

Appendix 3:

Vehicle, Bicycle & Pedestrian Traffic Analysis

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1 AUTOMATIC TRAFFIC RECORDER STUDIES

The NH 10 South Corridor Study area contains a multitude of historical traffic count locations conducted in the last five years. They include locations where studies are completed on a recurring basis (every three years) for the NH Department of Transportation (NHDOT) and “one-time” requests for other transportation planning-related inquiries that were made by the Town of Swanzey or implemented on behalf of the Cutler School in West Swanzey (Figure 1). Much of the data can be found in the NHDOT [Transportation Data Management System](#), an online database of traffic count data. Data in the following appendix includes information about traffic volumes as well as a subset of studies that include information about the mix of vehicles types (vehicle classification), operating speeds and gaps between vehicles on or near the NH 10 Corridor (Table 1).

Figure 1 – Excerpt of Project Advisory Committee slide depicting an inventory of recent traffic recorder studies within the study area



Source: 12/8/20 NH 10 Corridor Study Working Group Meeting

Table 1 - List of traffic count studies conducted in the last five years within the study area (approximately ¼ mile from the highway centerline)

Location Description	NHDOT Identifier	Most Recent Study	Types of Data Available
Ash Hill Road north of Sawyers Crossing Road	Not applicable	2018	Volume
Base Hill Road at Keene line	Not applicable	2020	Volume, Classification, Speed, Gap
California Street between NH 10 and Covered Bridge	Not applicable	2016	Volume, Classification, Speed, Gap
Cobble Hill Road west of NH 10	82441061	2019	Volume

Location Description	NHDOT Identifier	Most Recent Study	Types of Data Available
Denman Thompson Avenue over Ashuelot River	82441063	2020	Volume
Main Street over Ashuelot River	82441062	2019	Volume
Matthews Road at Keene line	Not applicable	2019	Volume
NH 10 (Keene Road) at Winchester line	62487054	2021	Volume, Classification, Speed, Gap
NH 10 (West Swanzey Road) at Keene line	82441050	2020	Volume, Classification, Speed, Gap
NH 10 (West Swanzey Road) south of Base Hill Road	82441070	2019	Volume, Classification, Speed, Gap
NH 10 (West Swanzey Road) south of West Street	Not applicable	2020	Volume, Classification, Speed, Gap
NH 10 (Winchester Street) north of Matthews Road	82237029	2019	Volume
North Winchester Street	Not applicable	2018	Volume
Sawyers Crossing Road east of NH 10	Not applicable	2020	Volume, Classification, Speed, Gap
South Winchester Street in front of Cutler School	Not applicable	2016	Volume, Classification, Speed, Gap
West Street east of Ford Road	82441060	2019	Volume
West Street east of NH 10	Not applicable	2018	Volume
Westport Village Road over Ashuelot River	82441059	2019	Volume

Source: SWRPC

1.1 TRAFFIC VOLUME OVERVIEW

For the purpose of this appendix, the included reports focus on the following six study locations which were evaluated most recently and in more detail than others. They also focus on the busiest, State-managed roads in the corridor study area:

- Base Hill Road at Keene line
- NH 10 at Keene line
- NH 10 south of Base Hill Road
- Sawyers Crossing east of NH 10
- NH 10 south of West Street
- NH 10 at Winchester line

Reports on the following pages focus on four key themes:

- **Volume Study Results** depict changes in traffic volumes throughout the day and by day of the week and identify peak hours of travel in bold font.
- **Classification Study Results** show traffic volumes based on a 13-member scheme, further aggregated into “light-duty” (classes 1-3), “medium-duty” (classes 4-7), or “heavy-duty” (classes 8-13) vehicle categories for ease of analysis.

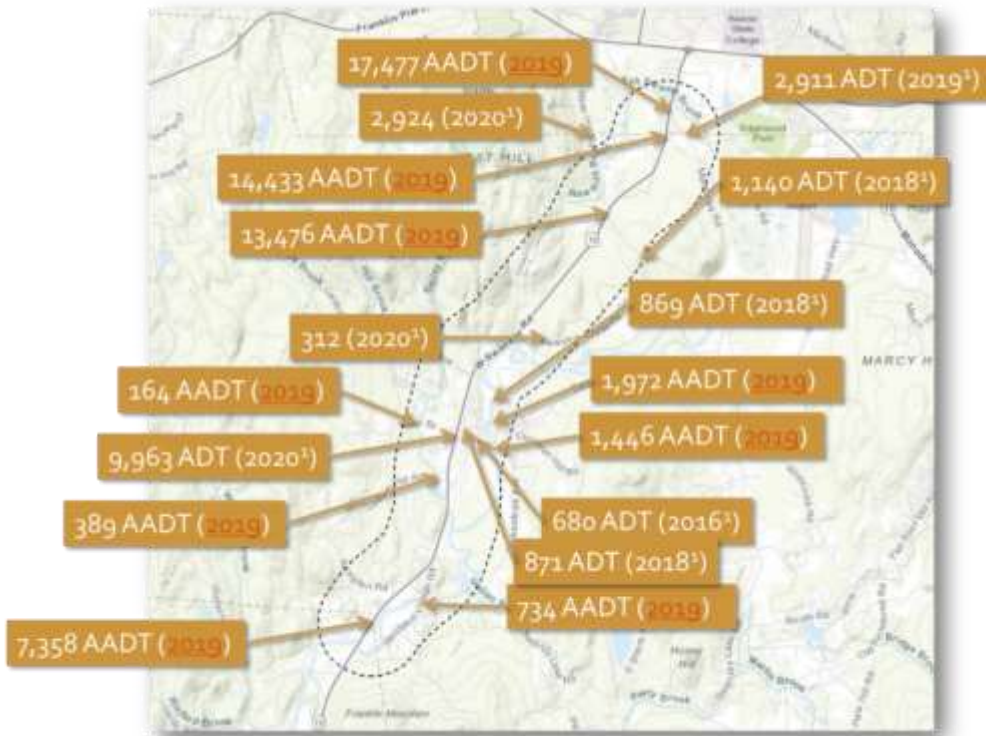
- **Speed Study Results** show how the operating speeds of vehicles vary by direction and throughout the day. SWRPC’s analysis of the collected data intentionally excludes vehicles closely following other vehicles to more accurately characterize the operating speed.
- **Gap Study Results** track and quantify gaps of time between vehicles in the flow of traffic throughout the day. The results are summarized based on thresholds identified in transportation research that are likely to be adequate for cars and trucks entering the roadway from a stop-controlled approach¹.

In order to characterize traffic volumes, transportation planners and traffic engineers frequently quantify the daily average of the number of vehicles at a specific location. Depending on the purpose of the study and the amount of data collected, results can even correct for or factor in how traffic volumes change throughout the year. The following two measures are typically used for this purpose:

- **Annual Average Daily Traffic (AADT)** describes the average number of vehicles traveling through a location per day throughout the year. They are derived from short-term weekday studies and are directly comparable with other AADT figures using a factoring system that accounts for seasonal fluctuations in traffic for different classes of roads. The estimates below were calculated by NHDOT and are valid for the 2019 calendar year (Figure 2).
- **Average Daily Traffic (ADT)** also describes the number of vehicles traveling through a location. They are also derived from short-term weekday studies, however, they are not directly comparable due to the natural changes in traffic volumes that occur throughout the year. The estimates in the figure below were calculated by SWRPC based on observed weekday traffic volumes during the study (Figure 2).

¹ Fitzpatrick, K. (1991), “Gaps Accepted at Stop-Controlled Intersections,” Transportation Research Record.
<http://onlinepubs.trb.org/Onlinepubs/trr/1991/1303/1303-011.pdf>

Figure 2 – Excerpt of Project Advisory Committee slide depicting estimated traffic volumes observed at selected sites



Source: 12/8/20 NH 10 Corridor Study Working Group Meeting

1.2 VOLUME STUDY RESULTS

Weekday average daily traffic volumes vary on NH 10 from a high south of Base Hill Road (14,471 vehicles per day) to roughly half that volume at the Winchester line (7,842).

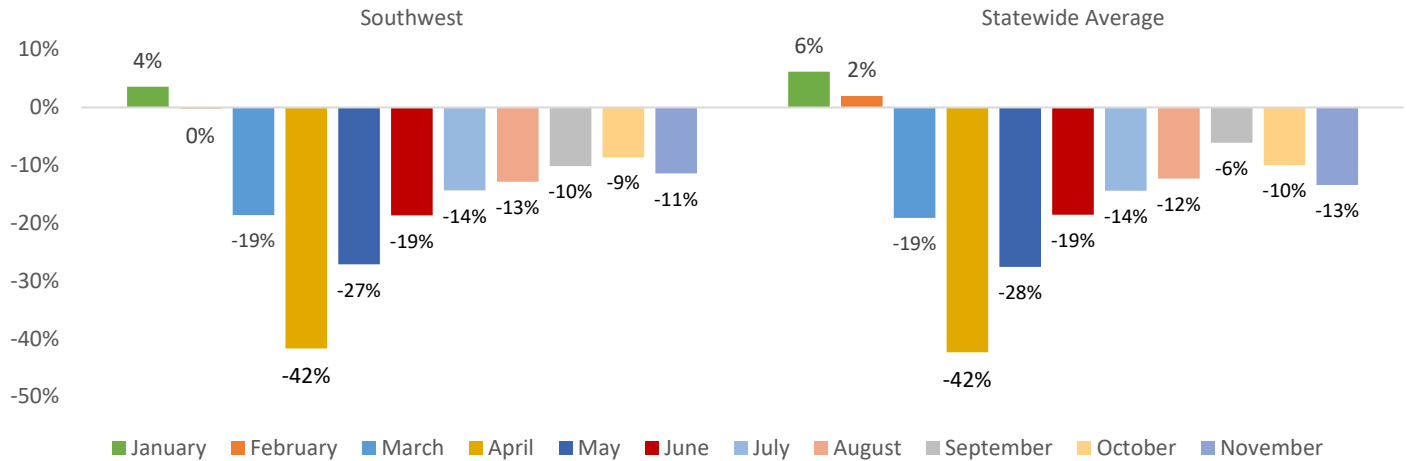
Table 2 - Comparison of Weekday Average Daily Traffic

Location (Study Year)	Average Annual Daily Traffic (vehicles per day)	Weekday Average Daily Traffic (vehicles per day)	Busiest Weekday Hour of Day (a.m.)		Busiest Weekday Hour of Day (p.m.)	
			Duration	Vehicles	Duration	Vehicles
Base Hill Road at Keene line (2020)	Not calculated	2,924	10:00 a.m. to 11:00 a.m.	195	3:00 p.m. to 4:00 p.m.	260
NH 10 at Keene line (2020)	12,528	13,553	11:00 a.m. to 12:00 p.m.	1,004	3:00 p.m. to 4:00 p.m.	1,204
NH 10 south of Base Hill Road (2019)	11,697	14,471	7:00 a.m. to 8:00 a.m.	1,111	4:00 p.m. to 5:00 p.m.	1,273
Sawyers Crossing east of NH 10 (2020)	Not calculated	312	11:00 a.m. to 12:00 p.m.	27	4:00 p.m. to 5:00 p.m.	32
NH 10 south of West Street (2020)	Not calculated	9,971	11:00 a.m. to 12:00 p.m.	674	4:00 p.m. to 5:00 p.m.	884
NH 10 at Winchester line (2020)	6,387	7,842	11:00 a.m. to 12:00 p.m.	506	4:00 p.m. to 5:00 p.m.	690

Source: SWRPC

It is important to note that studies conducted during the coronavirus pandemic are likely to be lower than expected. For example, an analysis of permanent traffic recorder results by the NHDOT Bureau of Traffic indicate August 2020 traffic volumes were 13% lower than August of 2019 (Figure 3).

Figure 3 - Comparison of Average Daily Traffic Volumes by Month (2019 vs. 2020)



Source: NHDOT (Note that NHDOT’s analysis did not include the month of December)

The following detailed volume study results show how hourly traffic volumes vary by time of day and how daily traffic volumes vary by day of the week. In the following sections, figures in **bold** indicate the busiest a.m. and p.m. hours of the day.

Each following report lists traffic volumes by hour in a weekly format, with one week per page. Each row represents a single hour time step, and the columns represent days of the week, with the actual dates shown.

Five-day and seven-day averages are provided on the right side of the report. The five-day average is the average vehicle flow for weekdays. The seven-day average is the average vehicle flow across the entire week. Note that weekends are underlined.

12 hour (0700-1900), 16 hour (0600-2200), 18 hour (0600-0000) and 24 hour (0000-0000) totals are included at the bottom of the Weekly Vehicle Counts report. Also included are the a.m. and p.m. peak hours for each day, and their respective hourly totals. Note that the a.m. and p.m. peaks are also indicated in the hourly totals by a bold typeface.

An asterisk * in the report matrix represents an hour where data is not available for the entire hour, or has been excluded in the report Profile. Note that this is different to a zero vehicle count for an hourly period, which will be correctly displayed with a 0.

1.2.1 Base Hill Road at Keene line

1.2.1.1 Wednesday, August 19, 2020 to Sunday, August 23, 2020

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
	17 Aug	18 Aug	19 Aug	20 Aug	21 Aug	22 Aug	23 Aug	1 - 5	1 - 7
0000-0100	*	*	5	2	5	15	4	4.0	6.2
0100-0200	*	*	4	5	3	8	6	4.0	5.2
0200-0300	*	*	8	8	4	7	4	6.7	6.2
0300-0400	*	*	8	9	9	5	5	8.7	7.2
0400-0500	*	*	15	14	18	8	1	15.7	11.2
0500-0600	*	*	47	46	38	24	12	43.7	33.4
0600-0700	*	*	118	121	119	41	37	119.3	87.2
0700-0800	*	*	180	156	160	76	67	165.3	127.8
0800-0900	*	*	153	141	163	131	111	152.3	139.8
0900-1000	*	*	170	238	170	184	167	192.7	185.8
1000-1100	*	*	191	207	186	212	202	194.7	199.6
1100-1200	*	*	184	197	200	226	245	193.7	210.4
1200-1300	*	*	198	199	236	274	247	211.0	230.8
1300-1400	*	*	190	222	232	261	245	214.7	230.0
1400-1500	*	*	231	235	257	276	220	241.0	243.8
1500-1600	*	*	245	252	282	207	214	259.7	240.0
1600-1700	*	*	237	266	273	186	180	258.7	228.4
1700-1800	*	*	209	233	250	173	143	230.7	201.6
1800-1900	*	*	141	127	154	131	141	140.7	138.8
1900-2000	*	*	94	96	129	93	105	106.3	103.4
2000-2100	*	*	80	70	79	78	65	76.3	74.4
2100-2200	*	*	38	40	63	54	29	47.0	44.8
2200-2300	*	*	19	28	28	54	15	25.0	28.8
2300-2400	*	*	11	6	21	21	11	12.7	14.0
Totals									
0700-1900	*	*	2329	2473	2563	2337	2182	2455.0	2376.8
0600-2200	*	*	2659	2800	2953	2603	2418	2804.0	2686.6
0600-0000	*	*	2689	2834	3002	2678	2444	2841.7	2729.4
0000-0000	*	*	2776	2918	3079	2745	2476	2924.3	2798.8
AM Peak	*	*	1000	0900	1100	1100	1100		
	*	*	191	238	200	226	245		
PM Peak	*	*	1500	1600	1500	1400	1200		
	*	*	245	266	282	276	247		

* - No data.

1.2.2 NH 10 at Keene line

1.2.2.1 Saturday, September 5, 2020 to Sunday, September 10, 2020

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
	31 Aug	01 Sep	02 Sep	03 Sep	04 Sep	05 Sep	06 Sep	1 - 5	1 - 7
0000-0100	*	*	*	*	*	40	38	*	39.0
0100-0200	*	*	*	*	*	29	35	*	32.0
0200-0300	*	*	*	*	*	31	13	*	22.0
0300-0400	*	*	*	*	*	17	14	*	15.5
0400-0500	*	*	*	*	*	32	26	*	29.0
0500-0600	*	*	*	*	*	113	72	*	92.5
0600-0700	*	*	*	*	*	242	175	*	208.5
0700-0800	*	*	*	*	*	461	338	*	399.5
0800-0900	*	*	*	*	*	675	477	*	576.0
0900-1000	*	*	*	*	*	908	676	*	792.0
1000-1100	*	*	*	*	*	1158	890	*	1024.0
1100-1200	*	*	*	*	*	1264	1025	*	1144.5
1200-1300	*	*	*	*	*	1250	1080	*	1165.0
1300-1400	*	*	*	*	*	1186	1082	*	1134.0
1400-1500	*	*	*	*	*	1157	1013	*	1085.0
1500-1600	*	*	*	*	*	1064	912	*	988.0
1600-1700	*	*	*	*	*	980	860	*	920.0
1700-1800	*	*	*	*	*	946	792	*	869.0
1800-1900	*	*	*	*	*	719	620	*	669.5
1900-2000	*	*	*	*	*	540	450	*	495.0
2000-2100	*	*	*	*	*	369	302	*	335.5
2100-2200	*	*	*	*	*	225	160	*	192.5
2200-2300	*	*	*	*	*	172	113	*	142.5
2300-2400	*	*	*	*	*	164	69	*	116.5
Totals									
0700-1900	*	*	*	*	*	11768	9765	*	10766.5
0600-2200	*	*	*	*	*	13144	10852	*	11998.0
0600-0000	*	*	*	*	*	13480	11034	*	12257.0
0000-0000	*	*	*	*	*	13742	11232	*	12487.0
AM Peak	*	*	*	*	*	1100	1100		
	*	*	*	*	*	1264	1025		
PM Peak	*	*	*	*	*	1200	1300		
	*	*	*	*	*	1250	1082		

* - No data.

1.2.2.2 Monday, September 7, 2020 to Thursday, September 10, 2020

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
	07 Sep	08 Sep	09 Sep	10 Sep	11 Sep	12 Sep	13 Sep	1 - 5	1 - 7
0000-0100	32	26	43	38	*	*	*	34.8	34.8
0100-0200	21	24	26	37	*	*	*	27.0	27.0
0200-0300	20	11	22	23	*	*	*	19.0	19.0
0300-0400	19	22	25	22	*	*	*	22.0	22.0
0400-0500	22	90	80	101	*	*	*	73.3	73.3
0500-0600	91	303	273	275	*	*	*	235.5	235.5
0600-0700	209	611	589	594	*	*	*	500.8	500.8
0700-0800	346	883	855	849	*	*	*	733.3	733.3
0800-0900	467	853	790	849	*	*	*	739.8	739.8
0900-1000	671	832	810	846	*	*	*	789.8	789.8
1000-1100	835	935	875	913	*	*	*	889.5	889.5
1100-1200	1003	1079	951	981	*	*	*	1003.5	1003.5
1200-1300	1040	1068	1059	1065	*	*	*	1058.0	1058.0
1300-1400	992	1089	1072	1072	*	*	*	1056.3	1056.3
1400-1500	1091	1051	1081	1190	*	*	*	1103.3	1103.3
1500-1600	975	1200	1287	1352	*	*	*	1203.5	1203.5
1600-1700	886	1260	1303	1352	*	*	*	1200.3	1200.3
1700-1800	676	1118	1121	1135	*	*	*	1012.5	1012.5
1800-1900	533	762	725	755	*	*	*	693.8	693.8
1900-2000	428	572	567	590	*	*	*	539.3	539.3
2000-2100	284	318	287	300	*	*	*	297.3	297.3
2100-2200	153	143	140	173	*	*	*	152.3	152.3
2200-2300	95	113	89	110	*	*	*	101.8	101.8
2300-2400	50	73	67	77	*	*	*	66.8	66.8
Totals									
0700-1900	9515	12130	11929	12359	*	*	*	11483.3	11483.3
0600-2200	10589	13774	13512	14016	*	*	*	12972.8	12972.8
0600-0000	10734	13960	13668	14203	*	*	*	13141.3	13141.3
0000-0000	10939	14436	14137	14699	*	*	*	13552.8	13552.8
AM Peak	1100	1100	1100	1100	*	*	*		
	1003	1079	951	981	*	*	*		
PM Peak	1400	1600	1600	1600	*	*	*		
	1091	1260	1303	1352	*	*	*		

* - No data.

1.2.3 NH 10 south of Base Hill Road

1.2.3.1 Saturday, September 21, 2019 to Sunday, September 22, 2019

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
	16 Sep	17 Sep	18 Sep	19 Sep	20 Sep	21 Sep	22 Sep	1 - 5	1 - 7
0000-0100	*	*	*	*	*	100	70	*	85.0
0100-0200	*	*	*	*	*	50	40	*	45.0
0200-0300	*	*	*	*	*	29	26	*	27.5
0300-0400	*	*	*	*	*	36	22	*	29.0
0400-0500	*	*	*	*	*	62	35	*	48.5
0500-0600	*	*	*	*	*	127	68	*	97.5
0600-0700	*	*	*	*	*	285	229	*	257.0
0700-0800	*	*	*	*	*	576	364	*	470.0
0800-0900	*	*	*	*	*	729	655	*	692.0
0900-1000	*	*	*	*	*	978	852	*	915.0
1000-1100	*	*	*	*	*	1093	959	*	1026.0
1100-1200	*	*	*	*	*	1135	1056	*	1095.5
1200-1300	*	*	*	*	*	1114	1175	*	1144.5
1300-1400	*	*	*	*	*	1076	1042	*	1059.0
1400-1500	*	*	*	*	*	1072	915	*	993.5
1500-1600	*	*	*	*	*	1030	898	*	964.0
1600-1700	*	*	*	*	*	928	890	*	909.0
1700-1800	*	*	*	*	*	872	775	*	823.5
1800-1900	*	*	*	*	*	729	603	*	666.0
1900-2000	*	*	*	*	*	599	470	*	534.5
2000-2100	*	*	*	*	*	606	269	*	437.5
2100-2200	*	*	*	*	*	334	152	*	243.0
2200-2300	*	*	*	*	*	200	103	*	151.5
2300-2400	*	*	*	*	*	136	60	*	98.0
Totals									
0700-1900	*	*	*	*	*	11332	10184	*	10758.0
0600-2200	*	*	*	*	*	13156	11304	*	12230.0
0600-0000	*	*	*	*	*	13492	11467	*	12479.5
0000-0000	*	*	*	*	*	13896	11728	*	12812.0
AM Peak	*	*	*	*	*	1100	1100		
	*	*	*	*	*	1135	1056		
PM Peak	*	*	*	*	*	1200	1200		
	*	*	*	*	*	1114	1175		

* - No data.

1.2.3.2 Monday, September 23, 2019 to Thursday, September 26, 2019

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
	23 Sep	24 Sep	25 Sep	26 Sep	27 Sep	28 Sep	29 Sep	1 - 5	1 - 7
0000-0100	32	56	59	54	*	*	*	50.3	50.3
0100-0200	19	25	46	31	*	*	*	30.3	30.3
0200-0300	32	28	37	34	*	*	*	32.8	32.8
0300-0400	39	43	37	34	*	*	*	38.3	38.3
0400-0500	112	130	118	118	*	*	*	119.5	119.5
0500-0600	423	367	388	364	*	*	*	385.5	385.5
0600-0700	761	742	774	741	*	*	*	754.5	754.5
0700-0800	1032	1120	1124	1167	*	*	*	1110.8	1110.8
0800-0900	1032	1038	1048	1102	*	*	*	1055.0	1055.0
0900-1000	796	814	812	832	*	*	*	813.5	813.5
1000-1100	810	796	733	865	*	*	*	801.0	801.0
1100-1200	832	779	834	859	*	*	*	826.0	826.0
1200-1300	848	899	837	895	*	*	*	869.8	869.8
1300-1400	900	919	932	970	*	*	*	930.3	930.3
1400-1500	964	974	996	1026	*	*	*	990.0	990.0
1500-1600	1136	1203	1177	1218	*	*	*	1183.5	1183.5
1600-1700	1207	1279	1299	1308	*	*	*	1273.3	1273.3
1700-1800	1167	1253	1139	1232	*	*	*	1197.8	1197.8
1800-1900	711	766	812	736	*	*	*	756.3	756.3
1900-2000	467	526	520	470	*	*	*	495.8	495.8
2000-2100	315	337	347	327	*	*	*	331.5	331.5
2100-2200	200	205	210	265	*	*	*	220.0	220.0
2200-2300	125	138	130	118	*	*	*	127.8	127.8
2300-2400	71	71	81	89	*	*	*	78.0	78.0
Totals									
0700-1900	11435	11840	11743	12210	*	*	*	11807.0	11807.0
0600-2200	13178	13650	13594	14013	*	*	*	13608.8	13608.8
0600-0000	13374	13859	13805	14220	*	*	*	13814.5	13814.5
0000-0000	14031	14508	14490	14855	*	*	*	14471.0	14471.0
AM Peak	0800	0700	0700	0700	*	*	*		
	1032	1120	1124	1167	*	*	*		
PM Peak	1600	1600	1600	1600	*	*	*		
	1207	1279	1299	1308	*	*	*		

* - No data.

1.2.4 Sawyers Crossing east of NH 10

1.2.4.1 Wednesday, August 19, 2020 to Sunday, August 23, 2020

Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
	17 Aug	18 Aug	19 Aug	20 Aug	21 Aug	22 Aug	23 Aug	1 - 5	1 - 7
0000-0100	*	*	2	0	0	0	1	0.7	0.6
0100-0200	*	*	0	1	0	0	1	0.3	0.4
0200-0300	*	*	0	0	0	3	1	0.0	0.8
0300-0400	*	*	2	1	0	0	0	1.0	0.6
0400-0500	*	*	3	6	2	1	1	3.7	2.6
0500-0600	*	*	3	0	1	3	1	1.3	1.6
0600-0700	*	*	11	10	7	2	6	9.3	7.2
0700-0800	*	*	18	12	19	10	3	16.3	12.4
0800-0900	*	*	13	11	17	12	17	13.7	14.0
0900-1000	*	*	15	20	9	30	20	14.7	18.8
1000-1100	*	*	20	21	14	28	29	18.3	22.4
1100-1200	*	*	24	28	28	35	21	26.7	27.2
1200-1300	*	*	28	24	13	37	8	21.7	22.0
1300-1400	*	*	26	21	40	37	25	29.0	29.8
1400-1500	*	*	35	25	23	48	16	27.7	29.4
1500-1600	*	*	18	33	28	42	15	26.3	27.2
1600-1700	*	*	32	29	34	29	23	31.7	29.4
1700-1800	*	*	18	17	26	19	15	20.3	19.0
1800-1900	*	*	17	12	23	22	21	17.3	19.0
1900-2000	*	*	11	17	11	18	16	13.0	14.6
2000-2100	*	*	9	5	13	26	3	9.0	11.2
2100-2200	*	*	5	13	0	11	1	6.0	6.0
2200-2300	*	*	7	0	1	4	4	2.7	3.2
2300-2400	*	*	1	1	2	7	1	1.3	2.4
Totals									
0700-1900	*	*	264	253	274	349	213	263.7	270.6
0600-2200	*	*	300	298	305	406	239	301.0	309.6
0600-0000	*	*	308	299	308	417	244	305.0	315.2
0000-0000	*	*	318	307	311	424	249	312.0	321.8
AM Peak	*	*	1100	1100	1100	1100	1000		
	*	*	24	28	28	35	29		
PM Peak	*	*	1400	1500	1300	1400	1300		
	*	*	35	33	40	48	25		

* - No data.

1.2.5 NH 10 south of West Street

1.2.5.1 Tuesday, August 25, 2020 to Sunday, August 30, 2020

	Mon 24 Aug	Tue 25 Aug	Wed 26 Aug	Thu 27 Aug	Fri 28 Aug	Sat 29 Aug	Sun 30 Aug	Averages	
								1 - 5	1 - 7
Hour									
0000-0100	*	40	32	31	30	42	27	33.3	33.7
0100-0200	*	20	23	22	15	41	25	20.0	24.3
0200-0300	*	21	21	22	16	16	13	20.0	18.2
0300-0400	*	26	22	22	22	11	9	23.0	18.7
0400-0500	*	78	85	90	75	29	22	82.0	63.2
0500-0600	*	248	233	221	220	86	63	230.5	178.5
0600-0700	*	411	432	414	409	171	158	416.5	332.5
0700-0800	*	555	587	591	554	254	250	571.8	465.2
0800-0900	*	570	577	500	508	372	356	538.8	480.5
0900-1000	*	580	572	541	588	573	570	570.3	570.7
1000-1100	*	586	594	600	641	709	709	605.3	639.8
1100-1200	*	651	647	614	784	837	765	674.0	716.3
1200-1300	*	649	725	736	790	815	874	725.0	764.8
1300-1400	*	671	710	662	779	814	855	705.5	748.5
1400-1500	*	682	684	669	855	749	799	722.5	739.7
1500-1600	*	793	869	768	891	644	754	830.3	786.5
1600-1700	*	886	908	858	882	652	665	883.5	808.5
1700-1800	*	836	780	769	832	581	635	804.3	738.8
1800-1900	*	446	500	534	631	507	623	527.8	540.2
1900-2000	*	392	357	417	480	357	360	411.5	393.8
2000-2100	*	267	254	236	294	236	276	262.8	260.5
2100-2200	*	123	134	132	198	177	133	146.8	149.5
2200-2300	*	93	93	87	144	96	69	104.3	97.0
2300-2400	*	53	52	55	87	58	51	61.8	59.3
Totals									
0700-1900	*	7905	8153	7842	8735	7507	7855	8158.8	7999.5
0600-2200	*	9098	9330	9041	10116	8448	8782	9396.3	9135.8
0600-0000	*	9244	9475	9183	10347	8602	8902	9562.3	9292.2
0000-0000	*	9677	9891	9591	10725	8827	9061	9971.0	9628.7
AM Peak	*	1100	1100	1100	1100	1100	1100		
	*	651	647	614	784	837	765		
PM Peak	*	1600	1600	1600	1500	1200	1200		
	*	886	908	858	891	815	874		

* - No data.

1.2.6 NH 10 at Winchester line

1.2.6.1 Wednesday, July 14, 2021 to Sunday, July 18, 2021







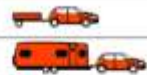

























Hour	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Averages	
	12 Jul	13 Jul	14 Jul	15 Jul	16 Jul	17 Jul	18 Jul	1 - 5	1 - 7
0000-0100	*	*	33	37	32	51	33	34.0	37.2
0100-0200	*	*	21	16	24	28	25	20.3	22.8
0200-0300	*	*	10	14	18	23	21	14.0	17.2
0300-0400	*	*	26	20	15	15	12	20.3	17.6
0400-0500	*	*	63	65	65	31	16	64.3	48.0
0500-0600	*	*	180	182	171	51	34	177.7	123.6
0600-0700	*	*	322	346	339	130	63	335.7	240.0
0700-0800	*	*	468	478	426	262	131	457.3	353.0
0800-0900	*	*	414	417	427	339	265	419.3	372.4
0900-1000	*	*	395	389	457	447	374	413.7	412.4
1000-1100	*	*	408	486	501	573	474	465.0	488.4
1100-1200	*	*	452	492	513	635	556	485.7	529.6
1200-1300	*	*	506	490	551	663	601	515.7	562.2
1300-1400	*	*	493	518	549	612	593	520.0	553.0
1400-1500	*	*	557	575	621	594	592	584.3	587.8
1500-1600	*	*	632	611	713	564	588	652.0	621.6
1600-1700	*	*	686	689	715	576	501	696.7	633.4
1700-1800	*	*	606	615	640	497	412	620.3	554.0
1800-1900	*	*	379	407	521	409	291	435.7	401.4
1900-2000	*	*	256	356	392	326	228	334.7	311.6
2000-2100	*	*	202	245	285	224	193	244.0	229.8
2100-2200	*	*	133	171	219	167	122	174.3	162.4
2200-2300	*	*	83	95	122	98	98	100.0	99.2
2300-2400	*	*	40	54	79	65	60	57.7	59.6
Totals									
0700-1900	*	*	5996	6167	6634	6171	5378	6265.7	6069.2
0600-2200	*	*	6909	7285	7869	7018	5984	7354.3	7013.0
0600-0000	*	*	7032	7434	8070	7181	6142	7512.0	7171.8
0000-0000	*	*	7365	7768	8395	7380	6283	7842.7	7438.2
AM Peak	*	*	0700	1100	1100	1100	1100		
	*	*	468	492	513	635	556		
PM Peak	*	*	1600	1600	1600	1200	1200		
	*	*	686	689	715	663	601		

* - No data.

1.3 CLASSIFICATION STUDY RESULTS

Vehicle types or classifications throughout the corridor were identified based on a 13-member scheme, further aggregated into “light-duty” (classes 1-3), “medium-duty” (classes 4-7), or “heavy-duty” (classes 8-13) categories for ease of analysis. For a breakdown of the 13 classes, see Figure 1 below.

Figure 4 - Federal Highway Administration Vehicle Classifications²

Class 1 Motorcycles		Class 7 Four or more axle, single unit	
Class 2 Passenger cars		Class 8 Four or less axle, single trailer	
			
			
Class 3 Four tire, single unit		Class 9 5-Axle tractor semitrailer	
			
Class 4 Buses		Class 10 Six or more axle, single trailer	
			
			
Class 5 Two axle, six tire, single unit		Class 11 Five or less axle, multi-trailer	
			
Class 6 Three axle, single unit		Class 12 Six axle, multi-trailer	
			
			
		Class 13 Seven or more axle, multi-trailer	
			

Source: Federal Highway Administration

Results show that NH 10 medium duty and heavy duty traffic volumes vary from between 622 and 724 trucks a day from the Keene line to the intersection of West Street.

Table 3 - Comparison of Traffic Volume by Classification

	Average Weekday Volume	Light Duty	%	Medium Duty	%	Heavy Duty	%
Base Hill Road at Keene line	2,924	2,836	97.0%	77	2.6%	11	0.4%
NH 10 at Keene line	13,553	12,930	95.4%	414	3.1%	208	1.5%
NH 10 south of Base Hill Road	14,471	13,709	94.7%	622	4.3%	140	1.0%
Sawyers Crossing east of NH 10	312	301	96.5%	10	3.2%	1	0.3%
NH 10 south of West Street	9,971	9,248	92.7%	503	5.0%	221	2.2%

² https://www.fhwa.dot.gov/policyinformation/tmguidetmg_2013/vehicle-types.cfm

NH 10 at Winchester line	7,843	7,221	92.1%	440	5.6%	182	2.3%
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Source: SWRPC

1.3.1 Base Hill Road at Keene line

1.3.1.1 Wednesday, August 19, 2020 to Sunday, August 23, 2020

1.3.1.1.1 Light-duty (1), Medium-duty(2), Heavy-duty(3) Statistics

	1	2	3	Total
Wed	2692	69	15	2776
(%)	97.0	2.5	0.5	
Thu	2826	83	9	2918
(%)	96.8	2.8	0.3	
Fri	2991	79	9	3079
(%)	97.1	2.6	0.3	
Sat	2678	58	9	2745
(%)	97.6	2.1	0.3	
Sun	2416	51	9	2476
(%)	97.6	2.1	0.4	

Average daily volume

Weekdays

	2836	77	11	2924
(%)	97.0	2.6	0.4	

Weekend

	2547	55	9	2611
(%)	97.6	2.1	0.3	

1.3.1.1.2 Detailed Classification Statistics

	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Wed	35	1972	685	4	64	1	0	14	0	1	0	0	0	2776
(%)	1.3	71.0	24.7	0.1	2.3	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	
Thu	29	2076	721	2	79	1	1	9	0	0	0	0	0	2918
(%)	1.0	71.1	24.7	0.1	2.7	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
Fri	56	2195	740	0	77	2	0	8	1	0	0	0	0	3079
(%)	1.8	71.3	24.0	0.0	2.5	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
Sat	38	2015	625	0	58	0	0	9	0	0	0	0	0	2745
(%)	1.4	73.4	22.8	0.0	2.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
Sun	46	1824	546	1	50	0	0	8	1	0	0	0	0	2476
(%)	1.9	73.7	22.1	0.0	2.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	

Average daily volume

Entire week														
	41	2016	663	1	66	1	0	10	0	0	0	0	0	2799
(%)	1.5	72.0	23.7	0.1	2.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
Weekdays														
	40	2081	715	2	73	1	0	10	0	0	0	0	0	2924
(%)	1.4	71.2	24.5	0.1	2.5	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	
Weekend														
	42	1920	586	1	54	0	0	9	1	0	0	0	0	2611
(%)	1.6	73.5	22.4	0.0	2.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	

1.3.2 NH 10 at Keene line

1.3.2.1 Saturday, September 5, 2020 to Thursday, September 10

1.3.2.1.1 Light-duty (1), Medium-duty(2), Heavy-duty(3) Statistics

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Total</u>
Sat	13453	169	120	13742
(%)	97.9	1.2	0.9	
Sun	11028	109	95	11232
(%)	98.2	1.0	0.8	
Mon	10658	153	128	10939
(%)	97.4	1.4	1.2	
Tue	13648	534	254	14436
(%)	94.5	3.7	1.8	
Wed	13484	455	198	14137
(%)	95.4	3.2	1.4	
Thu	13931	515	253	14699
(%)	94.8	3.5	1.7	

Average daily volume

Weekdays

	12930	414	208	13553
(%)	95.4	3.1	1.5	

Weekend

	12241	139	108	12487
(%)	98.0	1.1	0.9	

1.3.2.1.2 Detailed Classification Statistics

	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Sat	215	10614	2624	20	131	17	1	77	34	7	0	0	2	13742
(%)	1.6	77.2	19.1	0.1	1.0	0.1	0.0	0.6	0.2	0.1	0.0	0.0	0.0	
Sun	233	8724	2071	4	97	8	0	76	13	3	0	0	3	11232
(%)	2.1	77.7	18.4	0.0	0.9	0.1	0.0	0.7	0.1	0.0	0.0	0.0	0.0	
Mon	225	8533	1900	13	126	13	1	88	35	5	0	0	0	10939
(%)	2.1	78.0	17.4	0.1	1.2	0.1	0.0	0.8	0.3	0.0	0.0	0.0	0.0	
Tue	139	10628	2881	52	314	136	32	80	129	41	1	0	3	14436
(%)	1.0	73.6	20.0	0.4	2.2	0.9	0.2	0.6	0.9	0.3	0.0	0.0	0.0	
Wed	135	10416	2933	70	285	90	10	70	95	30	1	0	2	14137
(%)	1.0	73.7	20.7	0.5	2.0	0.6	0.1	0.5	0.7	0.2	0.0	0.0	0.0	
Thu	31	10795	3105	115	305	84	11	117	104	32	0	0	0	14699
(%)	0.2	73.4	21.1	0.8	2.1	0.6	0.1	0.8	0.7	0.2	0.0	0.0	0.0	

Average daily volume

Entire week

	133	10093	2705	63	258	81	14	89	91	27	1	0	1	13553
(%)	1.0	74.5	20.0	0.5	1.9	0.6	0.1	0.7	0.7	0.2	0.0	0.0	0.0	

Weekdays

	133	10093	2705	63	258	81	14	89	91	27	1	0	1	13553
(%)	1.0	74.5	20.0	0.5	1.9	0.6	0.1	0.7	0.7	0.2	0.0	0.0	0.0	

Weekend

	224	9669	2348	12	114	13	1	77	24	5	0	0	3	12487
(%)	1.8	77.4	18.8	0.1	0.9	0.1	0.0	0.6	0.2	0.0	0.0	0.0	0.0	

1.3.3 NH 10 south of Base Hill Road

1.3.3.1 Saturday, September 21, 2019 to Sunday, September 22, 2019

1.3.3.1.1 Light-duty (1), Medium-duty(2), Heavy-duty(3) Statistics

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Total</u>
Sat	13340	414	142	13896
(%)	96.0	3.0	1.0	
Sun	11396	205	127	11728
(%)	97.2	1.7	1.1	
Mon	13375	558	98	14031
(%)	95.3	4.0	0.7	
Tue	13797	554	157	14508
(%)	95.1	3.8	1.1	
Wed	13721	631	138	14490
(%)	94.7	4.4	1.0	
Thu	13943	744	168	14855
(%)	93.9	5.0	1.1	

Average daily volume

Weekdays

	13709	622	140	14471
(%)	94.7	4.3	1.0	

Weekend

	12368	310	135	12812
(%)	96.5	2.4	1.0	

1.3.3.1.2 Detailed Classification Statistics

	1	2	3	4	5	6	7	8	9	10	11	12	13	Total
Sat	244	10315	2781	45	338	28	3	113	19	7	0	0	3	13896
(%)	1.8	74.2	20.0	0.3	2.4	0.2	0.0	0.8	0.1	0.1	0.0	0.0	0.0	
Sun	359	9011	2026	7	176	22	0	99	21	2	0	0	5	11728
(%)	3.1	76.8	17.3	0.1	1.5	0.2	0.0	0.8	0.2	0.0	0.0	0.0	0.0	
Mon	113	10834	2428	124	349	80	5	39	47	11	1	0	0	14031
(%)	0.8	77.2	17.3	0.9	2.5	0.6	0.0	0.3	0.3	0.1	0.0	0.0	0.0	
Tue	62	11066	2669	119	303	123	9	52	77	23	3	0	2	14508
(%)	0.4	76.3	18.4	0.8	2.1	0.8	0.1	0.4	0.5	0.2	0.0	0.0	0.0	
Wed	104	11092	2525	137	329	134	31	53	65	16	0	0	4	14490
(%)	0.7	76.5	17.4	0.9	2.3	0.9	0.2	0.4	0.4	0.1	0.0	0.0	0.0	
Thu	24	11239	2680	133	465	129	17	76	72	19	0	0	1	14855
(%)	0.2	75.7	18.0	0.9	3.1	0.9	0.1	0.5	0.5	0.1	0.0	0.0	0.0	

Average daily volume

Weekdays

	76	11058	2576	128	362	117	16	55	65	17	1	0	2	14471
(%)	0.5	76.4	17.8	0.9	2.5	0.8	0.1	0.4	0.5	0.1	0.0	0.0	0.0	

Weekend

	302	9663	2404	26	257	25	2	106	20	5	0	0	4	12812
(%)	2.4	75.4	18.8	0.2	2.0	0.2	0.0	0.8	0.2	0.0	0.0	0.0	0.0	

1.3.4 Sawyers Crossing east of NH 10

1.3.4.1.1 Light-duty (1), Medium-duty(2), Heavy-duty(3) Statistics

Monday, August 17, 2020

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Total</u>
Mon*	0	0	0	0
(%)	0.0	0.0	0.0	
Tue*	0	0	0	0
(%)	0.0	0.0	0.0	
Wed	309	9	0	318
(%)	97.2	2.8	0.0	
Thu	291	15	1	307
(%)	94.8	4.9	0.3	
Fri	304	6	1	311
(%)	97.7	1.9	0.3	
Sat	406	17	1	424
(%)	95.8	4.0	0.2	
Sun	241	7	1	249
(%)	96.8	2.8	0.4	

Average daily volume

Weekdays

	301	10	1	312
(%)	96.6	3.2	0.2	

Weekend

	324	12	1	337
(%)	96.1	3.6	0.3	

* - Incomplete

1.3.4.1.2 Detailed Classification Statistics

Monday, August 17, 2020

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>Total</u>
Mon*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tue*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Wed	15	211	83	0	9	0	0	0	0	0	0	0	0	318
(%)	4.7	66.4	26.1	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Thu	9	197	85	1	13	1	0	1	0	0	0	0	0	307
(%)	2.9	64.2	27.7	0.3	4.2	0.3	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
Fri	20	201	83	1	5	0	0	1	0	0	0	0	0	311
(%)	6.4	64.6	26.7	0.3	1.6	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	
Sat	16	285	105	0	17	0	0	1	0	0	0	0	0	424
(%)	3.8	67.2	24.8	0.0	4.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	
Sun	14	172	55	0	7	0	0	1	0	0	0	0	0	249
(%)	5.6	69.1	22.1	0.0	2.8	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	

Average daily volume

Entire week

	15	213	82	0	10	0	0	1	0	0	0	0	0	322
(%)	4.6	66.3	25.5	0.1	3.2	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	

Weekdays

	15	203	84	1	9	0	0	1	0	0	0	0	0	312
(%)	4.7	65.1	26.8	0.2	2.9	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	

Weekend

	15	229	80	0	12	0	0	1	0	0	0	0	0	337
(%)	4.5	67.9	23.8	0.0	3.6	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	

* - Incomplete

1.3.5 NH 10 south of West Street

1.3.5.1.1 Light-duty (1), Medium-duty(2), Heavy-duty(3) Statistics

Monday, August 24, 2020

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Total</u>
Mon*	0	0	0	0
(%)	0.0	0.0	0.0	
Tue	8966	486	225	9677
(%)	92.7	5.0	2.3	
Wed	9151	514	226	9891
(%)	92.5	5.2	2.3	
Thu	8864	504	223	9591
(%)	92.4	5.3	2.3	
Fri	10009	507	209	10725
(%)	93.3	4.7	1.9	
Sat	8471	283	73	8827
(%)	96.0	3.2	0.8	
Sun	8680	266	115	9061
(%)	95.8	2.9	1.3	

Average daily volume

Weekdays

	9248	503	221	9971
(%)	92.7	5.0	2.2	

Weekend

	8576	275	94	8944
(%)	95.9	3.1	1.1	

* - Incomplete

1.3.5.1.2 Detailed Classification Statistics

Monday, August 24, 2020

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>Total</u>
Mon*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tue	69	6786	2111	40	285	88	73	68	105	52	0	0	0	9677
(%)	0.7	70.1	21.8	0.4	2.9	0.9	0.8	0.7	1.1	0.5	0.0	0.0	0.0	
Wed	135	6866	2150	40	297	99	78	71	89	66	0	0	0	9891
(%)	1.4	69.4	21.7	0.4	3.0	1.0	0.8	0.7	0.9	0.7	0.0	0.0	0.0	
Thu	26	6608	2230	44	330	72	58	80	99	44	0	0	0	9591
(%)	0.3	68.9	23.3	0.5	3.4	0.8	0.6	0.8	1.0	0.5	0.0	0.0	0.0	
Fri	147	7576	2286	50	338	78	41	87	79	42	1	0	0	10725
(%)	1.4	70.6	21.3	0.5	3.2	0.7	0.4	0.8	0.7	0.4	0.0	0.0	0.0	
Sat	16	6426	2029	15	259	9	0	40	28	5	0	0	0	8827
(%)	0.2	72.8	23.0	0.2	2.9	0.1	0.0	0.5	0.3	0.1	0.0	0.0	0.0	
Sun	263	6496	1921	8	255	3	0	92	16	6	0	0	1	9061
(%)	2.9	71.7	21.2	0.1	2.8	0.0	0.0	1.0	0.2	0.1	0.0	0.0	0.0	

Average daily volume

Entire week

	109	6793	2121	33	294	58	42	73	69	36	0	0	0	9629
(%)	1.1	70.5	22.0	0.3	3.1	0.6	0.4	0.8	0.7	0.4	0.0	0.0	0.0	

Weekdays

	94	6959	2194	44	313	84	63	77	93	51	0	0	0	9971
(%)	0.9	69.8	22.0	0.4	3.1	0.8	0.6	0.8	0.9	0.5	0.0	0.0	0.0	

Weekend

	140	6461	1975	12	257	6	0	66	22	6	0	0	1	8944
(%)	1.6	72.2	22.1	0.1	2.9	0.1	0.0	0.7	0.2	0.1	0.0	0.0	0.0	

* - Incomplete

1.3.6 NH 10 at Winchester line

1.3.6.1.1 Light-duty (1), Medium-duty(2), Heavy-duty(3) Statistics

Monday, July 12, 2021

	<u>1</u>	<u>2</u>	<u>3</u>	<u>Total</u>
Mon*	0	0	0	0
(%)	0.0	0.0	0.0	
Tue*	0	0	0	0
(%)	0.0	0.0	0.0	
Wed	6760	442	163	7365
(%)	91.8	6.0	2.2	
Thu	7170	428	170	7768
(%)	92.3	5.5	2.2	
Fri	7733	449	213	8395
(%)	92.1	5.3	2.5	
Sat	7036	250	94	7380
(%)	95.3	3.4	1.3	
Sun	6010	209	64	6283
(%)	95.7	3.3	1.0	

Average daily volume

Entire week

	6942	356	141	7438
(%)	93.3	4.8	1.9	

Weekdays

	7221	440	182	7843
(%)	92.1	5.6	2.3	

Weekend

	6523	230	79	6832
(%)	95.5	3.4	1.2	

* - Incomplete

1.3.6.1.2 Detailed Classification Statistics

Monday, July 12, 2021

	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	<u>8</u>	<u>9</u>	<u>10</u>	<u>11</u>	<u>12</u>	<u>13</u>	<u>Total</u>
Mon*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Tue*	0	0	0	0	0	0	0	0	0	0	0	0	0	0
(%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Wed	32	5013	1715	48	305	68	21	78	67	16	0	0	2	7365
(%)	0.4	68.1	23.3	0.7	4.1	0.9	0.3	1.1	0.9	0.2	0.0	0.0	0.0	
Thu	121	5285	1764	51	274	76	27	90	59	14	2	0	5	7768
(%)	1.6	68.0	22.7	0.7	3.5	1.0	0.3	1.2	0.8	0.2	0.0	0.0	0.1	
Fri	123	5643	1967	47	315	70	17	103	75	31	0	0	4	8395
(%)	1.5	67.2	23.4	0.6	3.8	0.8	0.2	1.2	0.9	0.4	0.0	0.0	0.0	
Sat	101	5357	1578	18	218	12	2	69	21	3	0	0	1	7380
(%)	1.4	72.6	21.4	0.2	3.0	0.2	0.0	0.9	0.3	0.0	0.0	0.0	0.0	
Sun	16	4580	1414	2	201	6	0	59	4	1	0	0	0	6283
(%)	0.3	72.9	22.5	0.0	3.2	0.1	0.0	0.9	0.1	0.0	0.0	0.0	0.0	

Average daily volume

Entire week

	79	5176	1688	33	263	46	13	80	45	13	0	0	2	7438
(%)	1.1	69.6	22.7	0.4	3.5	0.6	0.2	1.1	0.6	0.2	0.0	0.0	0.0	

Weekdays

	92	5314	1815	49	298	71	22	90	67	20	1	0	4	7843
(%)	1.2	67.8	23.1	0.6	3.8	0.9	0.3	1.2	0.9	0.3	0.0	0.0	0.0	

Weekend

	59	4969	1496	10	210	9	1	64	13	2	0	0	1	6832
(%)	0.9	72.7	21.9	0.1	3.1	0.1	0.0	0.9	0.2	0.0	0.0	0.0	0.0	

* - Incomplete

1.4 SPEED STUDY RESULTS

An analysis of operating speeds along the corridor shows that most drivers exceeded the posted speed limit at all locations in which speed studies were conducted. In the case of Base Hill Road at the Keene line and NH 10 at the Winchester line, over 90% of drivers were found to be exceeding the posted speed limit. Prevailing operating speeds (or the 85th percentile speed of vehicles in the study) were found to exceed the posted speed limits by over 10 mph in those two locations as well.

Table 4 - Comparison of Posted and Operating Speeds by Location and Direction of Travel

	Posted Speed Limit	85th Percentile (mph)	Vehicles Exceeding Posted Speed Limit
Base Hill Road at Keene line	30 mph	41.8	95.0%
<i>Northbound Only</i>		41.4	94.9%
<i>Southbound Only</i>		42.3	95.2%
NH 10 at Keene line	30 mph	36.7	73.4%
<i>Northbound Only</i>		37.5	82.6%
<i>Southbound Only</i>		35.8	64.8%
NH 10 south of Base Hill Road	40 mph	47.9	60.5%
<i>Northbound Only</i>		47.4	55.2%
<i>Southbound Only</i>		48.3	65.4%
Sawyers Crossing east of NH 10	30 mph	39.0	72.1%
<i>Westbound Only</i>		39.0	71.2%
<i>Eastbound Only</i>		39.1	73.4%
NH 10 south of West Street	40 mph	49.5	86.6%
<i>Northbound Only</i>		49.5	86.0%
<i>Southbound Only</i>		49.5	87.3%
NH 10 at Winchester line	50 mph	56.4	66.1%
<i>Northbound Only</i>		56.2	64.8%
<i>Southbound Only</i>		56.6	67.4%

Each following report provides all speed statistics grouped by hour of day.

1.4.1 Base Hill Road at Keene line

1.4.1.1 Speed Statistics by Hour

1.4.1.1.1 Both Directions of Travel

Vehicles = 11161

Posted speed limit = 30 mph, Exceeding = 10605 (95.02%), Mean Exceeding = 37.82 mph

Maximum = 71.1 mph, Minimum = 9.2 mph, Mean = 37.2 mph

85% Speed = 41.83 mph, 95% Speed = 45.19 mph, Median = 37.13 mph

10 mph Pace = 32 - 42, Number in Pace = 8307 (74.43%)

Variance = 24.01, Standard Deviation = 4.90 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	30 0.269%	30.9	57.8	39.3	38.9	44.8	52.9	30 100.0%
0100	25 0.224%	22.8	47.3	37.3	36.8	41.8	46.7	24 96.00%
0200	31 0.278%	19.8	43.9	36.2	36.9	41.5	43.4	28 90.32%
0300	36 0.323%	28.8	54.1	37.7	37.7	42.7	49.1	33 91.67%
0400	54 0.484%	29.0	48.3	38.5	38.1	43.8	47.1	53 98.15%
0500	156 1.398%	18.0	61.6	37.4	36.6	43.0	47.1	148 94.87%
0600	385 3.450%	13.0	71.1	38.0	38.3	42.7	46.1	368 95.58%
0700	535 4.793%	9.2	65.0	37.7	37.6	42.1	45.1	520 97.20%
0800	585 5.241%	16.9	65.6	37.7	37.6	42.2	45.1	565 96.58%
0900	704 6.308%	11.0	52.5	36.9	36.7	41.3	44.6	671 95.31%
1000	774 6.935%	13.6	53.6	37.1	37.0	41.6	44.8	741 95.74%
1100	813 7.284%	14.9	57.6	37.0	36.9	41.6	45.4	764 93.97%
1200	888 7.956%	10.0	59.1	37.5	37.4	42.2	46.2	840 94.59%
1300	902 8.082%	11.1	51.2	36.6	36.8	40.9	43.8	843 93.46%
1400	909 8.144%	12.9	51.5	36.6	36.6	41.4	44.4	851 93.62%
1500	921 8.252%	11.3	53.4	37.0	37.1	41.2	44.9	872 94.68%
1600	868 7.777%	12.7	50.9	37.6	37.5	41.9	45.2	841 96.89%
1700	796 7.132%	14.2	61.6	38.0	37.7	42.7	46.2	768 96.48%
1800	560 5.017%	18.2	61.1	37.7	37.5	42.6	46.3	535 95.54%
1900	440 3.942%	12.4	53.8	37.2	36.9	42.3	45.1	416 94.55%
2000	341 3.055%	17.4	67.2	36.2	36.1	40.9	44.7	308 90.32%
2100	207 1.855%	25.7	48.9	36.9	36.8	41.4	45.8	196 94.69%
2200	138 1.236%	26.8	46.7	36.5	36.2	41.1	45.2	129 93.48%
2300	63 0.564%	26.1	63.7	38.4	37.8	43.5	50.1	61 96.83%
----	11161 100.0%	9.2	71.1	37.2	37.1	41.8	45.2	10605 95.02%

1.4.1.1.2 Northbound Only

Vehicles = 5930

Posted speed limit = 30 mph, Exceeding = 5626 (94.87%), Mean Exceeding = 37.56 mph

Maximum = 71.1 mph, Minimum = 11.1 mph, Mean = 37.0 mph

85% Speed = 41.38 mph, 95% Speed = 44.52 mph, Median = 36.91 mph

10 mph Pace = 32 - 42, Number in Pace = 4530 (76.39%)

Variance = 22.39, Standard Deviation = 4.73 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	14 0.236%	31.5	47.2	39.3	38.9	43.8	47.2	14 100.0%
0100	16 0.270%	33.5	47.3	37.8	37.0	41.7	47.3	16 100.0%
0200	21 0.354%	25.1	43.9	37.4	39.0	42.0	43.9	20 95.24%
0300	30 0.506%	28.8	54.1	38.0	38.6	42.7	50.9	27 90.00%
0400	39 0.658%	29.0	47.1	38.1	37.9	42.6	45.6	38 97.44%
0500	106 1.788%	18.0	52.0	37.2	36.8	42.9	45.4	100 94.34%
0600	238 4.013%	24.3	71.1	38.1	37.9	42.5	44.9	231 97.06%
0700	338 5.700%	13.6	65.0	37.7	37.4	41.6	45.1	332 98.22%
0800	337 5.683%	16.9	51.1	37.4	37.6	41.8	44.9	321 95.25%
0900	425 7.167%	15.7	51.8	36.6	36.4	40.8	44.2	401 94.35%
1000	431 7.268%	13.6	53.6	36.6	36.6	40.8	43.4	411 95.36%
1100	448 7.555%	15.6	49.2	36.6	36.5	41.3	44.9	418 93.30%
1200	484 8.162%	17.5	59.1	37.4	37.2	41.6	45.3	461 95.25%
1300	464 7.825%	11.1	50.1	36.2	36.6	40.5	43.3	430 92.67%
1400	460 7.757%	12.9	48.5	36.2	36.4	40.9	43.7	426 92.61%
1500	462 7.791%	18.7	51.4	36.8	36.8	41.2	44.2	437 94.59%
1600	411 6.931%	18.0	50.9	37.0	36.9	41.1	43.6	396 96.35%
1700	390 6.577%	16.9	61.6	37.7	37.6	42.2	45.5	374 95.90%
1800	264 4.452%	18.2	54.7	37.4	37.3	42.1	46.5	253 95.83%
1900	210 3.541%	18.2	53.4	36.9	36.4	41.5	45.7	196 93.33%
2000	158 2.664%	21.0	58.5	36.4	36.2	41.0	44.5	145 91.77%
2100	88 1.484%	29.1	48.9	37.1	37.1	41.6	45.7	86 97.73%
2200	70 1.180%	27.8	46.7	37.0	36.6	42.3	45.4	68 97.14%
2300	26 0.438%	28.8	49.6	37.5	37.2	42.6	48.7	25 96.15%
----	5930 100.0%	11.1	71.1	37.0	36.9	41.4	44.5	5626 94.87%

1.4.1.1.3 Southbound Only

Vehicles = 5231

Posted speed limit = 30 mph, Exceeding = 4979 (95.18%), Mean Exceeding = 38.11 mph

Maximum = 67.2 mph, Minimum = 9.2 mph, Mean = 37.5 mph

85% Speed = 42.28 mph, 95% Speed = 45.86 mph, Median = 37.47 mph

10 mph Pace = 32 - 42, Number in Pace = 3800 (72.64%)

Variance = 25.67, Standard Deviation = 5.07 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	16 0.306%	30.9	57.8	39.4	38.6	46.9	57.8	16 100.0%
0100	9 0.172%	22.8	45.4	36.3	36.8	44.0	45.4	8 88.89%
0200	10 0.191%	19.8	39.9	33.6	36.1	38.4	39.9	8 80.00%
0300	6 0.115%	33.5	39.1	36.5	37.0	39.1	39.1	6 100.0%
0400	15 0.287%	31.3	48.3	39.8	39.8	47.1	48.3	15 100.0%
0500	50 0.956%	23.3	61.6	37.9	35.8	44.1	55.6	48 96.00%
0600	147 2.810%	13.0	54.2	37.8	38.4	43.4	46.7	137 93.20%
0700	197 3.766%	9.2	59.5	37.5	37.8	42.2	45.3	188 95.43%
0800	248 4.741%	22.8	65.6	38.0	37.5	42.6	45.4	244 98.39%
0900	279 5.334%	11.0	52.5	37.4	37.2	41.5	45.4	270 96.77%
1000	343 6.557%	17.0	49.5	37.7	37.7	42.2	46.1	330 96.21%
1100	365 6.978%	14.9	57.6	37.5	37.5	42.2	46.8	346 94.79%
1200	404 7.723%	10.0	55.0	37.7	37.6	43.2	46.8	379 93.81%
1300	438 8.373%	14.4	51.2	36.9	37.1	41.6	44.2	413 94.29%
1400	449 8.583%	23.7	51.5	37.1	37.1	41.6	45.4	425 94.65%
1500	459 8.775%	11.3	53.4	37.3	37.4	41.3	45.6	435 94.77%
1600	457 8.736%	12.7	50.9	38.2	38.3	42.9	45.6	445 97.37%
1700	406 7.761%	14.2	58.8	38.4	37.9	43.4	47.4	394 97.04%
1800	296 5.659%	20.6	61.1	38.0	37.7	42.9	46.3	282 95.27%
1900	230 4.397%	12.4	53.8	37.4	37.4	42.5	44.8	220 95.65%
2000	183 3.498%	17.4	67.2	36.1	36.1	40.9	45.1	163 89.07%
2100	119 2.275%	25.7	46.8	36.7	36.7	41.4	45.9	110 92.44%
2200	68 1.300%	26.8	46.1	36.0	35.9	40.4	45.6	61 89.71%
2300	37 0.707%	26.1	63.7	39.1	38.5	44.5	51.9	36 97.30%
----	5231 100.0%	9.2	67.2	37.5	37.5	42.3	45.9	4979 95.18%

1.4.2 NH 10 at Keene line

1.4.2.1 Speed Statistics by Hour

1.4.2.1.1 Both Directions of Travel

Vehicles = 32928

Posted speed limit = 30 mph, Exceeding = 24158 (73.37%), Mean Exceeding = 34.38 mph

Maximum = 98.0 mph, Minimum = 5.1 mph, Mean = 32.5 mph

85% Speed = 36.69 mph, 95% Speed = 39.37 mph, Median = 32.55 mph

10 mph Pace = 28 - 38, Number in Pace = 25430 (77.23%)

Variance = 19.35, Standard Deviation = 4.40 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	200 0.607%	18.2	65.5	33.6	33.1	37.9	42.3	154 77.00%
0100	164 0.498%	16.7	48.1	33.4	33.3	38.6	42.2	130 79.27%
0200	115 0.349%	18.6	47.6	34.2	34.3	38.7	42.3	92 80.00%
0300	114 0.346%	21.4	48.7	35.4	35.2	40.3	44.8	97 85.09%
0400	305 0.926%	11.9	49.8	35.1	35.2	39.8	42.4	271 88.85%
0500	810 2.460%	15.3	98.0	34.2	34.1	38.3	40.9	692 85.43%
0600	1346 4.088%	18.9	47.6	33.5	33.7	37.7	40.2	1090 80.98%
0700	1777 5.397%	14.3	52.2	33.1	33.0	37.5	40.2	1386 78.00%
0800	1959 5.949%	10.0	47.4	32.5	32.5	36.9	39.4	1439 73.46%
0900	2084 6.329%	10.9	46.0	32.1	32.2	36.4	38.9	1467 70.39%
1000	2164 6.572%	5.1	60.0	31.7	31.8	35.9	38.3	1454 67.19%
1100	2196 6.669%	15.9	49.3	31.7	31.8	35.9	38.5	1483 67.53%
1200	2152 6.535%	8.7	62.8	32.0	32.0	36.0	38.8	1520 70.63%
1300	2203 6.690%	9.9	48.2	31.7	31.8	36.1	38.4	1489 67.59%
1400	2214 6.724%	9.7	53.1	31.8	32.0	36.1	38.9	1511 68.25%
1500	2101 6.381%	7.4	47.9	32.1	32.2	36.4	38.9	1464 69.68%
1600	2059 6.253%	5.4	49.4	32.2	32.4	36.4	38.6	1500 72.85%
1700	2130 6.469%	9.5	50.5	32.7	32.7	36.8	39.6	1625 76.29%
1800	2048 6.220%	15.4	50.1	32.7	32.8	36.8	39.3	1565 76.42%
1900	1735 5.269%	8.9	54.0	32.1	32.2	36.5	38.9	1241 71.53%
2000	1287 3.909%	11.4	49.1	32.9	32.9	36.9	39.4	1005 78.09%
2100	798 2.423%	17.9	57.3	33.8	33.6	38.1	41.2	671 84.09%
2200	573 1.740%	17.5	55.2	34.0	33.8	37.9	40.7	503 87.78%
2300	394 1.197%	16.8	52.9	33.0	33.1	37.2	40.8	309 78.43%
----	32928 100.0%	5.1	98.0	32.5	32.5	36.7	39.4	24158 73.37%

1.4.2.1.2 Northbound Only

Vehicles = 15810

Posted speed limit = 30 mph, Exceeding = 13066 (82.64%), Mean Exceeding = 34.78 mph

Maximum = 98.0 mph, Minimum = 5.1 mph, Mean = 33.4 mph

85% Speed = 37.47 mph, 95% Speed = 40.15 mph, Median = 33.55 mph

10 mph Pace = 29 - 39, Number in Pace = 12650 (80.01%)

Variance = 18.89, Standard Deviation = 4.35 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	65 0.411%	18.2	65.5	35.4	34.8	39.9	47.5	53 81.54%
0100	69 0.436%	17.5	48.1	35.0	34.4	39.8	44.4	59 85.51%
0200	59 0.373%	26.0	46.6	35.1	34.7	40.4	42.4	49 83.05%
0300	60 0.380%	21.4	48.7	35.9	35.6	40.3	46.0	54 90.00%
0400	176 1.113%	11.9	49.8	36.1	36.0	40.2	43.4	166 94.32%
0500	401 2.536%	19.4	98.0	35.1	34.7	38.7	41.5	378 94.26%
0600	668 4.225%	21.1	47.6	34.7	34.8	38.4	41.0	599 89.67%
0700	873 5.522%	18.9	52.2	34.1	34.1	37.9	41.0	758 86.83%
0800	985 6.230%	12.8	47.4	33.5	33.7	37.6	40.1	799 81.12%
0900	1038 6.565%	16.9	46.0	33.1	33.1	37.1	39.7	833 80.25%
1000	1017 6.433%	5.1	60.0	32.7	32.9	36.7	38.9	789 77.58%
1100	1035 6.546%	15.9	46.2	32.7	32.8	36.6	38.9	814 78.65%
1200	1005 6.357%	8.7	62.8	33.1	33.1	36.9	39.5	833 82.89%
1300	1054 6.667%	10.5	48.2	32.8	33.0	36.9	39.3	841 79.79%
1400	1080 6.831%	9.7	53.1	32.9	33.1	37.0	39.7	867 80.28%
1500	1008 6.376%	7.4	47.9	33.1	33.3	37.1	39.9	801 79.46%
1600	986 6.237%	5.4	49.4	33.1	33.4	36.9	39.6	805 81.64%
1700	1042 6.591%	17.5	50.5	33.7	33.7	37.6	40.4	886 85.03%
1800	972 6.148%	15.4	50.1	33.6	33.6	37.5	39.9	825 84.88%
1900	839 5.307%	8.9	45.6	32.9	32.8	37.2	39.6	660 78.67%
2000	593 3.751%	16.6	49.1	33.5	33.7	37.4	40.1	491 82.80%
2100	366 2.315%	17.9	57.3	34.6	34.4	38.7	41.8	327 89.34%
2200	270 1.708%	17.5	55.2	34.9	34.7	39.0	41.7	247 91.48%
2300	149 0.942%	17.6	52.9	34.8	34.6	38.9	43.0	132 88.59%
----	15810 100.0%	5.1	98.0	33.4	33.6	37.5	40.2	13066 82.64%

1.4.2.1.3 Southbound Only

Vehicles = 17118

Posted speed limit = 30 mph, Exceeding = 11092 (64.80%), Mean Exceeding = 33.91 mph

Maximum = 64.2 mph, Minimum = 9.5 mph, Mean = 31.5 mph

85% Speed = 35.79 mph, 95% Speed = 38.59 mph, Median = 31.54 mph

10 mph Pace = 27 - 37, Number in Pace = 13316 (77.79%)

Variance = 18.06, Standard Deviation = 4.25 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	135 0.789%	21.7	64.2	32.7	32.1	36.5	39.8	101 74.81%
0100	95 0.555%	16.7	47.8	32.3	32.7	36.9	39.2	71 74.74%
0200	56 0.327%	18.6	47.6	33.2	32.9	37.6	41.7	43 76.79%
0300	54 0.315%	22.5	45.3	34.8	33.9	40.7	44.2	43 79.63%
0400	129 0.754%	12.6	45.1	33.6	33.4	39.1	41.8	105 81.40%
0500	409 2.389%	15.3	45.6	33.2	33.1	37.7	40.3	314 76.77%
0600	678 3.961%	18.9	46.0	32.4	32.4	36.8	39.6	491 72.42%
0700	904 5.281%	14.3	46.7	32.2	32.1	36.8	39.5	628 69.47%
0800	974 5.690%	10.0	43.9	31.6	31.5	35.9	38.5	640 65.71%
0900	1046 6.111%	10.9	45.2	31.2	31.3	35.2	37.9	634 60.61%
1000	1147 6.701%	10.4	52.2	30.7	30.8	34.8	37.6	665 57.98%
1100	1161 6.782%	17.9	49.3	30.8	30.8	35.0	37.6	669 57.62%
1200	1147 6.701%	14.3	43.0	31.0	30.9	35.2	38.2	687 59.90%
1300	1149 6.712%	9.9	46.6	30.8	30.6	34.9	37.5	648 56.40%
1400	1134 6.625%	13.4	46.2	30.8	30.6	35.1	38.3	644 56.79%
1500	1093 6.385%	13.8	45.4	31.2	31.2	35.2	38.1	663 60.66%
1600	1073 6.268%	10.3	47.5	31.4	31.4	35.6	37.7	695 64.77%
1700	1088 6.356%	9.5	48.5	31.8	31.8	35.8	38.5	739 67.92%
1800	1076 6.286%	15.8	46.3	31.8	31.9	35.8	38.7	740 68.77%
1900	896 5.234%	14.3	54.0	31.5	31.4	35.5	38.1	581 64.84%
2000	694 4.054%	11.4	49.1	32.4	32.2	36.4	39.0	514 74.06%
2100	432 2.524%	19.4	55.4	33.2	32.8	37.4	40.3	344 79.63%
2200	303 1.770%	17.8	53.4	33.3	33.1	36.5	40.0	256 84.49%
2300	245 1.431%	16.8	46.4	31.9	31.8	35.8	38.7	177 72.24%
----	17118 100.0%	9.5	64.2	31.5	31.5	35.8	38.6	11092 64.80%

1.4.3 NH 10 south of Base Hill Road

1.4.3.1.1 Both Directions of Travel

Vehicles = 33822

Posted speed limit = 40 mph, Exceeding = 20452 (60.47%), Mean Exceeding = 45.60 mph

Maximum = 96.7 mph, Minimum = 8.2 mph, Mean = 41.5 mph

85% Speed = 47.87 mph, 95% Speed = 51.56 mph, Median = 41.72 mph

10 mph Pace = 37 - 47, Number in Pace = 19371 (57.27%)

Variance = 41.61, Standard Deviation = 6.45 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 40 mph
0000	319 0.943%	20.4	71.3	42.5	42.2	48.4	52.1	213 66.77%
0100	192 0.568%	25.5	64.6	42.9	42.7	49.0	53.1	135 70.31%
0200	162 0.479%	21.7	58.5	43.6	43.3	49.8	52.7	120 74.07%
0300	193 0.571%	23.5	71.3	43.3	43.4	49.8	56.1	130 67.36%
0400	482 1.425%	24.5	72.2	44.9	44.4	52.0	55.9	370 76.76%
0500	1082 3.199%	17.9	96.7	42.5	41.7	49.9	56.7	645 59.61%
0600	1587 4.692%	21.3	71.4	40.3	39.7	47.6	52.8	774 48.77%
0700	1883 5.567%	16.9	62.1	40.2	40.5	47.1	50.1	982 52.15%
0800	2016 5.961%	21.9	68.9	40.0	39.8	46.8	50.7	986 48.91%
0900	2082 6.156%	18.1	61.7	40.7	40.8	47.8	51.4	1138 54.66%
1000	2122 6.274%	13.0	62.6	41.3	41.4	47.8	51.3	1222 57.59%
1100	2107 6.230%	18.6	61.6	41.0	41.2	47.3	50.7	1229 58.33%
1200	2149 6.354%	9.5	59.6	40.5	40.9	46.5	50.1	1220 56.77%
1300	2161 6.389%	8.2	68.8	40.6	40.8	47.0	50.4	1213 56.13%
1400	2150 6.357%	10.4	64.1	41.3	41.7	47.5	51.2	1292 60.09%
1500	2060 6.091%	12.2	63.1	42.1	42.1	49.1	52.6	1292 62.72%
1600	2108 6.233%	21.2	62.0	42.3	42.4	48.8	52.5	1355 64.28%
1700	2037 6.023%	11.8	65.5	42.8	43.2	49.2	52.7	1391 68.29%
1800	1898 5.612%	12.6	64.0	43.0	43.5	48.9	51.7	1355 71.39%
1900	1672 4.944%	22.0	58.9	41.9	42.4	47.4	50.4	1107 66.21%
2000	1321 3.906%	21.8	65.0	41.6	42.1	47.1	50.0	841 63.66%
2100	961 2.841%	22.3	62.1	42.6	43.1	47.9	51.3	678 70.55%
2200	647 1.913%	17.1	73.2	42.6	42.8	48.1	51.0	454 70.17%
2300	431 1.274%	27.2	85.6	43.1	42.8	47.4	51.8	310 71.93%
----	33822 100.0%	8.2	96.7	41.5	41.7	47.9	51.6	20452 60.47%

1.4.3.1.2 Northbound Only

Vehicles = 16337

Posted speed limit = 40 mph, Exceeding = 9011 (55.16%), Mean Exceeding = 45.42 mph

Maximum = 85.6 mph, **Minimum** = 10.4 mph, **Mean** = 40.9 mph

85% Speed = 47.42 mph, **95% Speed** = 51.56 mph, **Median** = 40.82 mph

10 mph Pace = 36 - 46, **Number in Pace** = 9431 (57.73%)

Variance = 41.33, **Standard Deviation** = 6.43 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 40 mph
0000	129 0.790%	20.4	71.3	42.3	42.1	47.8	53.9	80 62.02%
0100	70 0.428%	25.5	64.6	42.7	41.9	49.7	54.6	47 67.14%
0200	86 0.526%	21.7	58.3	42.7	42.0	49.6	54.3	58 67.44%
0300	126 0.771%	23.5	71.3	42.7	42.9	49.3	56.6	76 60.32%
0400	319 1.953%	24.5	65.4	43.6	43.2	50.3	54.9	229 71.79%
0500	668 4.089%	17.9	69.7	40.8	40.4	47.9	52.5	352 52.69%
0600	928 5.680%	21.3	70.4	38.5	38.1	44.6	49.7	351 37.82%
0700	935 5.723%	16.9	62.1	38.4	38.1	44.7	49.0	360 38.50%
0800	978 5.986%	23.8	60.6	38.9	38.6	45.0	49.0	399 40.80%
0900	1005 6.152%	18.1	57.1	39.4	39.5	45.6	49.9	464 46.17%
1000	1047 6.409%	17.5	62.6	41.0	40.6	47.5	51.4	562 53.68%
1100	1006 6.158%	21.0	56.7	40.8	40.9	47.3	50.8	572 56.86%
1200	1035 6.335%	21.1	59.3	41.1	41.3	47.2	51.4	618 59.71%
1300	1064 6.513%	19.9	68.8	41.1	41.2	47.6	51.7	617 57.99%
1400	1036 6.341%	10.4	64.1	41.5	41.6	48.3	52.9	614 59.27%
1500	1010 6.182%	20.6	63.1	42.3	41.7	49.8	53.7	620 61.39%
1600	1090 6.672%	21.2	62.0	41.9	41.9	48.5	52.6	673 61.74%
1700	1006 6.158%	16.5	61.9	41.6	41.9	48.1	51.6	615 61.13%
1800	863 5.282%	25.8	64.0	42.1	42.1	47.9	51.3	556 64.43%
1900	702 4.297%	24.5	57.7	41.3	41.3	47.1	50.6	421 59.97%
2000	483 2.956%	25.6	62.4	40.3	40.2	46.1	49.4	250 51.76%
2100	354 2.167%	22.3	62.1	42.0	42.1	47.4	52.0	225 63.56%
2200	248 1.518%	17.1	73.2	42.3	41.7	48.2	53.3	158 63.71%
2300	149 0.912%	29.6	85.6	42.3	41.5	47.1	52.2	94 63.09%
----	16337 100.0%	10.4	85.6	40.9	40.8	47.4	51.6	9011 55.16%

1.4.3.1.3 Southbound Only

Vehicles = 17485

Posted speed limit = 40 mph, Exceeding = 11441 (65.43%), Mean Exceeding = 45.75 mph

Maximum = 96.7 mph, Minimum = 8.2 mph, Mean = 42.1 mph

85% Speed = 48.32 mph, 95% Speed = 51.56 mph, Median = 42.50 mph

10 mph Pace = 39 - 49, Number in Pace = 10259 (58.67%)

Variance = 41.12, Standard Deviation = 6.41 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 40 mph
0000	190 1.087%	26.5	59.4	42.7	42.3	49.0	51.8	133 70.00%
0100	122 0.698%	26.7	61.2	43.0	43.2	48.7	53.0	88 72.13%
0200	76 0.435%	29.8	58.5	44.7	45.1	50.9	52.3	62 81.58%
0300	67 0.383%	30.4	62.9	44.5	44.3	50.1	55.1	54 80.60%
0400	163 0.932%	25.3	72.2	47.5	47.3	54.1	59.4	141 86.50%
0500	414 2.368%	24.7	96.7	45.2	43.5	52.8	71.6	293 70.77%
0600	659 3.769%	22.6	71.4	42.9	43.1	50.0	55.8	423 64.19%
0700	948 5.422%	21.1	60.6	42.0	42.8	48.2	50.9	622 65.61%
0800	1038 5.937%	21.9	68.9	41.0	41.0	47.9	51.7	587 56.55%
0900	1077 6.160%	21.3	61.7	42.0	42.1	49.0	52.9	674 62.58%
1000	1075 6.148%	13.0	61.7	41.5	42.2	47.9	51.1	660 61.40%
1100	1101 6.297%	18.6	61.6	41.1	41.4	47.3	50.7	657 59.67%
1200	1114 6.371%	9.5	59.6	40.1	40.6	46.0	49.3	602 54.04%
1300	1097 6.274%	8.2	57.2	40.1	40.6	46.3	49.4	596 54.33%
1400	1114 6.371%	13.5	56.8	41.0	41.8	47.1	49.7	678 60.86%
1500	1050 6.005%	12.2	61.2	41.9	42.4	48.5	51.4	672 64.00%
1600	1018 5.822%	21.6	60.0	42.8	43.4	49.0	52.3	682 66.99%
1700	1031 5.896%	11.8	65.5	43.9	44.3	49.8	53.1	776 75.27%
1800	1035 5.919%	12.6	60.1	43.8	44.5	49.3	52.0	799 77.20%
1900	970 5.548%	22.0	58.9	42.4	43.1	47.4	50.3	686 70.72%
2000	838 4.793%	21.8	65.0	42.3	42.7	47.4	50.3	591 70.53%
2100	607 3.472%	23.4	56.4	42.9	43.5	47.9	51.0	453 74.63%
2200	399 2.282%	20.0	55.9	42.8	43.4	48.0	50.4	296 74.19%
2300	282 1.613%	27.2	69.5	43.4	43.4	47.8	52.1	216 76.60%
----	17485 100.0%	8.2	96.7	42.1	42.5	48.3	51.6	11441 65.43%

1.4.4 Sawyers Crossing east of NH 10

1.4.4.1.1 Both Directions of Travel

Vehicles = 1564

Posted speed limit = 30 mph, Exceeding = 1128 (72.12%), Mean Exceeding = 36.19 mph

Maximum = 65.4 mph, Minimum = 5.5 mph, Mean = 32.7 mph

85% Speed = 39.03 mph, 95% Speed = 42.17 mph, Median = 33.89 mph

10 mph Pace = 30 - 40, Number in Pace = 968 (61.89%)

Variance = 50.05, Standard Deviation = 7.07 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	3 0.192%	29.2	40.6	34.8	34.7	40.6	40.6	2 66.67%
0100	2 0.128%	59.3	60.0	59.7	59.7	60.0	60.0	2 100.0%
0200	4 0.256%	20.1	37.6	31.3	33.8	37.6	37.6	3 75.00%
0300	3 0.192%	10.9	43.8	28.7	31.3	43.8	43.8	2 66.67%
0400	13 0.831%	29.7	43.1	34.5	33.7	36.8	43.1	12 92.31%
0500	8 0.512%	19.4	38.4	34.0	35.9	38.0	38.4	7 87.50%
0600	36 2.302%	24.1	51.3	36.0	36.1	40.8	46.8	32 88.89%
0700	61 3.900%	16.0	48.5	34.6	36.4	40.9	44.1	51 83.61%
0800	69 4.412%	15.4	42.0	32.3	34.1	39.8	41.3	46 66.67%
0900	91 5.818%	12.9	47.1	32.3	33.2	37.3	40.1	69 75.82%
1000	108 6.905%	8.7	51.8	31.8	32.5	39.3	43.4	75 69.44%
1100	133 8.504%	12.1	47.2	32.7	34.3	39.9	42.3	89 66.92%
1200	105 6.714%	7.1	43.4	32.9	34.7	38.9	40.4	81 77.14%
1300	146 9.335%	11.1	46.7	32.2	33.3	38.6	42.1	108 73.97%
1400	147 9.399%	10.8	65.4	33.4	34.4	39.3	43.0	112 76.19%
1500	132 8.440%	12.4	47.7	32.8	33.8	38.1	41.5	94 71.21%
1600	142 9.079%	15.1	45.7	34.7	35.6	40.1	42.7	116 81.69%
1700	92 5.882%	9.0	43.9	32.0	33.1	37.4	41.2	63 68.48%
1800	88 5.627%	5.5	43.8	32.7	34.4	39.9	42.6	63 71.59%
1900	72 4.604%	14.8	48.3	30.3	31.0	36.9	42.1	38 52.78%
2000	52 3.325%	17.6	43.6	30.6	31.0	36.9	41.8	28 53.85%
2100	30 1.918%	17.3	48.3	31.8	32.3	39.7	47.1	20 66.67%
2200	16 1.023%	11.0	43.7	32.5	34.6	40.8	43.7	11 68.75%
2300	11 0.703%	17.6	40.2	28.0	26.8	37.9	40.2	4 36.36%
----	1564 100.0%	5.5	65.4	32.7	33.9	39.0	42.2	1128 72.12%

1.4.4.1.2 Westbound Only

Vehicles = 895

Posted speed limit = 30 mph, Exceeding = 637 (71.17%), Mean Exceeding = 36.29 mph

Maximum = 65.4 mph, Minimum = 9.0 mph, Mean = 32.8 mph

85% Speed = 39.03 mph, 95% Speed = 42.75 mph, Median = 33.78 mph

10 mph Pace = 29 - 39, Number in Pace = 546 (61.01%)

Variance = 50.65, Standard Deviation = 7.12 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	1 0.112%	40.6	40.6	40.6	40.6	40.6	40.6	1 100.0%
0100	2 0.223%	59.3	60.0	59.7	59.7	60.0	60.0	2 100.0%
0200	2 0.223%	20.1	37.6	28.8	28.8	37.6	37.6	1 50.00%
0300	3 0.335%	10.9	43.8	28.7	31.3	43.8	43.8	2 66.67%
0400	7 0.782%	29.7	37.0	33.5	33.1	36.5	37.0	6 85.71%
0500	4 0.447%	34.6	37.3	36.2	36.4	37.3	37.3	4 100.0%
0600	19 2.123%	24.1	51.3	36.5	36.1	43.2	51.3	16 84.21%
0700	41 4.581%	16.0	48.5	36.4	36.9	42.9	45.8	37 90.24%
0800	34 3.799%	17.0	42.0	33.5	35.8	39.5	41.5	24 70.59%
0900	51 5.698%	12.9	47.1	33.1	33.3	38.5	43.3	39 76.47%
1000	67 7.486%	10.5	51.8	32.6	32.8	39.4	44.6	47 70.15%
1100	76 8.492%	12.1	47.2	31.3	32.5	39.1	41.2	45 59.21%
1200	62 6.927%	15.3	43.4	33.2	34.7	38.8	40.4	48 77.42%
1300	81 9.050%	11.1	46.7	32.2	33.4	38.0	42.3	57 70.37%
1400	94 10.50%	10.8	65.4	32.0	32.7	38.4	41.9	63 67.02%
1500	75 8.380%	12.4	47.7	32.7	33.7	38.1	41.2	56 74.67%
1600	82 9.162%	21.0	45.7	34.2	34.7	40.1	43.8	64 78.05%
1700	50 5.587%	9.0	41.9	32.0	33.8	38.9	41.3	34 68.00%
1800	48 5.363%	13.7	43.8	33.5	34.7	41.4	43.2	34 70.83%
1900	41 4.581%	14.8	48.3	31.0	32.3	40.3	42.8	23 56.10%
2000	28 3.128%	17.6	43.6	30.6	31.8	35.8	41.1	19 67.86%
2100	14 1.564%	17.5	48.3	31.0	31.0	44.0	48.3	8 57.14%
2200	6 0.670%	11.0	43.7	30.2	31.7	43.5	43.7	4 66.67%
2300	7 0.782%	17.6	40.2	29.1	29.8	39.6	40.2	3 42.86%
----	895 100.0%	9.0	65.4	32.8	33.8	39.0	42.7	637 71.17%

1.4.4.1.3 Eastbound Only

Vehicles = 669

Posted speed limit = 30 mph, Exceeding = 491 (73.39%), Mean Exceeding = 36.07 mph

Maximum = 47.2 mph, Minimum = 5.5 mph, Mean = 32.7 mph

85% Speed = 39.09 mph, 95% Speed = 41.50 mph, Median = 34.00 mph

10 mph Pace = 30 - 40, Number in Pace = 424 (63.38%)

Variance = 49.32, Standard Deviation = 7.02 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 30 mph
0000	2 0.299%	29.2	34.6	31.9	31.9	34.6	34.6	1 50.00%
0100	0 0.000%	0.0	0.0	0.0	0.0	0.0	0.0	0 -%
0200	2 0.299%	30.3	37.3	33.8	33.8	37.3	37.3	2 100.0%
0300	0 0.000%	0.0	0.0	0.0	0.0	0.0	0.0	0 -%
0400	6 0.897%	32.1	43.1	35.7	34.8	42.7	43.1	6 100.0%
0500	4 0.598%	19.4	38.4	31.9	34.9	38.4	38.4	3 75.00%
0600	17 2.541%	24.2	41.0	35.4	36.1	39.6	41.0	16 94.12%
0700	20 2.990%	16.2	40.1	31.0	33.2	38.7	40.1	14 70.00%
0800	35 5.232%	15.4	41.6	31.2	32.0	40.2	41.3	22 62.86%
0900	40 5.979%	14.8	40.6	31.3	33.1	35.7	37.2	30 75.00%
1000	41 6.129%	8.7	45.4	30.5	31.9	39.1	43.0	28 68.29%
1100	57 8.520%	14.1	47.2	34.6	37.1	40.7	44.6	44 77.19%
1200	43 6.428%	7.1	41.2	32.5	34.4	39.2	40.5	33 76.74%
1300	65 9.716%	13.7	45.0	32.2	33.2	39.2	42.1	51 78.46%
1400	53 7.922%	14.4	45.8	35.9	36.2	41.6	44.6	49 92.45%
1500	57 8.520%	15.3	46.1	32.9	34.0	38.6	41.9	38 66.67%
1600	60 8.969%	15.1	43.1	35.3	37.1	40.1	41.8	52 86.67%
1700	42 6.278%	17.2	43.9	32.0	32.6	36.9	43.0	29 69.05%
1800	40 5.979%	5.5	41.3	31.7	33.8	39.5	40.4	29 72.50%
1900	31 4.634%	16.0	38.0	29.4	29.9	36.1	37.8	15 48.39%
2000	24 3.587%	20.8	43.4	30.6	29.3	38.5	42.8	9 37.50%
2100	16 2.392%	17.3	43.8	32.6	33.4	40.0	43.8	12 75.00%
2200	10 1.495%	14.9	42.5	33.9	36.1	40.5	42.5	7 70.00%
2300	4 0.598%	22.4	34.4	26.1	23.8	34.4	34.4	1 25.00%
----	669 100.0%	5.5	47.2	32.7	34.0	39.1	41.5	491 73.39%

1.4.5 NH 10 south of West Street

1.4.5.1.1 Both Directions of Travel

Vehicles = 29820

Posted speed limit = 40 mph, Exceeding = 25825 (86.60%), Mean Exceeding = 46.06 mph

Maximum = 76.3 mph, Minimum = 7.2 mph, Mean = 44.8 mph

85% Speed = 49.55 mph, 95% Speed = 52.57 mph, Median = 44.85 mph

10 mph Pace = 40 - 50, Number in Pace = 21944 (73.59%)

Variance = 24.49, Standard Deviation = 4.95 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 40 mph
0000	190 0.637%	32.5	66.2	45.1	44.5	50.1	56.9	161 84.74%
0100	135 0.453%	34.1	61.8	45.4	44.9	50.8	55.3	121 89.63%
0200	104 0.349%	27.6	61.1	45.9	45.5	50.1	54.2	97 93.27%
0300	104 0.349%	25.7	57.1	46.0	46.0	50.7	53.4	97 93.27%
0400	333 1.117%	26.5	62.1	45.9	45.3	51.3	55.0	307 92.19%
0500	824 2.763%	24.8	63.7	45.6	45.3	49.8	53.8	753 91.38%
0600	1184 3.970%	12.6	65.5	46.5	46.6	51.0	53.9	1107 93.50%
0700	1472 4.936%	26.8	70.9	46.8	46.4	51.6	54.9	1379 93.68%
0800	1636 5.486%	10.7	66.2	45.9	45.9	51.0	54.5	1472 89.98%
0900	1799 6.033%	11.4	61.1	45.2	45.2	49.9	52.6	1605 89.22%
1000	1903 6.382%	19.6	61.1	44.6	44.6	49.3	52.3	1631 85.71%
1100	2047 6.865%	25.0	62.5	44.3	44.5	48.9	51.9	1744 85.20%
1200	2113 7.086%	10.2	64.0	44.2	44.5	48.9	51.8	1756 83.10%
1300	2019 6.771%	7.2	66.6	44.1	44.3	49.1	52.0	1682 83.31%
1400	2023 6.784%	11.8	61.2	44.3	44.4	49.0	51.8	1712 84.63%
1500	2071 6.945%	12.6	76.3	44.5	44.7	49.2	52.1	1764 85.18%
1600	2062 6.915%	14.1	65.7	44.9	45.1	49.2	52.0	1806 87.58%
1700	2010 6.740%	18.3	60.5	44.5	44.7	49.2	52.2	1739 86.52%
1800	1767 5.926%	15.7	62.5	44.8	45.0	49.5	52.6	1537 86.98%
1900	1449 4.859%	25.1	66.5	43.6	43.7	48.9	51.6	1148 79.23%
2000	1079 3.618%	25.0	63.0	44.3	44.1	48.7	51.9	933 86.47%
2100	700 2.347%	26.7	61.8	44.2	44.1	48.5	51.8	600 85.71%
2200	490 1.643%	28.5	64.5	44.5	44.3	49.0	52.7	421 85.92%
2300	306 1.026%	27.4	74.0	44.1	43.4	48.9	53.5	253 82.68%
----	29820 100.0%	7.2	76.3	44.8	44.9	49.5	52.6	25825 86.60%

1.4.5.1.2 Northbound Only

Vehicles = 15305

Posted speed limit = 40 mph, Exceeding = 13160 (85.98%), Mean Exceeding = 46.09 mph

Maximum = 74.0 mph, Minimum = 7.2 mph, Mean = 44.8 mph

85% Speed = 49.55 mph, 95% Speed = 52.68 mph, Median = 44.85 mph

10 mph Pace = 40 - 50, Number in Pace = 11171 (72.99%)

Variance = 24.65, Standard Deviation = 4.96 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 40 mph
0000	77 0.503%	36.4	62.2	46.0	45.0	52.2	58.1	69 89.61%
0100	59 0.385%	37.3	59.2	46.2	45.2	51.8	56.4	55 93.22%
0200	61 0.399%	34.5	58.8	45.8	45.4	50.1	55.1	56 91.80%
0300	70 0.457%	36.5	54.8	46.2	46.1	50.0	53.0	69 98.57%
0400	205 1.339%	34.0	61.0	46.4	45.5	51.9	54.9	194 94.63%
0500	522 3.411%	24.8	63.0	45.6	45.4	49.7	53.1	481 92.15%
0600	754 4.926%	32.9	61.3	46.9	46.9	51.0	54.0	718 95.23%
0700	846 5.528%	29.9	67.9	47.0	46.8	51.6	54.7	805 95.15%
0800	912 5.959%	21.6	66.2	46.0	46.0	50.8	54.5	827 90.68%
0900	962 6.286%	17.9	58.6	45.0	45.0	49.3	52.5	859 89.29%
1000	1007 6.580%	19.6	61.1	44.4	44.3	49.0	52.0	852 84.61%
1100	1071 6.998%	25.0	62.5	44.2	44.4	48.5	51.2	898 83.85%
1200	1068 6.978%	17.7	64.0	43.9	44.1	48.4	51.4	859 80.43%
1300	1039 6.789%	7.2	59.8	43.5	43.8	48.4	51.2	830 79.88%
1400	1016 6.638%	11.8	61.2	44.0	44.2	48.9	51.7	829 81.59%
1500	1000 6.534%	15.7	63.1	44.3	44.4	48.8	51.8	840 84.00%
1600	995 6.501%	14.1	65.7	44.8	45.0	49.2	52.0	866 87.04%
1700	970 6.338%	21.4	59.3	44.6	44.7	49.3	52.5	827 85.26%
1800	864 5.645%	15.7	58.7	44.7	44.7	49.4	52.6	749 86.69%
1900	693 4.528%	25.2	63.1	43.2	43.3	49.0	52.5	521 75.18%
2000	464 3.032%	27.4	63.0	44.5	44.3	49.2	52.6	396 85.34%
2100	311 2.032%	26.7	59.5	44.9	44.7	49.2	52.8	277 89.07%
2200	233 1.522%	28.7	64.5	44.8	44.7	49.5	53.4	197 84.55%
2300	106 0.693%	30.8	74.0	45.1	44.1	51.4	56.0	86 81.13%
----	15305 100.0%	7.2	74.0	44.8	44.9	49.5	52.7	13160 85.98%

1.4.5.1.3 Southbound Only

Vehicles = 14515

Posted speed limit = 40 mph, Exceeding = 12665 (87.25%), Mean Exceeding = 46.03 mph

Maximum = 76.3 mph, **Minimum** = 10.2 mph, **Mean** = 44.8 mph

85% Speed = 49.55 mph, **95% Speed** = 52.57 mph, **Median** = 44.85 mph

10 mph Pace = 40 - 50, **Number in Pace** = 10773 (74.22%)

Variance = 24.32, **Standard Deviation** = 4.93 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 40 mph
0000	113 0.779%	32.5	66.2	44.5	44.1	48.9	54.2	92 81.42%
0100	76 0.524%	34.1	61.8	44.8	44.3	50.0	54.6	66 86.84%
0200	43 0.296%	27.6	61.1	46.1	45.6	50.6	52.7	41 95.35%
0300	34 0.234%	25.7	57.1	45.6	45.4	52.0	54.4	28 82.35%
0400	128 0.882%	26.5	62.1	44.9	44.5	50.2	55.3	113 88.28%
0500	302 2.081%	30.6	63.7	45.7	45.1	50.1	54.4	272 90.07%
0600	430 2.962%	12.6	65.5	45.8	45.7	50.9	53.7	389 90.47%
0700	626 4.313%	26.8	70.9	46.5	46.0	51.4	55.3	574 91.69%
0800	724 4.988%	10.7	62.4	45.8	45.6	51.1	54.2	645 89.09%
0900	837 5.766%	11.4	61.1	45.4	45.4	50.0	52.9	746 89.13%
1000	896 6.173%	23.7	57.2	44.9	45.1	49.7	52.7	779 86.94%
1100	976 6.724%	27.2	59.9	44.5	44.6	49.2	52.2	846 86.68%
1200	1045 7.199%	10.2	61.3	44.5	44.7	49.2	52.0	897 85.84%
1300	980 6.752%	24.3	66.6	44.7	44.7	49.7	52.5	852 86.94%
1400	1007 6.938%	18.2	59.7	44.6	44.5	49.2	52.0	883 87.69%
1500	1071 7.379%	12.6	76.3	44.7	44.9	49.7	52.3	924 86.27%
1600	1067 7.351%	18.9	58.8	45.0	45.2	49.3	52.0	940 88.10%
1700	1040 7.165%	18.3	60.5	44.5	44.7	49.1	51.9	912 87.69%
1800	903 6.221%	25.8	62.5	44.9	45.1	49.7	52.6	788 87.26%
1900	756 5.208%	25.1	66.5	44.0	44.1	48.8	51.6	627 82.94%
2000	615 4.237%	25.0	60.1	44.1	44.0	48.2	50.9	537 87.32%
2100	389 2.680%	30.8	61.8	43.7	43.6	47.5	50.4	323 83.03%
2200	257 1.771%	28.5	59.5	44.2	44.1	48.7	51.4	224 87.16%
2300	200 1.378%	27.4	62.8	43.6	43.1	48.2	52.8	167 83.50%
----	14515 100.0%	10.2	76.3	44.8	44.9	49.5	52.6	12665 87.25%

1.4.6 NH 10 at Winchester line

1.4.6.1.1 Both Directions of Travel

Vehicles = 20346

Posted speed limit = 50 mph, Exceeding = 13447 (66.09%), Mean Exceeding = 54.26 mph

Maximum = 97.0 mph, Minimum = 6.4 mph, Mean = 51.4 mph

85% Speed = 56.37 mph, 95% Speed = 59.17 mph, Median = 51.79 mph

10 mph Pace = 47 - 57, Number in Pace = 14879 (73.13%)

Variance = 32.22, Standard Deviation = 5.68 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 50 mph
0000	175 0.860%	37.9	66.2	51.7	51.2	58.1	61.3	109 62.29%
0100	110 0.541%	35.1	70.0	51.3	51.1	58.9	60.7	67 60.91%
0200	82 0.403%	34.0	65.3	51.1	51.1	57.5	60.2	47 57.32%
0300	83 0.408%	31.6	64.7	50.4	51.2	56.3	60.4	46 55.42%
0400	219 1.076%	30.3	75.8	52.6	52.7	58.0	61.9	155 70.78%
0500	499 2.453%	13.7	69.4	52.4	52.6	57.8	60.8	370 74.15%
0600	785 3.858%	16.9	72.8	53.1	53.6	58.2	60.7	611 77.83%
0700	999 4.910%	16.6	77.0	52.2	52.7	57.2	59.4	740 74.07%
0800	1104 5.426%	12.7	67.3	51.6	51.9	56.7	59.6	753 68.21%
0900	1184 5.819%	8.0	67.2	50.9	51.6	56.1	58.6	779 65.79%
1000	1277 6.276%	8.5	70.7	51.1	51.4	55.9	58.5	805 63.04%
1100	1329 6.532%	8.6	83.5	50.9	51.1	55.6	58.2	824 62.00%
1200	1374 6.753%	7.1	65.0	51.0	51.3	55.6	58.6	851 61.94%
1300	1379 6.778%	6.4	67.1	50.9	51.4	55.5	58.5	896 64.97%
1400	1406 6.910%	9.6	67.7	51.4	51.8	56.1	59.1	935 66.50%
1500	1443 7.092%	8.0	70.4	51.2	51.7	56.0	58.6	950 65.84%
1600	1441 7.082%	6.4	97.0	51.6	52.0	56.4	58.8	971 67.38%
1700	1325 6.512%	6.7	74.3	52.0	52.1	56.5	59.2	938 70.79%
1800	1145 5.628%	17.4	66.2	52.8	52.8	57.3	60.2	864 75.46%
1900	947 4.654%	13.6	68.4	51.6	51.9	56.5	59.3	617 65.15%
2000	774 3.804%	13.7	67.2	50.7	50.7	55.7	58.3	433 55.94%
2100	610 2.998%	31.5	66.0	50.0	50.3	54.7	57.7	318 52.13%
2200	403 1.981%	16.1	64.2	50.6	50.9	55.9	59.1	231 57.32%
2300	253 1.243%	27.2	64.0	50.0	50.4	55.4	59.2	137 54.15%
----	20346 100.0%	6.4	97.0	51.4	51.8	56.4	59.2	13447 66.09%

1.4.6.1.2 Northbound Only

Vehicles = 10078

Posted speed limit = 50 mph, Exceeding = 6530 (64.79%), Mean Exceeding = 54.17 mph

Maximum = 97.0 mph, Minimum = 6.4 mph, Mean = 51.3 mph

85% Speed = 56.15 mph, 95% Speed = 58.83 mph, Median = 51.56 mph

10 mph Pace = 47 - 57, Number in Pace = 7434 (73.76%)

Variance = 32.27, Standard Deviation = 5.68 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 50 mph
0000	77 0.764%	39.3	62.5	50.5	50.2	56.3	60.4	41 53.25%
0100	48 0.476%	35.1	70.0	51.1	50.4	60.0	64.1	25 52.08%
0200	36 0.357%	34.0	65.3	49.9	49.0	58.5	64.7	16 44.44%
0300	49 0.486%	31.6	64.7	50.3	51.6	56.0	58.0	28 57.14%
0400	160 1.588%	35.4	66.1	52.8	52.9	57.8	61.9	115 71.88%
0500	303 3.007%	13.7	69.4	52.2	52.5	57.3	59.5	231 76.24%
0600	508 5.041%	19.1	66.4	53.3	53.7	58.1	61.0	391 76.97%
0700	590 5.854%	23.1	67.1	52.4	52.7	56.7	59.2	448 75.93%
0800	587 5.825%	14.2	63.3	51.2	51.8	56.4	59.1	381 64.91%
0900	615 6.102%	8.0	66.6	50.7	51.3	55.8	58.7	399 64.88%
1000	650 6.450%	8.5	65.2	50.7	51.1	55.4	57.7	404 62.15%
1100	672 6.668%	8.6	83.5	50.5	50.8	54.9	57.5	389 57.89%
1200	662 6.569%	7.1	64.7	50.7	51.2	55.3	58.1	404 61.03%
1300	660 6.549%	6.4	67.1	50.6	51.2	55.3	58.0	423 64.09%
1400	673 6.678%	9.6	67.7	51.2	51.7	56.0	58.9	443 65.82%
1500	680 6.747%	8.0	70.4	50.8	51.2	55.8	58.3	428 62.94%
1600	661 6.559%	6.4	97.0	51.5	52.0	56.1	58.3	422 63.84%
1700	613 6.083%	12.1	65.0	51.8	52.1	56.4	58.8	430 70.15%
1800	521 5.170%	31.8	66.2	52.6	52.7	56.9	59.7	385 73.90%
1900	435 4.316%	13.6	68.4	51.6	51.9	56.8	59.8	271 62.30%
2000	351 3.483%	28.9	65.9	50.9	50.8	55.6	59.2	199 56.70%
2100	265 2.629%	33.7	64.8	49.6	49.8	54.4	57.5	124 46.79%
2200	153 1.518%	38.1	59.7	50.0	50.2	55.5	58.3	80 52.29%
2300	109 1.082%	36.3	61.7	49.4	49.9	55.2	58.9	53 48.62%
----	10078 100.0%	6.4	97.0	51.3	51.6	56.1	58.8	6530 64.79%

1.4.6.1.3 Southbound Only

Vehicles = 10268

Posted speed limit = 50 mph, Exceeding = 6917 (67.36%), Mean Exceeding = 54.34 mph

Maximum = 77.0 mph, **Minimum** = 6.7 mph, **Mean** = 51.6 mph

85% Speed = 56.59 mph, **95% Speed** = 59.39 mph, **Median** = 51.90 mph

10 mph Pace = 47 - 57, **Number in Pace** = 7462 (72.67%)

Variance = 32.11, **Standard Deviation** = 5.67 mph

Hour Bins

Time	Bin	Min	Max	Mean	Median	85%	95%	>PSL 50 mph
0000	98 0.954%	37.9	66.2	52.6	52.4	59.2	62.9	68 69.39%
0100	62 0.604%	37.4	60.9	51.5	52.0	58.5	59.7	42 67.74%
0200	46 0.448%	40.8	59.5	52.0	52.1	57.0	59.3	31 67.39%
0300	34 0.331%	35.3	64.7	50.4	50.9	57.7	62.8	18 52.94%
0400	59 0.575%	30.3	75.8	52.2	51.4	59.1	67.3	40 67.80%
0500	196 1.909%	32.5	64.4	52.7	53.2	58.5	61.7	139 70.92%
0600	277 2.698%	16.9	72.8	52.9	53.4	58.2	60.3	220 79.42%
0700	409 3.983%	16.6	77.0	51.7	52.6	57.7	60.1	292 71.39%
0800	517 5.035%	12.7	67.3	52.0	52.1	57.1	60.1	372 71.95%
0900	569 5.541%	17.1	67.2	51.2	51.8	56.4	58.5	380 66.78%
1000	627 6.106%	14.7	70.7	51.6	51.8	56.2	59.1	401 63.96%
1100	657 6.399%	14.3	67.1	51.3	51.7	56.1	59.2	435 66.21%
1200	712 6.934%	12.4	65.0	51.2	51.4	56.0	58.9	447 62.78%
1300	719 7.002%	15.0	66.5	51.1	51.6	55.7	58.8	473 65.79%
1400	733 7.139%	16.5	65.1	51.6	51.9	56.1	59.1	492 67.12%
1500	763 7.431%	16.8	69.9	51.6	52.0	56.3	59.0	522 68.41%
1600	780 7.596%	14.2	67.7	51.8	52.0	56.6	59.3	549 70.38%
1700	712 6.934%	6.7	74.3	52.1	52.1	56.6	59.9	508 71.35%
1800	624 6.077%	17.4	64.8	52.9	53.0	57.4	60.6	479 76.76%
1900	512 4.986%	16.5	63.4	51.7	51.9	56.1	58.8	346 67.58%
2000	423 4.120%	13.7	67.2	50.5	50.6	55.7	57.9	234 55.32%
2100	345 3.360%	31.5	66.0	50.3	50.7	55.3	57.9	194 56.23%
2200	250 2.435%	16.1	64.2	51.0	51.4	56.0	60.0	151 60.40%
2300	144 1.402%	27.2	64.0	50.5	50.8	55.5	61.8	84 58.33%
----	10268 100.0%	6.7	77.0	51.6	51.9	56.6	59.4	6917 67.36%

1.5 GAP STUDY RESULTS

A review of the separation between vehicles during the peak morning and evening weekday commuting periods can provide insight into the relative ease of a car or truck to enter or cross NH 10 from a stop-controlled intersection or a driveway. The results are summarized based on thresholds identified in transportation research that are likely to be adequate for cars and trucks entering the roadway from a stop-controlled approach³. The threshold values for these critical gaps criteria are as follows:

- There was a 50 percent probability of a passenger vehicle driver “accepting” a gap for both right or left at 6.5 seconds. The probability increased to 85 percent at 8.25 second gap.
- There was a 50 percent probability of a truck driver “accepting” a gap at 8.5 seconds. The probability increased to 85 percent at a 10 second gap.

In general, the busier evening commuting periods had fewer opportunities to safely join or cross NH 10. The most difficult location along the corridor was the area south of Base Hill Road. For a complete comparison of the relative number of gaps meeting the criteria above, see Table 5 and Figure 5.

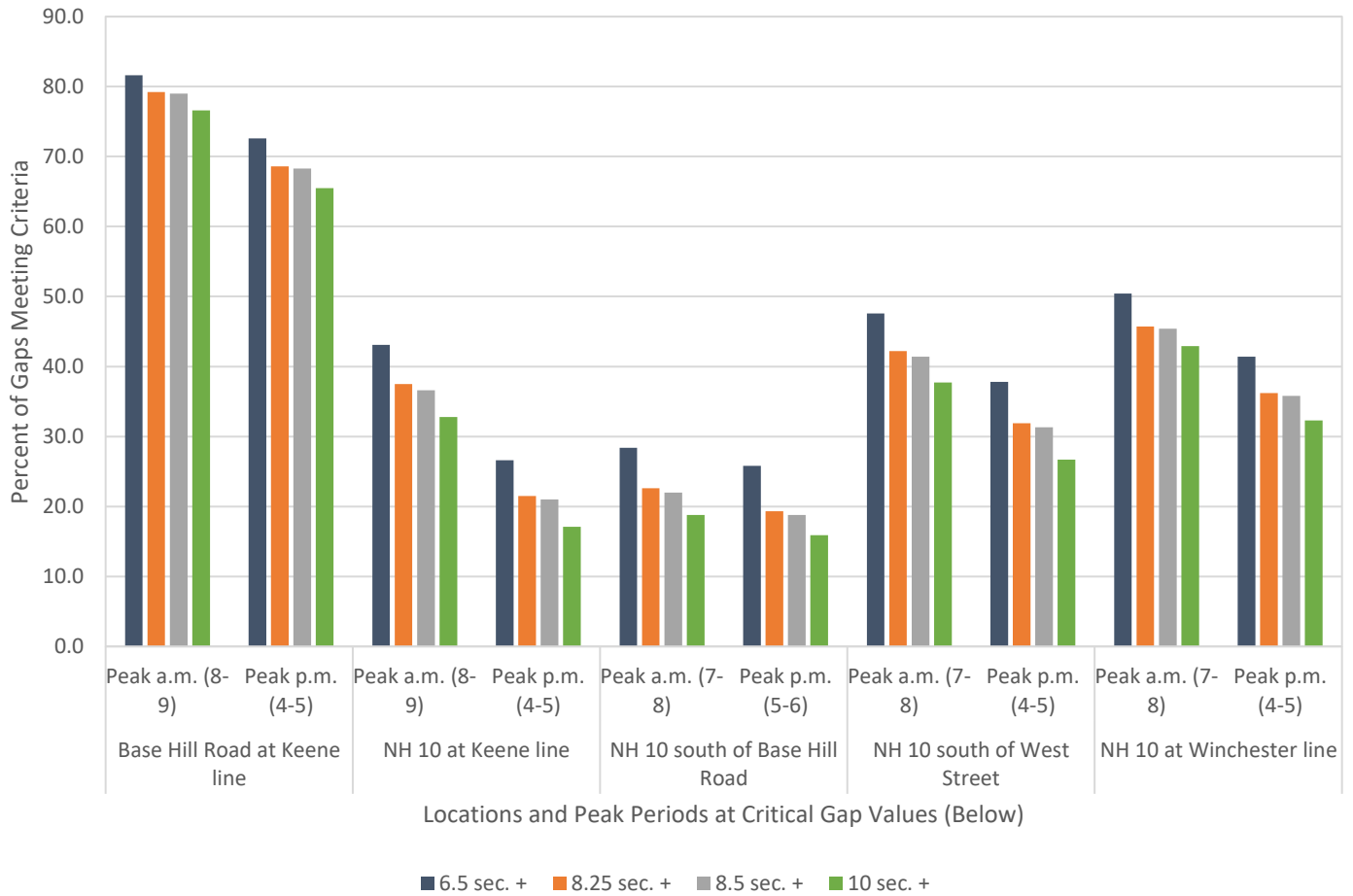
Table 5 - Comparison of the frequency of gaps in traffic on NH 10

Location	Time Period	Average Gap in Seconds	Gaps by Size							
			6.5 sec. +		8.25 sec. +		8.5 sec. +		10 sec. +	
			#	%	#	%	#	%	#	%
Base Hill Road at Keene line	Peak a.m. (8-9)	47.0	373	81.6	262	79.2	361	79.0	350	76.6
	Peak p.m. (4-5)	27.8	563	72.6	532	68.6	530	68.3	508	65.5
NH 10 at Keene line	Peak a.m. (8-9)	12.7	1,275	43.1	1,111	37.5	1,084	36.6	971	32.8
	Peak p.m. (4-5)	7.7	1,277	26.6	1,033	21.5	1,008	21.0	819	17.1
NH 10 south of Base Hill Road	Peak a.m. (7-8)	8.8	1,262	28.4	1,006	22.6	976	22.0	834	18.8
	Peak p.m. (5-6)	6.0	1,238	25.8	926	19.3	900	18.8	763	15.9
NH 10 south of West Street	Peak a.m. (7-8)	17.9	1,088	47.6	965	42.2	947	41.4	862	37.7
	Peak p.m. (4-5)	12.8	1,337	37.8	1,126	31.9	1,106	31.3	945	26.7
NH 10 at Winchester line	Peak a.m. (7-8)	90.3	692	50.4	627	45.7	623	45.4	589	42.9
	Peak p.m. (4-5)	23.8	865	41.4	756	36.2	749	35.8	675	32.3

³ Fitzpatrick, K. (1991). GAPS ACCEPTED AT STOP-CONTROLLED INTERSECTIONS. Transportation Research Record. <http://onlinepubs.trb.org/Onlinepubs/trr/1991/1303/1303-011.pdf>

Note that due to the low volume on Sawyers Crossing Road, statistics were not compiled for the site.

Figure 5 - Summary of locations by percentage of gaps meeting critical gap values



1.5.1 Base Hill Road at Keene line

1.5.1.1 Wednesday, August 19, 2020 to Friday, August 21, 2020

1.5.1.1.1 Separation Statistics (8:00 a.m. to 9:00 a.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	84 18.4%	84 18.4%	373 81.6%	0.00		0.00
6.50 - 8.25	11 2.4%	95 20.8%	362 79.2%	0.00		0.00
8.25 - 8.50	1 0.2%	96 21.0%	361 79.0%	0.00		0.00
8.50 - 10.00	11 2.4%	107 23.4%	350 76.6%	0.00		0.00
10.00 - 1000.00	350 76.6%	457 100.0%	0 0.0%	0.00		0.00

1.5.1.1.2 Separation Statistics (4:00 p.m. to 5:00 p.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	213 27.4%	213 27.4%	563 72.6%	0.00		0.00
6.50 - 8.25	31 4.0%	244 31.4%	532 68.6%	0.00		0.00
8.25 - 8.50	2 0.3%	246 31.7%	530 68.3%	0.00		0.00
8.50 - 10.00	22 2.8%	268 34.5%	508 65.5%	0.00		0.00
10.00 - 1000.00	508 65.5%	776 100.0%	0 0.0%	0.00		0.00

1.5.1.1.3 Separation Statistics by Hour

Time	Bin	Mean	Sep	Sep	Sep	Sep	Sep
			0.0	6.5	8.3	8.5	10.0
			6.5	8.3	8.5	10.0	1000.0
0000	12	1153.3	1	0	0	0	5
0100	12	1697.9	1	0	0	0	4
0200	20	1247.2	0	0	0	0	13
0300	26	887.5	0	0	0	0	19
0400	47	601.1	2	0	0	0	41
0500	131	167.8	11	1	1	5	112
0600	358	64.5	52	2	1	4	298
0700	496	43.4	99	12	2	14	369
0800	457	47.0	84	12	1	11	349
0900	578	37.0	161	12	3	20	382
1000	584	36.8	130	14	2	12	426
1100	581	37.2	131	12	2	14	422
1200	633	33.7	141	32	0	15	445
1300	644	33.1	131	24	2	16	471
1400	723	30.0	180	22	1	21	499
1500	779	27.4	198	32	4	27	518
1600	776	27.8	213	32	3	25	503
1700	692	30.8	168	26	4	19	475
1800	422	51.0	89	6	0	9	318
1900	319	67.5	50	8	0	6	255
2000	229	90.4	16	5	2	0	206
2100	141	152.1	12	2	0	1	126
2200	75	269.4	1	0	0	0	73
2300	38	507.7	2	0	0	0	29
----	8773		1873	254	28	219	6358

1.5.2 NH 10 at Keene line

1.5.2.1 Monday, September 7, 2020 to Friday, September 11, 2020

1.5.2.1.1 Separation Statistics (8:00 a.m. to 9:00 a.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	1684 56.9%	1684 56.9%	1275 43.1%	0.00		0.00
6.50 - 8.25	164 5.5%	1848 62.5%	1111 37.5%	0.00		0.00
8.25 - 8.50	27 0.9%	1875 63.4%	1084 36.6%	0.00		0.00
8.50 - 10.00	113 3.8%	1988 67.2%	971 32.8%	0.00		0.00
10.00 - 1000.00	968 32.7%	2956 99.9%	3 0.1%	0.00		0.00

1.5.2.1.2 Separation Statistics (4:00 p.m. to 5:00 p.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	3524 73.4%	3524 73.4%	1277 26.6%	0.00		0.00
6.50 - 8.25	244 5.1%	3768 78.5%	1033 21.5%	0.00		0.00
8.25 - 8.50	25 0.5%	3793 79.0%	1008 21.0%	0.00		0.00
8.50 - 10.00	189 3.9%	3982 82.9%	819 17.1%	0.00		0.00
10.00 - 1000.00	816 17.0%	4798 99.9%	3 0.1%	0.00		0.00

1.5.2.1.3 Separation Statistics by Hour

Time	Bin	Mean	Sep	Sep	Sep	Sep	Sep
			0.0	6.5	8.3	8.5	10.0
			6.5	8.3	8.5	10.0	1000.0
0000	139	549.6	11	1	1	2	118
0100	108	262.0	6	1	0	0	97
0200	76	860.5	2	1	0	1	65
0300	88	1345.4	3	2	0	0	72
0400	293	146.2	45	7	1	3	231
0500	942	94.5	303	26	4	23	579
0600	2003	18.3	1010	95	16	58	822
0700	2933	16.1	1748	148	16	102	915
0800	2959	12.7	1684	164	27	113	968
0900	3159	10.5	1848	170	25	120	995
1000	3558	43.0	2202	192	30	138	991
1100	4014	7.2	2624	244	28	171	947
1200	4232	19.2	2871	235	36	146	938
1300	4225	17.4	2843	241	28	173	935
1400	4413	10.4	3051	295	23	155	884
1500	4814	12.0	3515	290	31	153	820
1600	4801	7.7	3524	244	25	189	816
1700	4050	14.6	2721	235	29	149	911
1800	2775	11.3	1459	153	21	120	1021
1900	2157	17.5	1026	93	13	86	937
2000	1189	65.0	362	58	7	36	723
2100	609	46.2	110	16	0	15	468
2200	407	89.5	59	11	2	5	328
2300	267	101.8	29	3	0	9	225
----	54211		33056	2925	363	1967	15806

1.5.3 NH 10 south of Base Hill Road

1.5.3.1 Monday, September 23, 2020 to Thursday, September 26, 2020

1.5.3.1.1 Separation Statistics (7:00 a.m. to 8:00 a.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	3181 71.6%	3181 71.6%	1262 28.4%	0.00		0.00
6.50 - 8.25	256 5.8%	3437 77.4%	1006 22.6%	0.00		0.00
8.25 - 8.50	30 0.7%	3467 78.0%	976 22.0%	0.00		0.00
8.50 - 10.00	142 3.2%	3609 81.2%	834 18.8%	0.00		0.00
10.00 - 1000.00	830 18.7%	4439 99.9%	4 0.1%	0.00		0.00

1.5.3.1.2 Separation Statistics (5:00 p.m. to 6:00 p.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	3553 74.2%	3553 74.2%	1238 25.8%	0.00		0.00
6.50 - 8.25	312 6.5%	3865 80.7%	926 19.3%	0.00		0.00
8.25 - 8.50	26 0.5%	3891 81.2%	900 18.8%	0.00		0.00
8.50 - 10.00	137 2.9%	4028 84.1%	763 15.9%	0.00		0.00
10.00 - 1000.00	763 15.9%	4791 100.0%	0 0.0%	0.00		0.00

1.5.3.1.3 Separation Statistics by Hour

Time	Bin	Mean	Sep	Sep	Sep	Sep	Sep
			0.0	6.5	8.3	8.5	10.0
			6.5	8.3	8.5	10.0	1000.0
0000	201	147.2	23	1	1	4	171
0100	121	227.7	14	1	1	0	105
0200	131	223.8	14	3	0	1	111
0300	153	194.9	14	2	0	1	133
0400	478	61.8	92	21	2	12	351
0500	1542	72.6	662	91	10	60	717
0600	3018	42.6	1858	186	26	115	826
0700	4443	8.8	3181	256	30	142	830
0800	4220	9.6	2937	262	22	161	834
0900	3254	30.0	1988	197	24	114	928
1000	3204	13.3	1909	208	24	127	931
1100	3304	35.2	2017	227	16	130	912
1200	3479	17.4	2133	247	34	141	918
1300	3721	11.3	2390	271	28	152	879
1400	3960	7.3	2655	268	24	172	841
1500	4734	7.7	3495	310	23	142	763
1600	5093	8.0	3820	302	34	168	768
1700	4791	6.0	3553	312	26	137	763
1800	3025	9.5	1814	203	19	118	871
1900	1983	33.6	919	115	19	84	844
2000	1326	21.4	493	73	9	53	698
2100	880	39.9	252	37	9	32	549
2200	511	55.8	100	17	2	7	385
2300	312	88.7	43	8	1	9	251
----	57884		36376	3618	384	2082	15379

1.5.4 NH 10 south of West Street

1.5.4.1 Tuesday, August 25, 2020 to Friday, August 28, 2020

1.5.4.1.1 Separation Statistics (7:00 a.m. to 8:00 a.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	1199 52.4%	1199 52.4%	1088 47.6%	0.00		0.00
6.50 - 8.25	123 5.4%	1322 57.8%	965 42.2%	0.00		0.00
8.25 - 8.50	18 0.8%	1340 58.6%	947 41.4%	0.00		0.00
8.50 - 10.00	85 3.7%	1425 62.3%	862 37.7%	0.00		0.00
10.00 - 1000.00	860 37.6%	2285 99.9%	2 0.1%	0.00		0.00

1.5.4.1.2 Separation Statistics (4:00 p.m. to 5:00 p.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	2197 62.2%	2197 62.2%	1337 37.8%	0.00		0.00
6.50 - 8.25	211 6.0%	2408 68.1%	1126 31.9%	0.00		0.00
8.25 - 8.50	20 0.6%	2428 68.7%	1106 31.3%	0.00		0.00
8.50 - 10.00	161 4.6%	2589 73.3%	945 26.7%	0.00		0.00
10.00 - 1000.00	940 26.6%	3529 99.9%	5 0.1%	0.00		0.00

1.5.4.1.3 Separation Statistics by Hour

Time	Bin	Mean	Sep	Sep	Sep	Sep	Sep
			0.0	6.5	8.3	8.5	10.0
			6.5	8.3	8.5	10.0	1000.0
0000	133	216.5	7	1	0	4	120
0100	80	577.8	5	0	0	0	67
0200	80	378.4	5	0	0	0	67
0300	92	318.3	9	0	0	2	76
0400	328	91.4	50	6	0	7	265
0500	922	142.4	246	31	8	27	607
0600	1666	33.9	765	74	15	56	753
0700	2287	17.9	1199	123	18	85	860
0800	2155	20.0	1030	139	20	90	871
0900	2281	16.6	1122	126	22	106	904
1000	2421	18.7	1218	173	11	103	911
1100	2696	14.2	1401	198	21	138	935
1200	2900	13.3	1584	182	42	135	952
1300	2822	13.1	1539	204	18	128	930
1400	2890	11.9	1613	196	30	124	925
1500	3321	13.4	1998	220	21	148	930
1600	3534	12.8	2197	211	20	161	940
1700	3217	94.6	1909	209	22	147	926
1800	2111	21.5	953	125	20	85	923
1900	1646	21.8	685	104	10	62	783
2000	1051	30.8	366	43	4	34	602
2100	587	58.6	134	8	1	10	433
2200	417	67.2	75	9	4	5	324
2300	247	113.0	38	5	2	6	193
----	39884		20148	2387	309	1663	15297

1.5.5 NH 10 at Winchester line

1.5.5.1 Tuesday, August 11, 2020 to Friday, August 14, 2020

1.5.5.1.1 Separation Statistics (7:00 a.m. to 8:00 a.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	680 49.6%	680 49.6%	692 50.4%	0.00		0.00
6.50 - 8.25	65 4.7%	745 54.3%	627 45.7%	0.00		0.00
8.25 - 8.50	4 0.3%	749 54.6%	623 45.4%	0.00		0.00
8.50 - 10.00	34 2.5%	783 57.1%	589 42.9%	0.00		0.00
10.00 - 1000.00	586 42.7%	1369 99.8%	3 0.2%	0.00		0.00

1.5.5.1.2 Separation Statistics (4:00 p.m. to 5:00 p.m.)

Headway	Bin	Below	Above	sMult	n *	sMult
0.00 - 6.50	1225 58.6%	1225 58.6%	865 41.4%	0.00		0.00
6.50 - 8.25	109 5.2%	1334 63.8%	756 36.2%	0.00		0.00
8.25 - 8.50	7 0.3%	1341 64.2%	749 35.8%	0.00		0.00
8.50 - 10.00	74 3.5%	1415 67.7%	675 32.3%	0.00		0.00
10.00 - 1000.00	672 32.2%	2087 99.9%	3 0.1%	0.00		0.00

1.5.5.1.3 Separation Statistics by Hour

Time	Bin	Mean	Sep	Sep	Sep	Sep	Sep
			0.0	6.5	8.3	8.5	10.0
			6.5	8.3	8.5	10.0	1000.0
0000	102	243.3	6	1	0	0	92
0100	61	1290.3	2	0	0	0	56
0200	42	415.4	2	0	0	0	36
0300	61	420.9	5	0	0	0	53
0400	193	115.6	19	3	1	5	165
0500	533	40.3	116	21	2	15	379
0600	1007	21.3	406	42	3	40	516
0700	1372	90.3	680	65	4	34	586
0800	1258	67.3	570	56	5	40	585
0900	1241	34.4	543	54	7	55	579
1000	1395	16.3	676	58	9	42	609
1100	1457	14.8	714	72	9	40	622
1200	1547	18.6	771	83	7	54	631
1300	1560	95.6	781	84	9	52	631
1400	1753	24.9	941	94	14	61	642
1500	1956	11.0	1120	81	12	80	663
1600	2090	23.8	1225	109	7	74	672
1700	1861	29.4	1041	96	6	75	640
1800	1307	22.7	603	48	5	50	600
1900	1004	32.7	427	43	7	25	500
2000	732	30.3	258	18	3	31	422
2100	523	41.3	137	24	2	13	347
2200	300	106.8	60	2	0	4	233
2300	173	275.2	23	3	1	1	143
----	23528		11126	1057	113	791	10402

2 TURNING MOVEMENT STUDIES

Traffic volume studies at intersections require a different approach than automatic traffic recorder studies and require visits to the subject sites in-person during times of day that are of interest. Traffic volumes were manually recorded over 120 minutes at a morning and evening period for each approach and movement (left, through or right) and were aggregated to 15-minute intervals. Recorded data also contain information about vehicle type. This simplified version of vehicle classification includes cars (classes 1-3) and trucks (classes 4 and up).

The two intersections that were selected for study included NH 10 at Base Hill Road and NH 10 at Sawyers Crossing Road. They are beneficial for planning-level decisions and as context to a variety of traffic concerns.

2.1 NH 10 AT BASE HILL ROAD

The NH 10 at Base Hill Road intersection is a 3-leg unsignalized intersection with dedicated turn lanes at each approach. The minor approach (Base Hill Road) is stop-controlled.

The peak a.m. period was identified to occur from 7:00 a.m. to 8:00 a.m. It featured a total volume of 883 vehicles and was marked by a northbound flow of traffic (429 vehicles continued north on NH 10 through the intersection compared with 256 vehicles continuing south on NH 10).

The peak p.m. period was identified to occur from 3:30 p.m. to 4:30 p.m. It featured a total volume of 1,216 vehicles and was marked by a southbound flow of traffic (539 vehicles continued south on NH 10 compared to 395 continuing north on NH 10).

The following pages include complete reports on the a.m. and p.m. turning movement studies conducted on Tuesday, August 11, 2020 and Wednesday, August 12, 2020, respectively.

2.2 NH 10 AT SAWYERS CROSSING ROAD

The NH 10 at Sawyers Crossing Road intersection is a 3-leg unsignalized intersection without dedicated turn lanes. The northbound right turn from NH 10 to Sawyers Crossing features a deceleration or slip lane 100-120 feet in length. The minor approach (Sawyers Crossing Road) is stop-controlled.

The peak a.m. period was identified to occur from 7:00 a.m. to 8:00 a.m. It featured a total volume of 811 vehicles and was marked by a northbound flow of traffic (499 vehicles continued north on NH 10 through the intersection compared with 281 vehicles continuing south on NH 10). Only 11 vehicles turned left or right onto NH 10 from Sawyers Crossing Road during this period.

The peak p.m. period was identified to occur from 3:30 p.m. to 4:30 p.m. It featured a total volume of 1,042 vehicles and was marked by a southbound flow of traffic (592 vehicles continued south on NH 10 through the intersection compared to 418 continuing north). Peak traffic from the Sawyers Crossing Road approach remained low at 17 vehicles.

The following pages include complete reports on the a.m. and p.m. turning movement studies conducted on Tuesday, August 11, 2020 and Wednesday, August 12, 2020, respectively.

3 RIDESHARE STUDIES

A number of organizations, including the NHDOT and the Monadnock Alliance for Sustainable Transportation support an increase in ridesharing in the Region. Ridesharing provides societal benefits including less traffic, air pollutant emissions, greenhouse gas emissions, auto-related pollutant runoff in soils and waters, and demand for capacity expansion or maintenance improvements to highways, bridges and parking infrastructure. On the other hand, carpooling/ridesharing can translate into certain societal disincentives such as less gas tax revenue and flexibility of people to contribute to the economy as workers or shoppers.

Since 2013, SWRPC has conducted visual surveys focused on the number of people at set points around the region at peak morning and evening commuting periods. The purpose of the studies is to quantify the extent of ridesharing (also known as carpooling) and to document longitudinal trends based on a fuel price index associated with each period. The figures show ridesharing trends for all vehicles as opposed to only people commuting to work. One such location is directly in the project study area (i.e. NH 10 south of Base Hill Road).

3.1 NH 10 SOUTH OF BASE HILL ROAD SUMMARY AND REGIONAL COMPARISON

The following table provides an overview of the data collected in 2013, 2016 and 2019 (Table 6). The results show that overall between 16.9% and 19.3% of vehicles carried more than one occupant. While gas prices fluctuated between \$2.22 and \$3.53 during the period, the higher cost of gas did not seem to have a relationship to the prevalence of ridesharing based on the data collected by SWRPC.

Table 6 - Summary of Rideshare Study Results (NH 10 south of Base Hill Road)

Year	2019	2016	2013
Corridor	NH 10 South	NH 10 South	NH 10 South
Fuel Price	\$2.650	\$2.224	\$3.531
AM Date	7/16/2019	7/7/2016	9/26/2013
AM Start	7:30 AM	7:30 AM	7:00 AM
AM End	8:30 AM	8:30 AM	8:00 AM
AM Duration	1:00	1:00	1:00
PM Date	7/18/2019	7/5/2016	9/24/2013
PM Start	4:30 PM	4:30 PM	4:00 PM
PM End	5:30 PM	5:30 PM	5:00 PM
PM Duration	1:00	1:00	1:00
1 Passenger Vehicles	1,759	1,779	1,882
2 Passenger Vehicles	375	374	324
3 Passenger Vehicles	17	40	45
4+ Passenger Vehicles	9	12	13
Total Vehicles	2,160	2,205	2,264
Average Vehicle Occupancy	1.20	1.22	1.20
% People Ridesharing	32.2%	34.0%	30.7%
% Vehicles Ridesharing	18.6%	19.3%	16.9%

Source: SWRPC

However, compared to other studies conducted in the region during the same years, regional figures suggest that the site had a higher frequency of people ridesharing compared to other study sites in 2019 and 2016 (Table 7). More work is needed to assess the statistical significance of this finding and reasons for this difference.

Table 7 - Regional Comparison of Rideshare Study Results

	2019		2016		2013	
	NH 10 south of Base Hill Road	Region Average (based on 8 locations)	NH 10 south of Base Hill Road	Region Average (based on 10 locations)	NH 10 South of Base Hill Road	Region Average (based on 8 locations)
Average Vehicle Occupancy	1.20	1.18	1.22	1.21	1.20	1.20
% People Ridesharing	32.2%	28.1%	34.0%	32.8%	30.7%	30.8%
% Vehicles Ridesharing	18.6%	15.6%	19.3%	18.6%	16.9%	17.2%

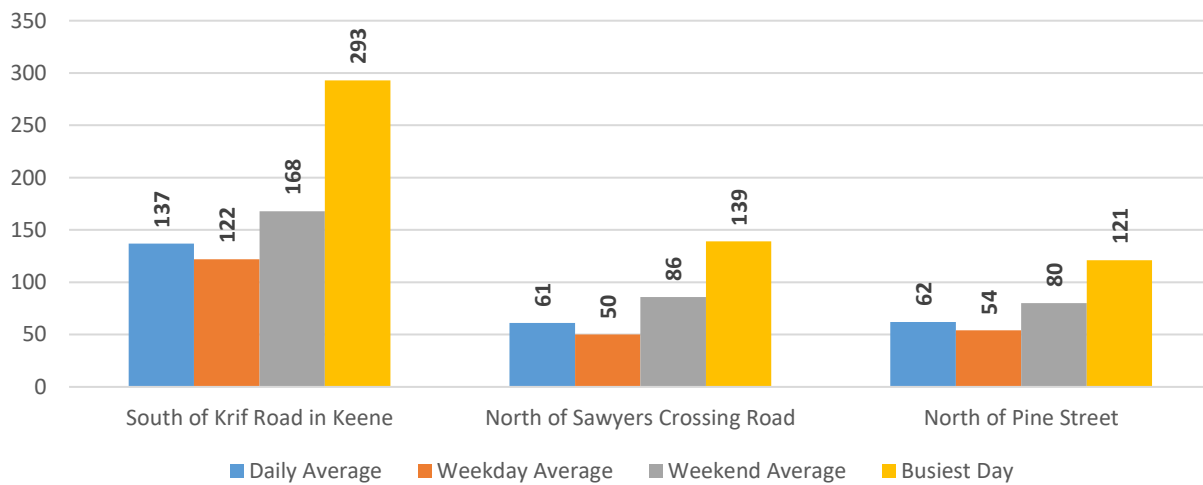
Source: SWRPC

4 BICYCLE AND PEDESTRIAN TRAFFIC STUDIES

4.1 ASHUELOT RAIL TRAIL STUDIES

No new counts of people walking or biking were conducted as part of the project. However, there are three recent studies of people walking and biking along the Ashuelot Rail Trail that are relevant to the project. The trail parallels NH 10 to the east throughout the Town of Swanzey and serves as an alternate route to the highway and highway shoulder that lacks dedicated facilities for walking and biking. Results indicated daily volumes of between 50 trips per day and 293 trips per day depending on the location and day of the week (Figure 6).

Figure 6 - Count Location Summary (Trips per Day)



The following pages include detailed reports about each study.

4.2 STRAVA METRO AND STRAVA GLOBAL HEATMAP

Software developer Strava offers [Strava Metro](#) to Departments of Transportation, counties, cities and others interested in quantifying the relative popularity of routes for walking and biking. A review of Strava Metro data by SWRPC indicated relatively strong popularity for trips by bike with State facilities (NH 10, Base Hill Road, Sawyers Crossing Road, Ashuelot Rail Trail) as well as local roads (including Eaton Road and California Street). The popularity of routes for walking and running was dominated by the Ashuelot Rail Trail (particularly north from West Swanzey) and other local roads. Even without access to Strava Metro, individuals are free to utilize Strava's [Global Heatmap](#) to view similar data.