NOVEMBER 2018

WIM #30
MN 61, MP 16.3
TWO HARBORS, MN

MONTHLY REPORT

Your Destination...Our Priority

WIM Site Location

WIM #30 is located on MN 61 near Two Harbors in Lake county.

System Operation

WIM #30 was operational for the entire month of November 2018. Volume was computed using all monthly data.

System Calibration

WIM #30 was most recently calibrated on 2017-01-20. Table 1 summarizes the front axle weights of class 9s by lane [1]. Table 1 indicates that the class 9 front axle weights were all within +/- 9% of baseline calibration values for all lanes except lane 1. Figure 1 shows the distribution of gross vehicle weights (GVW) in Class 9 vehicles at this site for the last 12 months of operation [2]. Figure 2 depicts the average front axle weight as a percent difference from the first full month following calibration.

Summary of Volume Statistics

Total Monthly Volume: 213943 | Passenger Vehicles: 199800 | Heavy Commercial Vehicles: 14143

Monthly Average Daily Traffic (MADT): 7131 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 471

See Table 2 for vehicle class breakdown

Passenger Vehicles (PVs) and Heavy Commercial Vehicles (HCVs)

Volume trends. NB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Sundays. SB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Thursdays (see Figure 3 and 4).

Passenger Vehicles (PVs)

Volume trends. On an average 24-hour day (see Figure 5), NB PVs generally reached peak volume levels between 03 PM and 05 PM. Similarly, SB PVs peaked in volume between 12 PM and 04 PM

Heavy Commercial Vehicles (HCVs)

Volume trends. On an average 24-hour day, HCVs traveling NB typically reached peak volume levels between 03 PM and 05 PM, while volume going SB peaked between 12 PM and 04 PM. See Figure 6. Out of all HCVs, the two highest traffic volumes were generated by Class 5's and Class 9's.

Overweight HCVs

Volume trends. Of a total of 14143 HCVs, 2368 of them were overweight [3]. These overweight HCVs contributed to 1.1% of total monthly volume, and 16.9% of total monthly HCV volume. NB overweight vehicles typically reached highest numbers on Wednesdays, with lowest volumes reported on Sundays. SB overweight vehicles tended to reach highest volumes on Tuesdays, with lowest volumes reported on Sundays. See Figure 3 .
The top two overweight violators by class were the class 9 and class 10 vehicles . Overall, overweight vehicles tended to reach peak volume concentrations during typical business hours, with 50.9% of all overweight vehicles traveling SB this month (see Figure 7 & 8). Figure 9 shows the number of vehicles exceeding 88,000 pounds that crossed the WIM over the last 12 months. The highest number of 88,000+ vehicles within the last 12 months occurred in March.
WIMs are currently used as a screening tool for weight enforcement, and it is estimated that the WIM scales can measure gross vehicle weights (GVW) within 90-95% of static weight scale measurements. Due to the possibility of measurement error, vehicles exceeding 10% of their legal weight limits (or 1.1 times their legal weight limits) are considered overweight in this report [4].
Using normal load limits ,501 NB vehicles exceeded 88,000 pounds (383 vehicles were Class 9's; 95 vehicles were Class 10's). Of vehicles traveling SB,

601 NB vehicles exceeded 88,000 pounds (526 vehicles were Class 10's; 42 vehicles were Class 9's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from November 2018.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in November 2018. Data suggests that there were greater numbers of empty Class 9's than fully_loaded Class 9's traveling NB, while there were more fully_loaded Class 9's than empty traveling SB. Data also suggests that there were more empty Class 10's than fully_loaded traveling in the NB direction. In the SB direction, there were more fully_loaded class 10 vehicles.

Freight Totals. A total of 120584 tons of freight was recorded to have crossed the WIM. More freight was shipped SB (50.9%) than NB (49.1%). See Table 4 and Figure 11 for more freight information.

Infrastructure Considerations

Bridge. Bridges No. 9341 and No. 9339, which are respectively on the NB and SB side of MN 61, are approximately 1.5 miles north of WIM #30. Bridge No. 9333 (a box culvert) is approximately 1.8 miles south of WIM #30. WIM #30 recorded a total of 213943 vehicles with a combined GVW of 1538536 kips (1 kip = 1,000 pounds = 0.5 tons) in November 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 12790 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 52.4% of all ESALs were recorded NB while 47.6% was observed SB. In particular, 54% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 18% of total GVW observed this month). See Table 6

and Figures 14-15 for more information on ESALs (Table 6 also provides flexible ESAL factors for each vehicle class using a terminal serviceability of 2.5 and a structural number of 5).

WIM monthly reports can be found at: http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html

MnDOT's vehicle classification scheme and vehicle class groupings for traffic forecasting can be found at: http://www.dot.state.mn.us/traffic/data/data-products.html#weight

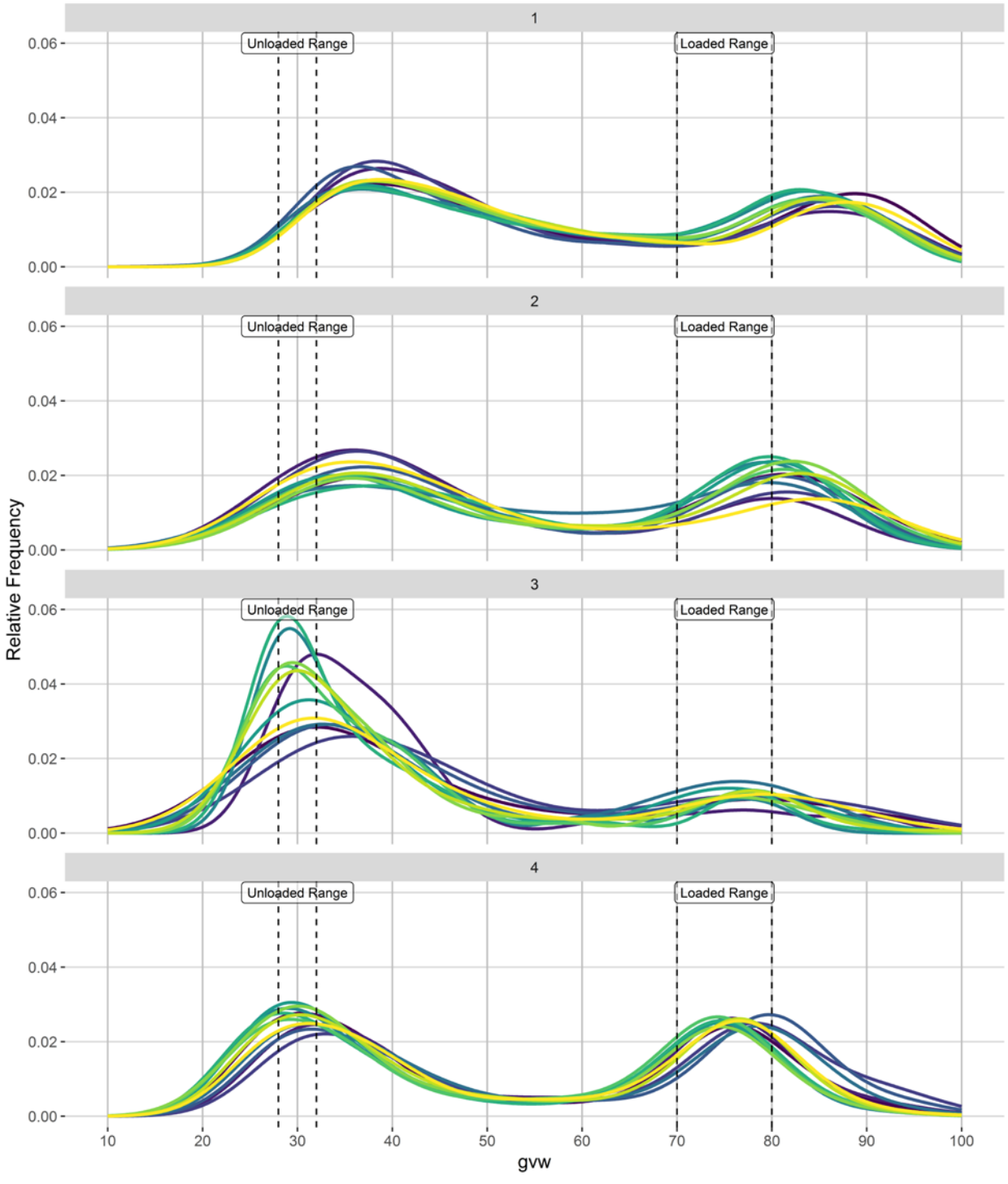
- [1] Front axle weights of Class 9s are monitored on a monthly basis to assure performance between calibrations. The current goal of the WIM scale calibration is to have each individual axle weight stay within a range of ?9% of baseline calibration values

- [2] Previous WIM research indicates that unloaded Class 9s typically weigh 28-32 kips, while loaded Class 9s generally fall in the 70-80 kip range. More recent data from several WIM sites suggests that the unloaded Class 9 range may have moved a little higher over time (due to increased presence of sleeper cabs, etc.), although these ranges are also thought to be site-specific.

- [3] An HCV is considered overweight during normal load limits in this report if they satisfy any of the following 1) exceed a gross vehicle weight (GVW) of 80,000 pounds, 2) exceed any of the legal weight maximums on any axle configurations (legal maximums are: single axle = 20,000 pounds; tandem axles spaced 8' or less = 34,000 pounds; tridem axles spaced 9' or less = 43,000 pounds; quad axles spaced 13' or less = 51,000 pounds). Monthly reports use this standard regardless of the time of year however, the Winter Load Increase (WLI) allows a 10% across the board increase in axle and gross vehicle weights without a permit on US, state routes, and county roads. An HCV is considered overweight during Winter Load Increase(WLI) if they satisfy any of the following 1) exceed a gross vehicle weight (GVW) of 88,000 pounds, 2) exceed any of the legal weight maximums on any axle configurations (legal maximums are: single axle = 22,000 pounds; tandem axles spaced 8' or less = 37,400 pounds; tridem axles spaced 9' or less = 47,300 pounds; quad axles spaced 13' or less = 56,100 pounds). An overweight HCV is only included once in the overweight volume calculations regardless of how many of the aforementioned conditions are violated. For information on MN weight limit dates and statutes: http://www.mrr.dot.state.mn.us/research/seasonal_load_limits/sllindex.asp

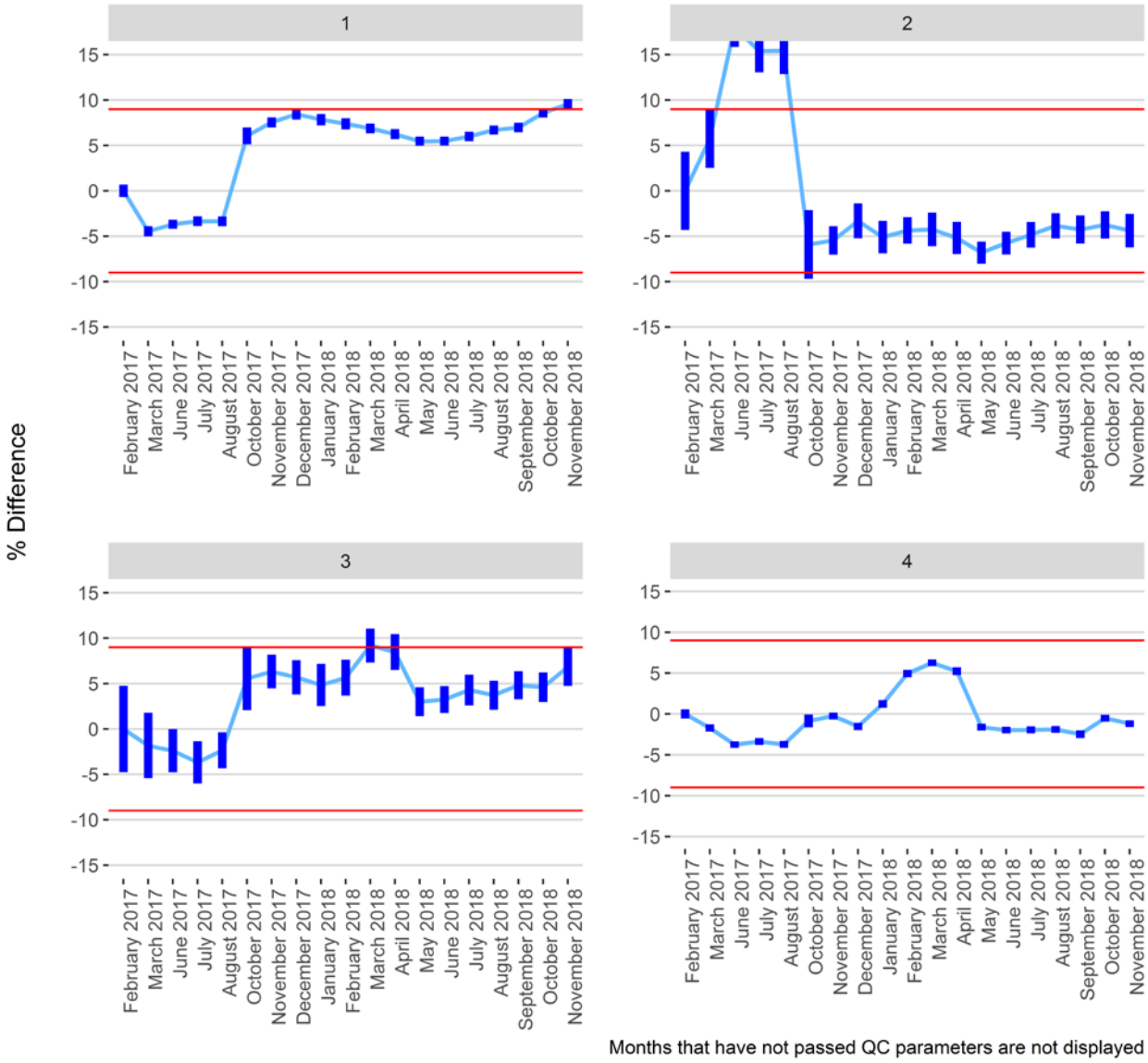
- [4] For example, Class 9s and 10s can legally have gross vehicle weights up to 80,000 lbs (with the exception of permitted loads) during normal load limits. To account for measurement error on the WIM scales, those exceeding 10% of the legal GVW maximum (or 1.1 times the legal GVW) should be screened (e.g., 80,000 lbs + 8,000 lbs = 88,000 lbs). Similarly during WLI vehicles weighing 96,800 lbs should be screened.

Figure 1 - Monthly Class 9 GVW Histogram



Months that have not passed QC parameters are not displayed

Figure 2 - Percent Difference of Front Axle Weight from Last Calibration (+/- 95% CI)



Months that have not passed QC parameters are not displayed

Figure 2 - Average Vehicle Volume vs. Day of the Week

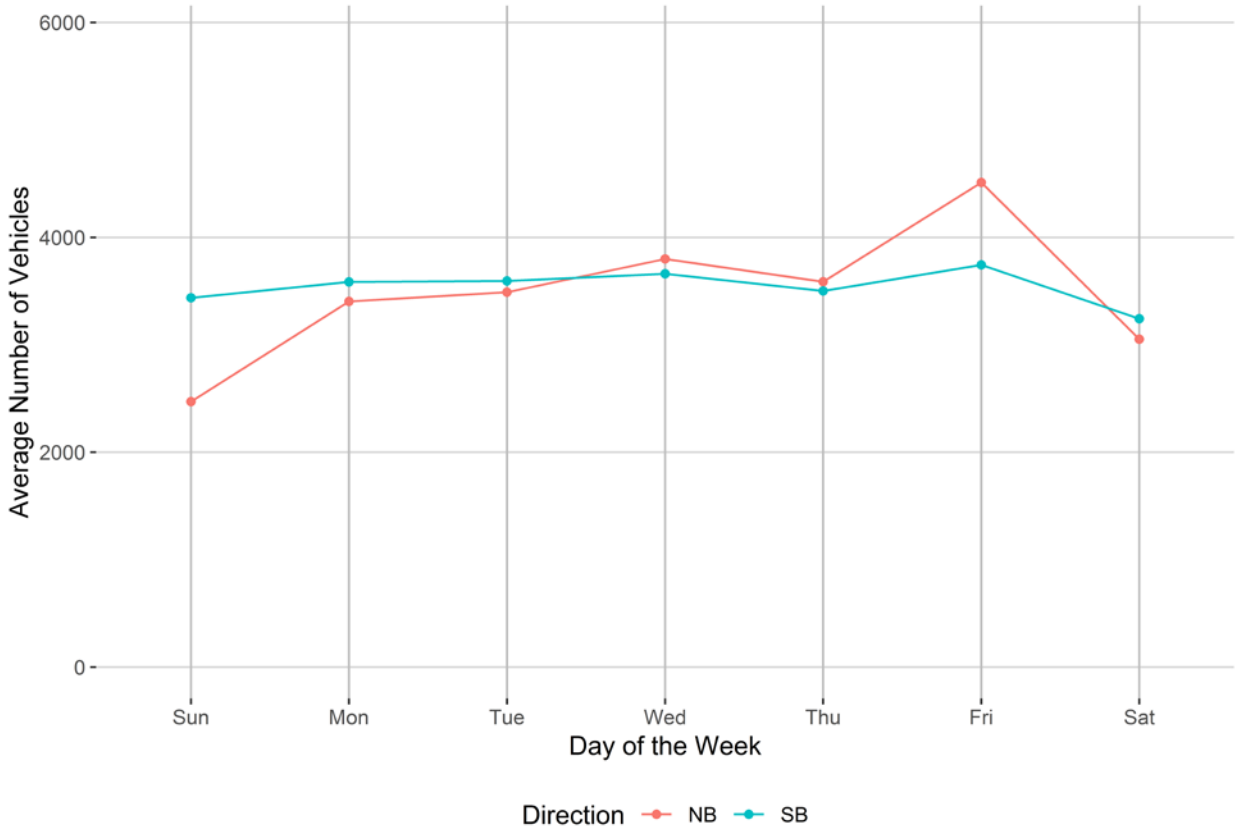


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

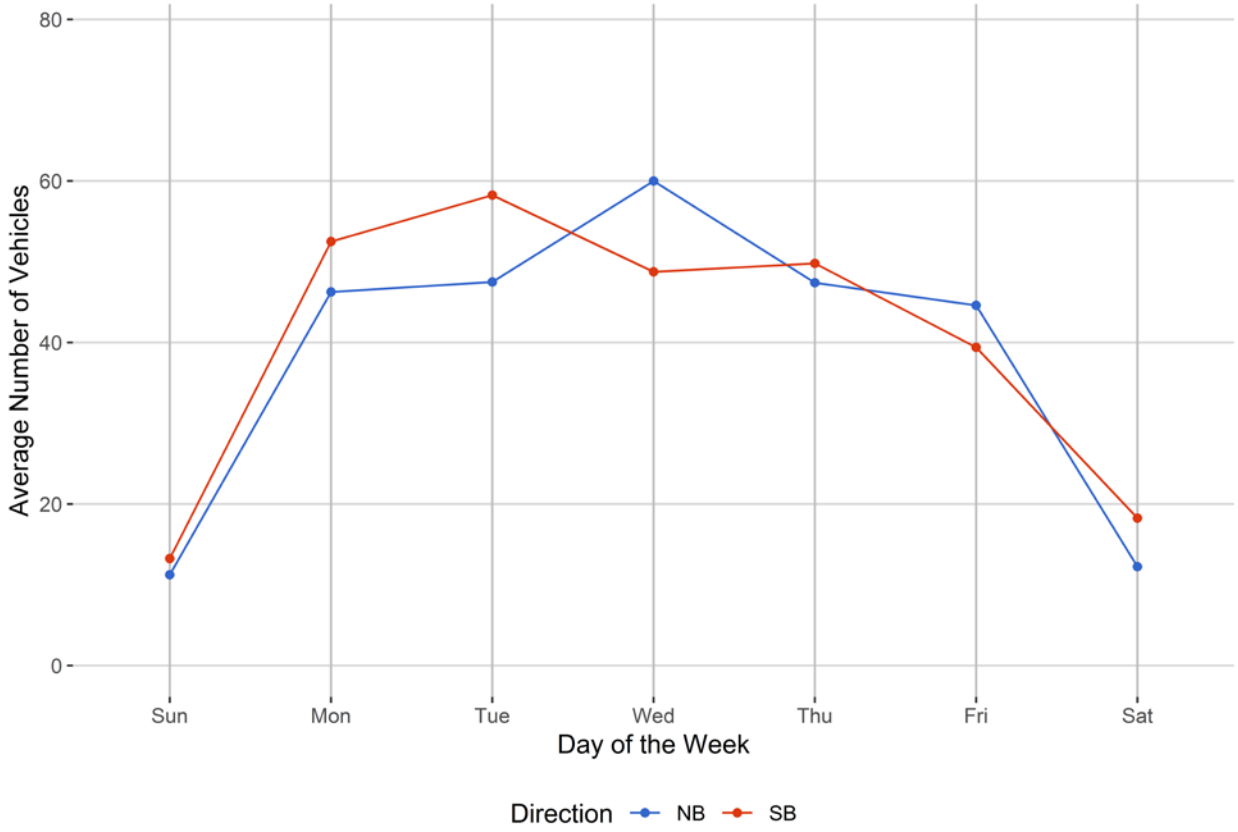


Figure 4 - Passenger Vehicles
vs. Hour of the Day

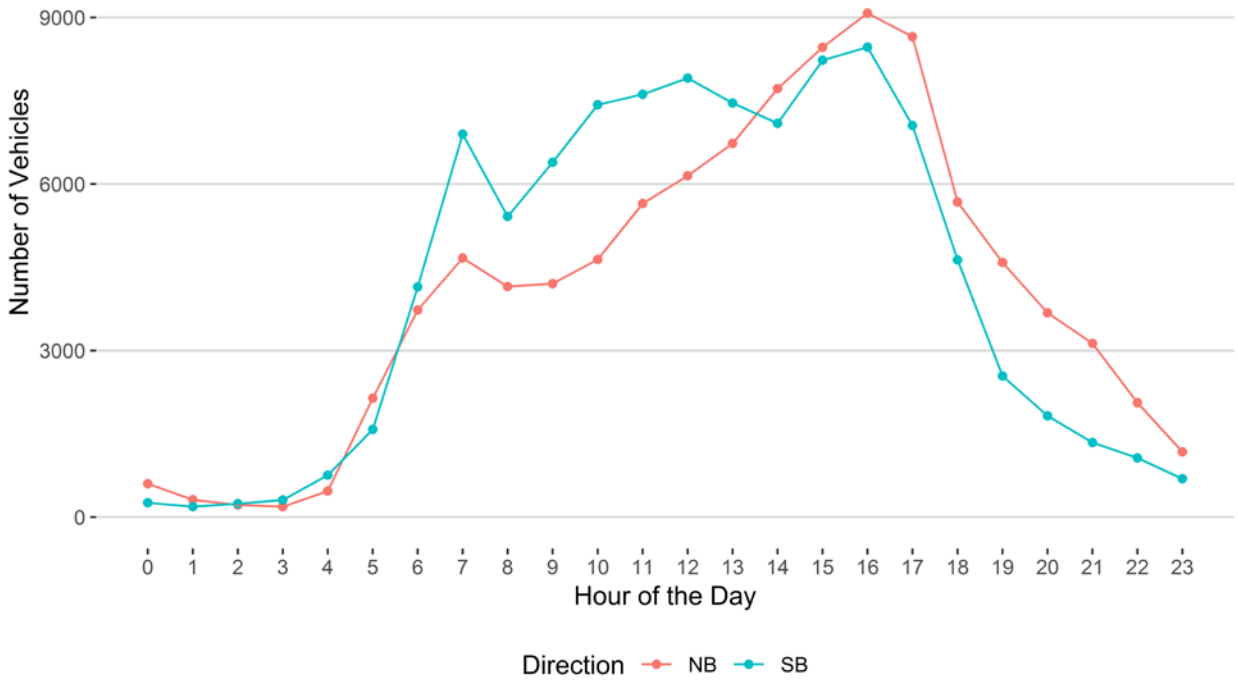


Figure 5 - Heavy Commercial Vehicles
vs. Hour of the Day

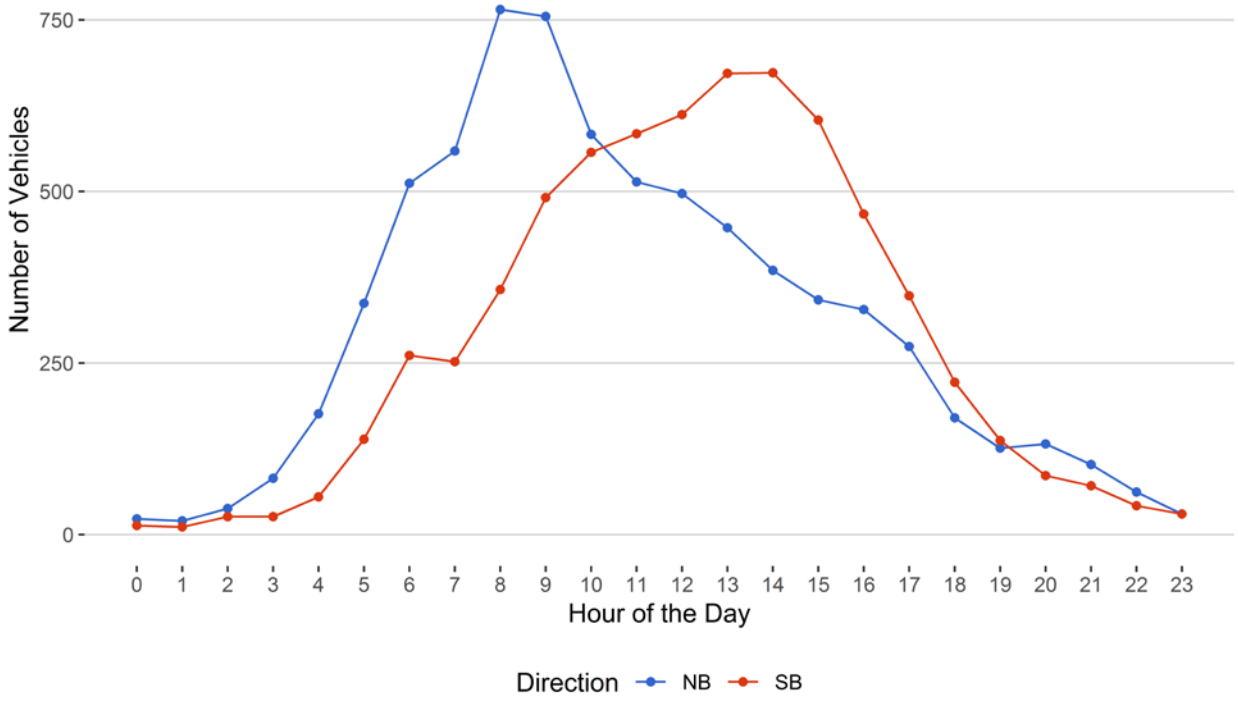


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

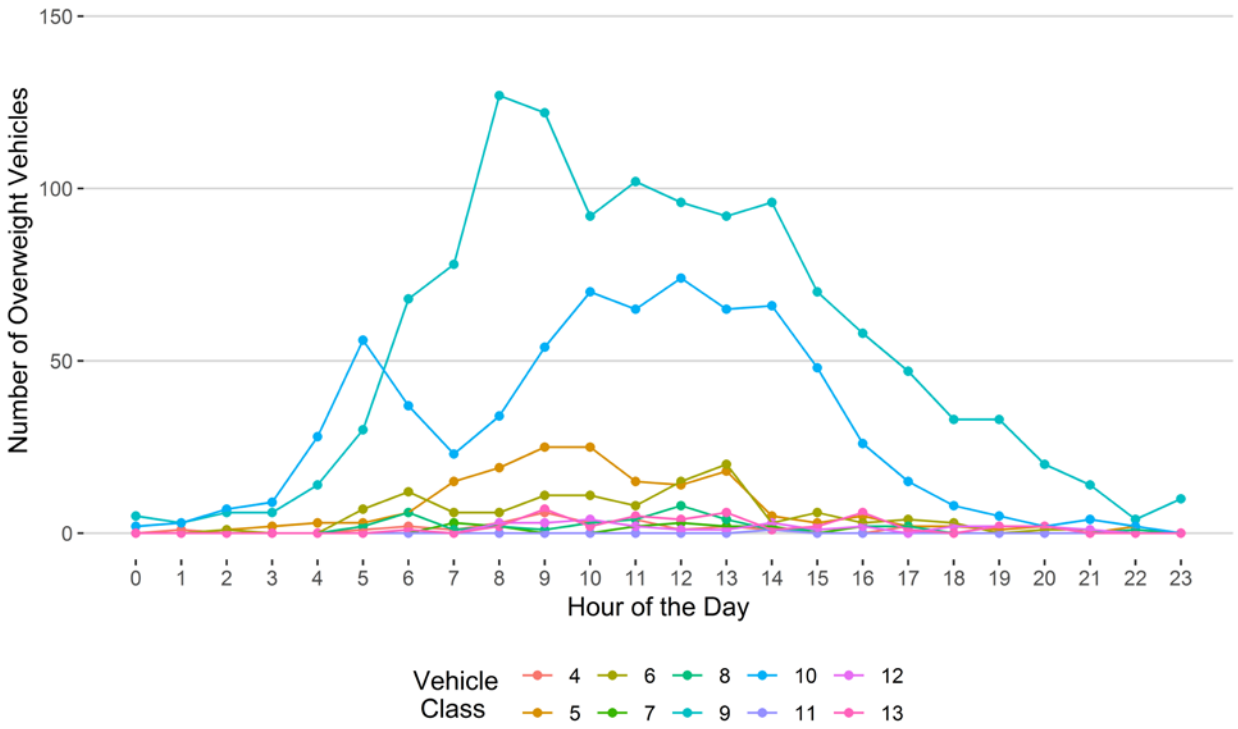


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

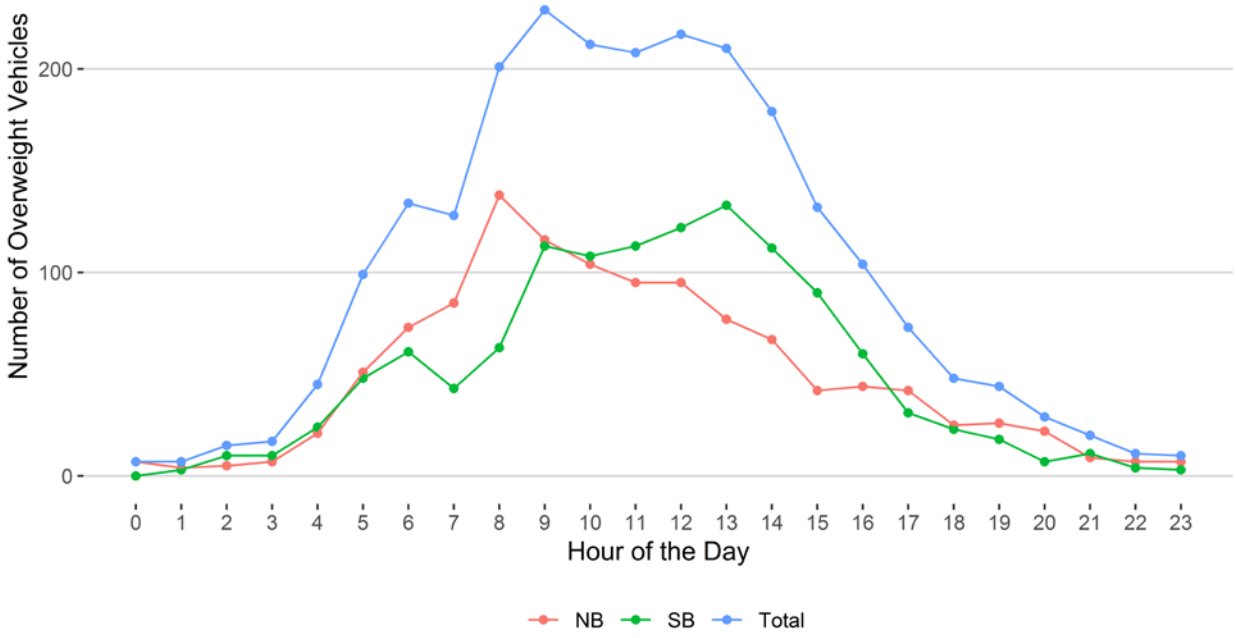
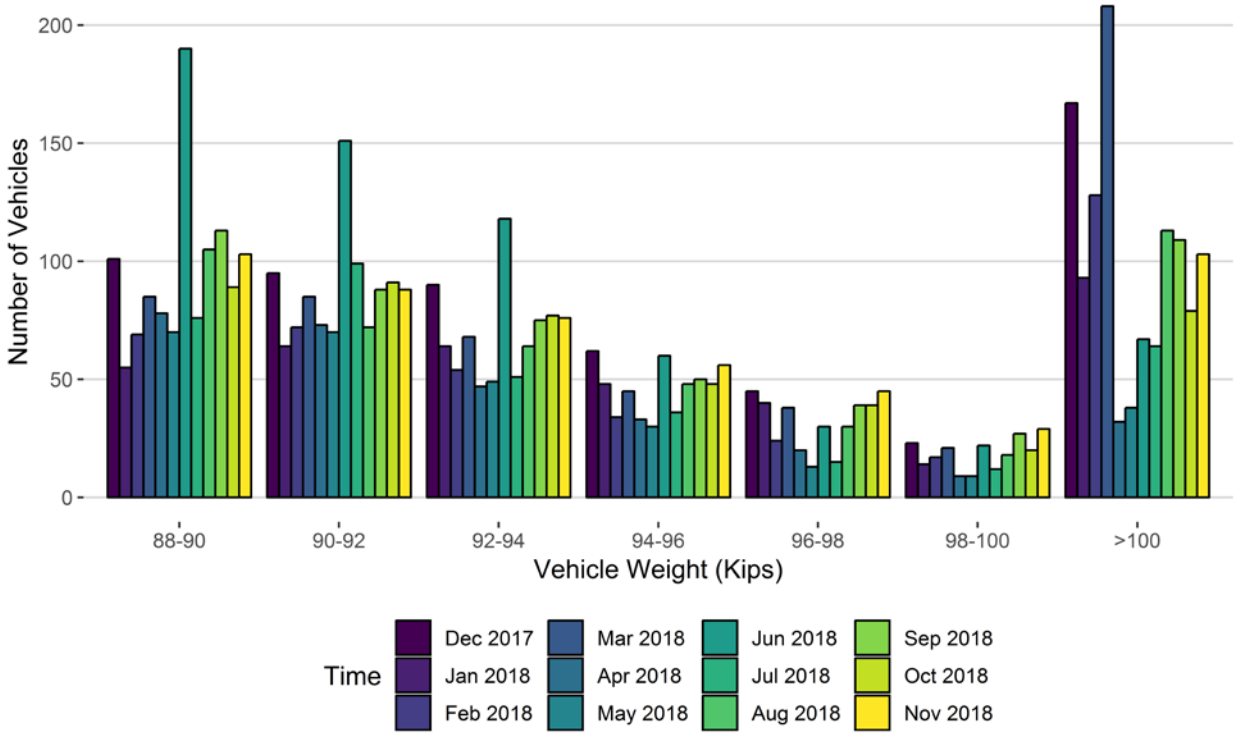
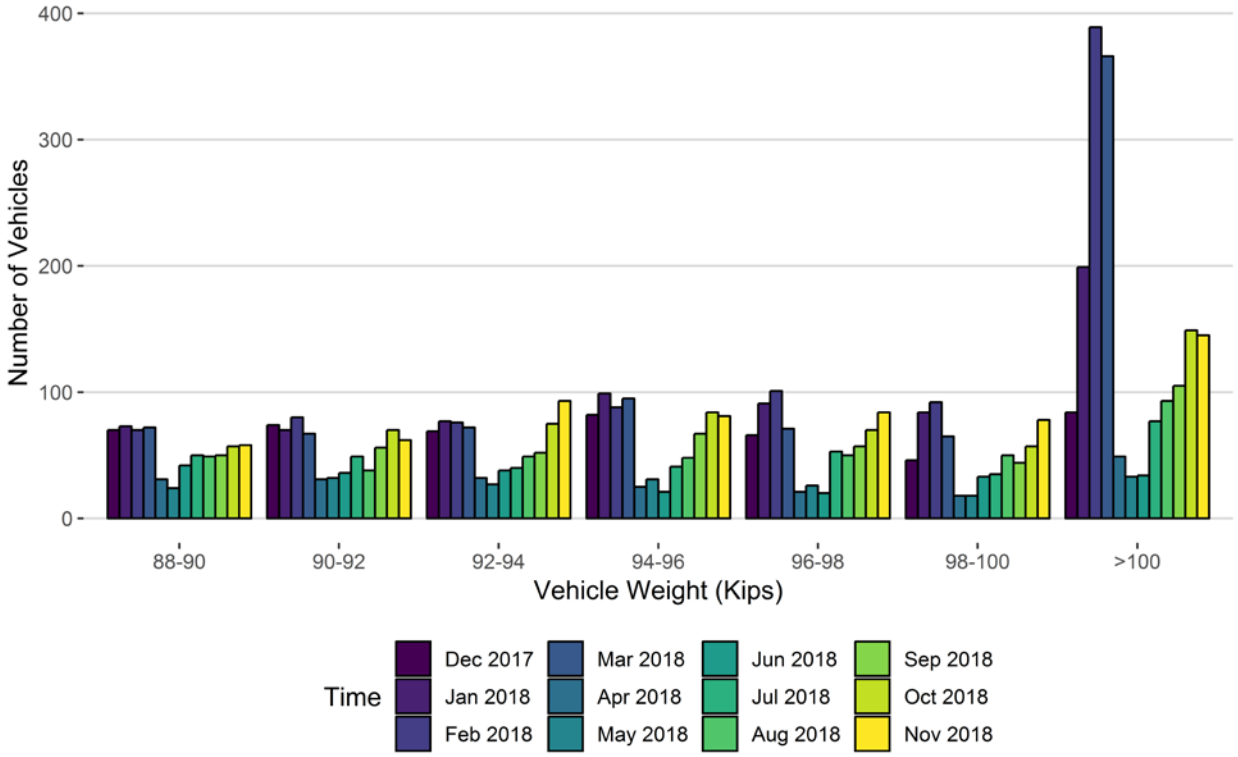


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	*Dec 2017*	*Jan 2018*	*Feb 2018*	*Mar 2018*	*Apr 2018*	*May 2018*	*Jun 2018*	*Jul 2018*	*Aug 2018*	*Sep 2018*	*Oct 2018*	*Nov 2018*
88-90	101	55	69	85	78	70	190	76	105	113	89	103
90-92	95	64	72	85	73	70	151	99	72	88	91	88
92-94	90	64	54	68	47	49	118	51	64	75	77	76
94-96	62	48	34	45	33	30	60	36	48	50	48	56
96-98	45	40	24	38	20	13	30	15	30	39	39	45
98-100	23	14	17	21	9	9	22	12	18	27	20	29
>100	167	93	128	208	32	38	67	64	113	109	79	103
Total	583	378	398	550	292	279	638	353	450	501	443	500

Figure 8 - Histogram of SB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	*Dec 2017*	*Jan 2018*	*Feb 2018*	*Mar 2018*	*Apr 2018*	*May 2018*	*Jun 2018*	*Jul 2018*	*Aug 2018*	*Sep 2018*	*Oct 2018*	*Nov 2018*
88-90	70	73	70	72	31	24	42	50	49	50	57	58
90-92	74	70	80	67	31	32	36	49	38	56	70	62
92-94	69	77	76	72	32	27	38	40	49	52	75	93
94-96	82	99	88	95	25	31	21	41	48	67	84	81
96-98	66	91	101	71	21	26	20	53	50	57	70	84
98-100	46	84	92	65	18	18	33	35	50	44	57	78
>100	84	199	389	366	49	33	34	77	93	105	149	145
Total	491	693	896	808	207	191	224	345	377	431	562	601

Figure 8 - Class 9's and 10's by Direction vs Gross Vehicle Weight

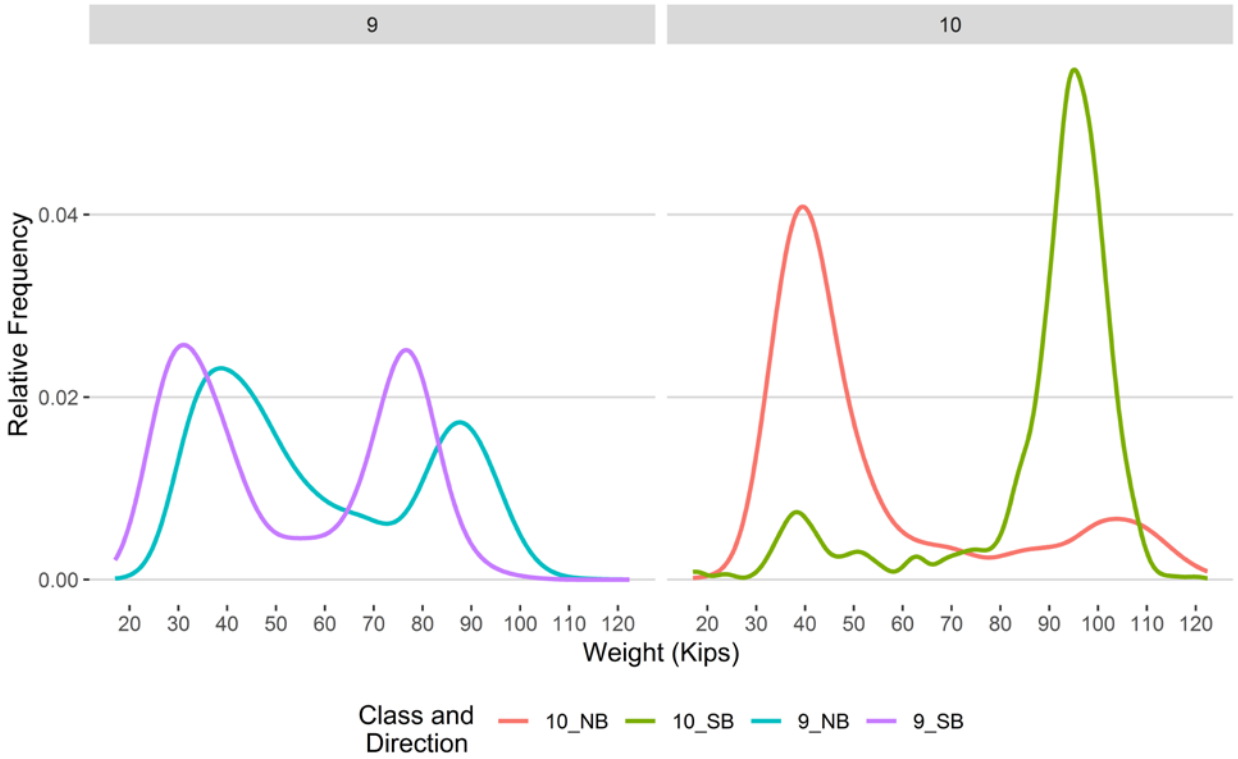


Figure 9 - Freight Percentage by Direction and Class

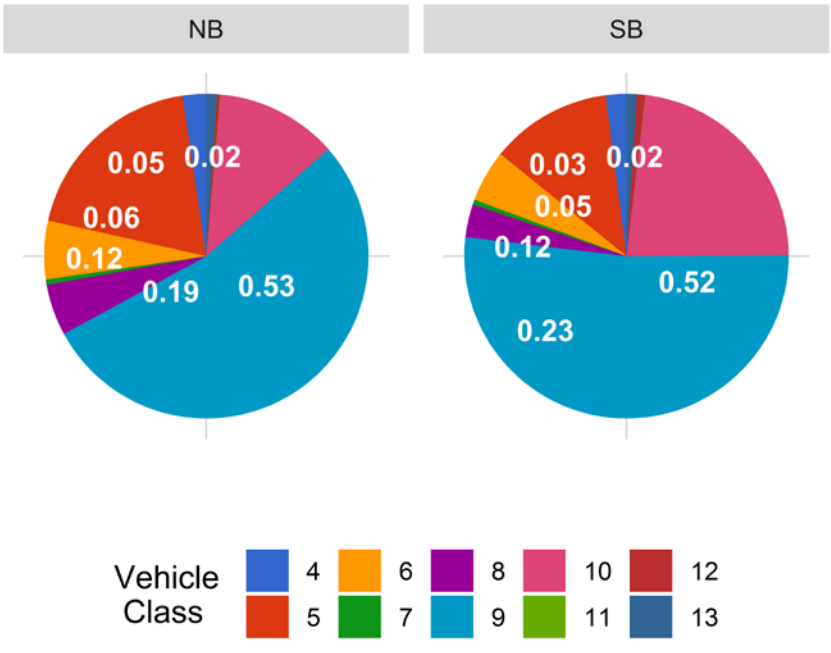


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

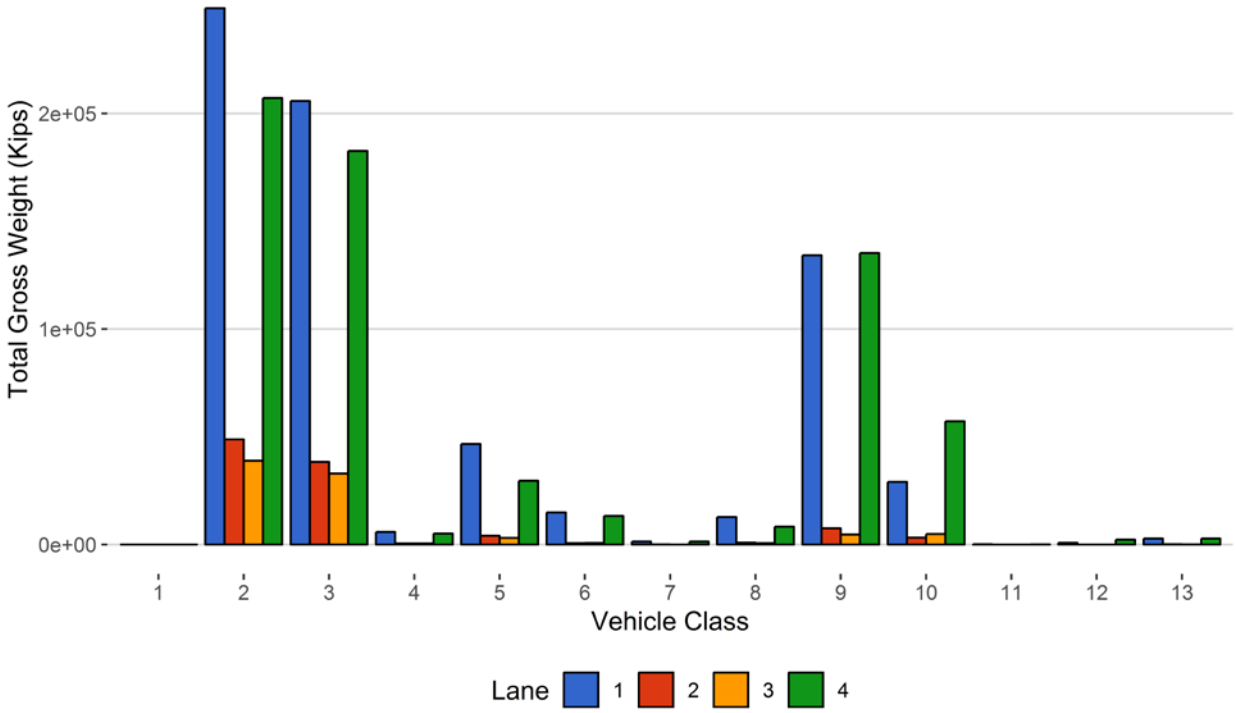


Figure 11 - Total Gross Vehicle Weight b

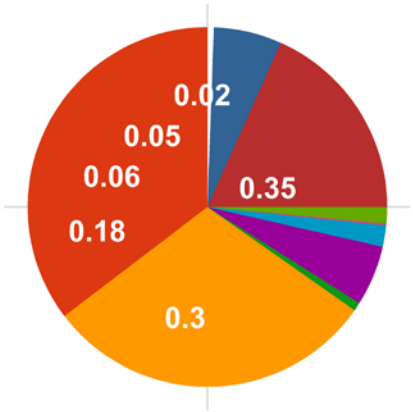


Figure 12 - Total ESALs by Class and Lane

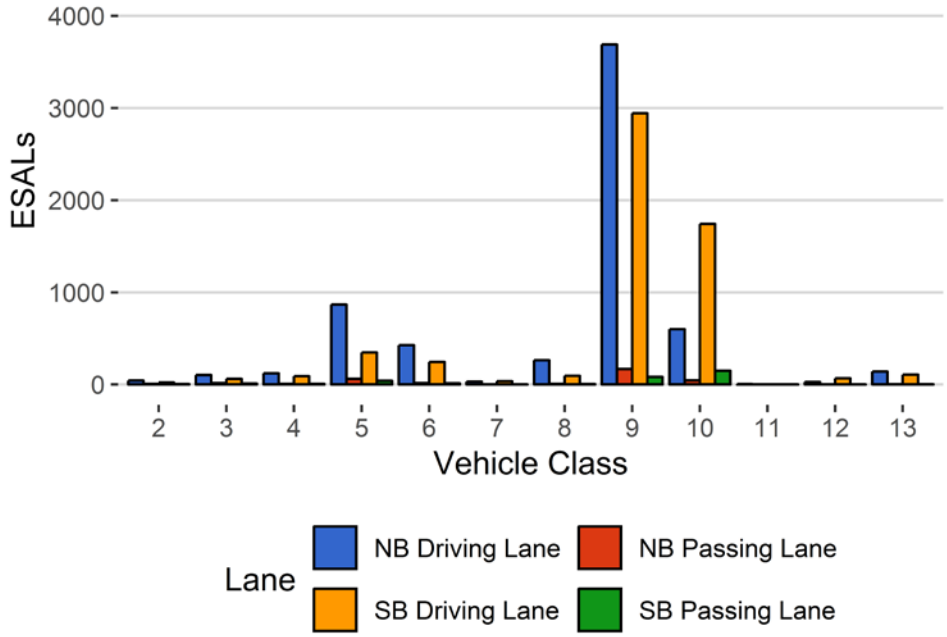


Figure 13 - ESALs by Class

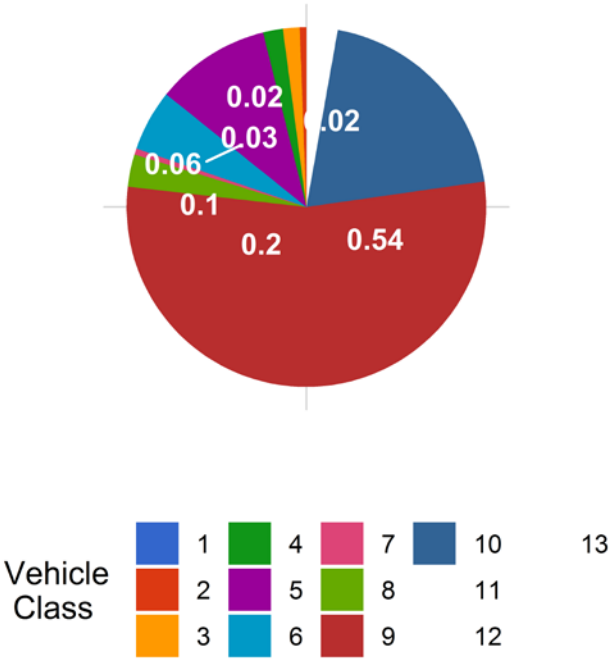


Table 1 Class 9 Front Axle Weight by Lane

Month	*Lane 1 (Kips)*	*Front Axle +/- 9%*	*Lane 2 (Kips)*	*Front Axle +/- 9%*	*Lane 3 (Kips)*	*Front Axle +/- 9%*	*Lane 4 (kips)*	*Front Axle +/- 9%*
February 2017	11.62	0.00	12.12	0.00	10.33	0.00	11.31	0.00
March 2017	11.10	-4.45	12.82	5.74	10.14	-1.83	11.11	-1.71
June 2017	11.19	-3.68	14.31	18.03	10.08	-2.40	10.88	-3.75
July 2017	11.23	-3.35	13.99	15.41	9.95	-3.68	10.93	-3.36
August 2017	11.23	-3.36	13.99	15.43	10.09	-2.35	10.89	-3.73
October 2017	12.32	6.06	11.40	-5.91	10.91	5.55	11.21	-0.85
November 2017	12.49	7.54	11.46	-5.46	10.99	6.32	11.28	-0.25
December 2017	12.60	8.45	11.72	-3.32	10.92	5.69	11.14	-1.52
January 2018	12.53	7.84	11.50	-5.10	10.83	4.84	11.45	1.24
February 2018	12.47	7.38	11.59	-4.37	10.92	5.64	11.87	4.95
March 2018	12.41	6.87	11.61	-4.25	11.28	9.19	12.01	6.26
April 2018	12.34	6.25	11.49	-5.19	11.21	8.47	11.90	5.24
May 2018	12.25	5.47	11.30	-6.81	10.64	3.00	11.12	-1.61
June 2018	12.25	5.47	11.42	-5.75	10.67	3.24	11.08	-1.97
July 2018	12.31	5.98	11.54	-4.83	10.78	4.29	11.09	-1.94
August 2018	12.39	6.70	11.65	-3.85	10.72	3.72	11.09	-1.88
September 2018	12.43	6.97	11.60	-4.27	10.83	4.82	11.03	-2.48
October 2018	12.61	8.58	11.67	-3.76	10.81	4.59	11.25	-0.51
November 2018	12.73	9.56	11.59	-4.38	11.04	6.84	11.17	-1.18

Table 2 Vehicle Classification Data

Vehicle Class	*Monthly Average Daily Volume*	*Monthly Total Volume*	*Monthly Total Volume Percentage*	*Monthly Total Overweight Vehicles*	*Monthly Total Overweight Percentage*
1	0	1	0	0	0
2	4316	129471	60.5	0	0
3	2344	70328	32.9	0	0
4	14	425	0.2	29	1.2
5	188	5640	2.6	168	7.1
6	28	831	0.4	118	5
7	2	51	0	16	0.7
8	25	742	0.3	38	1.6
9	168	5050	2.4	1226	51.8
10	44	1314	0.6	703	29.7
11	0	4	0	1	0
12	1	36	0	28	1.2
13	2	51	0	41	1.7
TOTAL	**7131**	**213943**	**100**	**2368**	**100**

Table 3 Top 10 Gross Vehicle Weight, Class 9 and 10

Date	*Day of Week*	*Time*	*Vehicle Class*	*Direction*	*Lane*	*GVW (lbs)*
2018-11-09	Friday	04:34:13	10	NB	1	122.39
2018-11-15	Thursday	14:47:36	10	NB	1	121.86
2018-11-13	Tuesday	12:50:33	10	NB	1	120.19
2018-11-20	Tuesday	18:24:30	10	SB	4	120.05
2018-11-30	Friday	05:36:21	10	NB	1	117.12
2018-11-06	Tuesday	04:15:01	10	NB	1	116.99
2018-11-18	Sunday	18:34:36	10	NB	1	116.43
2018-11-20	Tuesday	15:28:41	10	SB	4	115.49
2018-11-12	Monday	05:39:55	10	NB	1	115.39
2018-11-19	Monday	17:00:22	10	NB	1	115.37

Table 4 Freight Summary

Vehicle Class	*Direction*	*Weight of Empty Vehicle (Kips)*	*Total Number of Vehicles*	*Number of Empty Vehicles*	*Percentage of Empty Vehicles*	*Total Weight of Vehicles with Freight (Kips)*	*Total Weight of Empty Vehicles (Kips)*	*Total Weight of Freight (Tons)*
4	NB	15	213	21	9.9	5952	274	1536
5	NB	8	3212	76	2.4	50136	568	12524
6	NB	19	394	2	0.5	15401	34	3976
7	NB	11.5	24	0	0	1416	0	570
8	NB	31	404	134	33.2	11062	2524	1346
9	NB	33	2380	206	8.7	135409	6368	31833
10	NB	33.5	596	51	8.6	30582	1613	6162
11	NB	36.5	2	1	50	79	23	21
12	NB	36.5	10	1	10	767	18	219
13	NB	31.5	24	0	0	2836	0	1040
TOTAL	****	****	**7259**	**492**	****	**253639**	****	**59228**
Vehicle Class	Direction	Weight of Empty Vehicle (Kips)	Total Number of Vehicles	Number of Empty Vehicles	Percentage of Empty Vehicles	Total Weight of Vehicles with Freight (Kips)	Total Weight of Empty Vehicles (Kips)	Total Weight of Freight (Tons)
4	SB	15	208	65	31.2	4702	846	1279
5	SB	8	2369	425	17.9	29524	3034	6986
6	SB	19	428	23	5.4	13536	387	2921
7	SB	11.5	26	0	0	1332	0	517
8	SB	31	330	226	68.5	3937	4910	357
9	SB	33	2617	707	27	119963	19862	28467
10	SB	33.5	704	9	1.3	61705	228	19211
11	SB	36.5	2	1	50	44	18	4
12	SB	36.5	26	1	3.8	2199	17	643
13	SB	31.5	26	0	0	2763	0	972
TOTAL	****	****	**6736**	**1457**	****	**239706**	****	**61355**
GRAND TOTAL	****	****	**13995**	**1949**	**328**	**493345**	**40724**	**120584**

Table 5 Gross Vehicle Weight by Class and Lane

Vehicle Class	*NB Driving Lane*	*NB Passing Lane*	*SB Passing Lane*	*SB Driving Lane*	*Total*	*Percentage*
1	0	0	1	0	1	0
2	248883	48750	38855	207229	543717	35.4
3	205818	38338	32900	182602	459658	29.9
4	5749	478	475	5073	11774	0.8
5	46654	4050	3036	29522	83262	5.4
6	14837	598	676	13247	29357	1.9
7	1360	56	0	1332	2748	0.2
8	12728	858	593	8254	22432	1.5
9	134234	7543	4606	135219	281602	18.3
10	29051	3143	4791	57142	94128	6.1
11	102	0	0	62	164	0
12	786	0	0	2216	3001	0.2
13	2736	100	66	2697	5599	0.4
TOTAL	**702937**	**103913**	**86000**	**644596**	**1537445**	**100**
GVW/LANE	**45.72**	**6.76**	**5.59**	**41.93**	**100**	**0.01**

Table 6 ESALs by Class and Lane and Flexible ESAL Factors

Vehicle Class	*NB Driving Lane*	*NB Passing Lane*	*SB Passing Lane*	*SB Driving Lane*	*Total*	*Percentage*	*Flexible ESAL Factor*
1	0	0	0	0	0	0	0.5
2	42	7	5	22	76	0.6	0.0012
3	103	16	11	61	191	1.5	0.0056
4	122	8	7	90	227	1.78	1.08
5	868	61	41	347	1317	10.34	0.47
6	427	16	13	245	701	5.5	1.71
7	33	1	0	37	71	0.56	2.62
8	264	6	4	95	370	2.91	1.01
9	3690	168	83	2945	6886	54.08	2.76
10	601	45	149	1744	2539	19.94	3.9
11	5	0	0	0	5	0.04	1.42
12	28	0	0	69	97	0.76	4.3
13	142	2	2	107	254	1.99	8.29
TOTAL	**6324**	**331**	**315**	**5763**	**12733**	**100**	**28**
ESALS/LANE	**49.7**	**2.6**	**2.5**	**45.3**	**100**	**–**	**–**

Table 7 Site Summary: Volume and Vehicle Class

Month	*Total Volume*	*Monthly ADT*	*Monthly HCADT*	*Passenger Vehicles*	*Passenger Vehicles %*	*Heavy Commercial Vehicles*	*Heavy Commercial Vehicles %*	*Heavy Commercial Vehicles in Driving Lane %*	*Heavy Commercial Vehicles in Passing Lane %*
Dec 2017	210731	6798	402	198277	94.1	12454.1	5.9	93.2	6.8
Jan 2018	203332	6559	416	190447	93.7	12885.2	6.3	94.4	5.6
Feb 2018	187761	6706	445	175314	93.4	12446.9	6.6	93.7	6.3
Mar 2018	227467	7338	458	213260	93.8	14206.9	6.2	93.5	6.5
Apr 2018	208109	6937	390	196423	94.4	11686.2	5.6	93.5	6.5
May 2018	275473	8886	486	260406	94.5	15066.6	5.5	91.8	8.2
Jun 2018	306452	10215	626	287683	93.9	18769.5	6.1	90.8	9.2
Jul 2018	350547	11308	574	332764	94.9	17782.9	5.1	90.2	9.8
Aug 2018	358059	11550	592	339709	94.9	18350	5.1	90.6	9.4
Sep 2018	313915	10464	604	295806	94.2	18109.5	5.8	90.9	9.1
Oct 2018	288734	9314	557	271460	94	17274.5	6	91.5	8.5
Nov 2018	213943	7131	471	199800	93.4	14142.7	6.6	92.7	7.3
TOTAL	**3144523**	**–**	**–**	**2961349**	**–**	**183175**	**–**	**–**	**–**
AVERAGE	**262044**	**8601**	**502**	**246779**	**94**	**15265**	**6**	**92**	**8**

ESALs

Month	*ESALS NB Passing Lane*	*ESALS NB Driving Lane*	*ESALS SB Driving Lane*	*ESALS SB Passing Lane*	*Total ESALS*	*Driving Lane ESALS %*	*Passing Lane ESALS %*	*Pavement Life Decrease Months*
Dec 2017	6031	297	262	4744	11333	95	5	62.1
Jan 2018	5226	297	153	5862	11538	96	4	70
Feb 2018	5255	266	317	7250	13089	96	4	91.1
Mar 2018	6638	321	340	7817	15116	96	4	71.8
Apr 2018	4677	226	180	4274	9357	96	4	29.7
May 2018	5870	397	196	4186	10649	94	6	19.6
Jun 2018	8117	587	372	5176	14252	93	7	29.4
Jul 2018	6965	535	336	5229	13065	93	7	23.1
Aug 2018	7274	628	412	5605	13919	93	7	29.6
Sep 2018	7125	574	424	5493	13615	93	7	31.5
Oct 2018	7067	554	340	6223	14184	94	6	31.9
Nov 2018	6376	331	315	5768	12790	95	5	48.1
TOTAL	**76620**	**5013**	**3647**	**67628**	**152908**	**–**	**–**	**–**
AVERAGE	**6385**	**418**	**304**	**5636**	**12742**	**94**	**6**	**45**

Gross Vehicle Weight

Month	*GVW NB Passing Lane*	*GVW NB Driving Lane*	*GVW SB Passing Lane*	*GVW SB Driving Lane*	*Total GVW Kips*
Dec 2017	642847	77552	51867	631608	1403875
Jan 2018	612031	73787	60261	626261	1372339
Feb 2018	725128	97474	95556	725911	1644069
Mar 2018	624365	79369	76549	597736	1378018
Apr 2018	805267	135068	123381	716964	1780680
May 2018	956809	179159	163542	840328	2139837
Jun 2018	989942	190861	199906	891495	2272204
Jul 2018	1029912	206482	199903	915971	2352268
Aug 2018	928245	167946	179934	843547	2119672
Sep 2018	874341	151885	156271	815285	1997782
Oct 2018	703774	103950	86051	644760	1538536
Nov 2018	675664	81599	69056	602852	1429172
TOTAL	**9568325**	**1545133**	**1462277**	**8852718**	**21428453**
AVERAGE	**797360**	**128761**	**121856**	**737727**	**1785704**

Overweight Vehicles

Month	*Total Number of Overweight Vehicles*	*Overweight / Total Volume*	*Overweight / Heavy Commercial Volume*	*Number Over 88,000 lbs*	*Number Over 98,000 lbs*
Dec 2017	2132	1	17.2	1074	320
Jan 2018	2101	1.1	16.5	1071	390
Feb 2018	2416	1.3	19.6	1294	626
Mar 2018	2872	1.3	20.3	1363	661
Apr 2018	1663	0.8	14.3	499	108
May 2018	1827	0.7	12.2	470	98
Jun 2018	2892	1	15.4	866	157
Jul 2018	2415	0.7	13.6	700	189
Aug 2018	2476	0.7	13.5	830	275
Sep 2018	2546	0.8	14.1	934	286
Oct 2018	2727	0.9	15.8	1007	305
Nov 2018	2379	1.1	16.9	1102	355
TOTAL	**28446**	**–**	**–**	**11210**	**3770**
AVERAGE	**2370.5**	**1**	**15.8**	**934.2**	**314.2**

Freight

Month	*NB Freight Tons*	*SB Freight Tons*	*Total Freight*	*NB Freight %*	*SB Freight %*
Dec 2017	55298	50890	106189	52.1	47.9
Jan 2018	49987	59879	109866	45.5	54.5
Feb 2018	48947	66785	115732	42.3	57.7
Mar 2018	61186	72833	134019	45.7	54.3
Apr 2018	46511	43976	90486	51.4	48.6
May 2018	61664	47687	109351	56.4	43.6
Jun 2018	88451	64157	152607	58	42
Jul 2018	72207	58420	130627	55.3	44.7
Aug 2018	73261	62083	135345	54.1	45.9
Sep 2018	75479	60417	135896	55.5	44.5
Oct 2018	71194	66929	138122	51.5	48.5
Nov 2018	59228	61355	120584	49.1	50.9
TOTAL	**763413**	**715410**	**1478823**	**–**	**–**
AVERAGE	**63617.8**	**59617.5**	**123235.3**	**51.4**	**48.6**