)
Date Range:	1/1/2016 to 12/31/2020
Criteria:	



Continuation of Research on Traffic Safety During the COVID-19 Public Health Emergency: January – June 2021

The National Highway Traffic Safety Administration continues to explore traffic safety during the COVID-19 public health emergency. This work is crucial to further understanding changes in dangerous driving behaviors and letting us expand or evolve countermeasures to meet current needs in States and across the country. This Research Note updates traffic safety behavioral research findings during the COVID-19 public health emergency through the first half of the 2021 calendar year.

To date, NHTSA has released three reports synthesizing traffic safety data in 2020. NHTSA also released an interim report on research examining the presence of drugs and alcohol in road users who were seriously and fatally injured in crashes, which noted increased prevalence of alcohol and some other drugs among these individuals. These reports provided context to preliminary 2020 data that showed increases in the number and rate of fatalities per 100 million vehicle miles traveled (VMT) (National Center for Statistics and Analysis, 2021a). Given the importance of these findings, NHTSA immediately convened workshops and meetings with national partners, State highway safety professionals, and researchers. In these meetings, NHTSA led conversation on how to address these increases in traffic fatalities, especially focusing on risky driving behaviors. NHTSA continued to collect and synthesize data. New findings are described below. Data limitations identified in the earlier reports also apply to the data reported here.

Background

After the declaration of the public health emergency in March 2020, driving patterns and behaviors in the United States changed significantly (Wagner et al., 2020; Office of Behavioral Safety Research, 2021a, 2021b). Of the drivers who remained on the roads, some engaged

in riskier behavior, including speeding, failure to wear seat belts, and driving under the influence of alcohol or other drugs. Traffic data cited in those reports showed average speeds increased during the last three quarters of 2020, and extreme speeds, those 20 miles per hour (or more) higher than the posted speed limit, became more common. These findings were supported by analyses of data from fatal crashes that show an estimated 11% increase in speeding-related fatalities (NCSA, 2021b). Other data suggested fewer people in crashes used their seat belts. Earlier research reports showed changes in the prevalence of alcohol and other drugs during the pandemic among seriously or fatally injured road users at different phases of the pandemic (Thomas et al., 2020; Office of Behavioral Safety Research, 2021a, 2021b). For example, the Thomas group found that almost two-thirds of the seriously or fatally injured drivers in their study tested positive for at least one active drug, including alcohol, marijuana, or opioids between mid-March and mid-July 2020. They also reported the proportion of drivers testing positive for opioids nearly doubled after mid-March 2020, compared to the previous 6 months, while marijuana prevalence increased by about 50%.

This Research Note includes analyses from the Bureau of Transportation Statistics (BTS) and the Federal Highway Administration's (FHWA) National Performance Management Research Dataset (NPMRDS). These sources use telematic data that captures large volumes of information but does not permit analysis of individual performance. To address this limitation, researchers sought other data sources through traditional literature as well as "gray literature" such as blog posts to identify potential emerging behavioral safety trends that occurred during the public health emergency. They identified research reports documenting changes in distracted driving and other risky driving behaviors,

the findings of which are described later in this report. Data from the National Emergency Medical Services Information System (NEMSIS) are also included in this Research Note. NEMSIS data are derived from

Travel Patterns

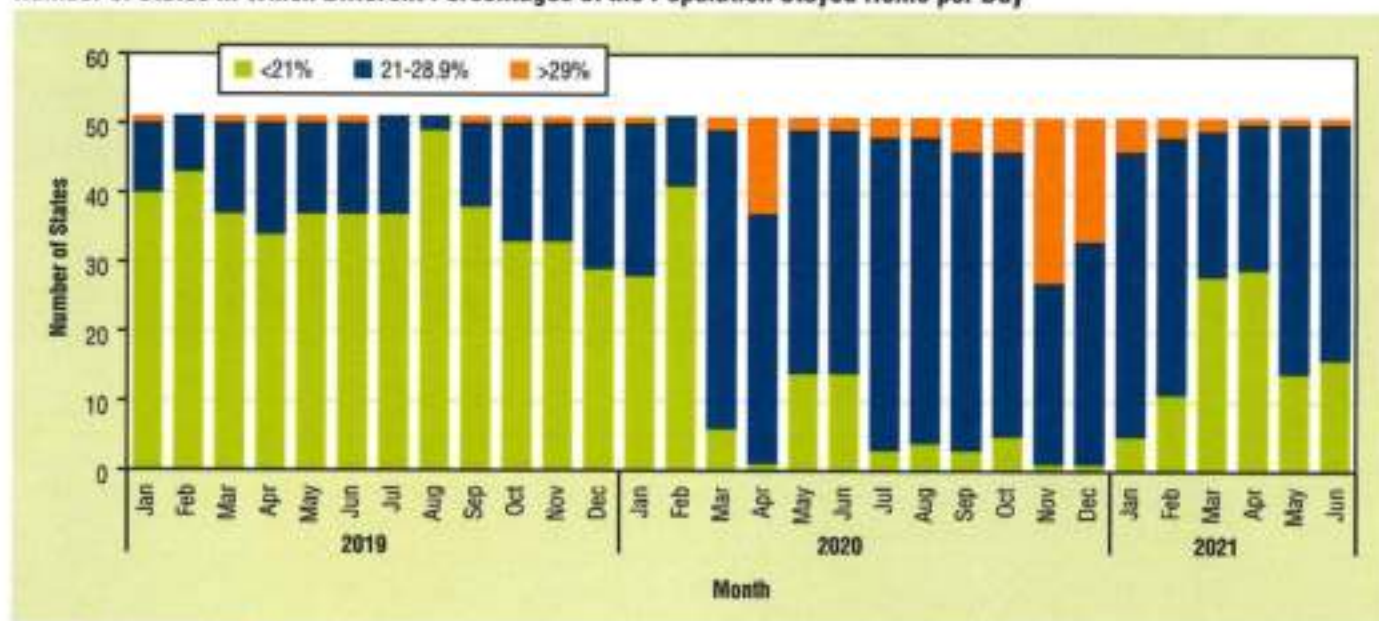
Researchers using the BTS (2021) interactive data dashboard on travel (see www.bts.gov/daily-travel) determined that in 2019 and early 2020 (before the pandemic) around 19% of the national population stayed home on any given day. During the post-public health emergency portion of 2020 (March-December) that percentage shifted to around 25%. Since the beginning of 2021, the percentage of people staying home per day has dropped from a high of 26% in January to approximately 23% in May and June. This suggests that while more people are traveling outside the home in 2021, the rates have not returned to pre-pandemic levels.

There were considerable differences among States in the numbers of people who stayed home per day through-

responding emergency medical services (EMS) agencies in States and Territories. While the database does not contain every EMS dispatch, it does include millions of motor vehicle crash-related cases every year.

out the pandemic. Gulf Coast States regularly had the lowest percentages of people staying home since March 2020. Washington, DC, New York, and the West Coast States had the highest percentages of people staying home. Figure 1 shows the change by month in number of States that experienced less than 21%, 21 to 28.9%, or more than 29% of their populations staying home each day in 2019, 2020, and through June 2021. These percentage ranges were selected to illustrate changes at the extremes from March to December 2020. The increasing number of States in which fewer than 21% of the population stayed home per day in 2021 suggests that these locations may be experiencing travel that approaches pre-pandemic levels.

Figure 1
Number of States in Which Different Percentages of the Population Stayed Home per Day

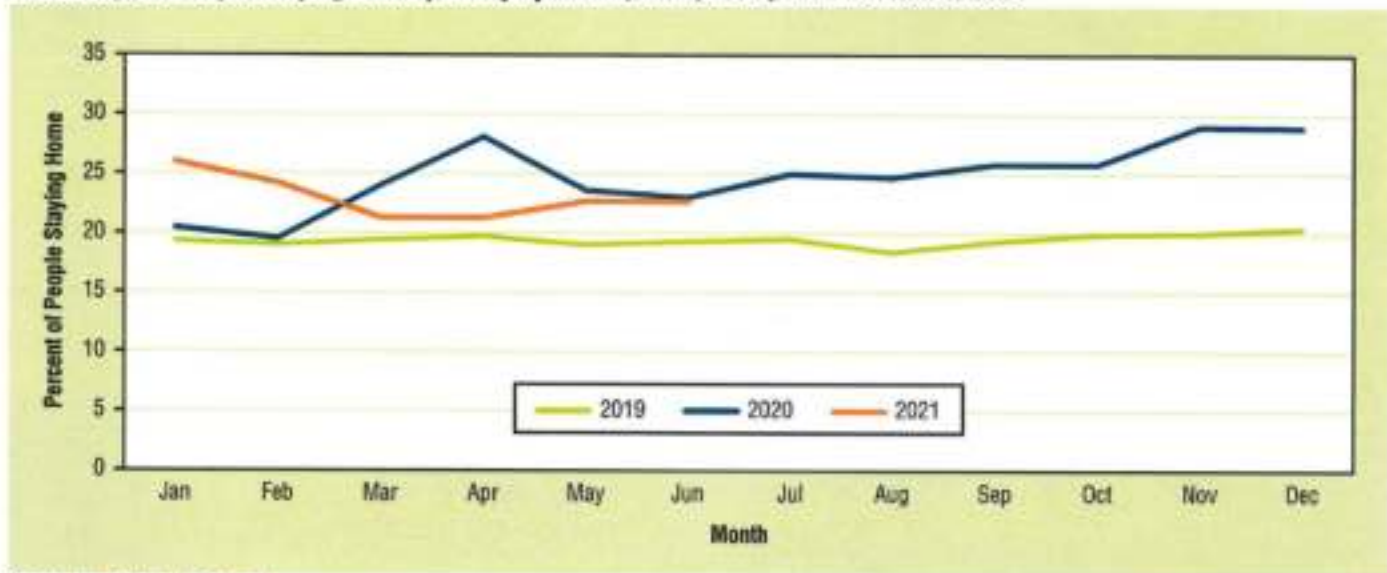


Source: www.bts.gov/daily-travel

National data showed the proportion of the population who stayed home at the highest levels for the year in November (29%) and December (28.9%) of 2020 (see Figure 2). The proportion of the population staying

home to-date in 2021 is higher than 2019 but is generally lower than during the 2020 post-public health emergency.

Figure 2
Percentage of People Staying Home per Day by Month, 2019, 2020, and First Half of 2021



Source: www.bls.gov/daily-travel

FHWA (2021) reported VMT on urban and rural roads in the first half of 2021, which indicates that compared to 2020, VMT on urban roads increased by 12.2%. For 2020 compared to 2019, VMT on urban roads decreased 14.2%. This suggests an approximate return to the VMT

levels from 2019 in 2021. The VMT on rural roads in the first half of 2021 increased 14.1% compared to 2020. In 2020 compared to 2019, the VMT on rural roads decreased by 11.1%.

Changes in Crash Rates

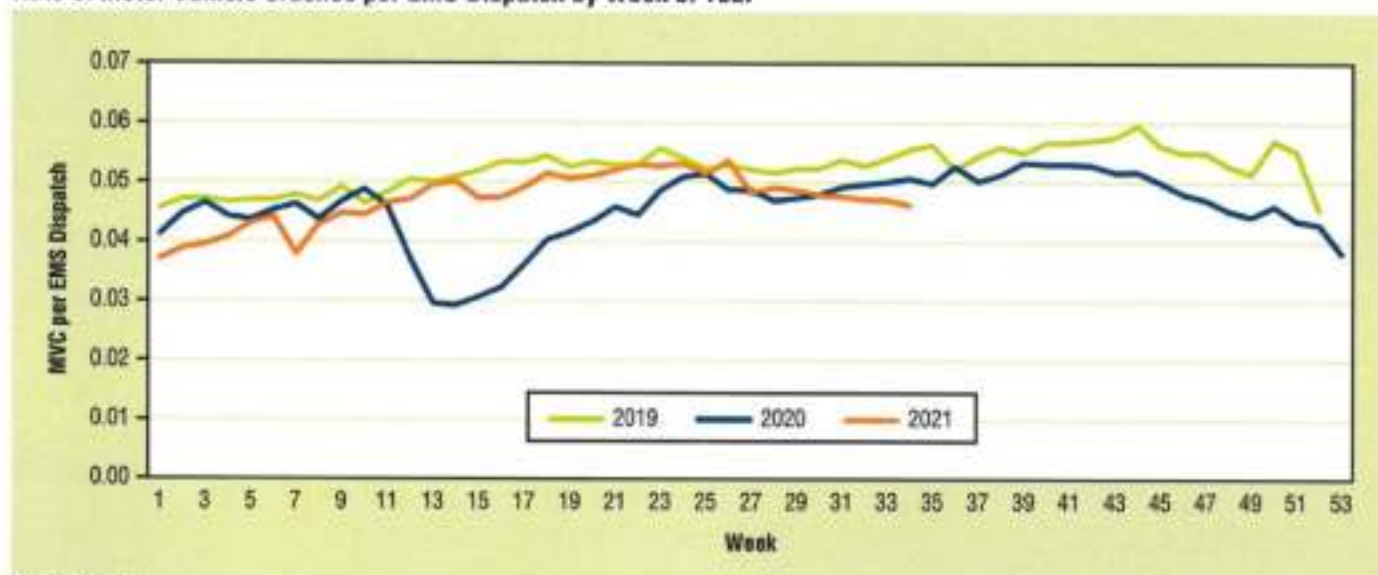
NHTSA used the NEMSIS database that includes EMS activations from 49 States and U.S. Territories to explore changes in a range of crash-related metrics that occurred between 2019¹ and first 34 weeks of 2021. NHTSA uses rates partly because the number of agencies contributing data increases each year. Therefore, counts of incidents compared across years could be misleading due to increases in the number of participating entities. The first metric is the rate of motor vehicle crashes (MVCs) per EMS activation (Figure 3),² perhaps a leading indicator of roadway fatalities (one would expect EMS activation decreases compared to the previous year to be associated with decreases in fatalities). Further analysis is required to determine what factors contributed to the decreased rate that counterintuitively occurred as road fatalities increased.

Preliminary analysis conducted by the NEMSIS Technical Assistance Center (Mann, 2021) suggests the rates per EMS activation for influenza-like illness (which includes COVID symptoms), cardiac arrest, scene of death, opioid-related, and mental/behavioral-related activations all increased in 2020 compared to 2019. Further, the rates seen in 2021 have not regressed to pre-pandemic levels for these EMS activations. These increases could mask changes in crash rates, especially in the severity of crashes, as hypothesized by their associations with increased alcohol use, speed increases, and ejections from vehicles. These are seen in other data presented later in this Research Note.

¹ Interested readers can explore earlier years' NEMSIS data and data added after Week 30, 2021 at <https://nemsis.org/view-reports/public-reports/ems-data-cube/>

² In 2020 the NEMSIS database analysis year was 53 weeks.

Figure 3
Rate of Motor Vehicle Crashes per EMS Dispatch by Week of Year



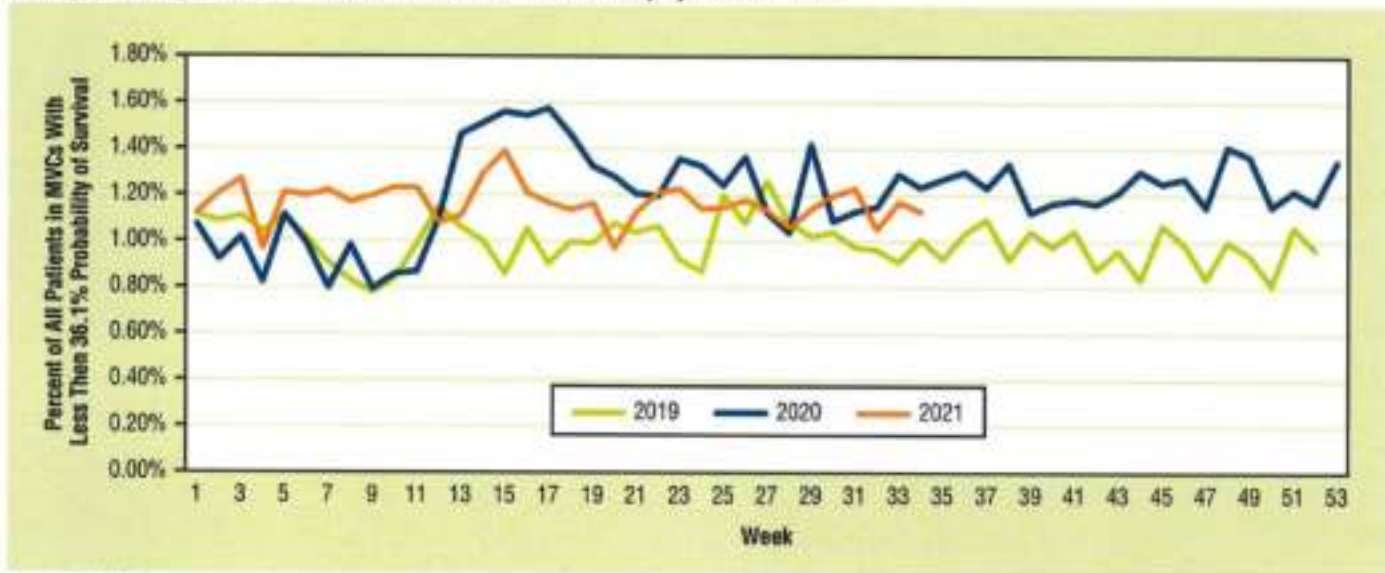
Source: NEMSIS

The NEMSIS data include metrics on crash severity. For people treated at the scenes of motor vehicle crashes, EMS professionals use an injury scoring system called the Revised Trauma Score (RTS) to determine the level of care needed to save the lives of the injured. Under RTS, patients who present with a probability of survival of 36.1% or less are considered severely injured and are often transported to Level 1 or Level 2 trauma centers that provide higher levels of critical care to the most severely injured. Figure 4 shows the percentage of patients in crashes whose probability of survival was in this range for 2019, 2020, and the first 34 weeks of 2021. Beginning in Week 12 of 2020, the percentage of those injured with a probability of survival of 36.1% or less never dropped below 1.00% — the average of 2019. The 2020 average of 1.21% strongly suggests an increase

in the severity of crashes, especially considering the relatively low percentages prior to week 12 of that year. This relative increase has continued through week 34 of 2021 (the latest available data), yielding an average of 1.17% of all motor vehicle crash patients in the NEMSIS database being severely injured through that date in 2021. The practical implications of this are important to consider: in 2019, for every 10,000 patients who were injured in crashes, 100 needed high-level trauma care to survive; in 2020, there were 121 who needed that care, and in 2021, there were 117 who needed high-level trauma care. Taken in the context of the challenges that the EMS system has experienced since the start of the pandemic, which are described in the next section, this is a significant concern.

Figure 4

Percentage of All Patients in Motor Vehicle Crashes With Probabilities of Survival 36.1% or Less (Severely Injured; Transport to Higher Level Trauma Center Recommended) by Week of Year



Source: NEMSIS

COVID-19 and First Responders

It is important to acknowledge the social context in which first responders, in particular EMS clinicians, fire, law enforcement, and telecommunicator professionals operated throughout the pandemic. From the start of the pandemic through early September 2021, NHTSA's internal estimates suggest that more than 800 first responders (law enforcement, fire fighters, EMS clinicians, and telecommunications professionals) died due to COVID-19. Research conducted by Ngo et al. (2021), suggests that during the early months of the pandemic (April – October 2020) trauma patients who were seriously injured in motor vehicle crashes were significantly more likely than the general population to be COVID-positive; of this population, more than half had at least one drug present in their system, suggesting not only clustering of risks among the injured but increased risk of exposure to COVID for people who care for those motor-vehicle trauma patients.

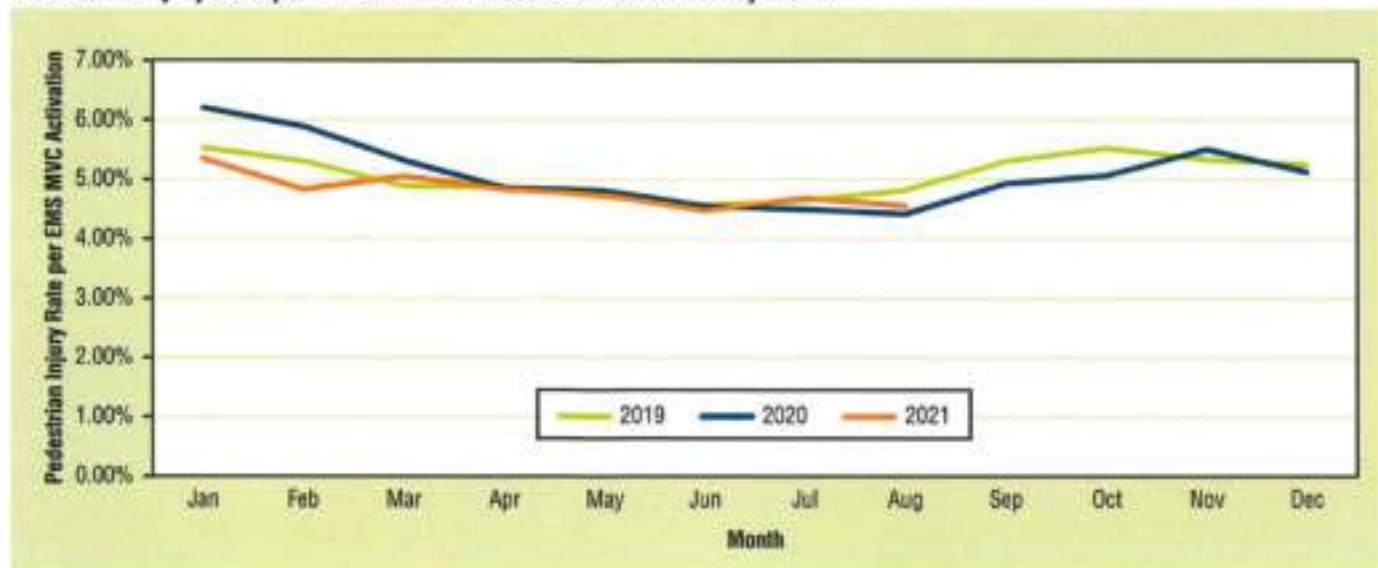
An additional concern regarding the EMS system is the increase in the time for EMS personnel and equipment to return to service after transporting patients. Mann (2021) notes that the average influenza-like-illness return-to-service times for responding units is minutes longer since the start of the pandemic. These are minutes that the units are not available for crash (or any other) response. A recent detailed literature review of ambulance offload delay literature by Li, Vanberkel, and Carter (2019) demonstrates poor clinical outcomes related to delays. Further, Byrne et al. (2019) note that longer response times are associated with higher MVC mortality. These issues, alongside news reports (e.g., Athans, 2021; and Nelson, 2021) and other reports of EMS staffing shortages, suggest that a better understanding of the pandemic effects on this particular subset of clinicians is necessary to limit excess road deaths.

Pedestrian Safety

Understanding the changes in risks among different road user types is an important element for identifying appropriate countermeasures. To explore this, researchers examined NEMSIS data related to pedestrian crashes in 2019, 2020, and 2021. Figure 5 shows the pedestrian injury rate per EMS MVC activation by month in those years. The practical implications for these data are mixed. For every 10,000 EMS MVC activations in 2019, there were 506 for injured pedestrians. In 2020, that number was 510, and through

August 2021, that number was 482. Analysis of 2020 State data published by the Governors Highway Safety Association (2021), projects increases in pedestrian fatalities in 2020 compared to 2019. Given the observed decreases in EMS MVC activation rates in 2021 shown in Figure 3, the change in pedestrian injury rates merits closer examination. For example, the increases in speeds discussed later in this report could have contributed to these reported increases in pedestrian deaths.

Figure 5
Pedestrian Injury Rate per EMS Motor Vehicle Crash Activation by Month



Source: NEMSIS

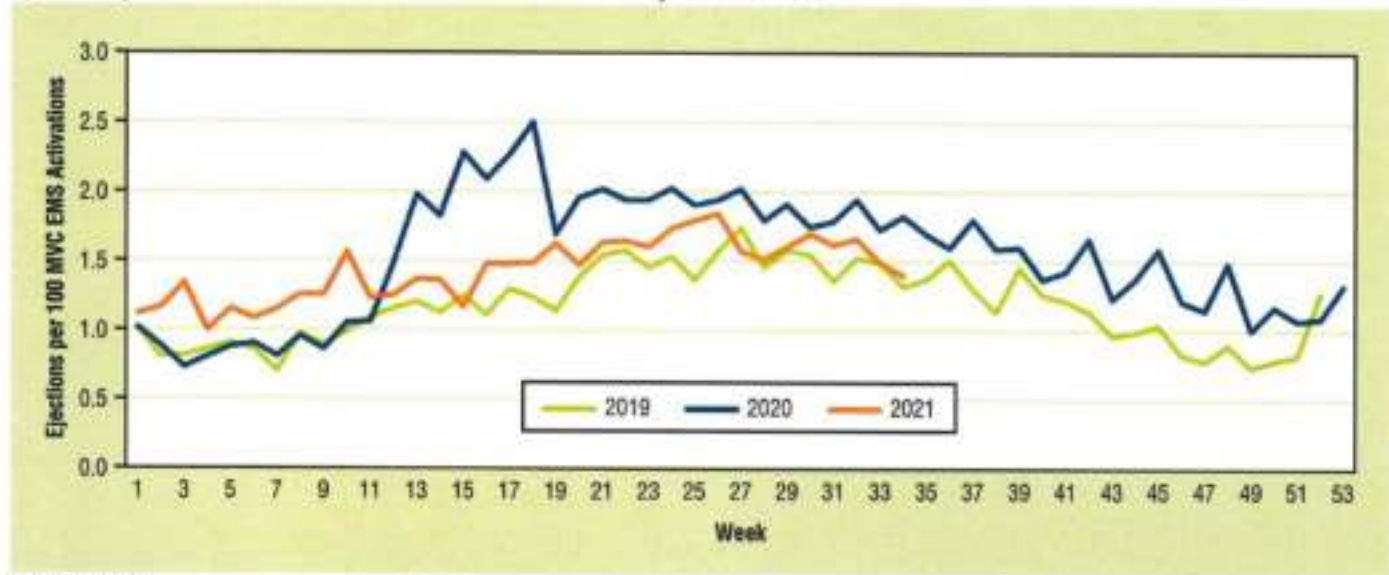
Changes in Risky Behaviors

Seat Belt Use

Seat belts are among the most important safety features in a vehicle because they keep occupants in place, which mitigates injuries during a crash. Ejections from vehicles are a surrogate measure of seat belt use because people using seat belts are less likely to be ejected. Ejections are also correlated with crash severity. The number and rate of ejections per EMS activation in response to motor vehicle crashes is available in the

NEMSIS database (NHTSA, 2021). Figure 6 shows the ejection rate by week for 2019, 2020, and 2021 through week 34; compared to 2019, it shows an increase in the ejection rate in most of 2020 after week 10, when the COVID-19 public health emergency was declared. The ejection rates through week 34 of 2021 were also higher in most weeks than those observed in 2019.

Figure 6
Ejections per 100 Motor Vehicle Crash EMS Activations by Week of Year

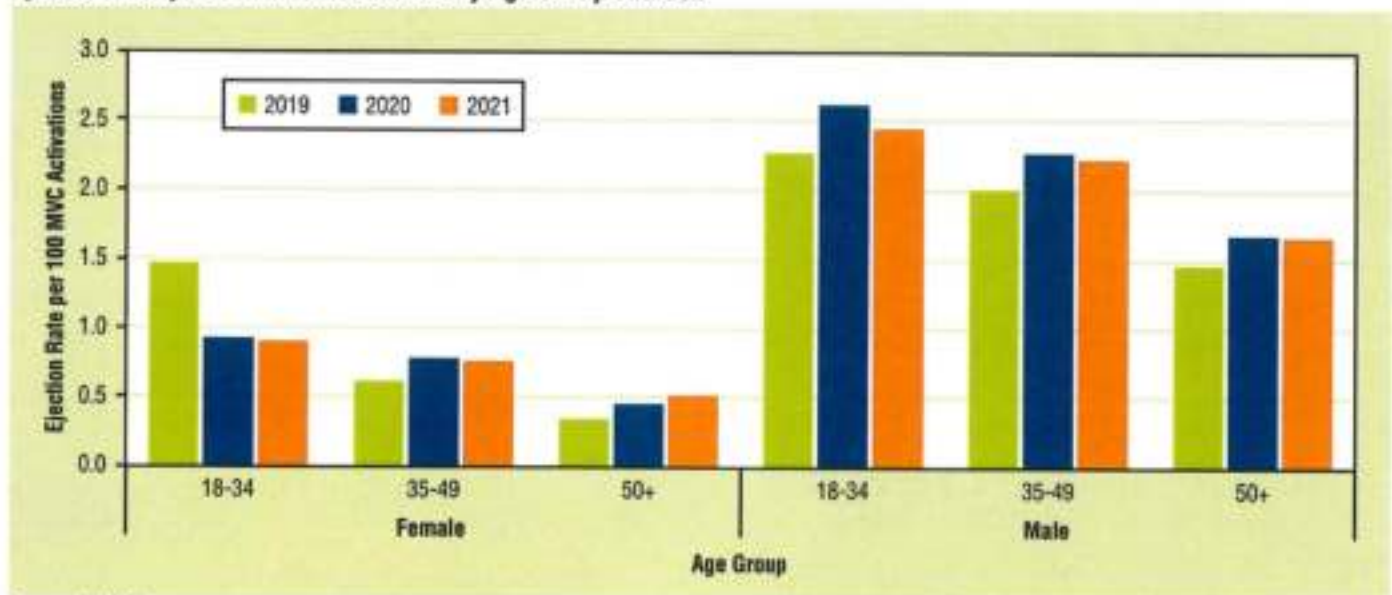


Source: NEMSIS

NHTSA queried the NEMSIS data related to the age groups and sex of those who were ejected to determine whether different groups might comprise the changes in the trends in ejection profiles in 2020 and through week 34 of 2021 (see Figure 7). In 2020, the majority of increases in ejection rates occurred among males, with the largest increases occurring among those 18 to 34 years old, followed by those 35 to 49 years old. Through

week 34 in 2021, although the ejection rates for different age groups were lower than they were in 2020, these rates did not revert to those seen in 2019. It is interesting to note the steep and sustained reductions in the ejection rate among women 18 to 34 years old in 2020 and 2021 compared to 2019; understanding the reasons for this would be valuable in developing countermeasures.

Figure 7
Ejection Rate per 100 MVC Activations by Age Group and Sex

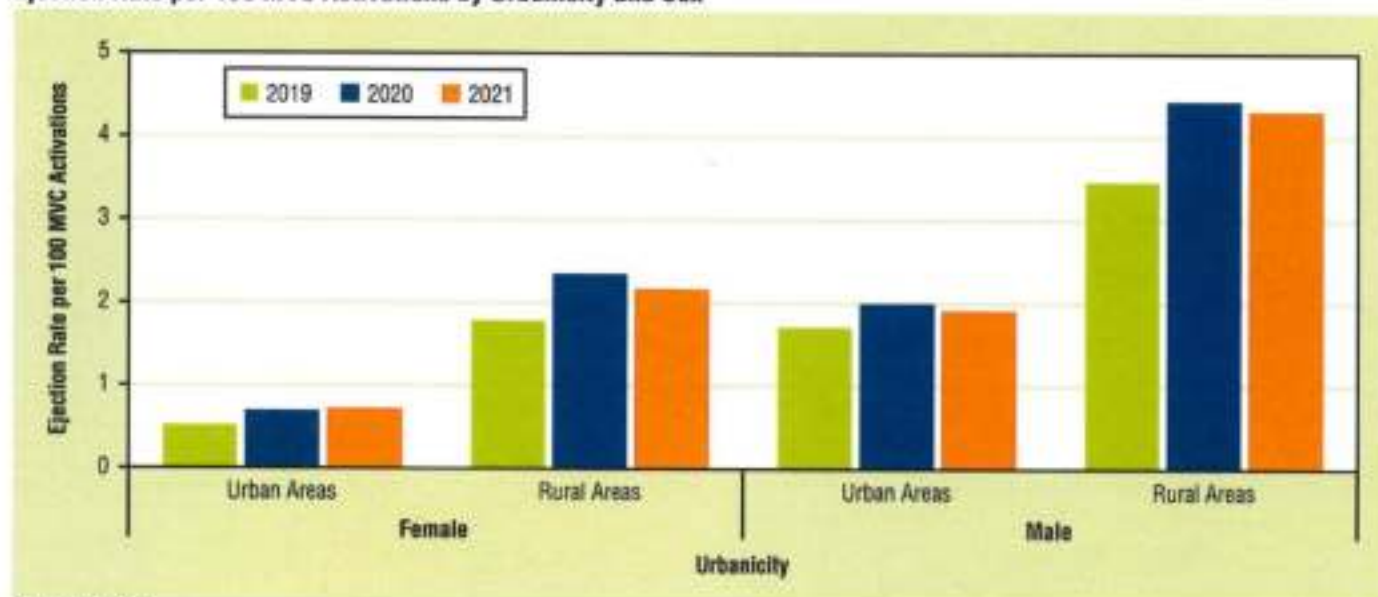


Source: NEMSIS

NEMSIS data on urbanicity uses USDA Urban Influence Codes (NEMSIS, 2021). This analysis collapses the 12 categories in that system to urban and rural. The analysis of NEMSIS data regarding the urbanicity of those ejected shown in Figure 8 reveals that while there were increases in ejections in both urban and rural areas, ejections increased more in rural areas, particularly among males. Compared to 2019, the observed ejection rates

for both males and females in 2020 increased in urban and rural areas. Although for the most part the rates observed in 2021 (through week 34) are lower than those observed in 2020, they remain higher than the rates in 2019. This is particularly stark in the observations from rural areas. Because EMS response times are longer in rural counties and are correlated with patient outcomes (Byrne et al., 2019), this sustained increase is concerning.

Figure 8
Ejection Rate per 100 MVC Activations by Urbanicity and Sex



Source: NEMSIS

Alcohol and Drug Use

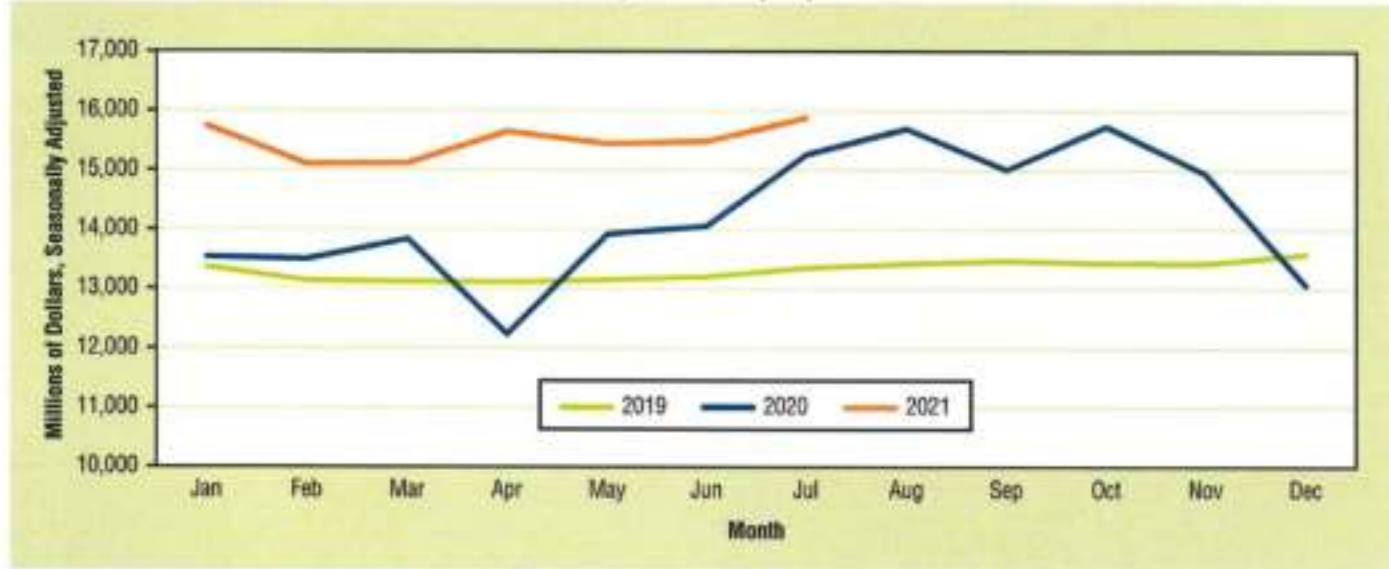
Earlier research released by NHTSA (Office of Behavioral Safety Research, 2021a, 2021b; Thomas et al., 2020; Wagner et al., 2020) noted changes in alcohol and other drug use among seriously and fatally injured road users during the pandemic through the end of 2020. Updated analyses of the data from 2021 are not available at the time of writing this report.

Self-reported survey data reported by Vanlaar et al. (2021) suggests that a subset (7.6%) of the U.S. adult population was more likely to drive impaired during the pandemic than before it. Other data sources suggest continued increases in alcohol and other drug use

(not necessarily related to driving) into 2021 compared to levels in 2019 and 2020. U.S. Census Bureau (2021) data shown in Figure 9 show that wholesale alcoholic beverage sales are higher in 2021 compared to 2019 and 2020. The National Institute on Alcohol Abuse and Alcoholism (2021) conducted analyses of 12 States' per capita changes in alcohol sales in 2020 compared to the average of the previous three years. The data presented in Figure 10 indicate variability in these differences by month, from a low of -2.2% in May to a high of 15.9% higher in July 2020. However, these 12 States may not be representative of the Nation in terms of alcohol consumption.

Figure 9

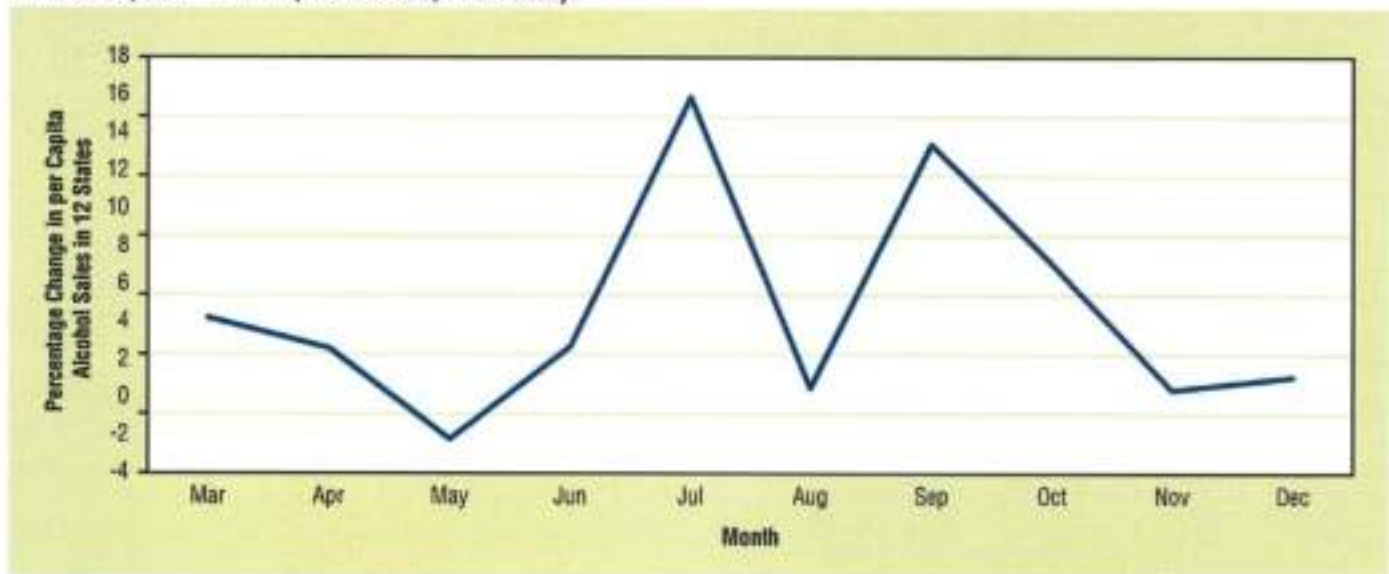
Merchant Wholesalers, Except Manufacturers' Sales Branches and Offices: Nondurable Goods: Beer, Wine, and Distilled Alcoholic Beverage Sales, Millions of Dollars, Monthly, Seasonally Adjusted



Source: U.S. Census Bureau

Figure 10

Percentage Changes in Monthly per Capita Sales of Alcoholic Beverages (In Gallons of Ethanol) in 2020 Compared to the Prior 3-Year Average in 12 States (Alaska, Colorado, Connecticut, Delaware, Florida, Illinois, Kentucky, Massachusetts, Minnesota, North Dakota, Tennessee, and Texas)



Source: National Institute on Alcohol Abuse and Alcoholism

A bulletin by the Substance Abuse and Mental Health Services Administration (2021) on mental health and substance use during the pandemic noted increases in substance use and changes in treatment of substance use disorder through calendar year 2020. This would appear to have continued into 2021, given Mann's (2021) reporting of increases in the rates of opioid overdoses and naloxone administration managed by EMS responders in 2020 and 2021 compared to previous years' rates. Similarly, States that report their cannabis-related sales taxes show year-over-year

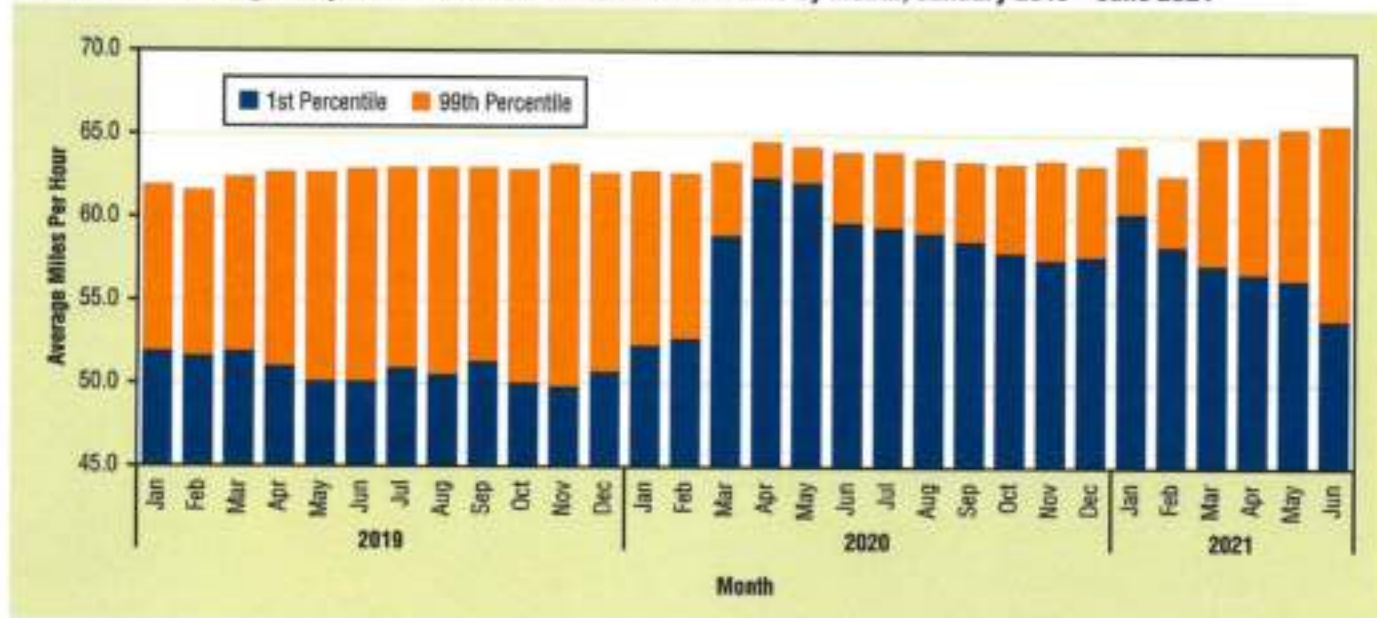
increases in sales tax revenues for the first six months of 2021 compared to 2020, and for the full year of 2020 compared to 2019 (California Department of Tax and Fee Administration, 2021; Colorado Department of Revenue, 2021; Oregon Department of Revenue, 2021; State of Nevada Department of Taxation, 2021). The apparent increase in cannabis use may not be solely related to the pandemic, as it occurs at the same time as shifting public perceptions and legislation related to marijuana (Van Green, 2021).

Speed

Earlier research released by NHTSA (Office of Behavioral Safety Research, 2021a, 2021b) noted increases in speeds across urban and rural environments through the FHWA's analysis of the NPMRDS. This data set represents the average speeds across different roadway classifications nationwide. Analyses were conducted comparing the highest and lowest speeds for four different roadway classifications for 2019, 2020, and the first half of 2021 (Center for Advanced Transportation

Technology, 2021). Figure 11 shows the range in speeds for urban interstates from the slowest 1% of vehicles (1st percentile) to the fastest 1% of vehicles (99th percentile) from January 2019 through June 2021. It is interesting to note that the range of speeds from March 2020 through February 2021 became relatively narrow compared to previous months; it is also interesting to note the shift to consistently faster 99th percentile speeds evidenced from March through June 2021.

Figure 11
Urban Interstate Range of Speeds – 1st Percentile to 99th Percentile by Month, January 2019 – June 2021

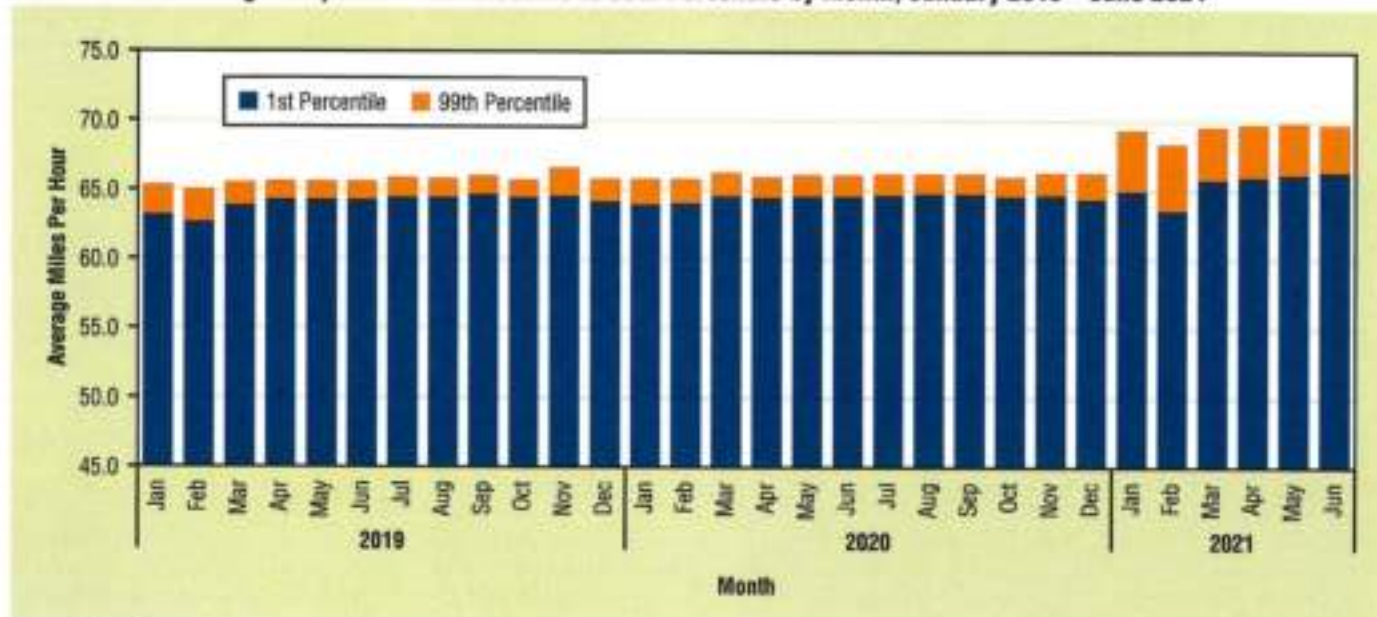


Sources: NPMRDS

Figure 12 shows the range in speeds for rural interstates from the slowest and fastest 1% of vehicles for the same timeframe. The rural interstates do not show the dispersion in speeds seen for the urban interstates. However,

starting in January 2021, there appears to be an increase in the speeds of both the slowest and the fastest vehicles on these roads.

Figure 12

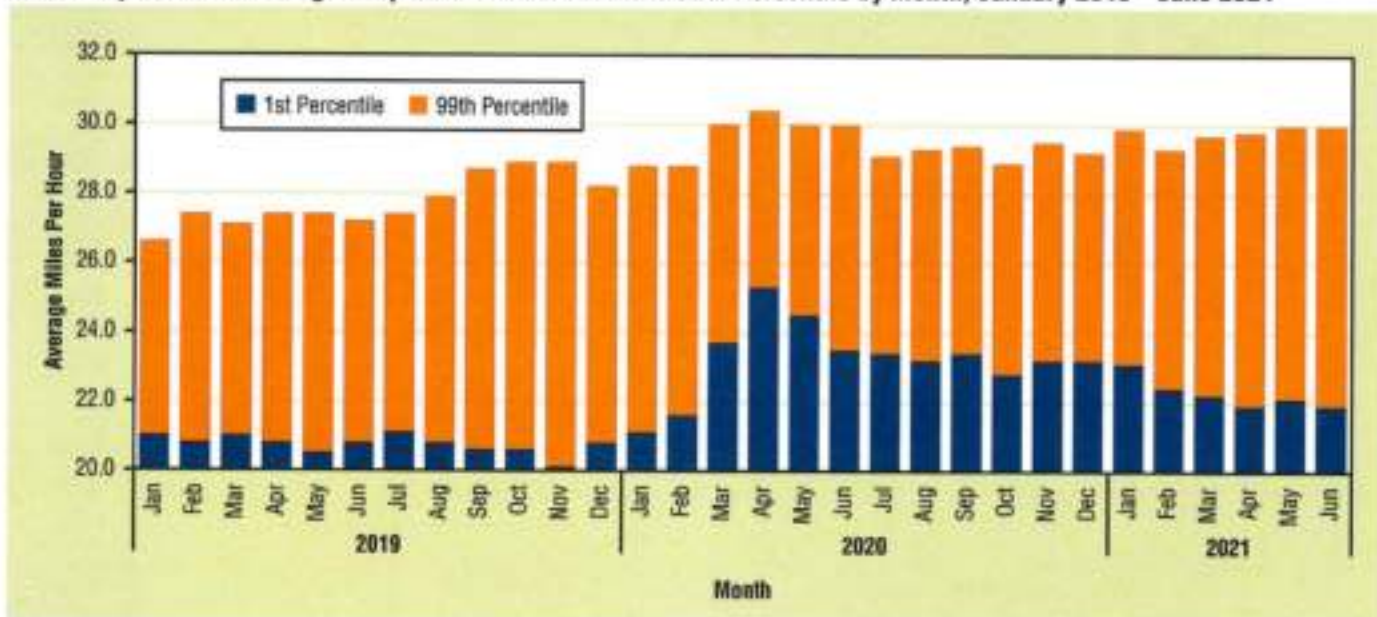
Rural Interstate Range of Speeds – 1st Percentile to 99th Percentile by Month, January 2019 – June 2021

Source: NPMRDS

Figure 13 shows the range of speeds on major collectors³ in urban areas from January 2019 through June 2021. Starting in March 2020, the average speeds for the slow-

est 1% of vehicles on these roads increased. Generally, since that time, the average speeds for the fastest 1% of vehicles also increased.

Figure 13

Urban Major Collector Range of Speeds – 1st Percentile to 99th Percentile by Month, January 2019 – June 2021

Source: NPMRDS

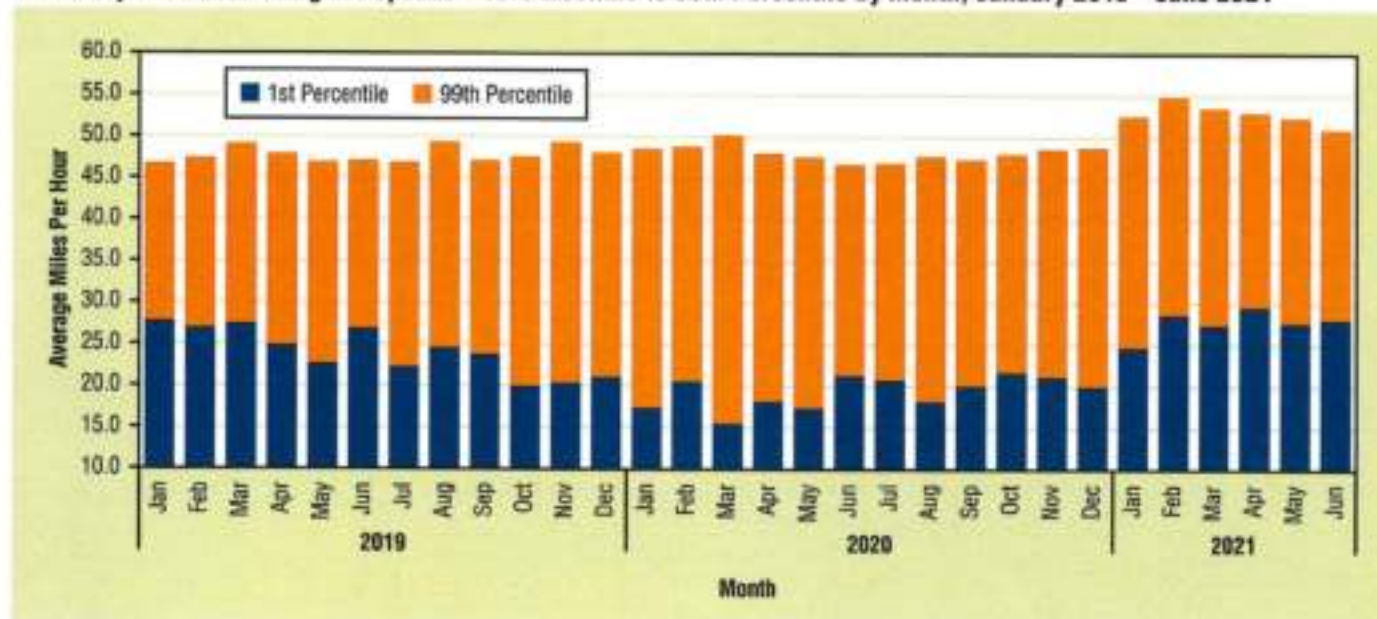
³ Federal Highway Administration definitions of roadway classifications can be found at www.fhwa.dot.gov/planning/2010/processes/statewide/related/highway_functional_classifications/section03.cfm

Figure 14 shows the range of speeds on major collectors for rural areas from January 2019 through June 2021. The slowest 1% of vehicles on these roads appear to have reduced their speeds throughout all of 2020

(not just during the public health emergency). Between February and June 2021, the average speeds of the fastest 1% of vehicles increased above those seen in 2019.

Figure 14

Rural Major Collector Range of Speeds – 1st Percentile to 99th Percentile by Month, January 2019 – June 2021



Source: NPMRDS

While the real change in speeds might have been a few miles per hour, this is still a safety concern. In a meta-analysis, Elvik (2005) found that increased driving speed increased the risk of crashes and the severity of injuries resulting from those crashes. Further, crash test research by Kim et al. (2021) showed that speeds 10 mph above the 40 mph baseline exceeded the capacity handled by the vehicle's energy-absorbing structures, and survival likelihood (as measured through crash test dummies) was significantly reduced.

Distracted Driving

NHTSA does not have access to detailed data related to distracted driving. Because of this, published reports by holders of the data are important for our understanding of the phenomenon and the risks associated with it during the pandemic. The data-holders use different metrics for assessing distraction, though the metrics are associated with people manipulating their cell phones while their vehicles are in transit. One of these data-holders, Cambridge Mobile Telematics (2021), reported increases in the incidence of phone manipulation per kilometer of driving through March 2021 compared

Analyses of speeding behavior (driving faster than the posted speed limits) since the start of the pandemic reveal other changes. Cambridge Mobile Telematics (2021) analysis of telematic data suggested that as trips taken decreased by 50%, their measure of speeding risk increased by 45%. Further, they reported an approximate one third increase in speeding above pre-pandemic levels from November 2020 through March 2021. In their survey of self-reported behaviors, Vanlaar et al. (2021) reported that 7.6% of U.S. respondents indicated they were more likely to excessively speed during COVID-19 as compared to before the pandemic.

to January 2020 baseline observations. Further, they reported that the 10% of most-distracted drivers have an insurance loss frequency that is 2.2 times the 10% of least-distracted drivers. Separately, Zendrive (2020) analysis showed increases in cell phone use among drivers after the mid-March 2020 start of the public health emergency. In addition, their analyses suggest that in more than 16% of the crashes their algorithms detect, a cell phone was manipulated less than five seconds before impact. These studies suggest that risks associated with cell phone distraction increased during the

pandemic. Separate from studies of telematics, Vanlaar et al. (2021) reported in their survey of self-reported behaviors that 6.8% of U.S. respondents indicated they were more likely to have driven while distracted during COVID-19 as compared to before the pandemic. Followup questions about the source of distraction suggested that competing thoughts unrelated to driving were the largest source of distraction for these drivers. Taken together, these studies suggest an increase in distracted driving during the pandemic compared to before the start of the public health emergency.

Summary

In the first half of 2021, data suggest that trip-taking rebounded but had not reverted to levels seen before March 2020. Ejection rates remained elevated compared to the same period in 2019. The increase in severe injury rates observed throughout the latter part of 2020 is a disturbing trend that appears to have continued in 2021. The increases in ejections among males and those in rural areas in 2020 and 2021 are a cause for concern, in part because of the structure and current challenges in the EMS system, but also because speeds in rural areas tend to be higher than in urban areas. Addressing the needs of vulnerable road users requires that we understand how their risks might have changed during 2020 and 2021. Given the observed decrease in crash rates in 2021 compared to 2020 and the external projections of increases in pedestrian fatalities, there is continued need to improve data to understand potential changes in pedestrian safety, particularly in the context of the changing environments in which people were walking. The changes in drug and alcohol sales and other reported behavioral shifts also merit continued exploration. In particular, increases in sales of alcohol and marijuana, while indirect measures of risk to road traffic safety, are indicators of social changes that could have traffic safety implications.

While previous research had posited that decreases in VMT in 2020 had allowed increases in speeds compared to 2019, the return of VMT in 2021 paired with increased speeds on different roadway types in 2021 suggests this supposition may not completely explain differences in behavior. Research showing increases in speeding behavior in 2020 and 2021 causes concern for the safety implications of those increases. This note also provides a brief introduction to recent literature on distracted driving produced by companies that collect and analyze data related to cell phone or vehicle positioning. While the reports include opaque data and analysis techniques, they provide an indication that distracted driving behav-

ior may have changed since the start of the pandemic. Survey research conducted in 2020 provided further evidence of behavioral change related to distracted driving during the pandemic. Continued monitoring of the literature could provide additional insights.

Accessing early data from 2021 has proven to be challenging. Reviewing the changing traffic safety environment as it evolves can provide direction on where to look for opportunities to deploy countermeasures. The past 18 months have provided strong impetus for NHTSA and partner organizations to focus on known, observable problems, such as the risky driving behaviors discussed here. This Research Note provides further evidence that speeding and not using seat belts remained elevated in 2021 compared to pre-pandemic times. Changes in alcohol and other types of drug use are also documented here. However, another key issue to consider is how short-term approaches to studying observable changes in behavior or crash outcomes are limited by the data available to researchers. For example, innovative analyses in non-traditional literature can teach us about behavior and can enable consideration of new countermeasures. This type of analysis could hold promise for traffic safety professionals by helping to identify emerging problems and quickly respond to changes in the traffic safety environment.

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