

AUGUST 2018



05/18/2010

**WIM #26  
I-35, MP 30.1  
OWATONNA, MN**

**MONTHLY  
REPORT**



06/28/2010

*Your Destination...Our Priority*



## WIM Site Location

WIM #26 is located on I-35 near Owatonna in Steele county.

## System Operation

WIM #26 was operational for the entire month of August 2018. Volume was computed using all monthly data.

## System Calibration

WIM #26 was most recently calibrated on 2018-06-21. Table 1 summarizes the front axle weights of class 9s by lane <sup>1</sup>. 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 <sup>2</sup>. 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: 761407 | Passenger Vehicles: 601556 | Heavy Commercial Vehicles: 159851

Monthly Average Daily Traffic (MADT): 24562 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 5156

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 Sundays, 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 9's and Class 5's.

## Overweight HCVs

**Volume trends.** Of a total of 159851 HCVs, 28138 of them were overweight<sup>3</sup>. These overweight HCVs contributed to 3.8% of total monthly volume, and 18% of total monthly HCV volume. NB overweight vehicles typically reached highest numbers on Thursdays, with lowest volumes reported on Saturdays. 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 6 vehicles . Overall, overweight vehicles tended to reach peak volume concentrations during typical business hours, with 70.6% 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 August.

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<sup>4</sup>.

Using normal load limits ,723 NB vehicles exceeded 88,000 pounds (434 vehicles were Class 9's; 171 vehicles were Class 10's). Of vehicles traveling SB,

212 NB vehicles exceeded 88,000 pounds (99 vehicles were Class 13's; 69 vehicles were Class 10'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 1781322 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (55.4%) than SB (44.6%). See Table 4 and Figure 11 for more freight information.

## Infrastructure Considerations

**Bridge.** Bridge No. 91086 (a box culvert) is approximately 0.5 miles north of WIM #26, and Bridge No. 91095 (also a box culvert) is 6.9 miles south of WIM #26. WIM #26 recorded a total of 761407 vehicles with a combined GVW of 11064134 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 166172 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 57.7% of all ESALs were recorded NB while 42.3% was observed SB. In particular, 81% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 59% 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).

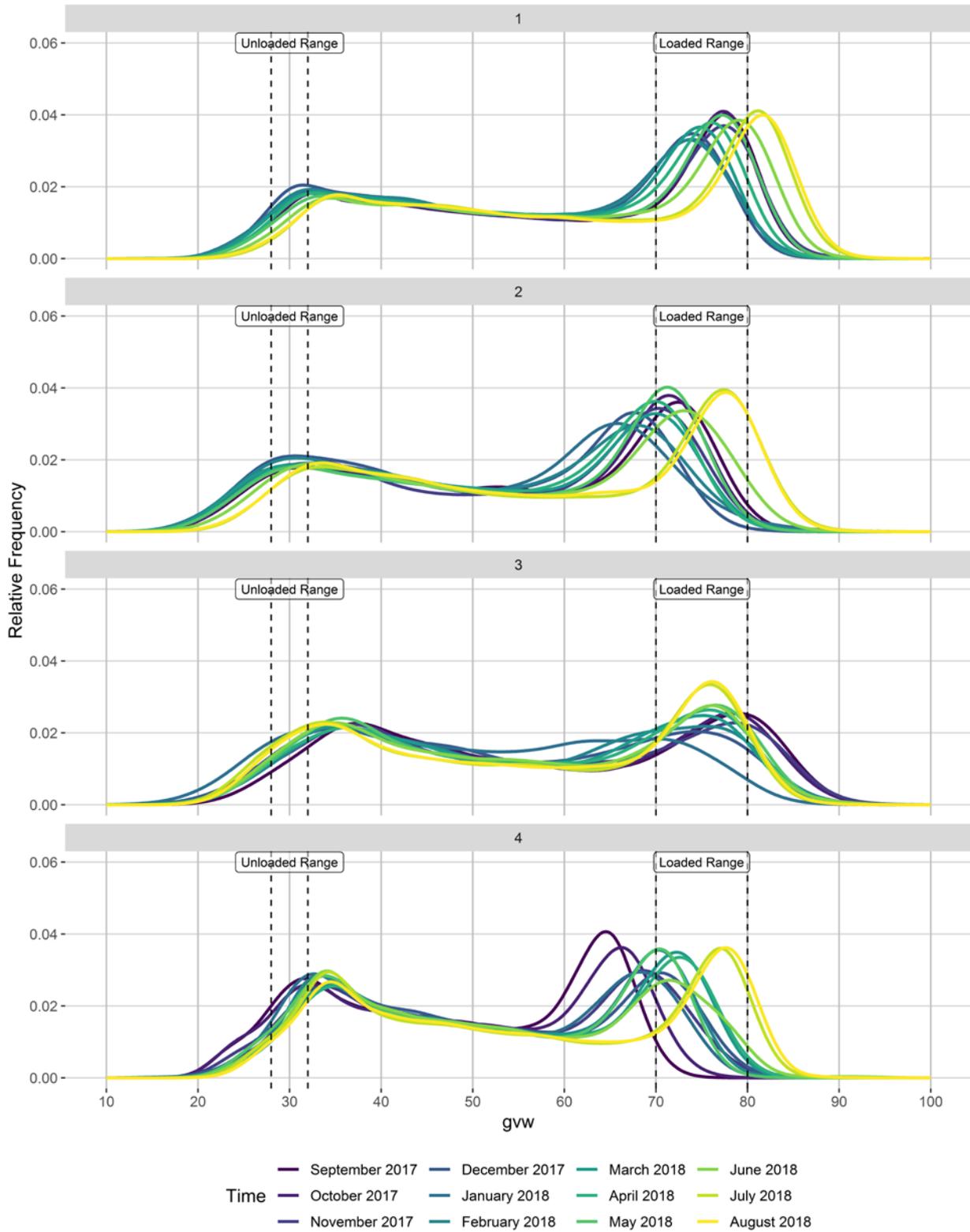
*WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>*

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>

- <sup>1</sup> 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
- <sup>2</sup> 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.
- <sup>3</sup> 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](http://www.mrr.dot.state.mn.us/research/seasonal_load_limits/sllindex.asp)
- <sup>4</sup> 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.

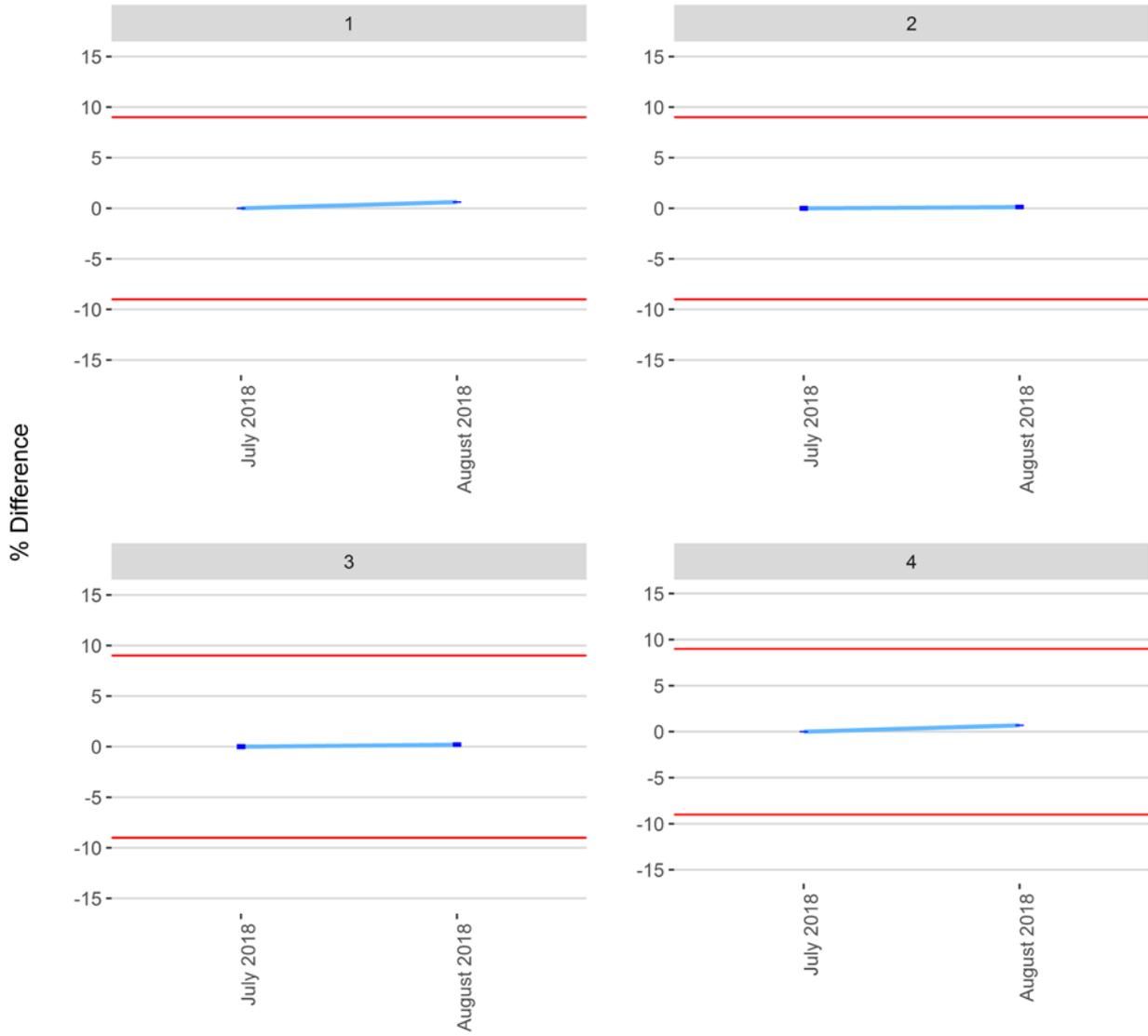
**To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to [ADArequest.dot@state.mn.us](mailto:ADArequest.dot@state.mn.us). Please request at least one week in advance.**

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

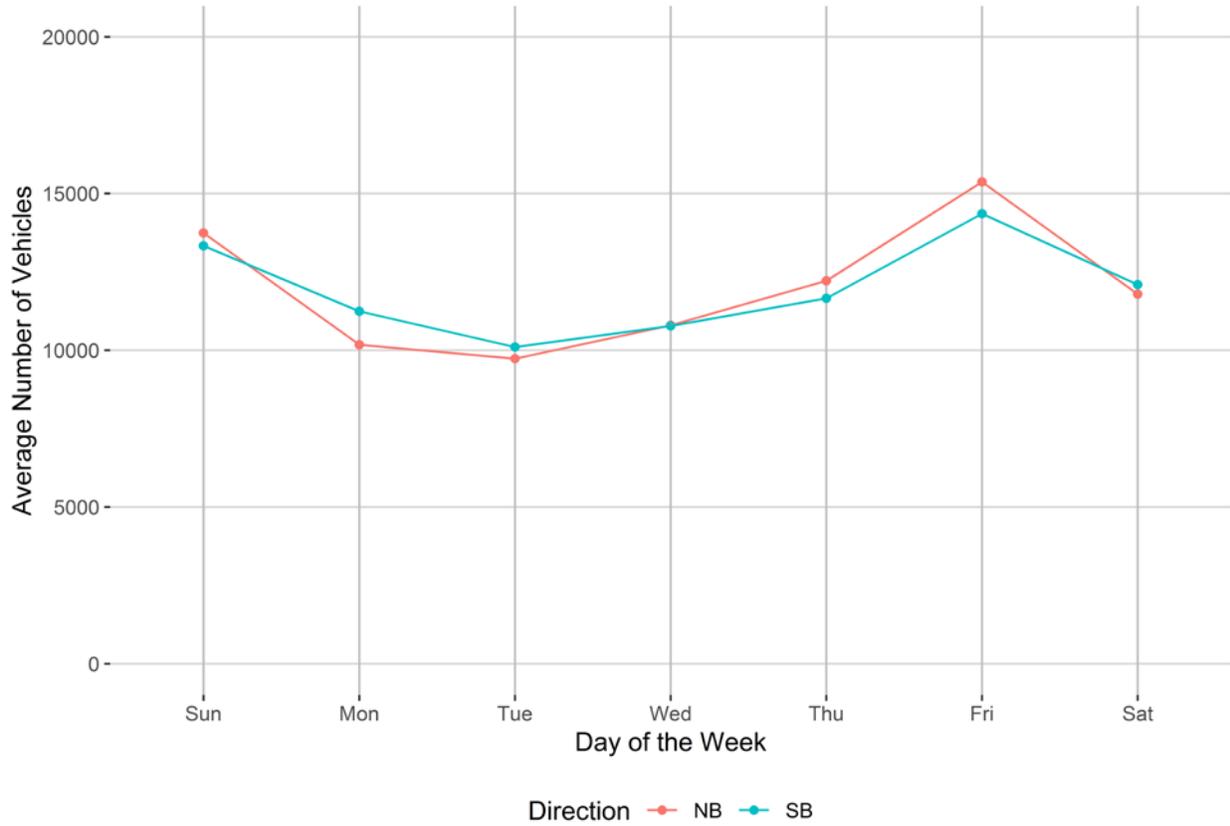


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

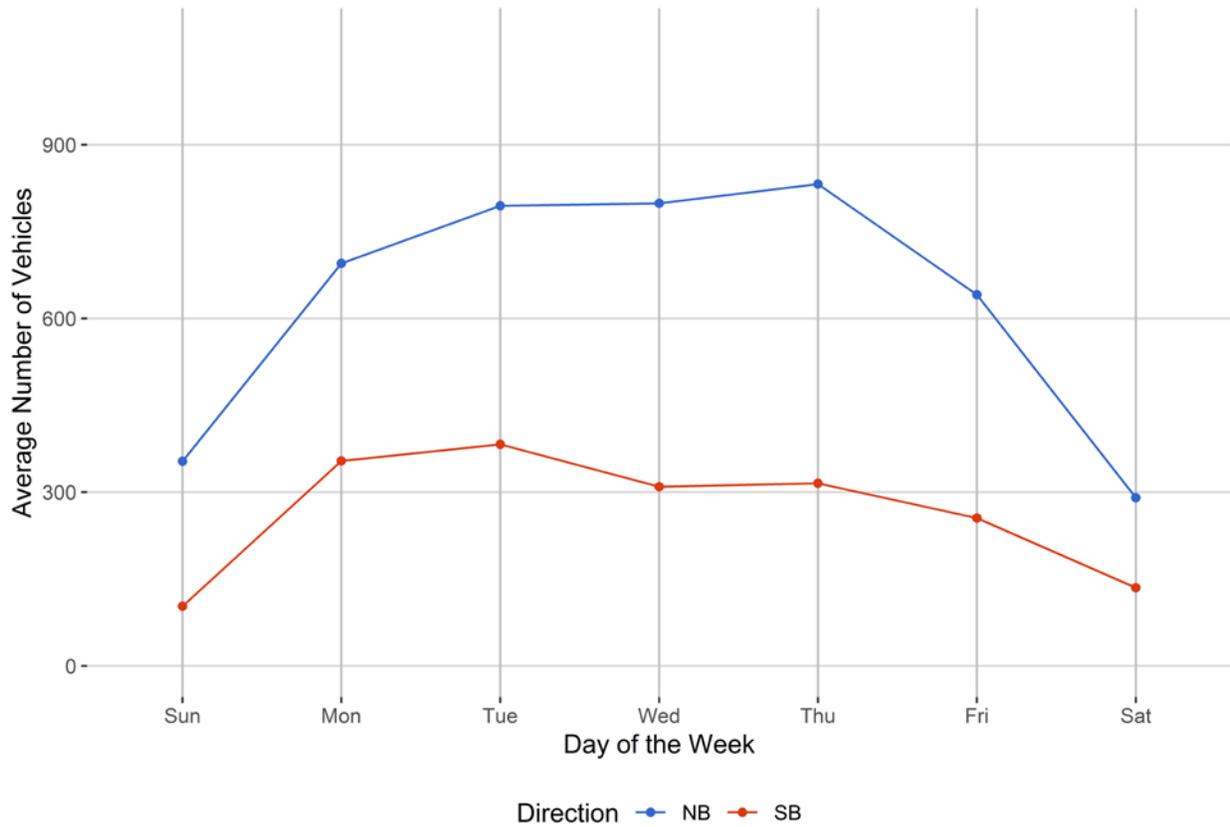


Figure 4 - Passenger Vehicles vs. Hour of the Day

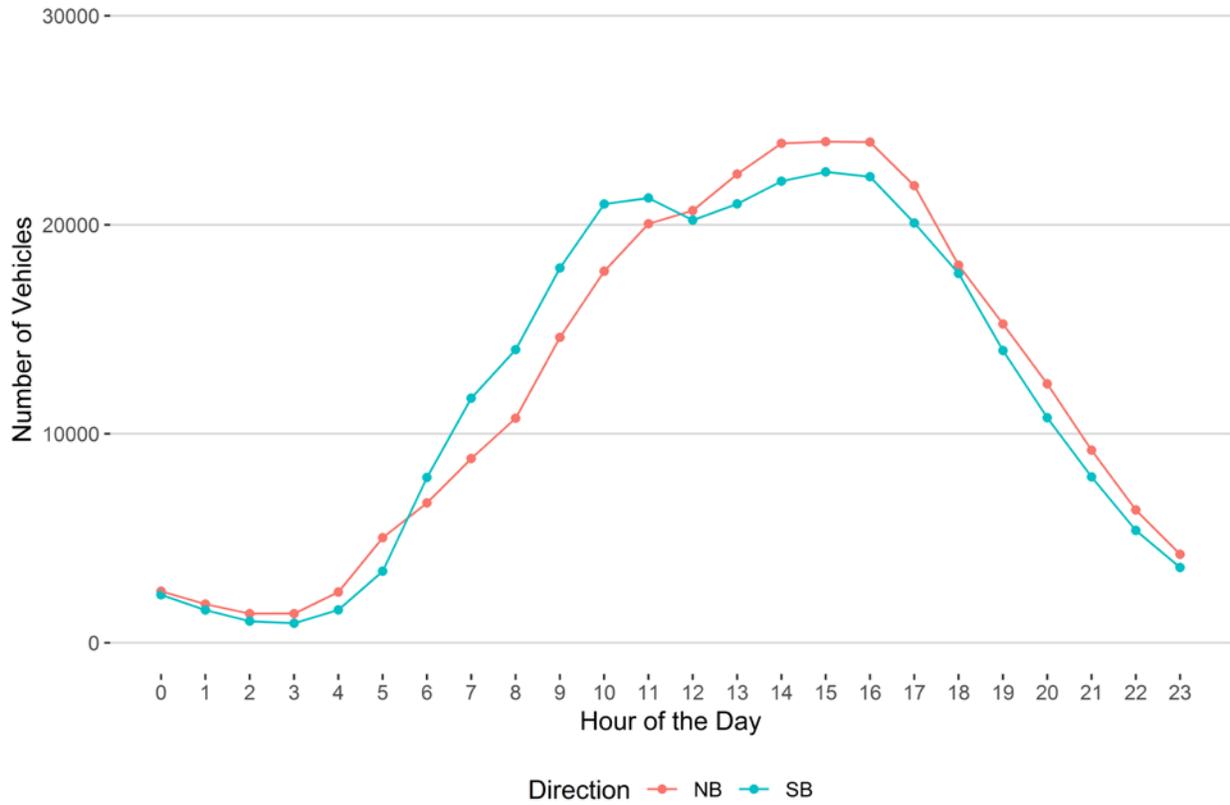


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

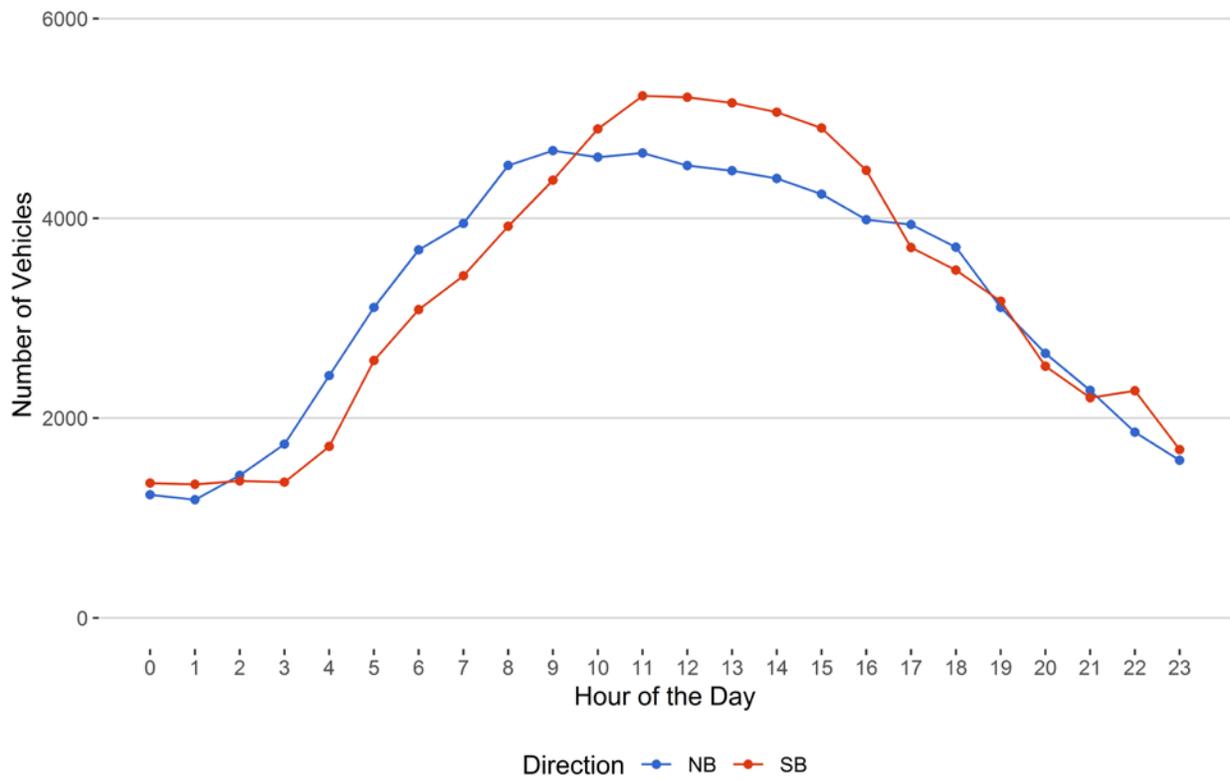


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

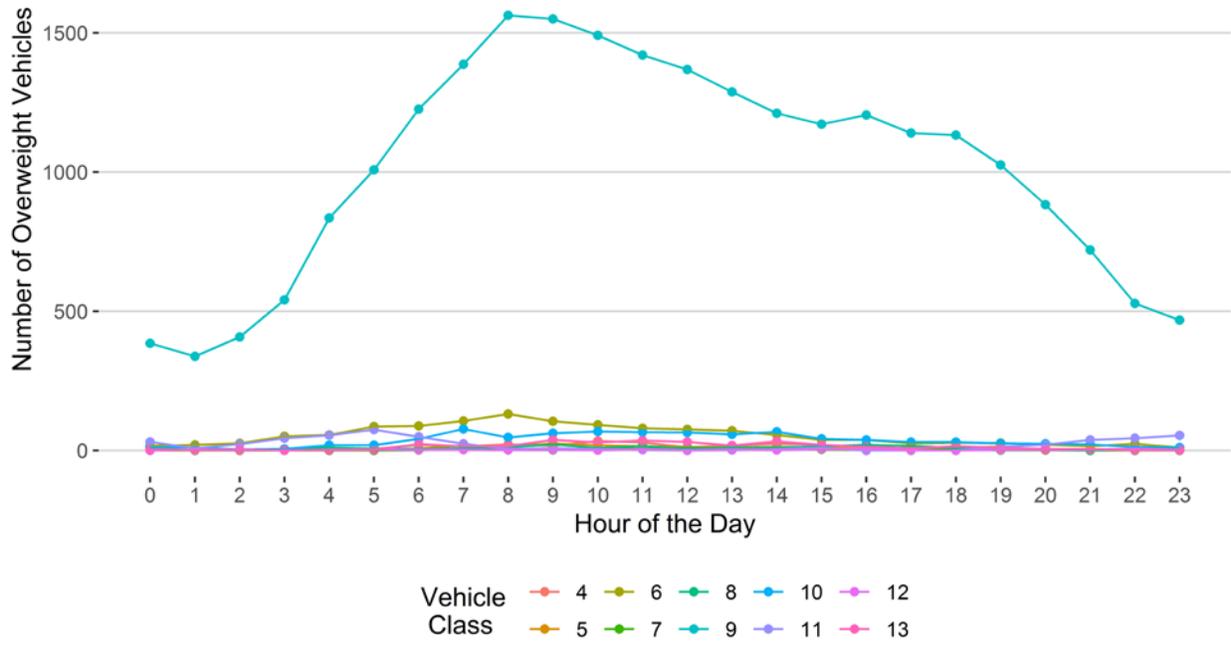


Figure 7 - Overweight Vehicles by Direction  
Hour of the Day

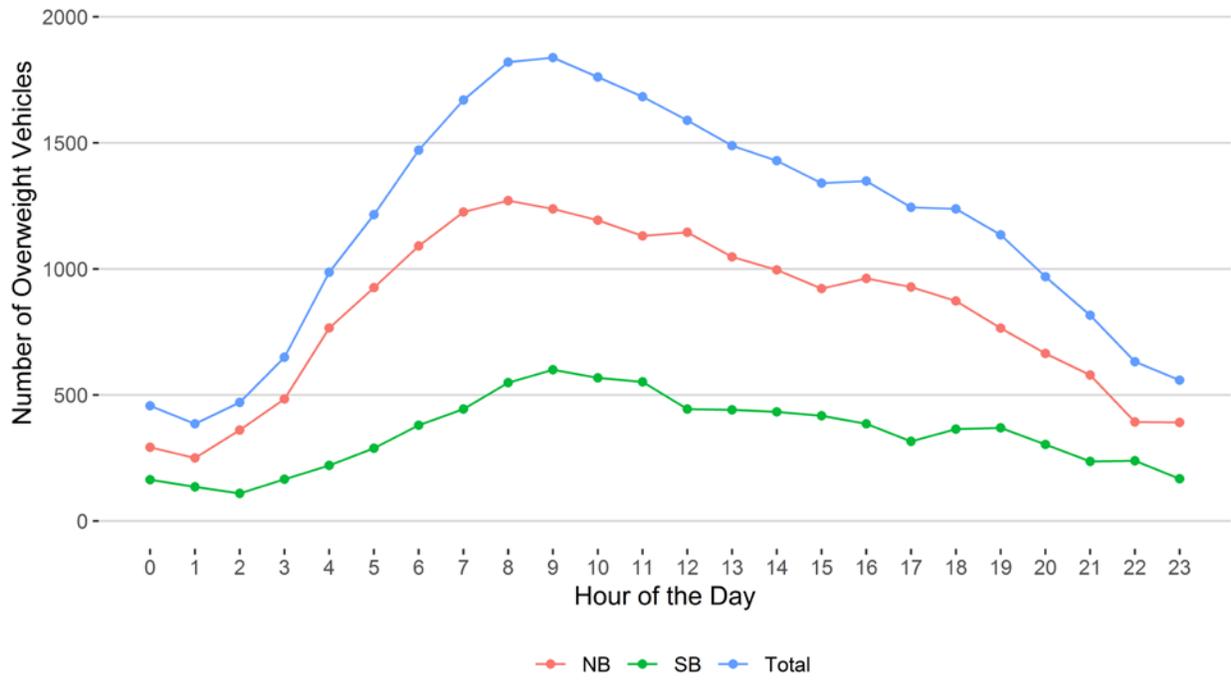
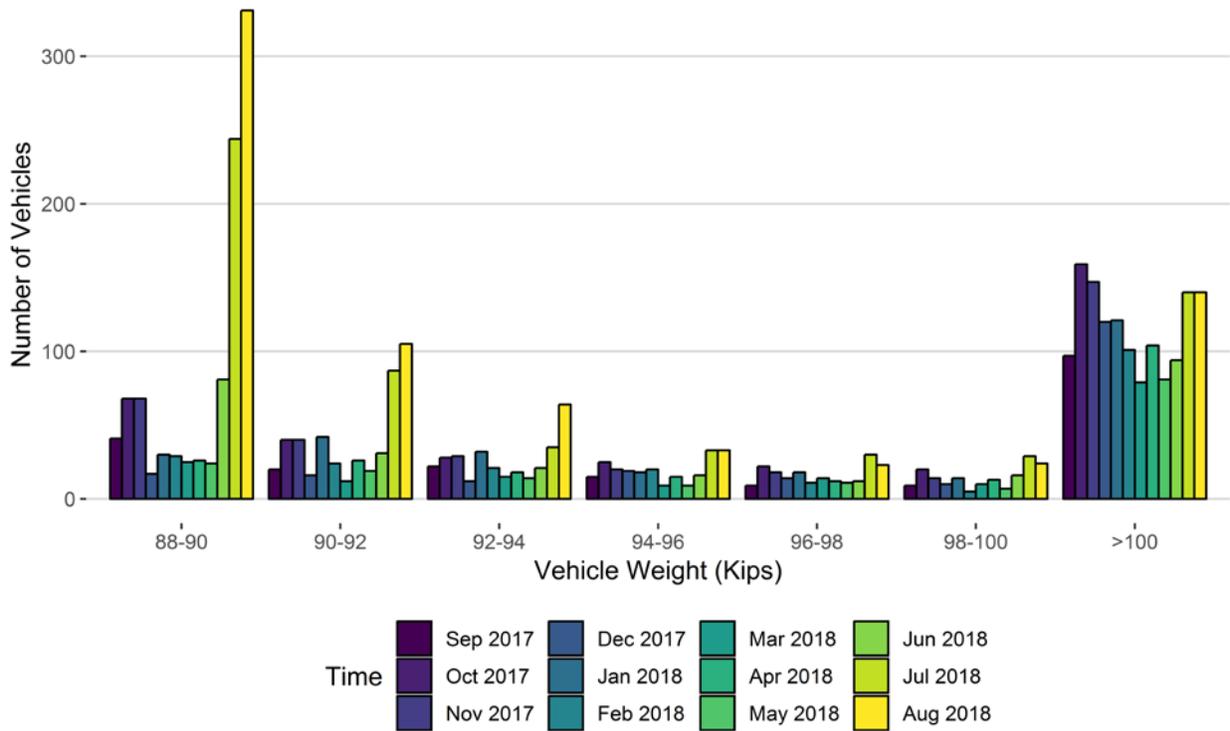
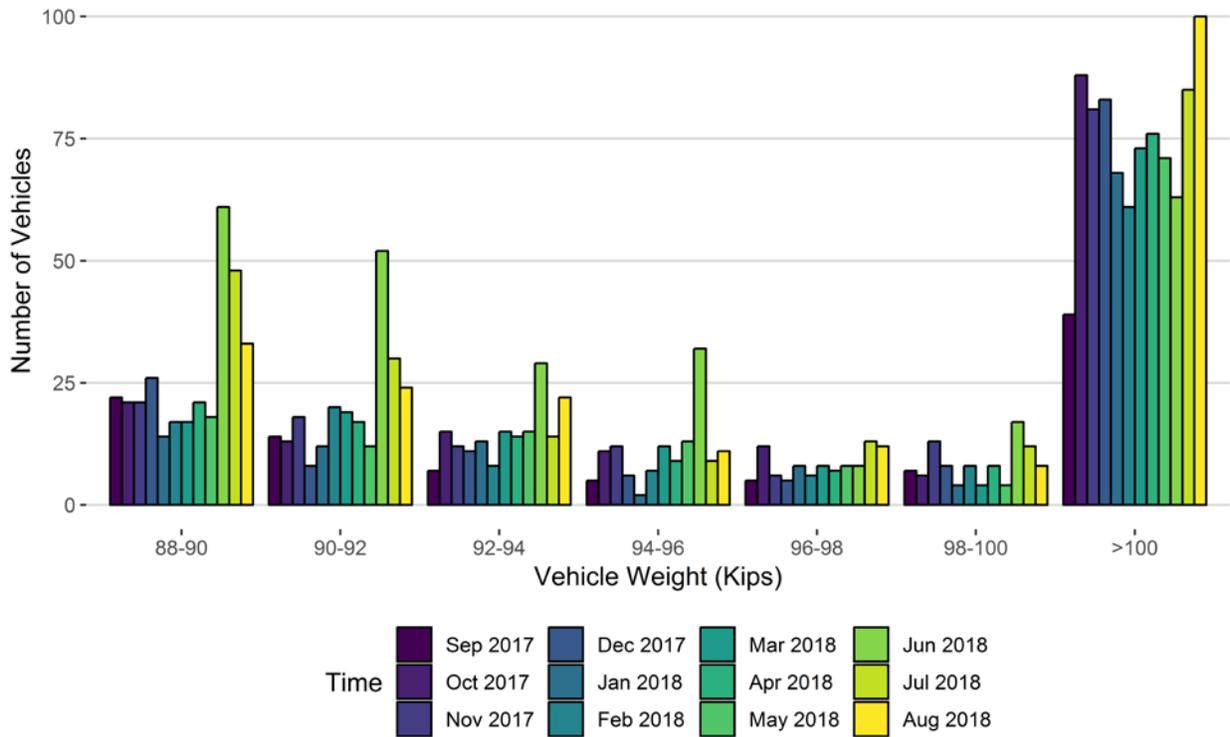


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018
88-90	41	68	68	17	30	29	25	26	24	81	244	331
90-92	20	40	40	16	42	24	12	26	19	31	87	105
92-94	22	28	29	12	32	21	15	18	14	21	35	64
94-96	15	25	20	19	18	20	9	15	9	16	33	33
96-98	9	22	18	14	18	11	14	12	11	12	30	23
98-100	9	20	14	10	14	5	10	13	7	16	29	24
>100	97	159	147	120	121	101	79	104	81	94	140	140
Total	213	362	336	208	275	211	164	214	165	271	598	720

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



Vehicle Weights (Kips)	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018
88-90	22	21	21	26	14	17	17	21	18	61	48	33
90-92	14	13	18	8	12	20	19	17	12	52	30	24
92-94	7	15	12	11	13	8	15	14	15	29	14	22
94-96	5	11	12	6	2	7	12	9	13	32	9	11
96-98	5	12	6	5	8	6	8	7	8	8	13	12
98-100	7	6	13	8	4	8	4	8	4	17	12	8
>100	39	88	81	83	68	61	73	76	71	63	85	100
Total	99	166	163	147	121	127	148	152	141	262	211	210

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

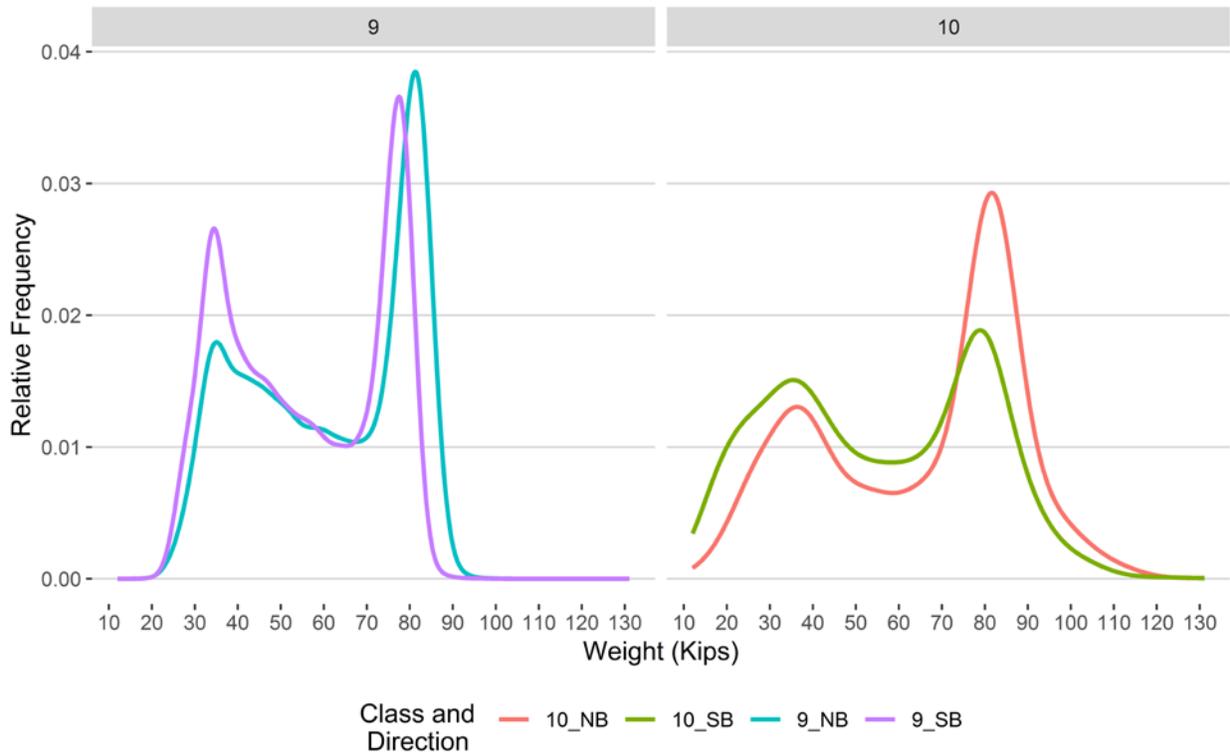


Figure 9 - Freight Percentage by Direction and Class

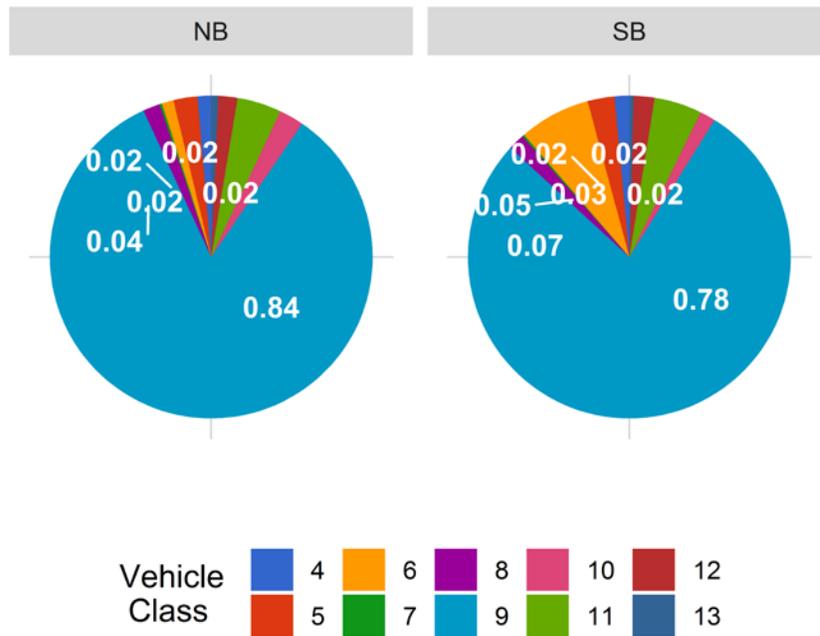


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

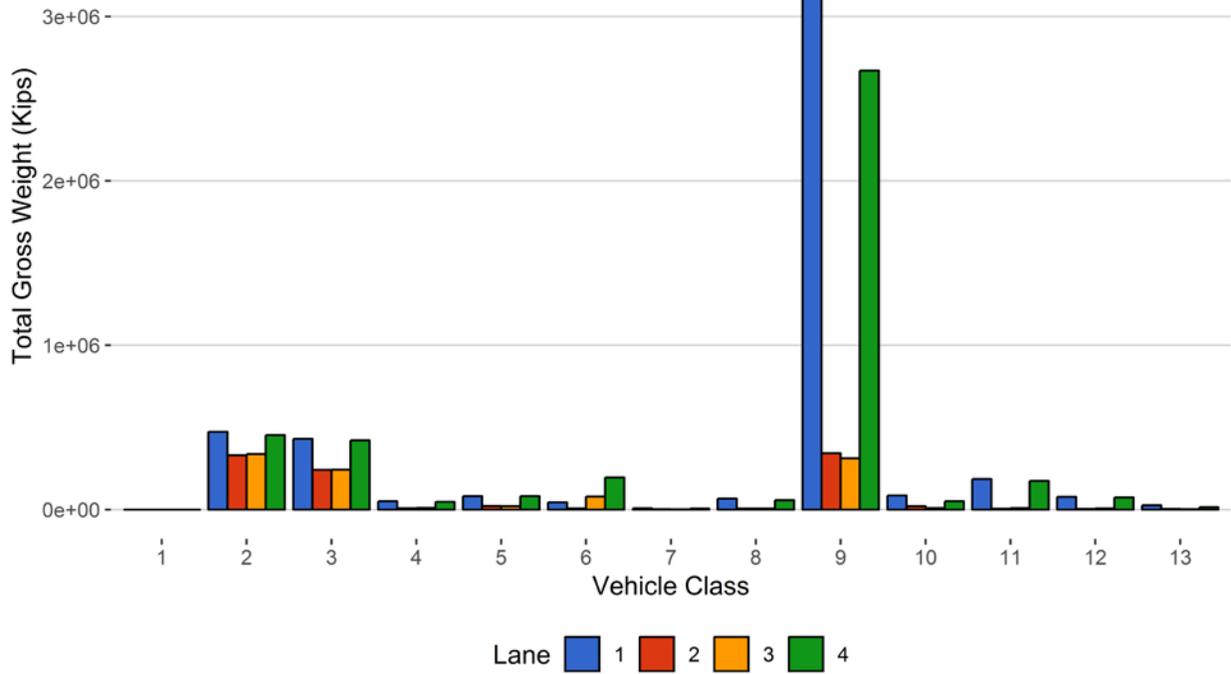


Figure 11 - Total Gross Vehicle Weight t

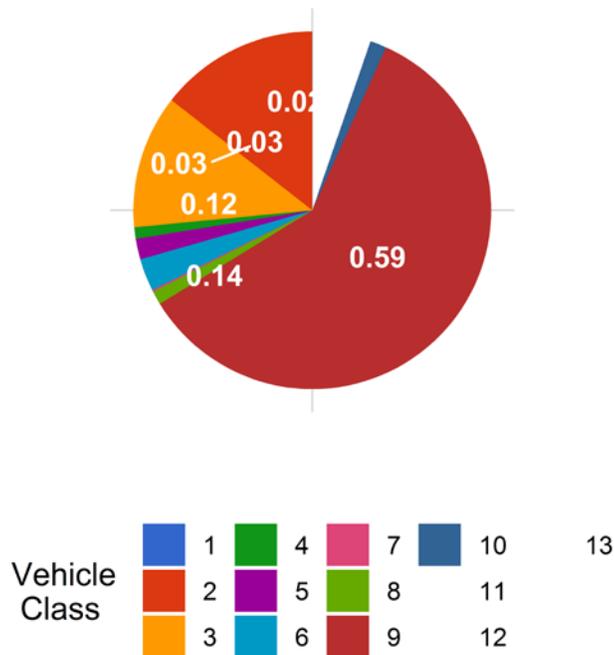


Figure 12 - Total ESALs by Class and Lane

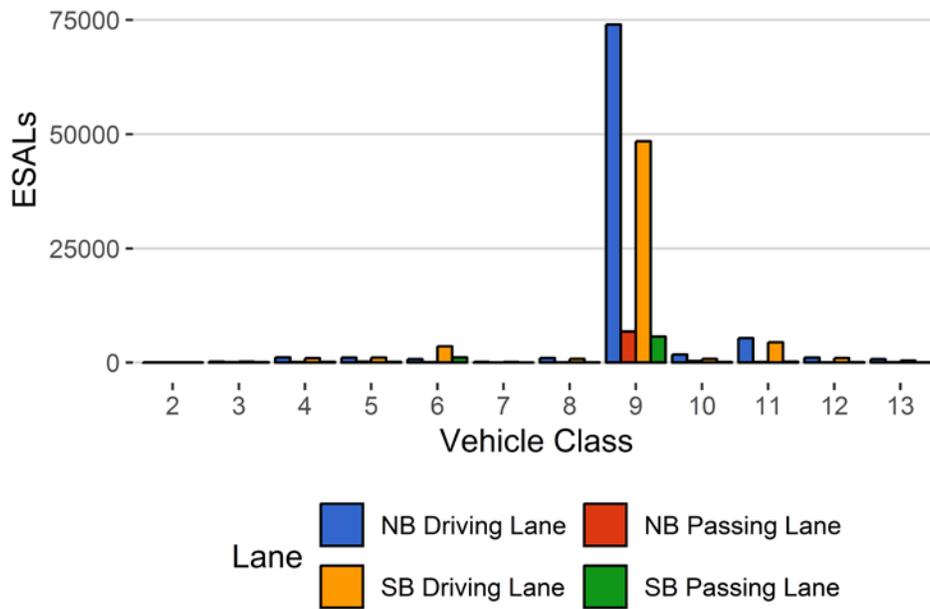
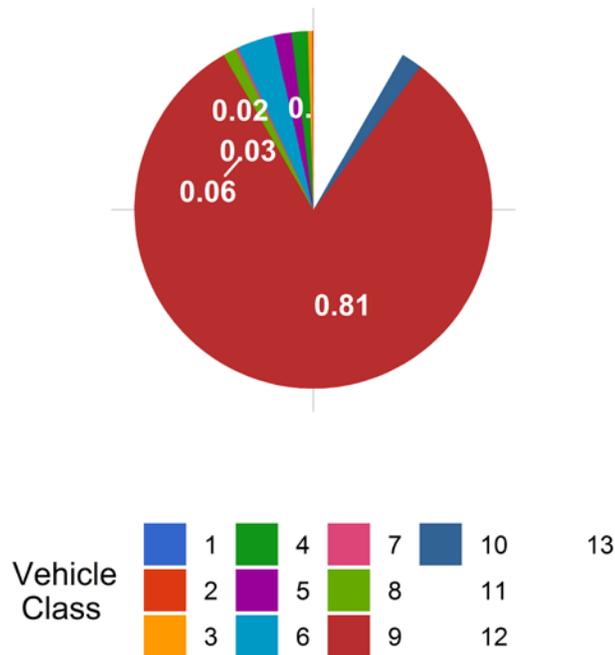


Figure 13 - ESALs by Class



**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>
July 2018	11.67	0.00	11.30	0.00	11.46	0.0	11.42	0.00
August 2018	11.75	0.62	11.31	0.12	11.49	0.2	11.50	0.69

**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	4	129	0	0	0
2	12885	399450	52.5	0	0
3	6515	201978	26.5	0	0
4	132	4078	0.5	297	1.1
5	460	14275	1.9	213	0.8
6	343	10627	1.4	1290	4.6
7	12	375	0	66	0.2
8	140	4337	0.6	203	0.7
9	3682	114128	15	24293	86.3
10	89	2749	0.4	858	3
11	199	6155	0.8	518	1.8
12	85	2624	0.3	70	0.2
13	16	503	0.1	330	1.2
<b>TOTAL</b>	<b>24562</b>	<b>761407</b>	<b>100</b>	<b>28138</b>	<b>100</b>

**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	17:54:25	10	NB	1	131.1
2018-08-03	Friday	09:00:11	10	SB	4	124.73
2018-08-20	Monday	17:41:56	10	NB	1	118.9
2018-08-03	Friday	19:54:23	10	SB	4	117.2
2018-08-29	Wednesday	08:23:23	10	NB	1	116.79
2018-08-24	Friday	21:01:54	10	NB	1	115.69
2018-08-12	Sunday	08:55:39	10	NB	1	114.77
2018-08-17	Friday	07:20:46	10	NB	1	113.17
2018-08-22	Wednesday	08:18:05	10	NB	2	112.07
2018-08-30	Thursday	23:14:48	10	NB	1	111.78

**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	2027	197	9.7	55895	2590	14222
5	NB	8	7012	664	9.5	98246	4814	23731
6	NB	19	1796	323	18	45451	5632	8732
7	NB	11.5	204	0	0	10276	0	3965
8	NB	31	2247	984	43.8	50788	22570	5817
9	NB	33	58432	4121	7.1	3464305	123371	836021
10	NB	33.5	1622	206	12.7	100104	5476	26334
11	NB	36.5	3001	67	2.2	189059	1794	40984
12	NB	36.5	1314	12	0.9	82013	240	17245
13	NB	31.5	332	1	0.3	30027	18	9800
<b>TOTAL</b>	<b>****</b>	<b>****</b>	<b>77987</b>	<b>6575</b>	<b>****</b>	<b>4126165</b>	<b>****</b>	<b>986853</b>
<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	1966	197	10	53849	2600	13657
5	SB	8	6964	610	8.8	98541	4423	23855
6	SB	19	8608	276	3.2	269198	4854	55445
7	SB	11.5	163	0	0	7683	0	2904
8	SB	31	1999	923	46.2	42554	20673	4599
9	SB	33	53304	5919	11.1	2806661	175987	621478
10	SB	33.5	1069	238	22.3	53694	5769	12928
11	SB	36.5	3025	100	3.3	180409	2849	36823
12	SB	36.5	1255	11	0.9	79664	240	17129
13	SB	31.5	160	0	0	16343	0	5651
<b>TOTAL</b>	<b>****</b>	<b>****</b>	<b>78513</b>	<b>8274</b>	<b>****</b>	<b>3608597</b>	<b>****</b>	<b>794470</b>
<b>GRAND TOTAL</b>	<b>****</b>	<b>****</b>	<b>156500</b>	<b>14849</b>	<b>210</b>	<b>7734762</b>	<b>383899</b>	<b>1781322</b>

**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	78	67	17	10	172	0
2	472595	330453	337508	453562	1594117	14.4
3	430489	241845	242500	421005	1335839	12.1
4	50334	8150	9779	46671	114934	1
5	81621	21438	20764	82200	206023	1.9
6	43699	7384	78887	195164	325135	2.9
7	8279	1997	1088	6596	17959	0.2
8	66790	6568	5963	57264	136585	1.2
9	3244602	343075	311475	2671174	6570325	59.5
10	85355	20225	9288	50175	165043	1.5
11	185474	5379	8978	174280	374111	3.4
12	77495	4758	6991	72913	162157	1.5
13	25671	4375	2005	14338	46389	0.4
<b>TOTAL</b>	<b>4772481</b>	<b>995714</b>	<b>1035242</b>	<b>4245350</b>	<b>11048788</b>	<b>100</b>
<b>GVW/LANE</b>	<b>43.19</b>	<b>9.01</b>	<b>9.37</b>	<b>38.42</b>	<b>100</b>	<b>0</b>

**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	0.0079
2	58	39	42	55	194	0.12	0.001
3	221	88	85	207	601	0.36	0.0061
4	1153	144	182	1000	2479	1.5	1.24
5	1100	213	195	1112	2620	1.58	0.38
6	780	111	1131	3588	5610	3.39	1.08
7	190	33	26	143	393	0.24	2.12
8	1043	63	59	794	1959	1.18	0.92
9	73993	6809	5702	48455	134960	81.43	2.42
10	1786	356	156	820	3118	1.88	2.31
11	5370	130	210	4477	10187	6.15	3.38
12	1113	63	89	1008	2273	1.37	1.77
13	755	111	43	436	1345	0.81	5.36
<b>TOTAL</b>	<b>87563</b>	<b>8160</b>	<b>7920</b>	<b>62096</b>	<b>165739</b>	<b>100</b>	<b>21</b>
<b>ESALS/LANE</b>	<b>52.8</b>	<b>4.9</b>	<b>4.8</b>	<b>37.5</b>	<b>100</b>	<b>-</b>	<b>-</b>

**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>
Sep 2017	664495	22150	4449	531039	79.9	133456.3	20.1	92.4	7.6
Oct 2017	667623	21536	4620	524413	78.5	143210	21.5	92.4	7.6
Nov 2017	630878	21029	4385	499321	79.1	131556.6	20.9	92.9	7.1
Dec 2017	598759	19315	3752	482443	80.6	116315.6	19.4	91.9	8.1
Jan 2018	498163	16070	3966	375222	75.3	122941	24.7	88.4	11.6
Feb 2018	464482	16589	4150	348276	75	116206.3	25	92	8
Mar 2018	610968	19709	4160	482021	78.9	128946.7	21.1	93.1	6.9
Apr 2018	580205	19340	4325	450468	77.6	129736.9	22.4	91.8	8.2
May 2018	719401	23206	4783	571124	79.4	148276.5	20.6	91.1	8.9
Jun 2018	747544	24918	4473	613365	82.1	134179	17.9	90.9	9.1
Jul 2018	778261	25105	4938	625188	80.3	153073.3	19.7	90	10
Aug 2018	761407	24562	5156	601556	79	159850.7	21	87.3	12.7
<b>TOTAL</b>	<b>7722186</b>	<b>-</b>	<b>-</b>	<b>6104436</b>	<b>-</b>	<b>1617749</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>AVERAGE</b>	<b>643516</b>	<b>21127</b>	<b>4430</b>	<b>508703</b>	<b>79</b>	<b>134812</b>	<b>21</b>	<b>91</b>	<b>9</b>

## 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>
Sep 2017	61593	3080	5710	28145	98528	91	9	1.3
Oct 2017	66601	3451	5521	34297	109870	92	8	2.1
Nov 2017	60237	2750	4767	39203	106958	93	7	2.4
Dec 2017	151523	2537	4138	37192	195390	97	3	1.5
Jan 2018	46740	3145	5747	31738	87370	90	10	2.6
Feb 2018	45003	2704	4412	36670	88789	92	8	1.3
Mar 2018	51869	2660	4158	45512	104199	93	7	0.8
Apr 2018	53425	3150	5206	45592	107375	92	8	1.2
May 2018	65022	3953	6376	43927	119277	91	9	0.8
Jun 2018	65146	4085	5477	43627	118334	92	8	1.6
Jul 2018	84400	6449	5875	59420	156145	92	8	3.5
Aug 2018	87730	8168	7986	62288	166172	90	10	4
<b>TOTAL</b>	<b>839290</b>	<b>46131</b>	<b>65373</b>	<b>507611</b>	<b>1458406</b>	-	-	-
<b>AVERAGE</b>	<b>69941</b>	<b>3844</b>	<b>5448</b>	<b>42301</b>	<b>121534</b>	<b>92</b>	<b>8</b>	<b>2</b>

## 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>
Sep 2017	3275872	466854	698236	2966421	7407383
Oct 2017	3170037	420956	496963	3061183	7149139
Nov 2017	3711268	525438	606268	3615881	8458855
Dec 2017	3624977	545528	630879	3546495	8347880
Jan 2018	4186867	740631	818945	3906425	9652869
Feb 2018	4025326	788976	859885	3638548	9312736
Mar 2018	4721860	908715	910021	4255066	10795661
Apr 2018	4778193	996057	1037615	4252269	11064134
May 2018	3995653	604537	753105	3271699	8624994
Jun 2018	4193508	627103	742411	3610520	9173542
Jul 2018	3855881	557231	673377	3560603	8647091
Aug 2018	3245594	531065	608746	3263953	7649358
<b>TOTAL</b>	<b>46785037</b>	<b>7713091</b>	<b>8836451</b>	<b>42949063</b>	<b>106283641</b>
<b>AVERAGE</b>	<b>3898753</b>	<b>642758</b>	<b>736371</b>	<b>3579089</b>	<b>8856970</b>

## 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>
Sep 2017	8219	1.3	6.4	314	154
Oct 2017	8706	1.4	6.3	535	276
Nov 2017	8945	1.5	7	502	256
Dec 2017	3916	0.7	3.4	479	326
Jan 2018	4115	0.9	3.5	400	207
Feb 2018	4373	1	3.9	340	176
Mar 2018	5137	0.9	4.1	314	166
Apr 2018	6713	1.2	5.4	367	201
May 2018	8892	1.3	6.2	310	163
Jun 2018	13748	1.9	10.7	534	191
Jul 2018	25547	3.4	17	823	274
Aug 2018	28197	3.8	17.9	935	276
<b>TOTAL</b>	<b>126508</b>	<b>-</b>	<b>-</b>	<b>5853</b>	<b>2666</b>
<b>AVERAGE</b>	<b>10542.3</b>	<b>1.6</b>	<b>7.6</b>	<b>487.8</b>	<b>222.2</b>

## 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>
Sep 2017	725921	495253	1221175	59.4	40.6
Oct 2017	790336	566563	1356900	58.2	41.8
Nov 2017	707648	586202	1293850	54.7	45.3
Dec 2017	542161	526583	1068744	50.7	49.3
Jan 2018	600277	513278	1113555	53.9	46.1
Feb 2018	574758	537046	1111805	51.7	48.3
Mar 2018	650592	625947	1276539	51	49
Apr 2018	658557	636211	1294768	50.9	49.1
May 2018	777383	660394	1437777	54.1	45.9
Jun 2018	752229	604505	1356734	55.4	44.6
Jul 2018	944419	750020	1694439	55.7	44.3
Aug 2018	986853	794470	1781322	55.4	44.6
<b>TOTAL</b>	<b>8711134</b>	<b>7296473</b>	<b>16007608</b>	-	-
<b>AVERAGE</b>	<b>725927.9</b>	<b>608039.4</b>	<b>1333967.3</b>	<b>54.3</b>	<b>45.7</b>