

AUGUST 2018



09/14/2010

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

**MONTHLY
REPORT**



09/14/2010

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 August 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. 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: 358059 | Passenger Vehicles: 339709 | Heavy Commercial Vehicles: 18350

Monthly Average Daily Traffic (MADT): 11550 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 592

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 Tuesdays. SB vehicles typically reached highest volume levels on Sundays, with lowest volumes reported on Tuesdays (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 02 PM and 04 PM. Similarly, SB PVs peaked in volume between 02 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 02 PM and 04 PM, while volume going SB peaked between 02 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 18350 HCVs, 2448 of them were overweight³. These overweight HCVs contributed to 0.7% of total monthly volume, and 13.4% of total monthly HCV volume. NB overweight vehicles typically reached highest numbers on Thursdays, with lowest volumes reported on Sundays. SB overweight vehicles tended to reach highest volumes on Tuesdays, with lowest volumes reported on Saturdays. 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 60.6% of all overweight vehicles traveling NB 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 report⁴.

Using normal load limits ,453 NB vehicles exceeded 88,000 pounds (249 vehicles were Class 9's; 136 vehicles were Class 10's). Of vehicles traveling SB,

377 NB vehicles exceeded 88,000 pounds (302 vehicles were Class 10's; 41 vehicles were Class 9's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from August 2018.

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

Freight Totals. A total of 135345 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (54.1%) than SB (45.9%). 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 358059 vehicles with a combined GVW of 2352268 kips (1 kip = 1,000 pounds = 0.5 tons) in August 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 13919 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 56.8% of all ESALs were recorded NB while 43.2% was observed SB. In particular, 49% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 13% 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).

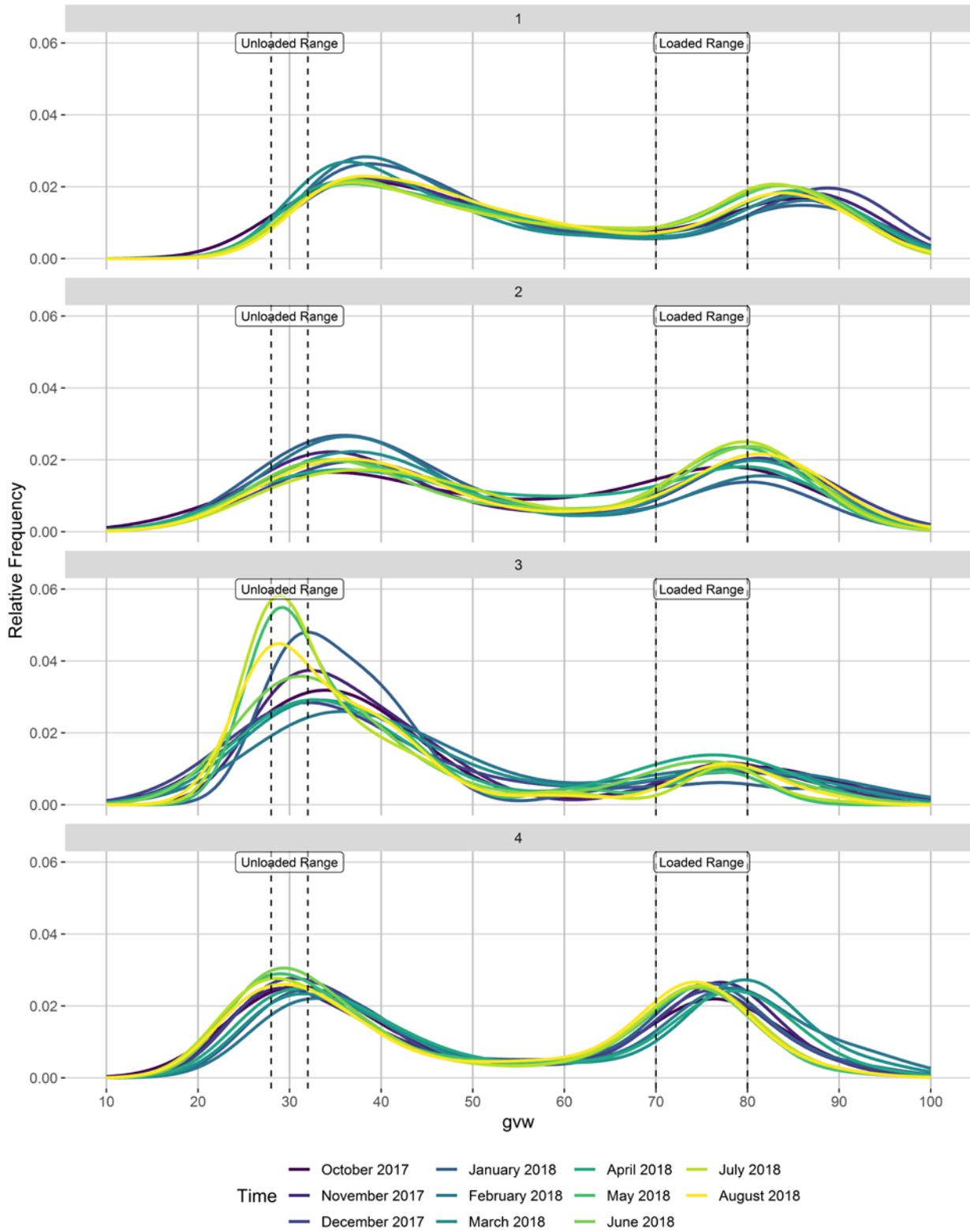
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

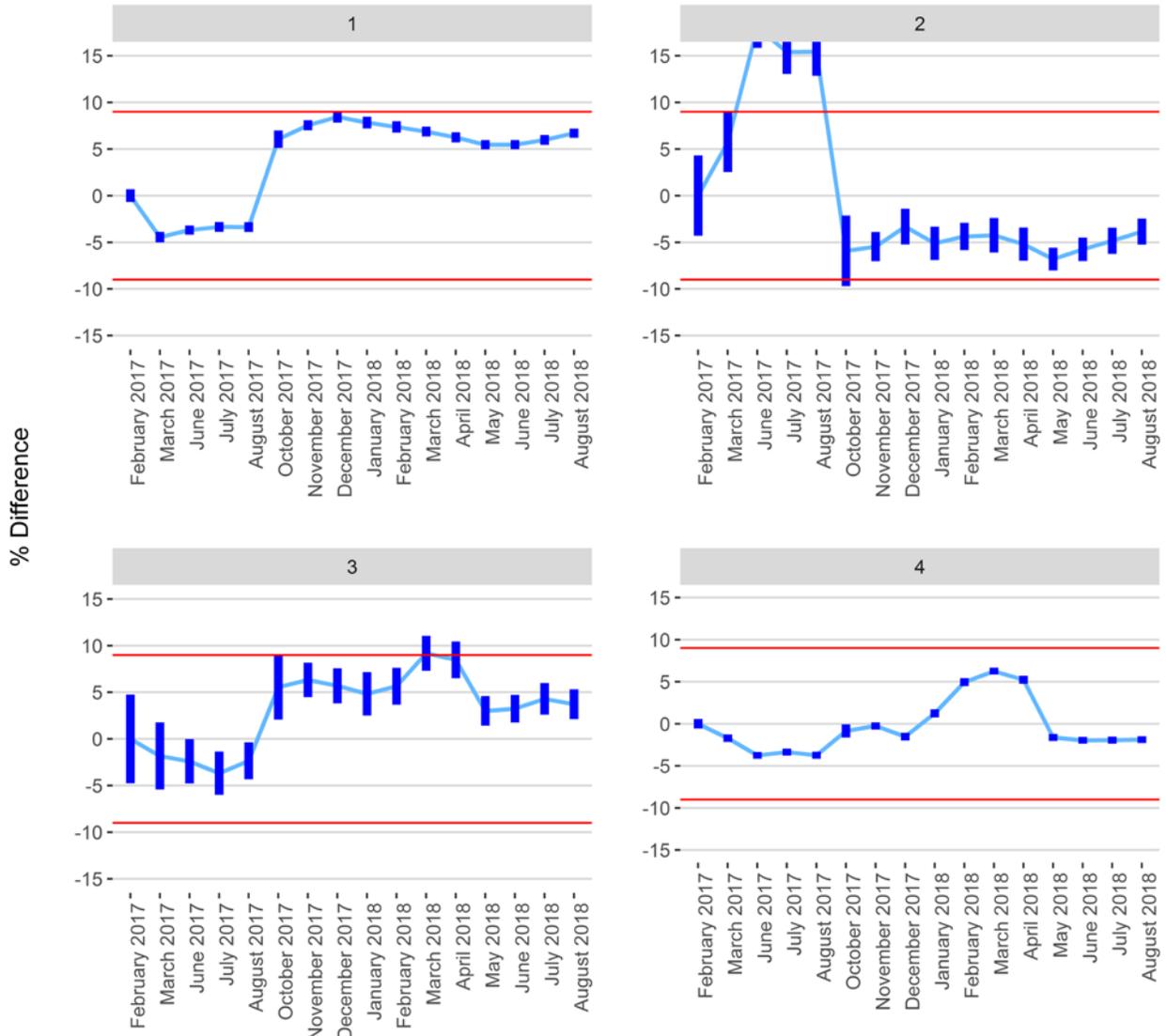
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

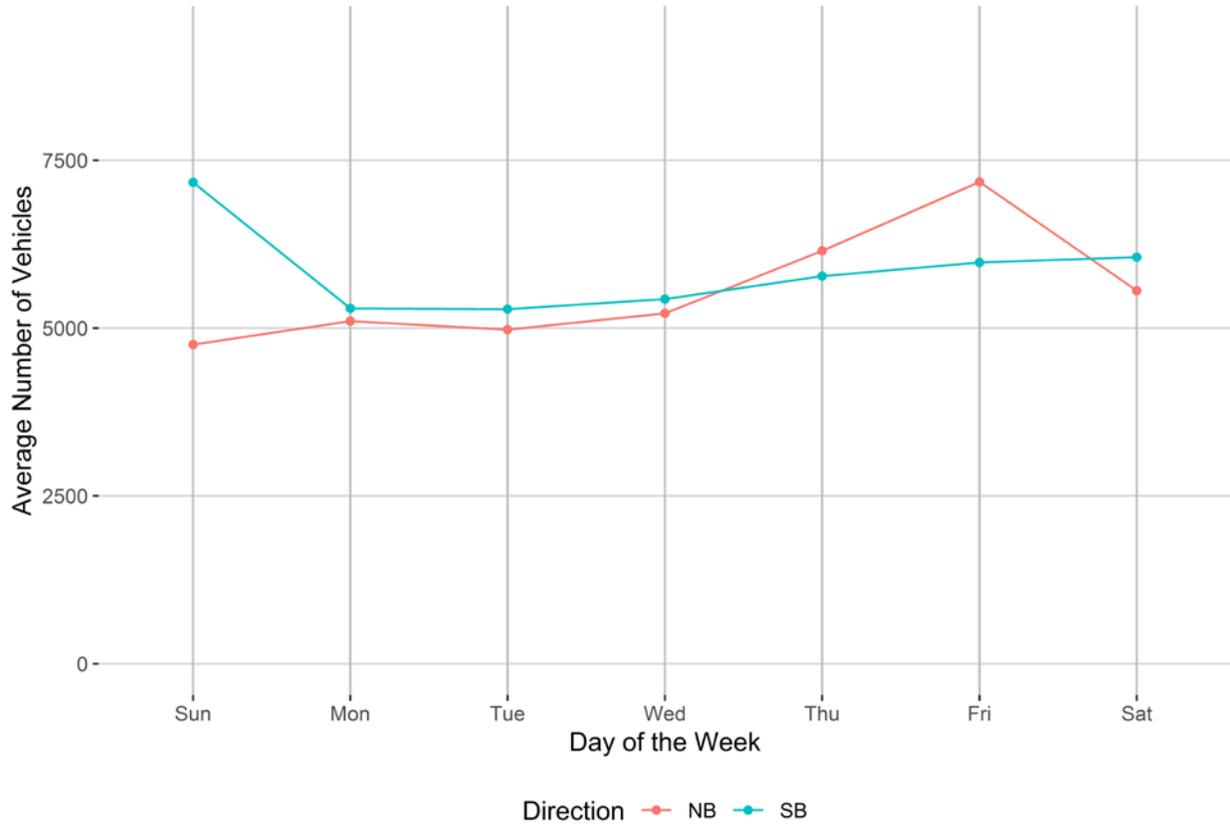


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

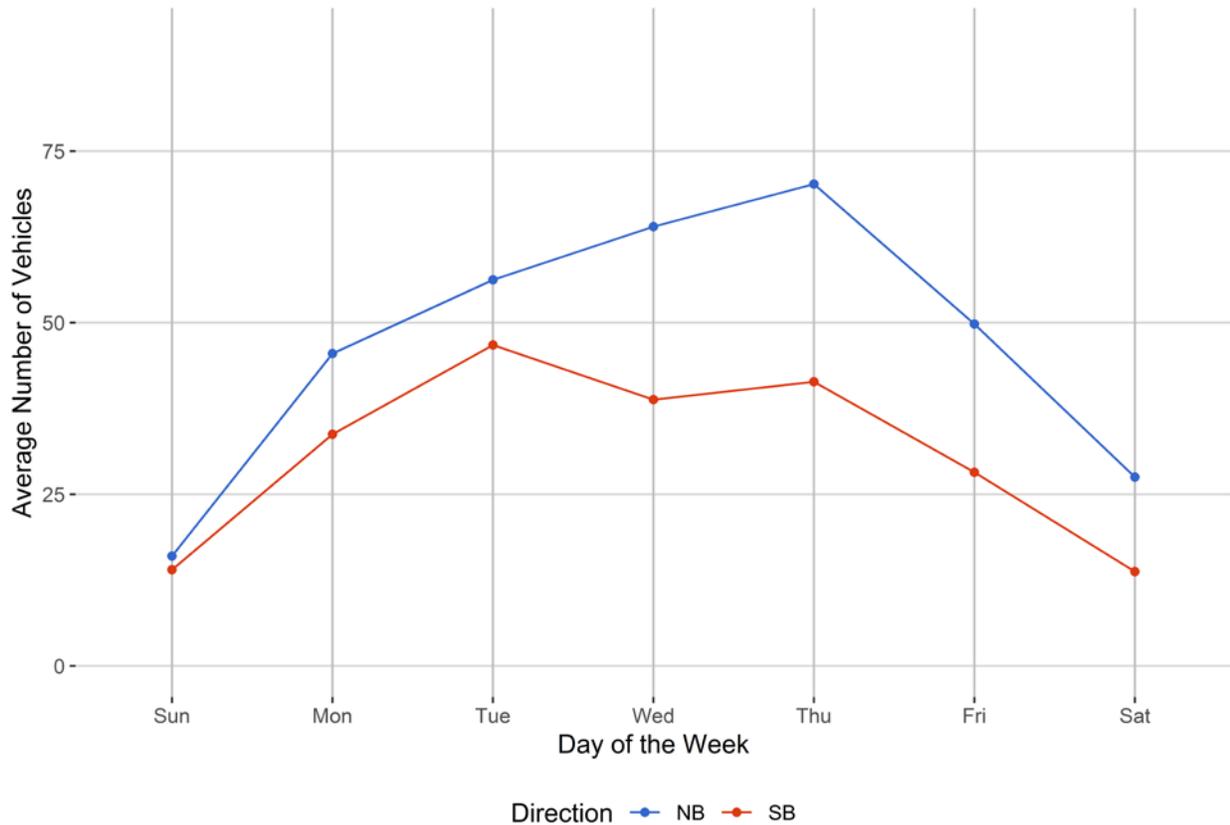


Figure 4 - Passenger Vehicles vs. Hour of the Day

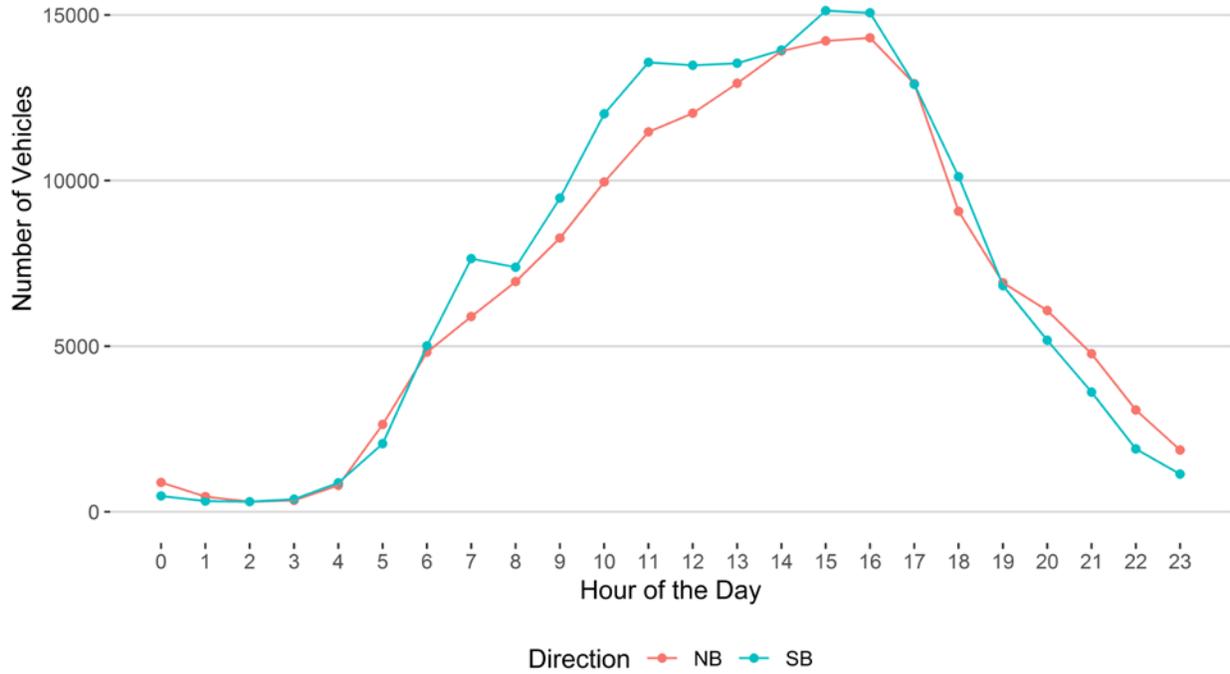


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

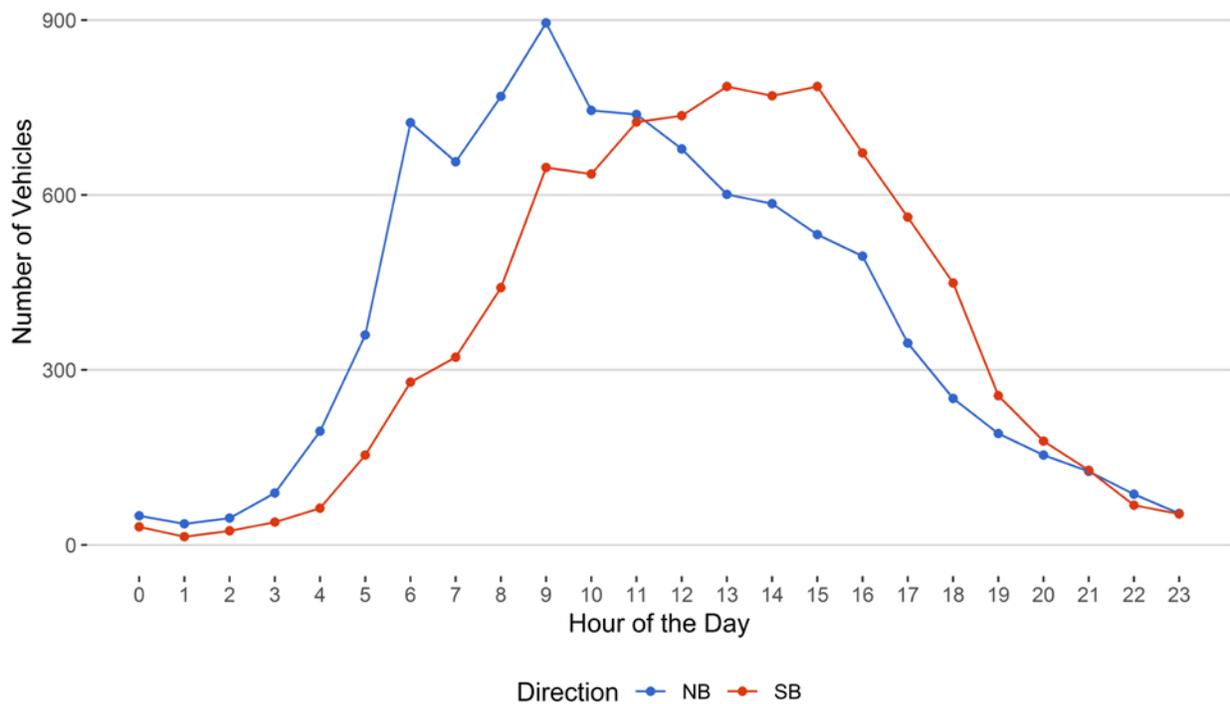


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

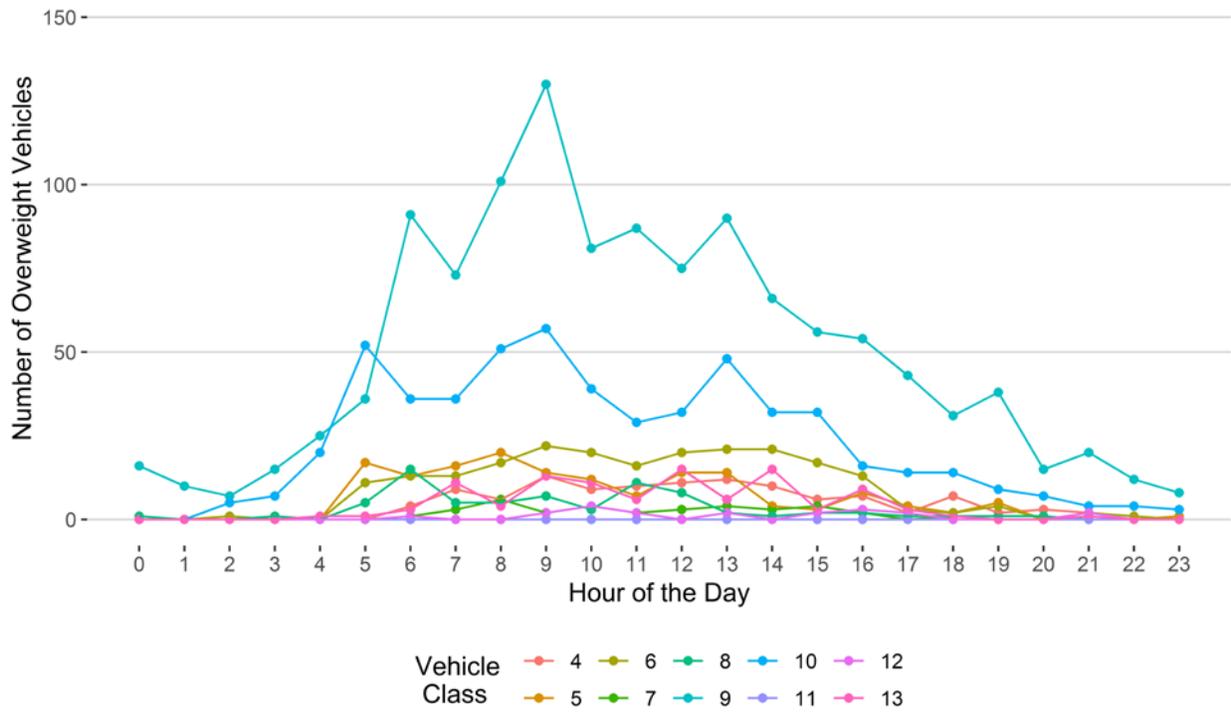


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

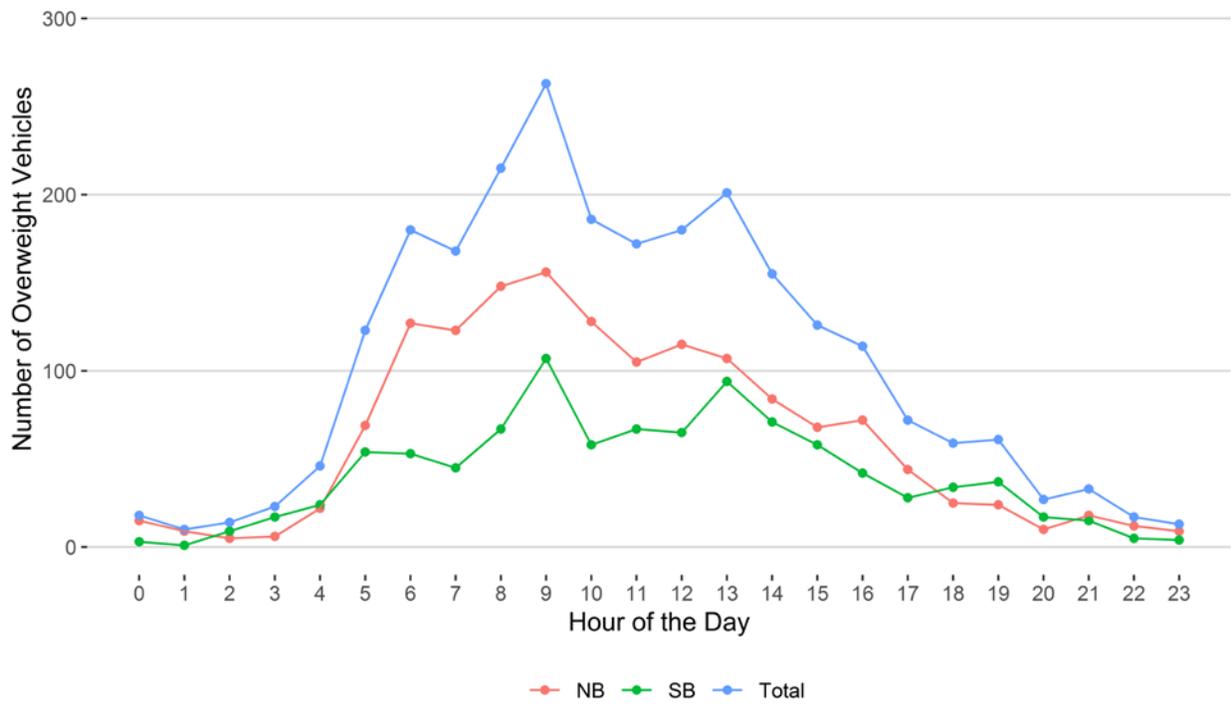
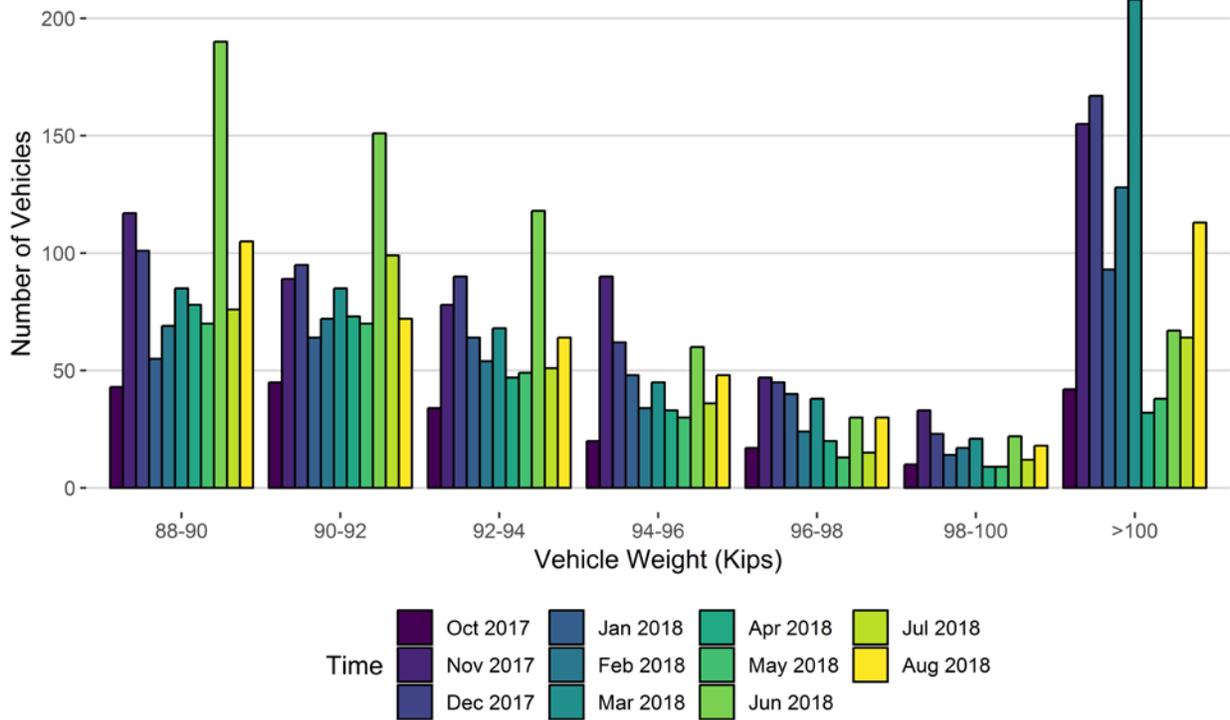
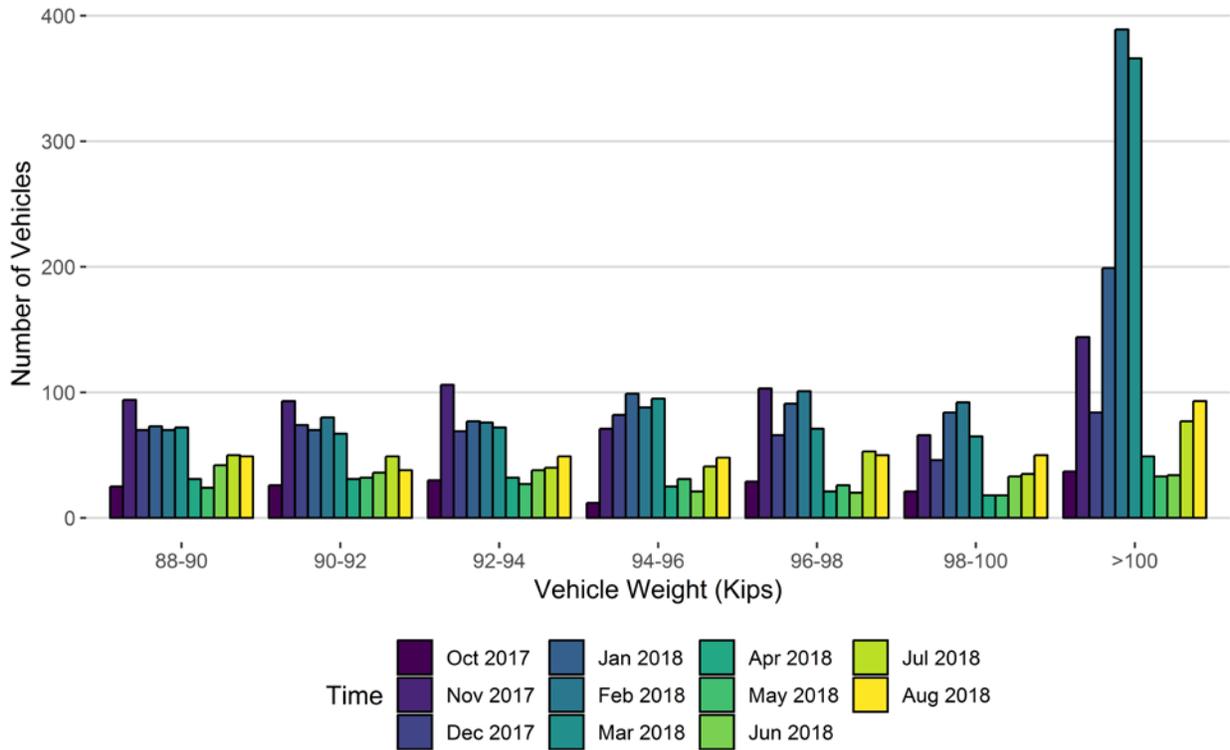


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018
88-90	43	117	101	55	69	85	78	70	190	76	105
90-92	45	89	95	64	72	85	73	70	151	99	72
92-94	34	78	90	64	54	68	47	49	118	51	64
94-96	20	90	62	48	34	45	33	30	60	36	48
96-98	17	47	45	40	24	38	20	13	30	15	30
98-100	10	33	23	14	17	21	9	9	22	12	18
>100	42	155	167	93	128	208	32	38	67	64	113
Total	211	609	583	378	398	550	292	279	638	353	450

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



Vehicle Weights (Kips)	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018
88-90	25	94	70	73	70	72	31	24	42	50	49
90-92	26	93	74	70	80	67	31	32	36	49	38
92-94	30	106	69	77	76	72	32	27	38	40	49
94-96	12	71	82	99	88	95	25	31	21	41	48
96-98	29	103	66	91	101	71	21	26	20	53	50
98-100	21	66	46	84	92	65	18	18	33	35	50
>100	37	144	84	199	389	366	49	33	34	77	93
Total	180	677	491	693	896	808	207	191	224	345	377

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

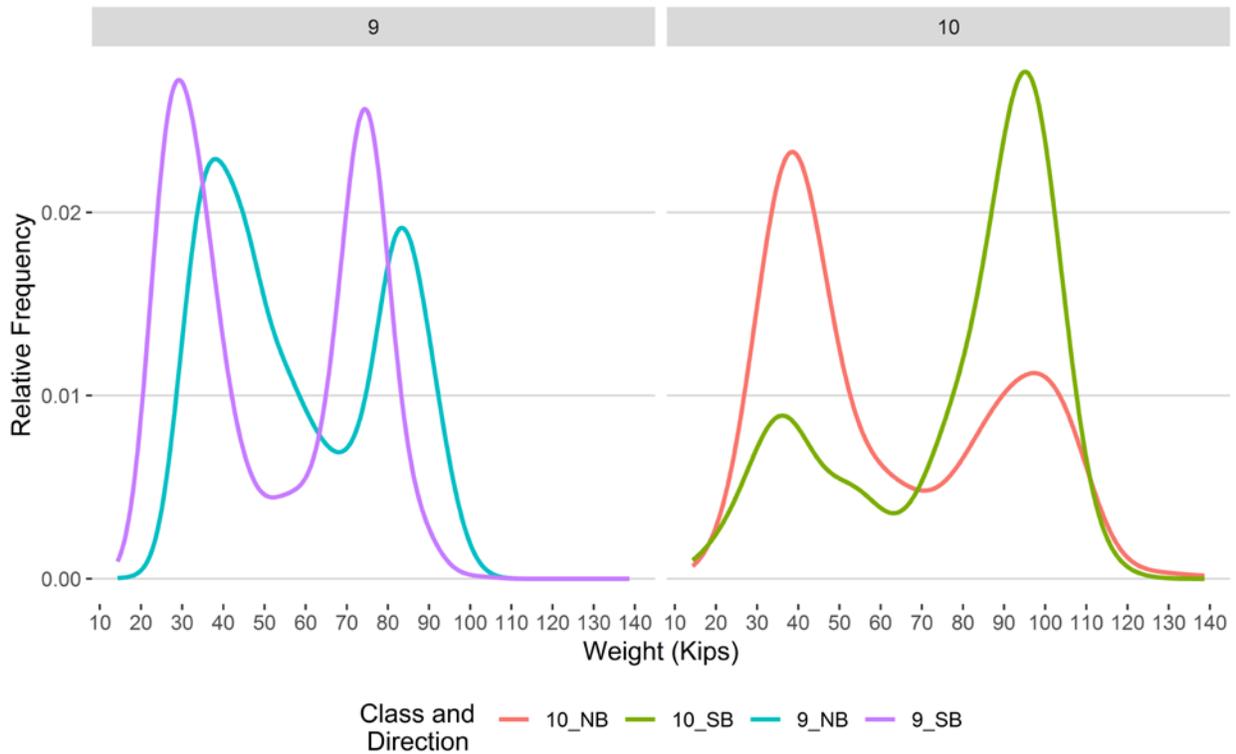


Figure 9 - Freight Percentage by Direction and Class

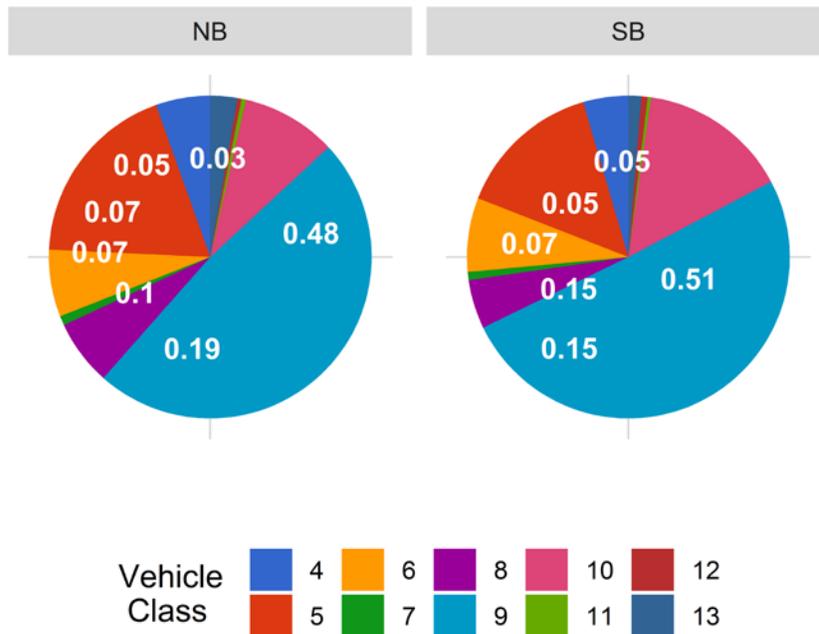


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

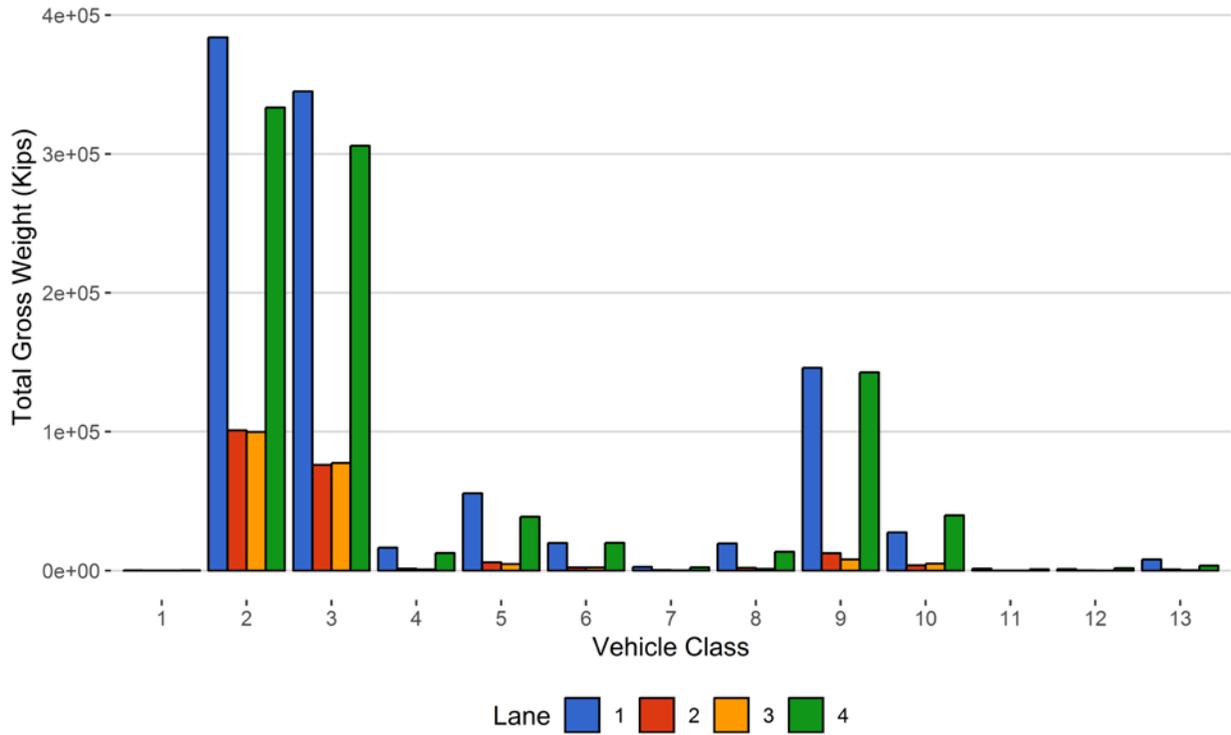


Figure 11 - Total Gross Vehicle Weight t

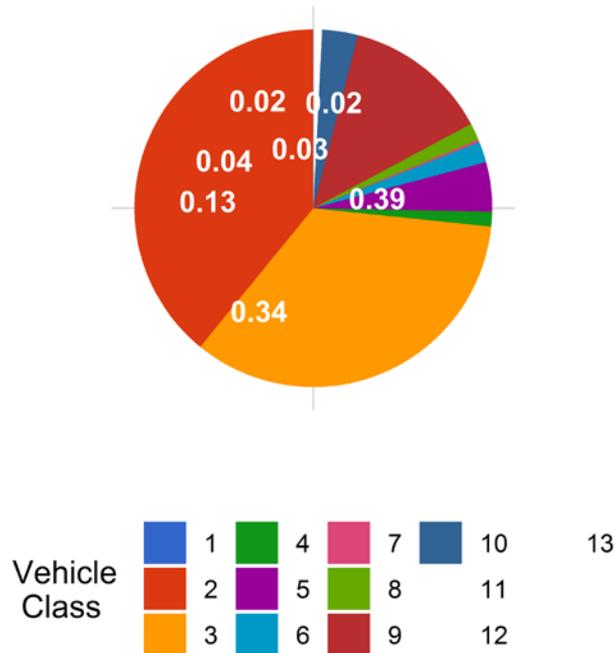


Figure 12 - Total ESALs by Class and Lane

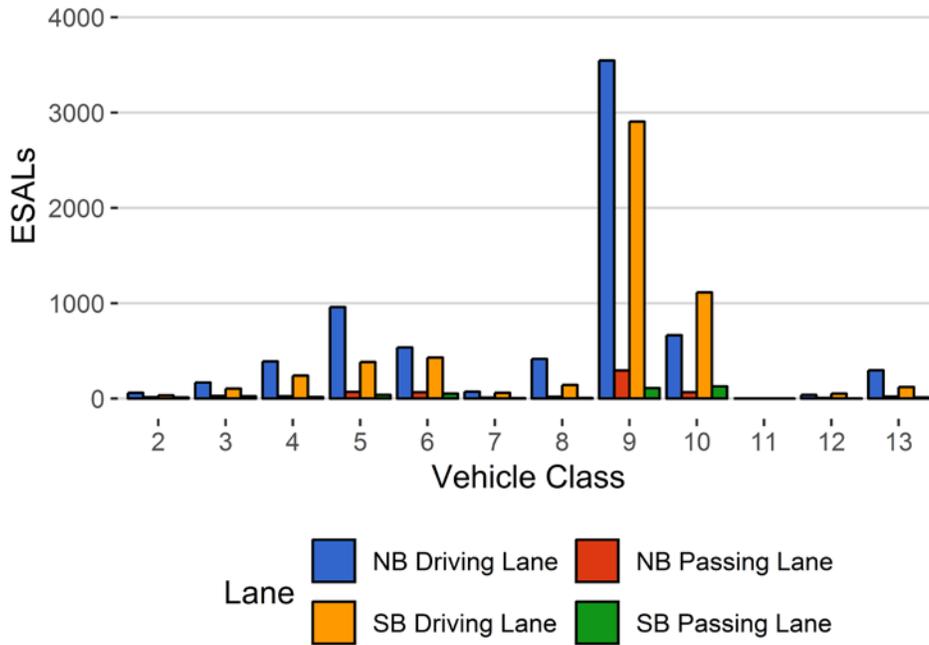


Figure 13 - ESALs by Class

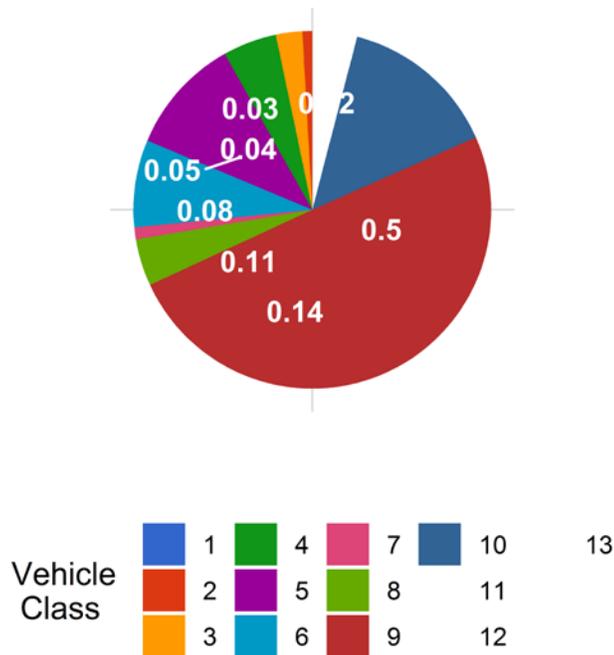


Table 1 Class 9 Front Axle Weight by Lane

<i>Month</i>	<i>Lane 1 (Kips)</i>	<i>Front Axle +/- 9%</i>	<i>Lane 2 (Kips)</i>	<i>Front Axle +/- 9%</i>	<i>Lane 3 (Kips)</i>	<i>Front Axle +/- 9%</i>	<i>Lane 4 (kips)</i>	<i>Front Axle +/- 9%</i>
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

Table 2 Vehicle Classification Data

<i>Vehicle Class</i>	<i>Monthly Average Daily Volume</i>	<i>Monthly Total Volume</i>	<i>Monthly Total Volume Percentage</i>	<i>Monthly Total Overweight Vehicles</i>	<i>Monthly Total Overweight Percentage</i>
1	9	281	0.1	0	0
2	7129	221006	61.7	0	0
3	3820	118422	33.1	0	0
4	38	1166	0.3	114	4.7
5	238	7364	2.1	158	6.5
6	41	1274	0.4	217	8.9
7	4	115	0	37	1.5
8	45	1388	0.4	72	2.9
9	183	5667	1.6	1180	48.2
10	35	1088	0.3	547	22.3
11	4	126	0	0	0
12	1	43	0	20	0.8
13	4	120	0	103	4.2
TOTAL	11550	358059	100	2448	100

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

<i>Date</i>	<i>Day of Week</i>	<i>Time</i>	<i>Vehicle Class</i>	<i>Direction</i>	<i>Lane</i>	<i>GVW (lbs)</i>
2018-08-06	Monday	08:32:45	10	NB	1	138.71
2018-08-18	Saturday	06:12:33	10	NB	1	126.94
2018-08-27	Monday	10:05:19	10	NB	1	126.31
2018-08-31	Friday	06:09:32	10	NB	1	120.75
2018-08-28	Tuesday	19:26:06	10	SB	4	117.23
2018-08-12	Sunday	20:26:29	10	SB	4	116.12
2018-08-05	Sunday	22:34:12	10	SB	4	113.15
2018-08-07	Tuesday	12:11:37	10	NB	1	111.88
2018-08-10	Friday	05:59:24	10	SB	4	110.28
2018-08-08	Wednesday	06:00:47	10	SB	4	110.2

Table 4 Freight Summary

<i>Vehicle Class</i>	<i>Direction</i>	<i>Weight of Empty Vehicle (Kips)</i>	<i>Total Number of Vehicles</i>	<i>Number of Empty Vehicles</i>	<i>Percentage of Empty Vehicles</i>	<i>Total Weight of Vehicles with Freight (Kips)</i>	<i>Total Weight of Empty Vehicles (Kips)</i>	<i>Total Weight of Freight (Tons)</i>
4	NB	15	625	44	7	17250	595	4267
5	NB	8	4022	171	4.3	60285	1262	14739
6	NB	19	585	5	0.9	21921	83	5450
7	NB	11.5	62	0	0	3068	0	1177
8	NB	31	740	389	52.6	14759	6723	1939
9	NB	33	2698	227	8.4	151513	6917	34985
10	NB	33.5	505	43	8.5	29901	1299	7212
11	NB	36.5	68	68	100	0	1438	0
12	NB	36.5	17	3	17.6	1217	77	353
13	NB	31.5	83	0	0	8891	0	3138
TOTAL	****	****	9405	950	****	308805	****	73261
<i>Vehicle Class</i>	<i>Direction</i>	<i>Weight of Empty Vehicle (Kips)</i>	<i>Total Number of Vehicles</i>	<i>Number of Empty Vehicles</i>	<i>Percentage of Empty Vehicles</i>	<i>Total Weight of Vehicles with Freight (Kips)</i>	<i>Total Weight of Empty Vehicles (Kips)</i>	<i>Total Weight of Freight (Tons)</i>
4	SB	15	533	106	19.9	12165	1332	2880
5	SB	8	3291	627	19.1	39003	4434	8845
6	SB	19	680	47	6.9	21294	816	4634
7	SB	11.5	52	0	0	2444	0	923
8	SB	31	638	505	79.2	4887	9766	382
9	SB	33	2930	942	32.2	124975	25846	29686
10	SB	33.5	576	44	7.6	43607	1211	12892
11	SB	36.5	57	57	100	0	1012	0
12	SB	36.5	26	4	15.4	1752	99	475
13	SB	31.5	36	0	0	3868	0	1367
TOTAL	****	****	8819	2332	****	253995	****	62083
GRAND TOTAL	****	****	18224	3282	480	562800	62911	135345

Table 5 Gross Vehicle Weight by Class and Lane

<i>Vehicle Class</i>	<i>NB Driving Lane</i>	<i>NB Passing Lane</i>	<i>SB Passing Lane</i>	<i>SB Driving Lane</i>	<i>Total</i>	<i>Percentage</i>
1	122	34	34	170	360	0
2	383967	100976	99853	333459	918256	39.1
3	345037	76156	77479	305925	804597	34.3
4	16486	1359	867	12629	31341	1.3
5	55626	5921	4697	38740	104985	4.5
6	19851	2153	2149	19961	44114	1.9
7	2629	439	149	2295	5512	0.2
8	19556	1926	1163	13490	36135	1.5
9	145960	12470	8050	142770	309251	13.2
10	27492	3708	5041	39777	76019	3.2
11	1360	78	48	964	2450	0.1
12	1075	220	58	1793	3146	0.1
13	7987	904	293	3575	12758	0.5
TOTAL	1027149	206344	199883	915548	2348923	100
GVW/LANE	43.73	8.78	8.51	38.98	100	0

Table 6 ESALs by Class and Lane and Flexible ESAL Factors

<i>Vehicle Class</i>	<i>NB Driving Lane</i>	<i>NB Passing Lane</i>	<i>SB Passing Lane</i>	<i>SB Driving Lane</i>	<i>Total</i>	<i>Percentage</i>	<i>Flexible ESAL Factor</i>
1	0	0	0	0	0	0	0.0036
2	60	14	12	36	122	0.89	0.0011
3	169	29	26	105	329	2.38	0.0056
4	390	24	16	241	672	4.87	1.16
5	960	71	39	384	1453	10.54	0.4
6	537	67	53	431	1088	7.89	1.72
7	73	10	4	61	149	1.08	2.53
8	417	19	8	143	587	4.25	0.86
9	3547	297	111	2905	6859	49.74	2.44
10	666	66	129	1114	1975	14.32	3.64
11	2	0	0	1	2	0.02	0.12
12	40	7	0	54	101	0.73	3.89
13	298	21	14	121	454	3.29	7
TOTAL	7157	625	412	5596	13791	100	24
ESALS/LANE	51.9	4.5	3	40.6	100	-	-

Table 7 Site Summary: Volume and Vehicle Class

<i>Month</i>	<i>Total Volume</i>	<i>Monthly ADT</i>	<i>Monthly HCAD T</i>	<i>Passenger Vehicles</i>	<i>Passenger Vehicles %</i>	<i>Heavy Commercial Vehicles</i>	<i>Heavy Commercial Vehicles %</i>	<i>Heavy Commercial Vehicles in Driving Lane %</i>	<i>Heavy Commercial Vehicles in Passing Lane %</i>
Oct 2017	79225	7922	171	73909	93.3	5315.5	6.7	91.8	8.2
Nov 2017	214234	7141	488	199588	93.2	14646	6.8	92.7	7.3
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
TOTAL	2621390	-	-	2467780	-	153610	-	-	-
AVERAGE	238308	8305	459	224344	94	13965	6	92	8

ESALS

<i>Month</i>	<i>ESALS NB Passing Lane</i>	<i>ESALS NB Driving Lane</i>	<i>ESALS SB Driving Lane</i>	<i>ESALS SB Passing Lane</i>	<i>Total ESALS</i>	<i>Driving Lane ESALS %</i>	<i>Passing Lane ESALS %</i>	<i>Pavement Life Decrease Months</i>
Oct 2017	2404	157	213	1939	4714	92	8	40.8
Nov 2017	6711	379	332	6211	13634	95	5	53.5
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
TOTAL	65168	4091	3114	58294	130667	-	-	-
AVERAGE	5924	372	283	5300	11879	94	6	47

Gross Vehicle Weight

<i>Month</i>	<i>GVW NB Passing Lane</i>	<i>GVW NB Driving Lane</i>	<i>GVW SB Passing Lane</i>	<i>GVW SB Driving Lane</i>	<i>Total GVW Kips</i>
Oct 2017	642847	77552	51867	631608	1403875
Nov 2017	612031	73787	60261	626261	1372339
Dec 2017	725128	97474	95556	725911	1644069
Jan 2018	624365	79369	76549	597736	1378018
Feb 2018	805267	135068	123381	716964	1780680
Mar 2018	956809	179159	163542	840328	2139837
Apr 2018	989942	190861	199906	891495	2272204
May 2018	1029912	206482	199903	915971	2352268
Jun 2018	246018	34262	43177	241343	564799
Jul 2018	698717	96530	89621	663298	1548165
Aug 2018	675664	81599	69056	602852	1429172
TOTAL	8006699	1252143	1172819	7453767	17885427
AVERAGE	727882	113831	106620	677615	1625948

Overweight Vehicles

<i>Month</i>	<i>Total Number of Overweight Vehicles</i>	<i>Overweight / Total Volume</i>	<i>Overweight / Heavy Commercial Volume</i>	<i>Number Over 88,000 lbs</i>	<i>Number Over 98,000 lbs</i>
Oct 2017	998	1.3	18.8	392	110
Nov 2017	2780	1.3	19	1289	398
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
TOTAL	24572	-	-	9848	3332
AVERAGE	2233.8	1	16.4	895.3	302.9

Freight

<i>Month</i>	<i>NB Freight Tons</i>	<i>SB Freight Tons</i>	<i>Total Freight</i>	<i>NB Freight %</i>	<i>SB Freight %</i>
Oct 2017	25289	21734	47024	53.8	46.2
Nov 2017	65328	66591	131919	49.5	50.5
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
TOTAL	648129	615034	1263163	-	-
AVERAGE	58920.8	55912.2	114833	51.3	48.7