JUNE 2018

WIM #32
US 52, MP 66.0
ORONOCO, MN

MONTHLY REPORT

Your Destination...Our Priority

WIM Site Location

WIM #32 is located on US 52 near Oronoco in Olmsted county.

System Operation

WIM #32 was operational for the entire month of June 2018. Volume was computed using all monthly data.

System Calibration

WIM #32 was most recently calibrated on 2017-05-05. 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: 1097500 | Passenger Vehicles: 1014403 | Heavy Commercial Vehicles: 83097

Monthly Average Daily Traffic (MADT): 36583 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 2770

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 Mondays. SB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Mondays (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 07 AM and 05 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 07 AM and 05 PM. See Figure 6. Out of all HCVs, the two highest traffic volumes were generated by Class 9's and Class 5's.

Overweight HCVs

Volume trends. Of a total of 83097 HCVs, 2655 of them were overweight [3]. These overweight HCVs contributed to 0.2% of total monthly volume, and 3.2% 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 Mondays, with lowest volumes reported on Sundays. See Figure 3 .
The top two overweight violators by class were the class 9 and class 13 vehicles . Overall, overweight vehicles tended to reach peak volume concentrations during typical business hours, with 67.3% 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 June.
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 ,162 NB vehicles exceeded 88,000 pounds (87 vehicles were Class 13's; 61 vehicles were Class 10's). Of vehicles traveling SB,

99 NB vehicles exceeded 88,000 pounds (75 vehicles were Class 13's; 20 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from June 2018.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in June 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 627438 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. Bridge No. 55X13 (a box culvert) is approximately 1/3 of a mile north of WIM #32, and Bridge No. 8960 (a box culvert) is approximately 1 ¾ miles south of WIM #32. WIM #32 recorded a total of 1097500 vehicles with a combined GVW of 7580388 kips (1 kip = 1,000 pounds = 0.5 tons) in June 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 48387 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 55.2% of all ESALs were recorded NB while 44.8% was observed SB. In particular, 74% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 32% 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

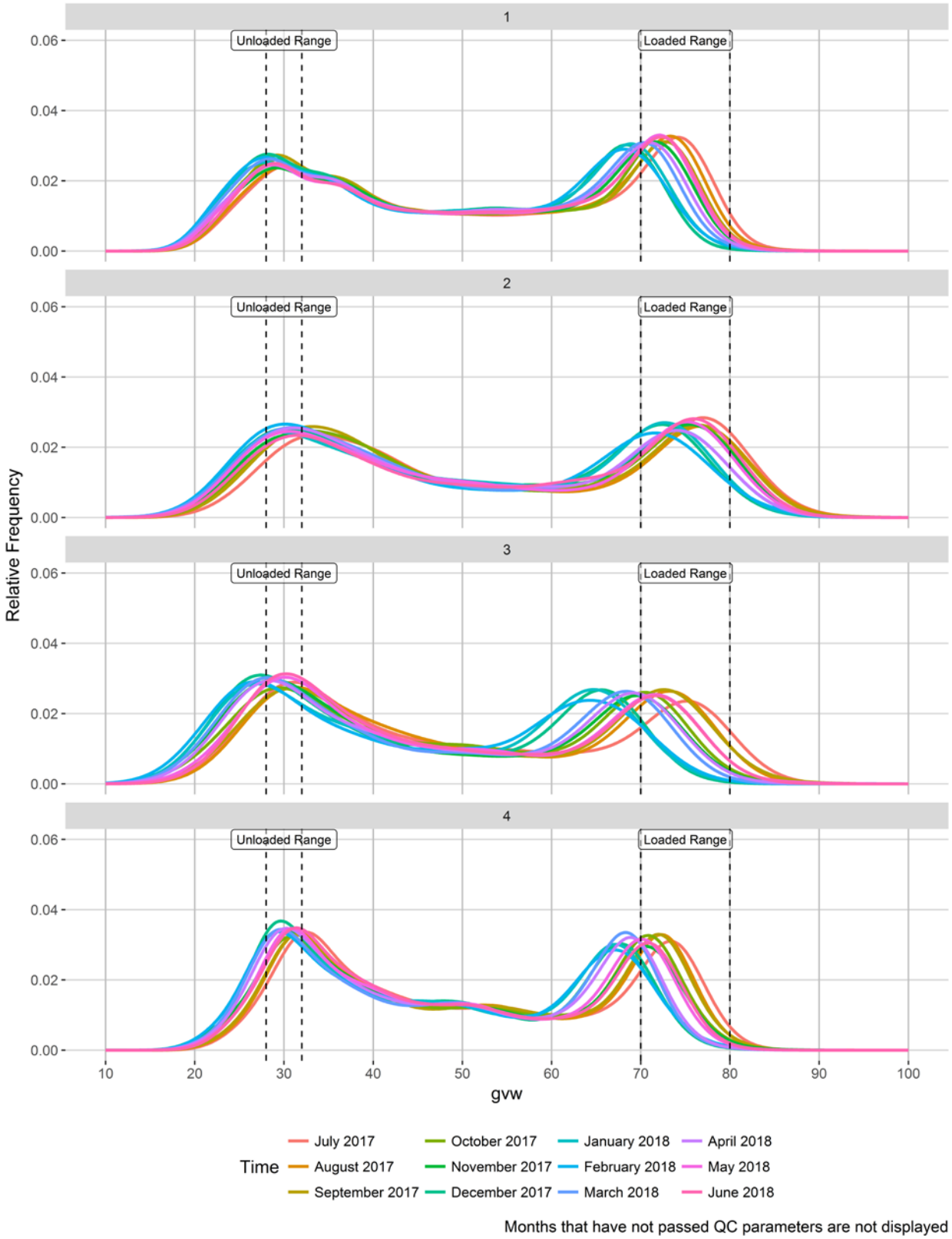
- [1] Front axle weights of Class 9s are monitored on a monthly basis to assure performance between calibrations. The current goal of the WIM scale calibration is to have each individual axle weight stay within a range of ?9% of baseline calibration values

- [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

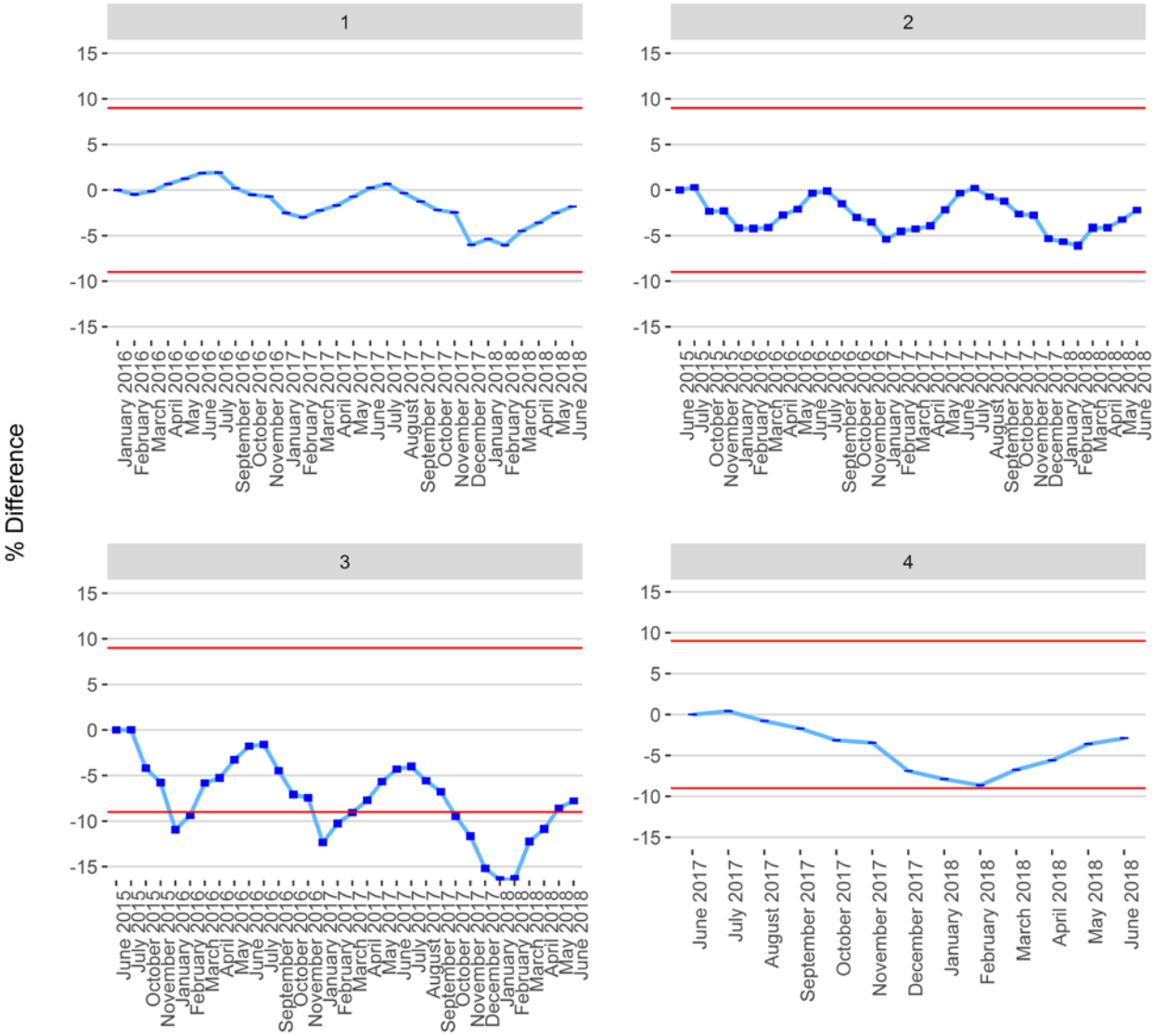
- [4] For example, Class 9s and 10s can legally have gross vehicle weights up to 80,000 lbs (with the exception of permitted loads) during normal load limits. To account for measurement error on the WIM scales, those exceeding 10% of the legal GVW maximum (or 1.1 times the legal GVW) should be screened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

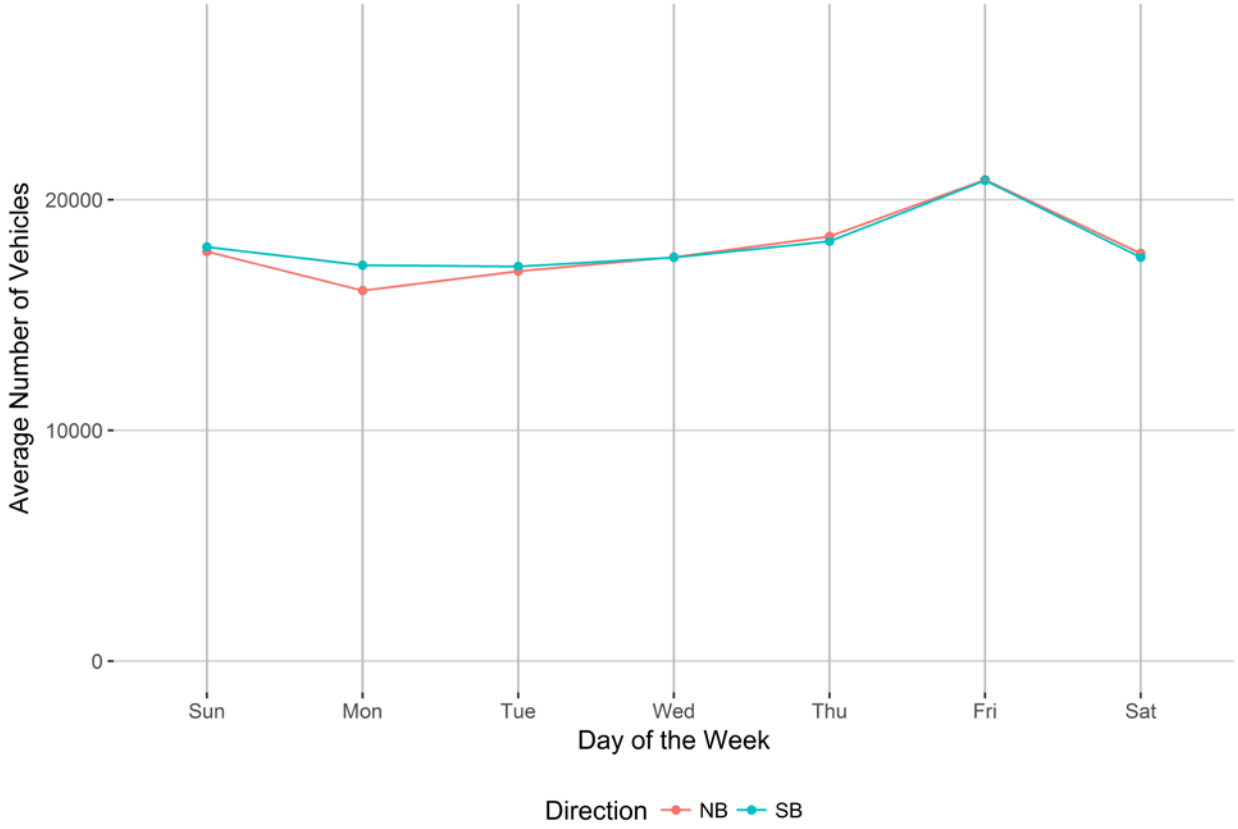


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

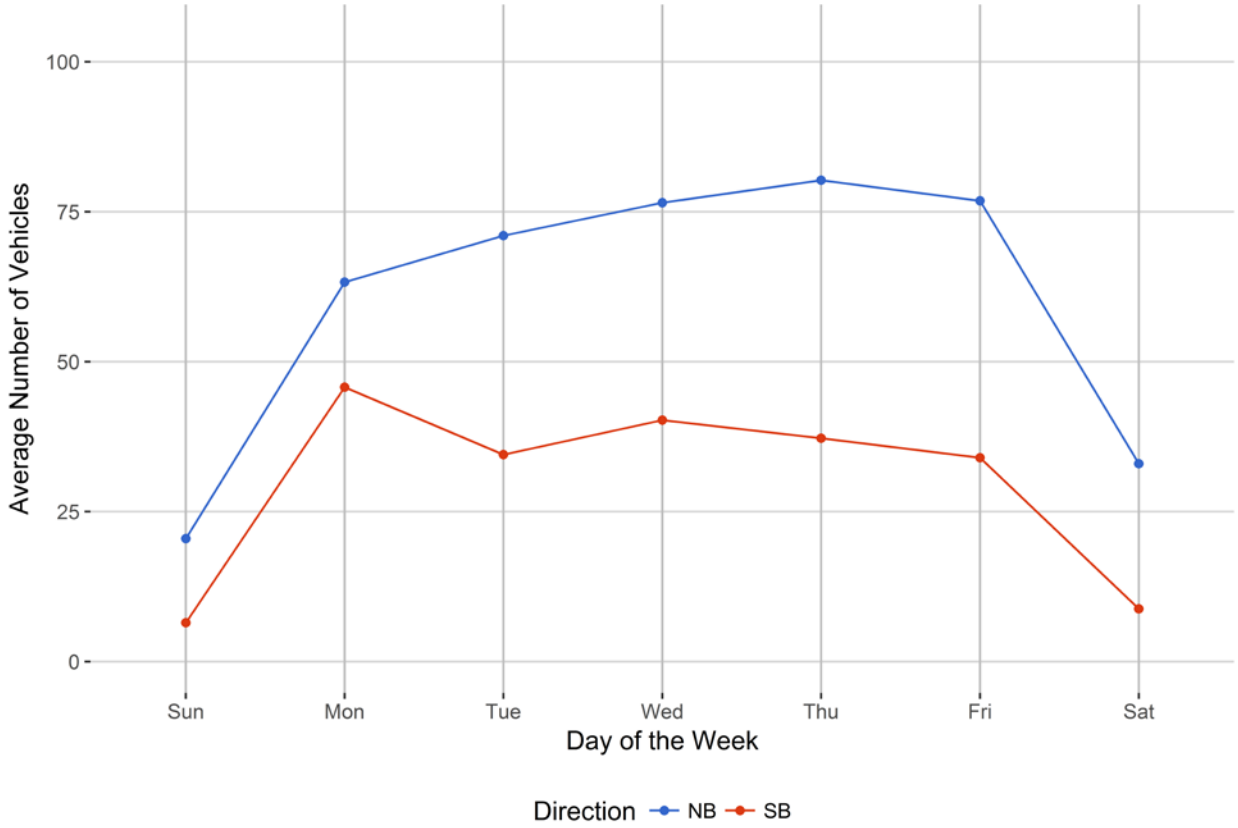


Figure 4 - Passenger Vehicles vs. Hour of the Day

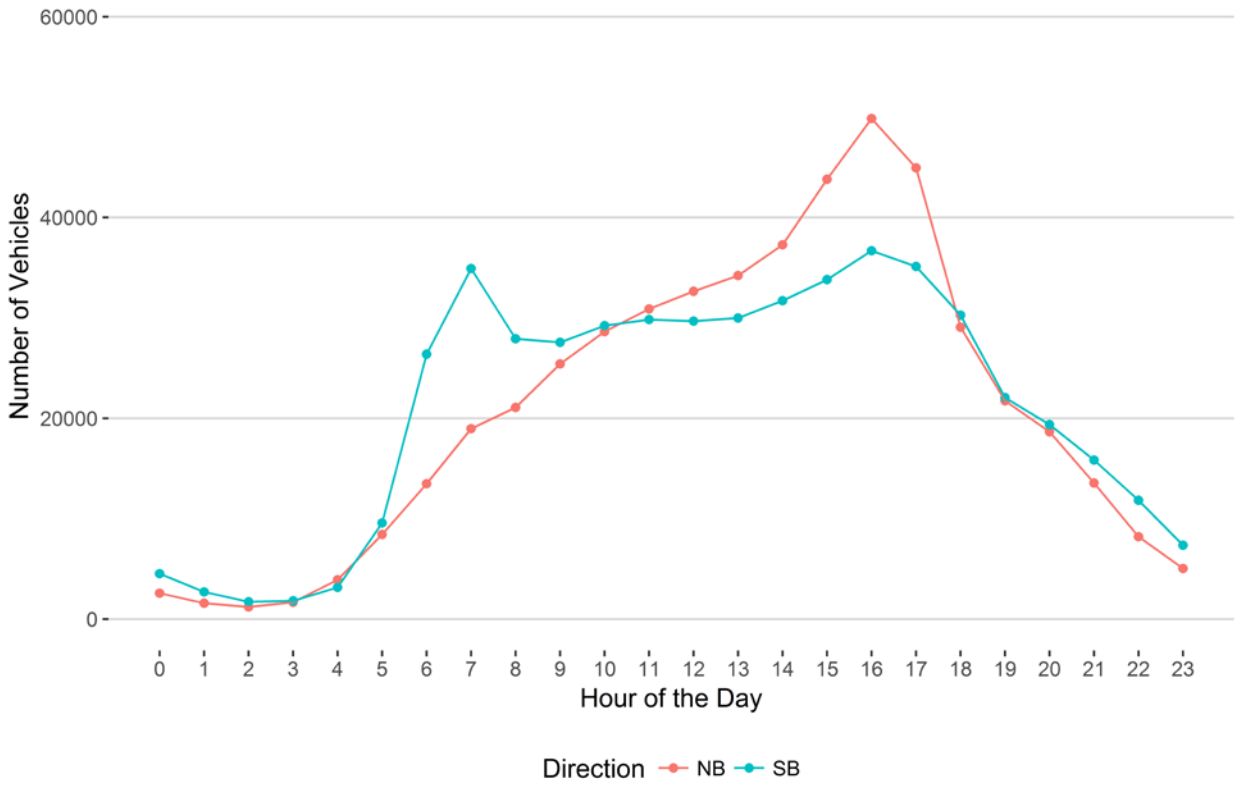


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

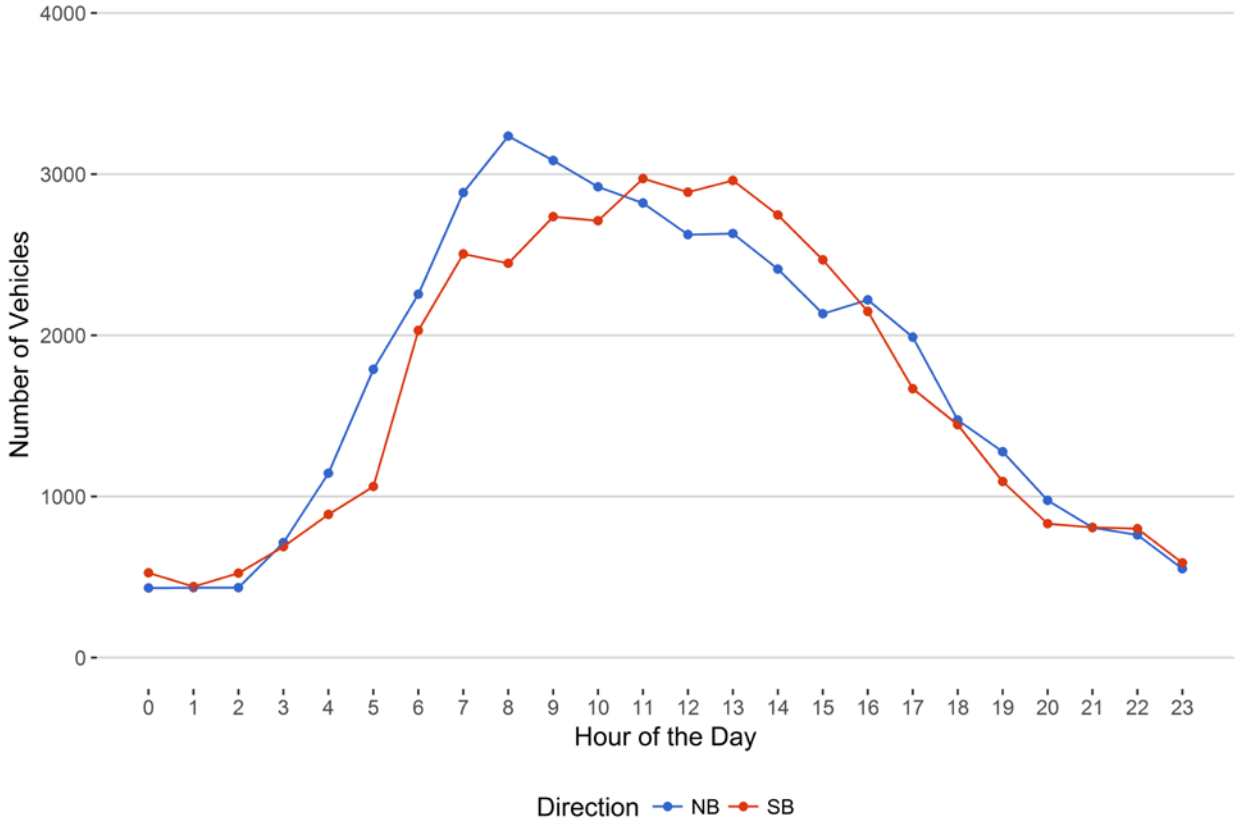


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

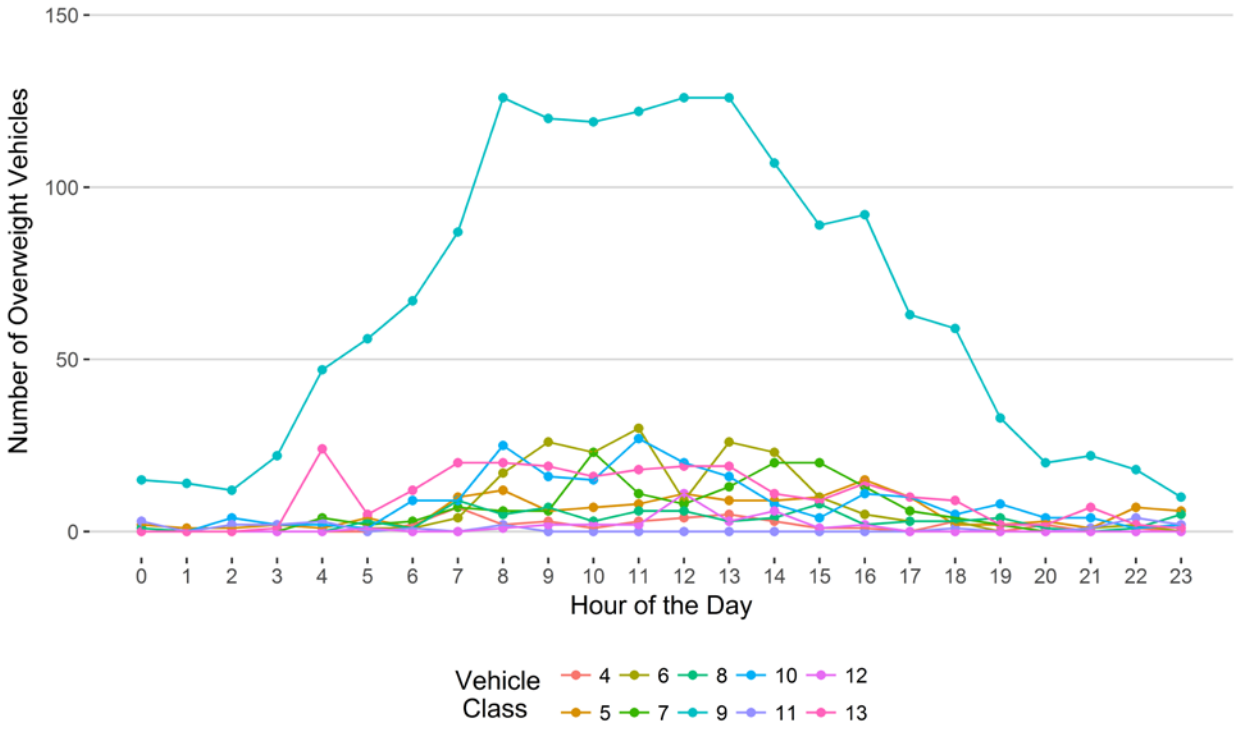


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

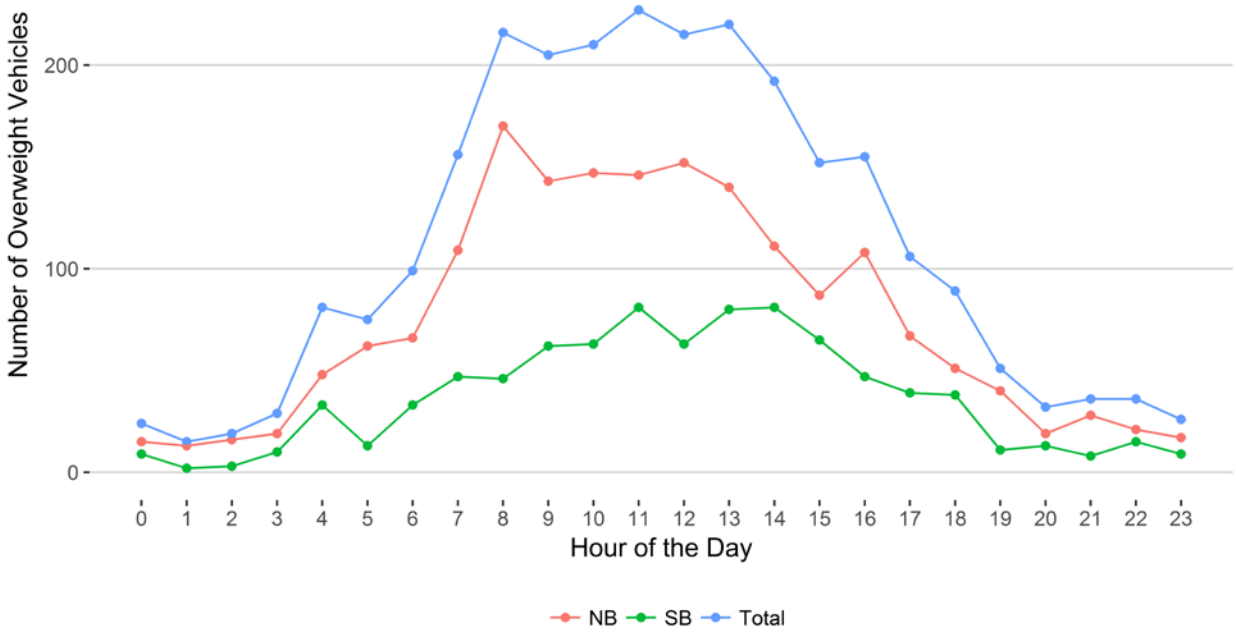
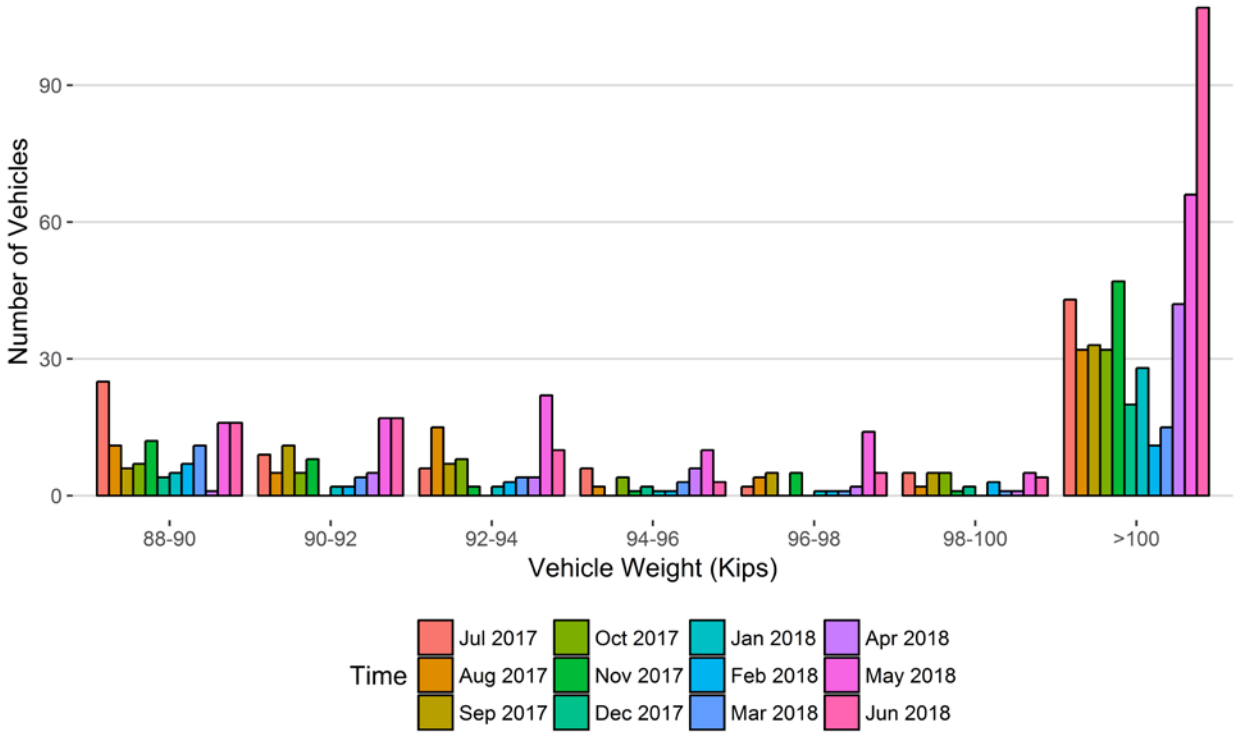
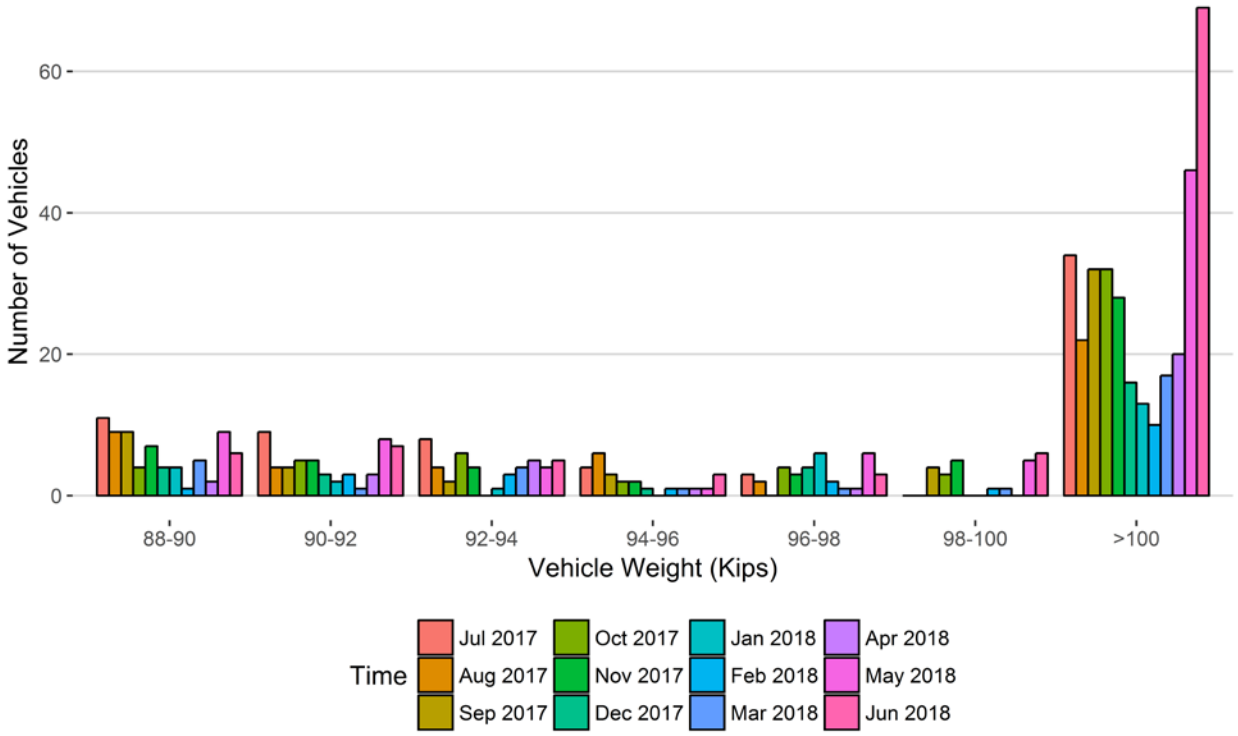


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	*Jul 2017*	*Aug 2017*	*Sep 2017*	*Oct 2017*	*Nov 2017*	*Dec 2017*	*Jan 2018*	*Feb 2018*	*Mar 2018*	*Apr 2018*	*May 2018*	*Jun 2018*
88-90	25	11	6	7	12	4	5	7	11	1	16	16
90-92	9	5	11	5	8	0	2	2	4	5	17	17
92-94	6	15	7	8	2	0	2	3	4	4	22	10
94-96	6	2	0	4	1	2	1	1	3	6	10	3
96-98	2	4	5	0	5	0	1	1	1	2	14	5
98-100	5	2	5	5	1	2	0	3	1	1	5	4
>100	43	32	33	32	47	20	28	11	15	42	66	107
Total	96	71	67	61	76	28	39	28	39	61	150	162

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



Vehicle Weights (Kips)	*Jul 2017*	*Aug 2017*	*Sep 2017*	*Oct 2017*	*Nov 2017*	*Dec 2017*	*Jan 2018*	*Feb 2018*	*Mar 2018*	*Apr 2018*	*May 2018*	*Jun 2018*
88-90	11	9	9	4	7	4	4	1	5	2	9	6
90-92	9	4	4	5	5	3	2	3	1	3	8	7
92-94	8	4	2	6	4	0	1	3	4	5	4	5
94-96	4	6	3	2	2	1	0	1	1	1	1	3
96-98	3	2	0	4	3	4	6	2	1	1	6	3
98-100	0	0	4	3	5	0	0	1	1	0	5	6
>100	34	22	32	32	28	16	13	10	17	20	46	69
Total	69	47	54	56	54	28	26	21	30	32	79	99

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

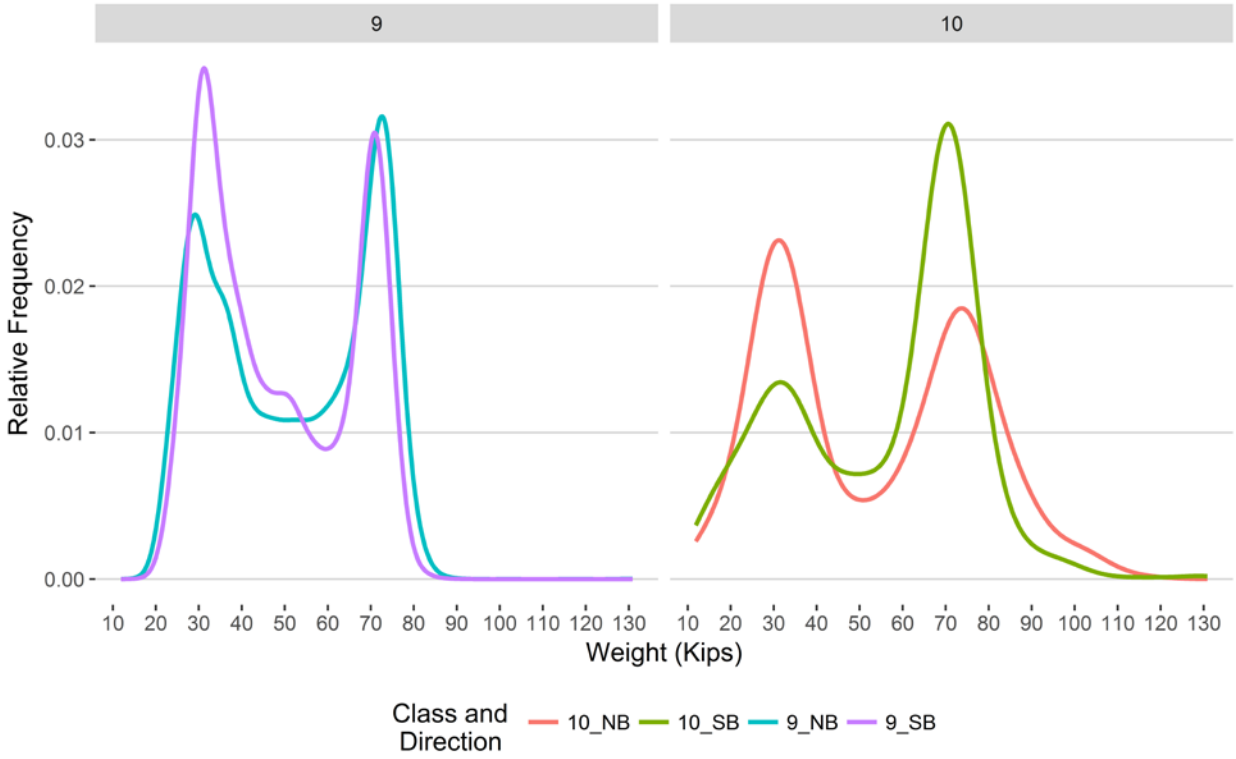


Figure 9 - Freight Percentage by Direction and Class

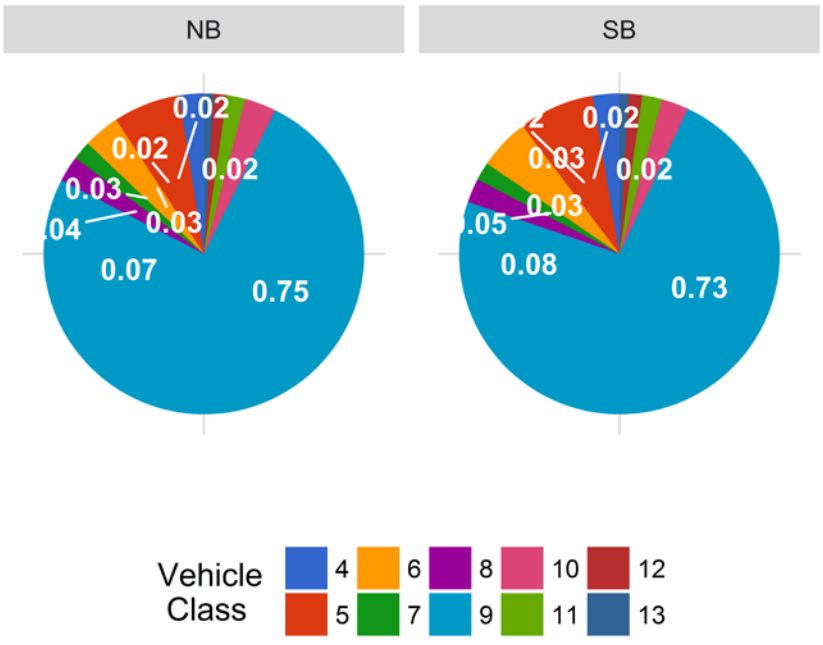


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

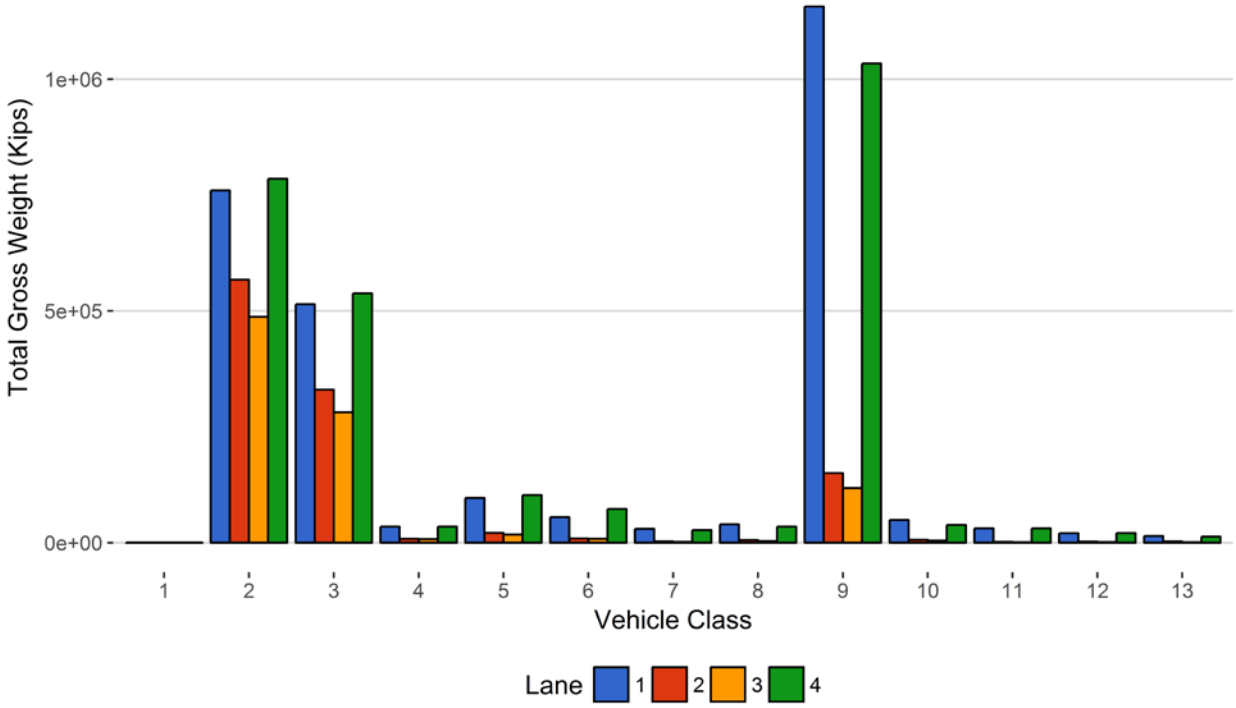


Figure 11 - Total Gross Vehicle Weight I

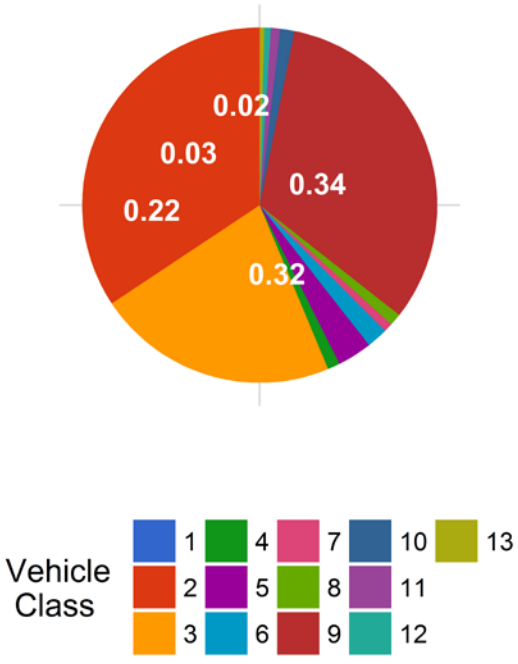


Figure 12 - Total ESALs by Class and Lane

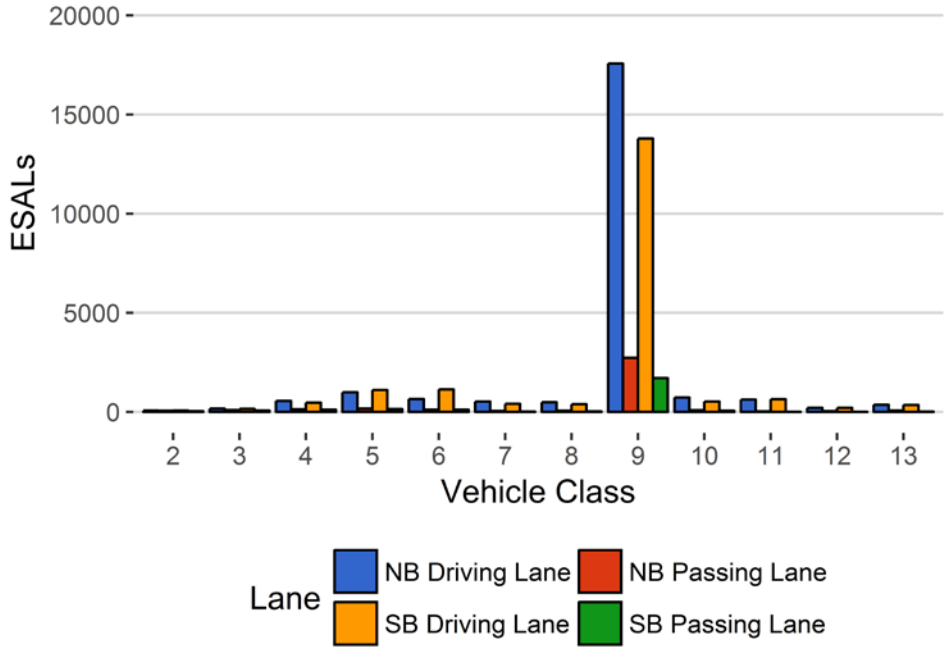


Figure 13 - ESALs by Class

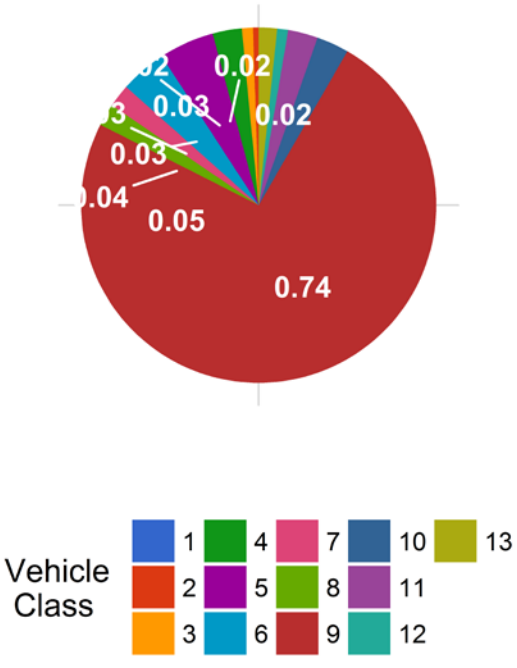


Table 1 Class 9 Front Axle Weight by Lane

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%*
June 2015	NA	NA	11.20	0.00	11.34	0.00	NA	NA
July 2015	NA	NA	11.23	0.30	11.35	0.02	NA	NA
October 2015	NA	NA	10.93	-2.33	10.87	-4.19	NA	NA
November 2015	NA	NA	10.94	-2.29	10.69	-5.77	NA	NA
January 2016	10.55	0.00	10.73	-4.17	10.10	-10.94	NA	NA
February 2016	10.50	-0.47	10.72	-4.22	10.29	-9.33	NA	NA
March 2016	10.53	-0.14	10.74	-4.11	10.68	-5.82	NA	NA
April 2016	10.62	0.67	10.89	-2.75	10.75	-5.26	NA	NA
May 2016	10.68	1.24	10.96	-2.10	10.97	-3.27	NA	NA
June 2016	10.74	1.86	11.16	-0.34	11.14	-1.78	NA	NA
July 2016	10.75	1.92	11.18	-0.10	11.16	-1.59	NA	NA
September 2016	10.57	0.21	11.03	-1.49	10.84	-4.47	NA	NA
October 2016	10.49	-0.52	10.86	-3.01	10.54	-7.07	NA	NA
November 2016	10.47	-0.71	10.80	-3.51	10.50	-7.44	NA	NA
January 2017	10.28	-2.51	10.59	-5.39	9.94	-12.34	NA	NA
February 2017	10.23	-2.99	10.69	-4.53	10.18	-10.26	NA	NA
March 2017	10.31	-2.25	10.72	-4.26	10.32	-9.07	NA	NA
April 2017	10.37	-1.68	10.76	-3.92	10.47	-7.71	NA	NA
May 2017	10.47	-0.72	10.95	-2.16	10.70	-5.67	NA	NA
June 2017	10.57	0.24	11.16	-0.34	10.86	-4.30	10.78	0.00
July 2017	10.62	0.68	11.22	0.24	10.89	-4.00	10.82	0.42
August 2017	10.51	-0.35	11.11	-0.73	10.71	-5.58	10.69	-0.78
September 2017	10.41	-1.25	11.06	-1.23	10.58	-6.78	10.60	-1.70
October 2017	10.31	-2.19	10.90	-2.63	10.27	-9.46	10.44	-3.15
November 2017	10.29	-2.46	10.89	-2.77	10.02	-11.64	10.41	-3.43
December 2017	9.91	-6.02	10.60	-5.33	9.62	-15.19	10.04	-6.89

January 2018	9.98	-5.37	10.56	-5.67	9.48	-16.42	9.93	-7.89
February 2018	9.91	-6.06	10.51	-6.11	9.49	-16.37	9.85	-8.63
March 2018	10.07	-4.48	10.73	-4.14	9.96	-12.23	10.05	-6.73
April 2018	10.17	-3.58	10.73	-4.13	10.11	-10.86	10.18	-5.59
May 2018	10.28	-2.51	10.83	-3.25	10.37	-8.56	10.39	-3.60
June 2018	10.36	-1.80	10.95	-2.19	10.46	-7.78	10.47	-2.88

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	15	449	0	0	0
2	23969	719085	65.5	0	0
3	9829	294869	26.9	0	0
4	98	2931	0.3	38	1.4
5	576	17295	1.6	140	5.3
6	169	5073	0.5	184	6.9
7	35	1063	0.1	148	5.6
8	100	2999	0.3	75	2.8
9	1652	49563	4.5	1572	59.2
10	61	1822	0.2	206	7.8
11	41	1216	0.1	21	0.8
12	27	811	0.1	31	1.2
13	11	324	0	240	9
TOTAL	**36583**	**1097500**	**100**	**2655**	**100**

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

Date	*Day of Week*	*Time*	*Vehicle Class*	*Direction*	*Lane*	*GVW (lbs)*
2018-06-01	Friday	04:38:25	9	NB	1	130.9
2018-06-29	Friday	04:58:05	9	NB	1	130.2
2018-06-15	Friday	03:12:07	10	SB	4	129.79
2018-06-06	Wednesday	15:32:38	9	SB	4	129.16
2018-06-22	Friday	06:27:34	10	SB	3	128.96
2018-06-08	Friday	04:53:08	9	NB	1	127.5
2018-06-05	Tuesday	06:43:28	10	SB	4	124.95
2018-06-12	Tuesday	03:48:51	9	NB	1	118.73
2018-06-02	Saturday	06:40:49	10	NB	1	117.98
2018-06-30	Saturday	13:31:58	10	SB	4	117.54

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	1405	158	11.2	41050	1993	11172
5	NB	8	8518	1253	14.7	108402	9047	25141
6	NB	19	2386	455	19.1	56697	7351	10004
7	NB	11.5	539	0	0	32599	0	13200
8	NB	31	1615	1098	68	20537	24814	2255
9	NB	33	25307	5975	23.6	1140487	166411	251266
10	NB	33.5	1032	310	30	46889	8326	11351
11	NB	36.5	613	56	9.1	30846	1637	5258
12	NB	36.5	416	51	12.3	21079	1690	3878
13	NB	31.5	177	1	0.6	17082	19	5769
TOTAL	****	****	**42008**	**9357**	****	**1515668**	****	**339294**
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	1487	209	14.1	39674	2608	10252
5	SB	8	8545	1424	16.7	110000	10144	26516
6	SB	19	2619	394	15	74570	6592	16148
7	SB	11.5	510	0	0	28703	0	11419
8	SB	31	1344	858	63.8	18921	19179	1927
9	SB	33	23592	6092	25.8	974457	177466	198478
10	SB	33.5	766	173	22.6	38507	4288	9321
11	SB	36.5	587	66	11.2	29637	1982	5310
12	SB	36.5	384	10	2.6	21502	315	3925
13	SB	31.5	143	2	1.4	14136	35	4847
TOTAL	****	****	**39977**	**9228**	****	**1350107**	****	**288144**
GRAND TOTAL	****	****	**81985**	**18585**	**362**	**2865775**	**443896**	**627438**

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	161	117	135	118	531	0
2	759927	567311	487380	785304	2599922	34.3
3	514455	330249	281350	537808	1663861	22
4	34711	8332	7560	34721	85324	1.1
5	96461	20987	17466	102678	237593	3.1
6	55148	8900	8445	72717	145210	1.9
7	30007	2592	1464	27240	61302	0.8
8	39803	5548	3408	34692	83451	1.1
9	1156957	149941	117893	1034030	2458820	32.5
10	49005	6210	4384	38411	98009	1.3
11	30813	1670	805	30814	64102	0.8
12	20385	2384	1116	20701	44586	0.6
13	14445	2656	972	13199	31272	0.4
TOTAL	**2802278**	**1106896**	**932378**	**2732433**	**7573985**	**100**
GVW/LANE	**37**	**14.61**	**12.31**	**36.08**	**100**	**0**

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	0.0023
2	73	61	44	71	249	0.52	7e-04
3	165	99	69	155	488	1.01	0.0034
4	556	138	115	472	1282	2.65	0.89
5	995	171	145	1106	2417	5.01	0.28
6	655	120	123	1138	2036	4.22	0.81
7	526	52	22	408	1008	2.09	1.92
8	491	64	30	395	980	2.03	0.66
9	17571	2735	1709	13786	35801	74.15	1.47
10	734	92	63	530	1419	2.94	1.58
11	621	36	17	642	1316	2.73	2.19
12	208	45	14	211	478	0.99	1.19
13	366	68	18	352	805	1.67	4.88
TOTAL	**22961**	**3682**	**2369**	**19268**	**48279**	**100**	**16**
ESALS/LANE	**47.6**	**7.6**	**4.9**	**39.9**	**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 %*
Jul 2017	975969	31483	2421	900904	92.3	75065.2	7.7	87.4	12.6
Aug 2017	1009074	32551	2616	927992	92	81081.8	8	88.3	11.7
Sep 2017	941075	31369	2573	863885	91.8	77190.3	8.2	89.1	10.9
Oct 2017	953108	30745	2606	872337	91.5	80770.9	8.5	89.1	10.9
Nov 2017	900902	30030	2391	829176	92	71725.8	8	89.1	10.9
Dec 2017	869439	28046	2065	805426	92.6	64013	7.4	88.2	11.8
Jan 2018	777133	25069	2126	711218	91.5	65915.4	8.5	87.3	12.7
Feb 2018	732422	26158	2134	672666	91.8	59756.2	8.2	89.1	10.9
Mar 2018	899645	29021	2200	831445	92.4	68199.7	7.6	90.2	9.8
Apr 2018	850664	28356	2215	784220	92.2	66444	7.8	89.5	10.5
May 2018	1039431	33530	2662	956910	92.1	82521.5	7.9	87.5	12.5
Jun 2018	1097500	36583	2770	1014403	92.4	83097.5	7.6	87.6	12.4
TOTAL	**11046362**	**--**	**--**	**10170582**	**--**	**875781**	**--**	**--**	**--**
AVERAGE	**920530**	**30245**	**2398**	**847548**	**92**	**72982**	**8**	**89**	**11**

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*
Jul 2017	22257	3831	2252	20033	48372	87	13	1.7
Aug 2017	23865	3536	2284	20897	50582	88	12	1.2
Sep 2017	20809	3103	2028	20608	46548	89	11	0.9
Oct 2017	22079	3110	1788	19884	46861	90	10	1.6
Nov 2017	19599	2736	1498	16531	40364	90	10	1.1
Dec 2017	14090	2504	1185	12527	30306	88	12	0.7
Jan 2018	15526	2839	1441	13237	33043	87	13	1.2
Feb 2018	14312	2062	1192	12404	29970	89	11	0.5
Mar 2018	17718	2055	1307	14249	35330	90	10	1.1
Apr 2018	17911	2401	1428	13971	35711	89	11	1.5
May 2018	22396	3529	2349	18747	47020	88	12	2
Jun 2018	23012	3694	2374	19307	48387	87	13	2.4
TOTAL	**233575**	**35399**	**21126**	**202394**	**492494**	**--**	**--**	**--**
AVERAGE	**19465**	**2950**	**1760**	**16866**	**41041**	**89**	**11**	**1**

Gross Vehicle Weight

Month	*GVW NB Passing Lane*	*GVW NB Driving Lane*	*GVW SB Passing Lane*	*GVW SB Driving Lane*	*Total GVW Kips*
Jul 2017	2084390	711458	548906	2059562	5404317
Aug 2017	1947717	627968	484577	1890136	4950397
Sep 2017	2337771	771441	616757	2244953	5970921
Oct 2017	2259387	759393	600722	2164611	5784113
Nov 2017	2707830	1023785	857182	2663473	7252270
Dec 2017	2805374	1107547	932861	2734606	7580388
Jan 2018	2582553	971563	803393	2647878	7005386
Feb 2018	2736287	998847	829406	2723748	7288288
Mar 2018	2534621	897107	740675	2614255	6786658
Apr 2018	2637284	907307	731619	2602728	6878938
May 2018	2414147	828796	668537	2357091	6268571
Jun 2018	2153551	784938	597727	2126715	5662931
TOTAL	**29200911**	**10390150**	**8412361**	**28829757**	**76833179**
AVERAGE	**2433409**	**865846**	**701030**	**2402480**	**6402765**

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*
Jul 2017	3688	0.4	5	168	82
Aug 2017	3022	0.3	3.8	123	58
Sep 2017	2871	0.3	3.8	124	77
Oct 2017	2480	0.3	3.1	117	72
Nov 2017	1977	0.2	2.8	133	81
Dec 2017	868	0.1	1.4	61	38
Jan 2018	1147	0.1	1.8	65	41
Feb 2018	1037	0.1	1.7	50	26
Mar 2018	1066	0.1	1.6	70	34
Apr 2018	1338	0.2	2	93	63
May 2018	2314	0.2	2.8	232	122
Jun 2018	2666	0.2	3.2	261	186
TOTAL	**24474**	**--**	**--**	**1497**	**880**
AVERAGE	**2039.5**	**0.2**	**2.8**	**124.8**	**73.3**

Freight

Month	*NB Freight Tons*	*SB Freight Tons*	*Total Freight*	*NB Freight %*	*SB Freight %*
Jul 2017	325024	283175	608199	53.4	46.6
Aug 2017	340556	296904	637460	53.4	46.6
Sep 2017	301806	300251	602057	50.1	49.9
Oct 2017	327015	290927	617942	52.9	47.1
Nov 2017	288577	242461	531038	54.3	45.7
Dec 2017	226392	195594	421986	53.6	46.4
Jan 2018	243904	210402	454307	53.7	46.3
Feb 2018	217781	187177	404958	53.8	46.2
Mar 2018	259219	219426	478646	54.2	45.8
Apr 2018	262841	213385	476226	55.2	44.8
May 2018	329620	285332	614952	53.6	46.4
Jun 2018	339294	288144	627438	54.1	45.9
TOTAL	**3462029**	**3013179**	**6475208**	**--**	**--**
AVERAGE	**288502.5**	**251098.2**	**539600.7**	**53.5**	**46.5**