

**JANUARY 2018**



**WIM #42  
US 61,  
MP 119.6  
COTTAGE  
GROVE,  
MINNESOTA**

**MONTHLY  
REPORT**



*Your Destination... Our Priority*



## WIM Site Location

WIM #42 is located on US 61 near Cottage Grove in Washington county.

## System Operation

WIM #42 was operational for the entire month of January 2018. Volume was computed using all monthly data.

## System Calibration

WIM #42 was most recently calibrated on 2016-08-04. 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 except lane 2. 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: 872295 | Passenger Vehicles: 833551 | Heavy Commercial Vehicles: 38744

Monthly Average Daily Traffic (MADT): 28139 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1250

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 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 06 AM and 04 PM. Similarly, SB PVs peaked in volume between 03 PM and 05 PM

### Heavy Commercial Vehicles (HCVs)

**Volume trends.** On an average 24-hour day, HCVs traveling NB typically reached peak volume levels between 06 AM and 04 PM, while volume going SB peaked between 03 PM and 05 PM. See Figure 6. Out of all HCVs, the two highest traffic volumes were generated by Class 9's and Class 14's.

## Overweight HCVs

**Volume trends.** Of a total of 38744 HCVs, 2759 of them were overweight<sup>3</sup>. These overweight HCVs contributed to 0.3% of total monthly volume, and 7.4% 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 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 67.9% 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 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 ,69 NB vehicles exceeded 88,000 pounds (46 vehicles were Class 10's; 12 vehicles were Class 9's). Of vehicles traveling SB,

155 NB vehicles exceeded 88,000 pounds (99 vehicles were Class 9's; 32 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from January 2018.

**Loaded vs. Unloaded HCVs.** Figure 10 shows the GVW distributions of Class 9s and 10s in January 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 244524 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (50.2%) than SB (49.8%). See Table 4 and Figure 11 for more freight information.

## Infrastructure Considerations

**Bridge.** Bridge No. 5895 (Hastings Bridge) is approximately 1.9 miles south of WIM #42, and Bridge No. 82J16 is 1.0 miles north of WIM #42. WIM #42 recorded a total of 872295 vehicles with a combined GVW of 4740903 kips (1 kip = 1,000 pounds = 0.5 tons) in January 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

**Pavement Design.** A total of 20755 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 52.9% of all ESALs were recorded SB while 47.1% was observed NB. In particular, 67% 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).

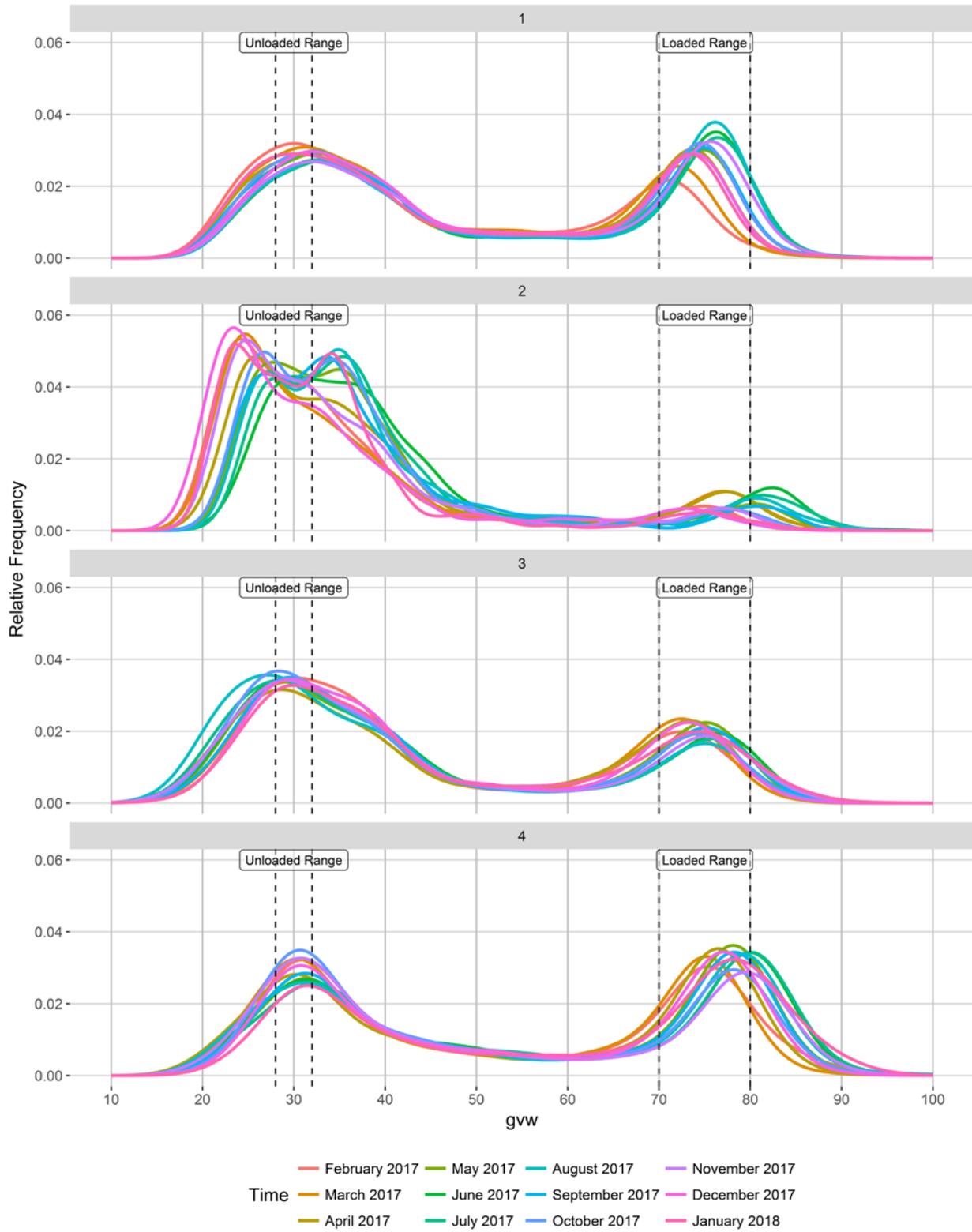
*WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>*

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>

- <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.

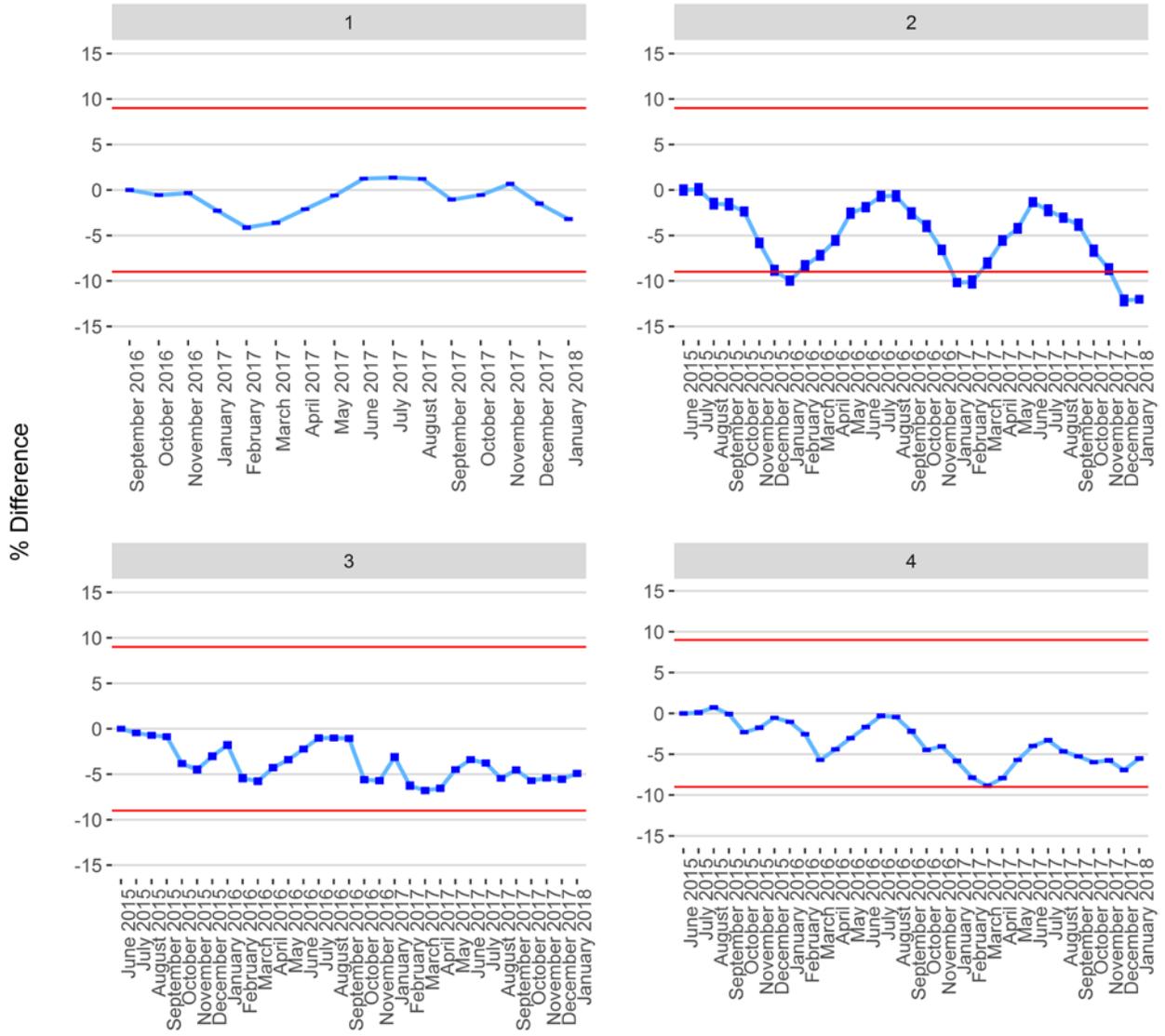
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Figure 1 - Monthly Class 9 GVW Histogram



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

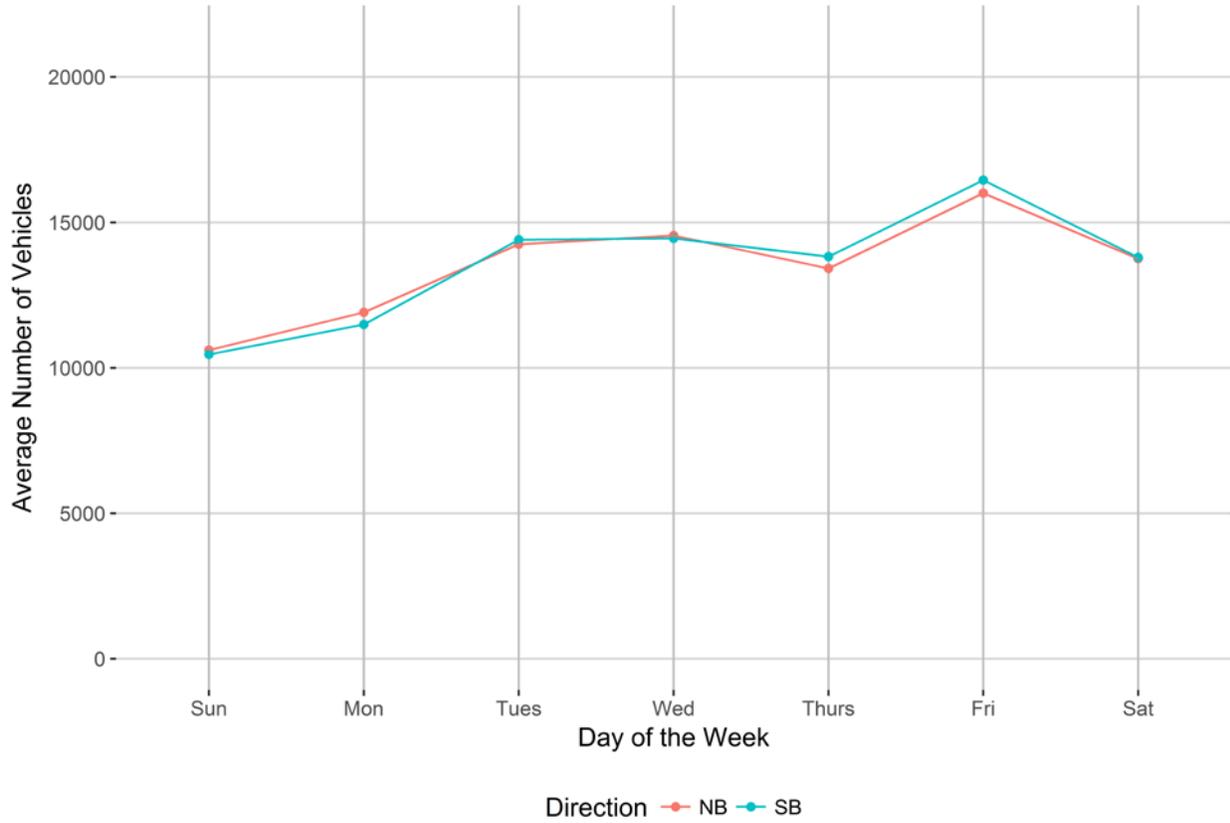


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

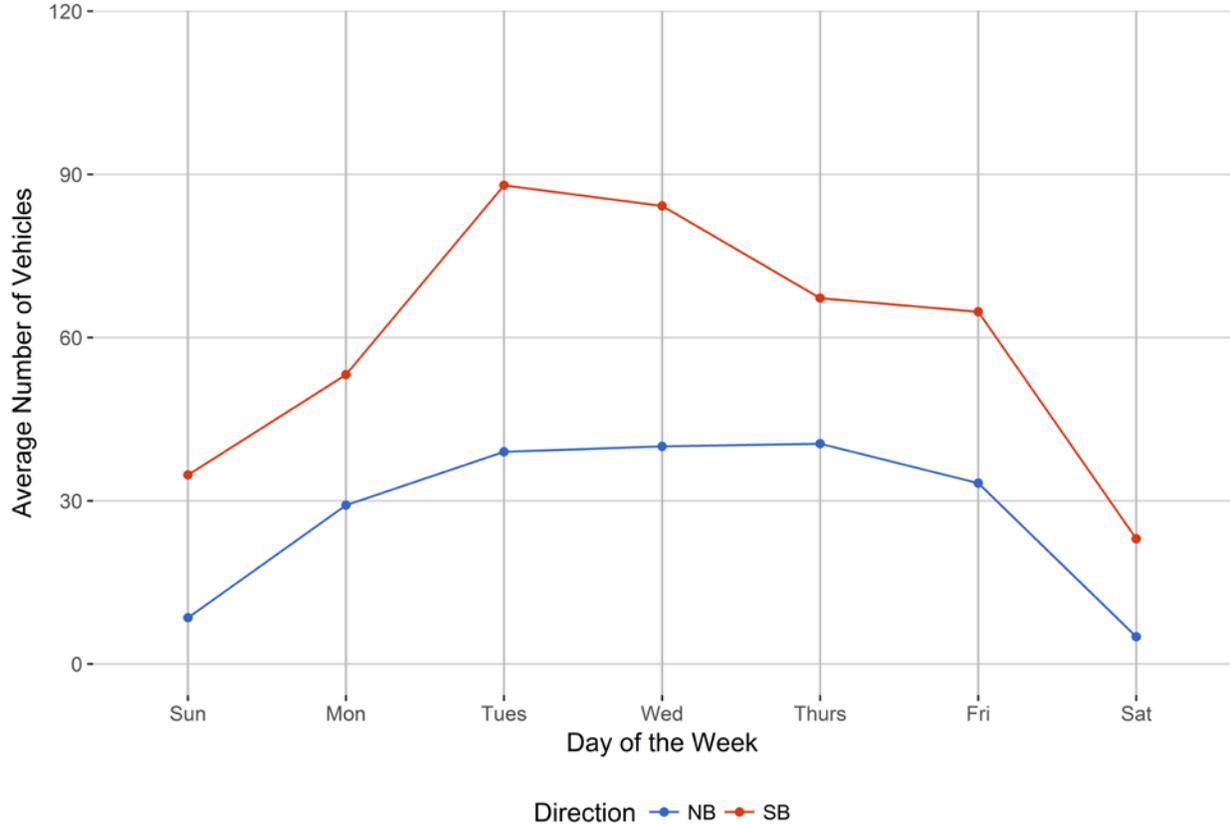


Figure 4 - Passenger Vehicles vs. Hour of the Day

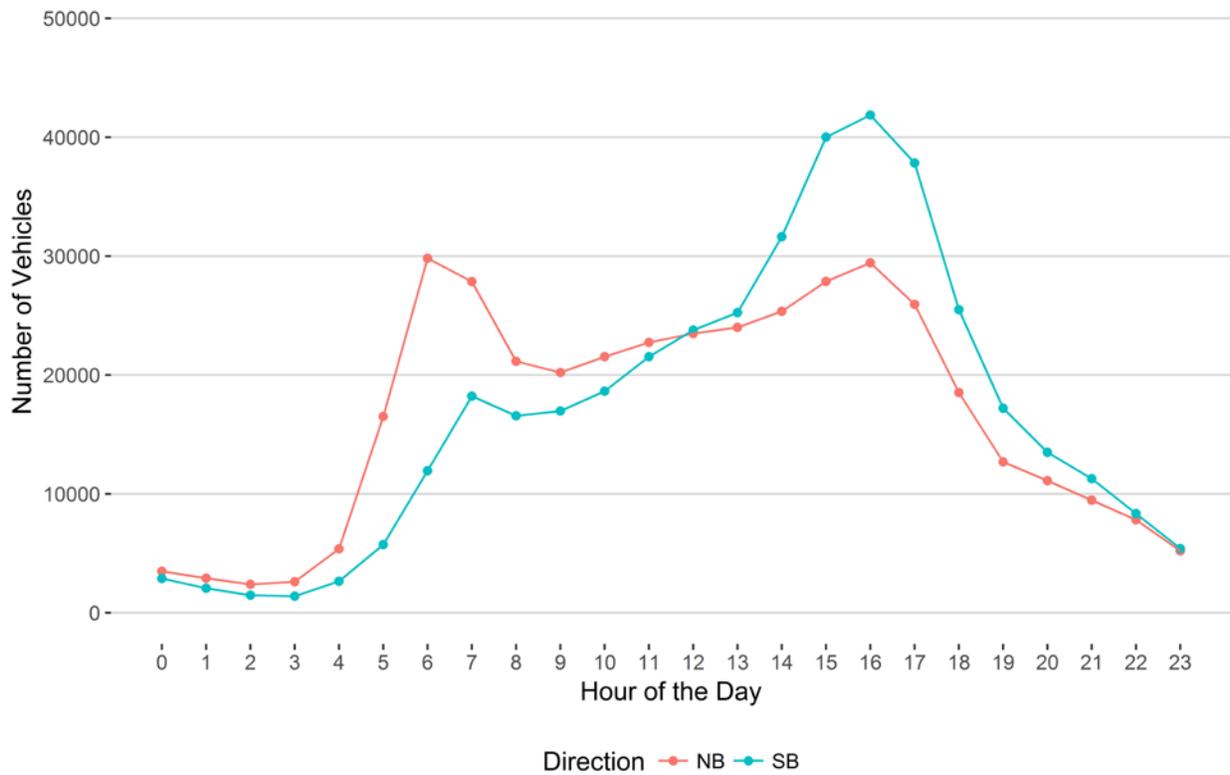


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

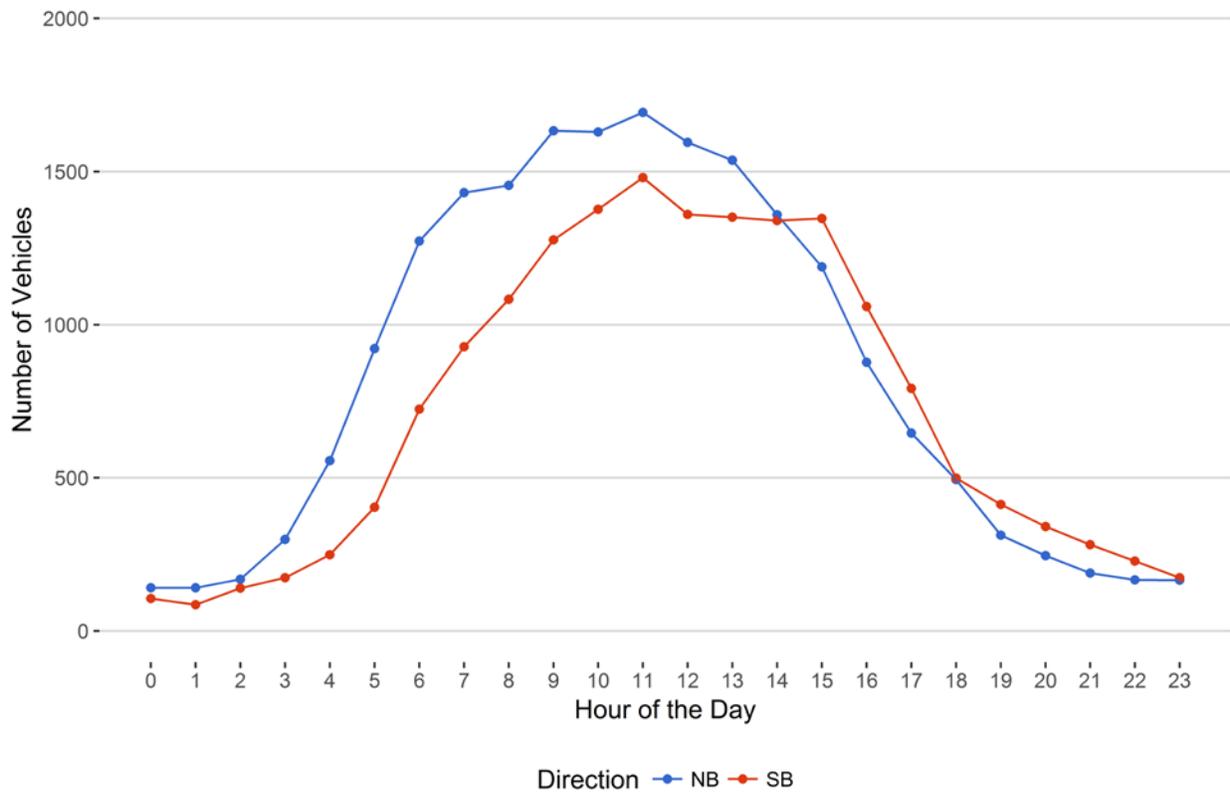


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

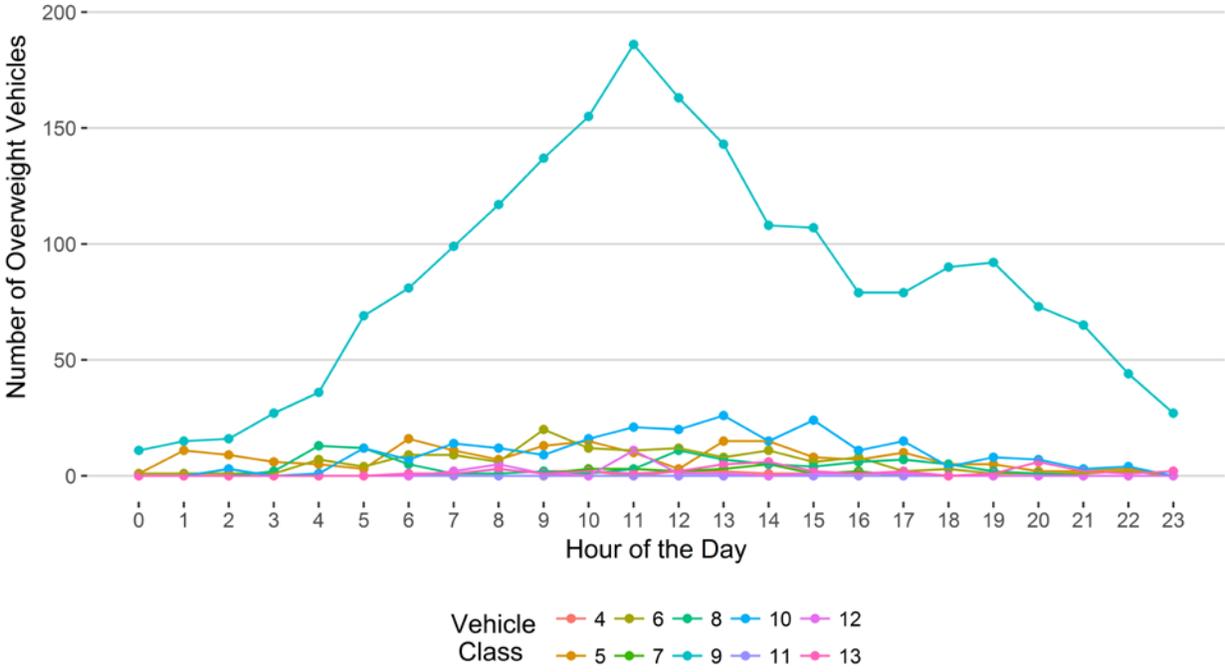


Figure 7 - Overweight Vehicles by Direction  
Hour of the Day

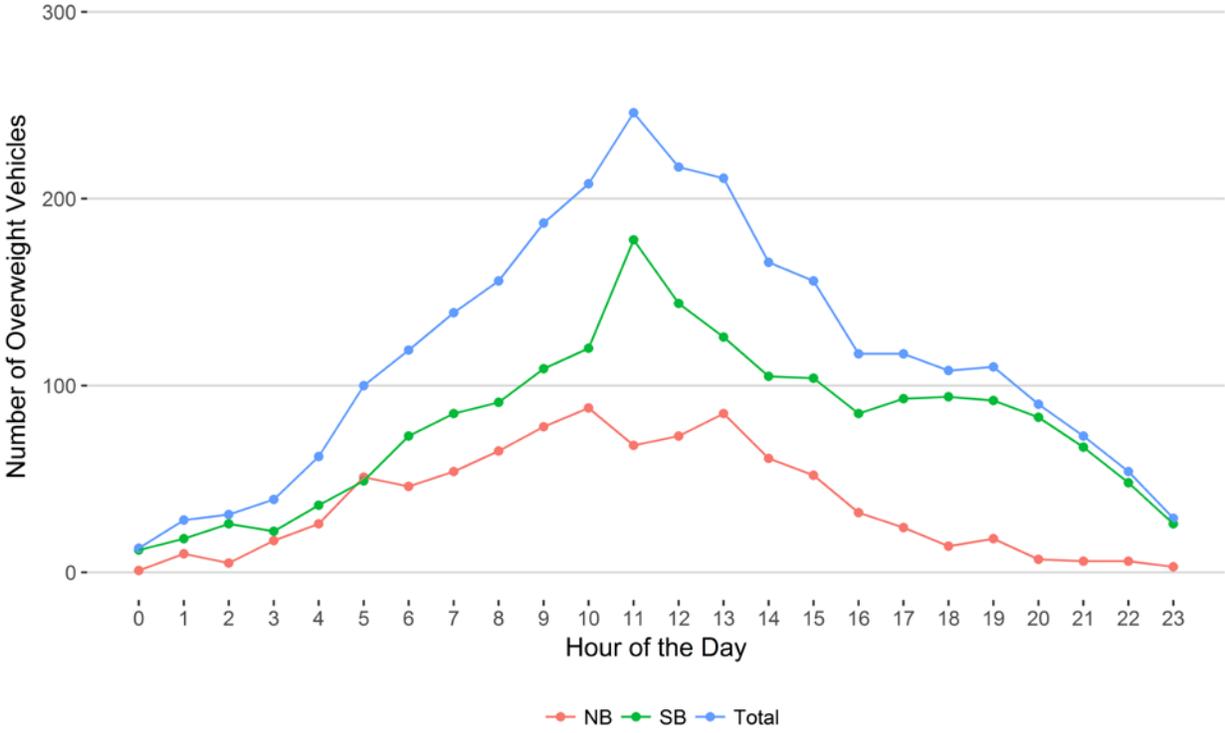
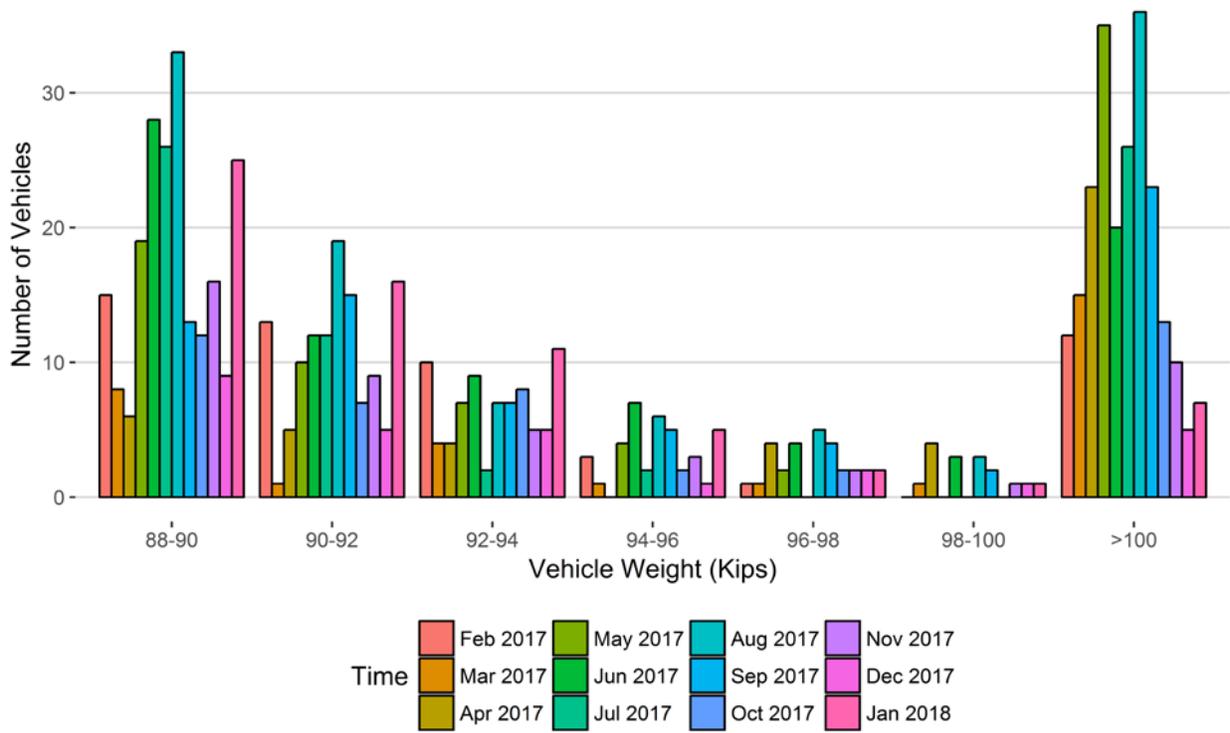
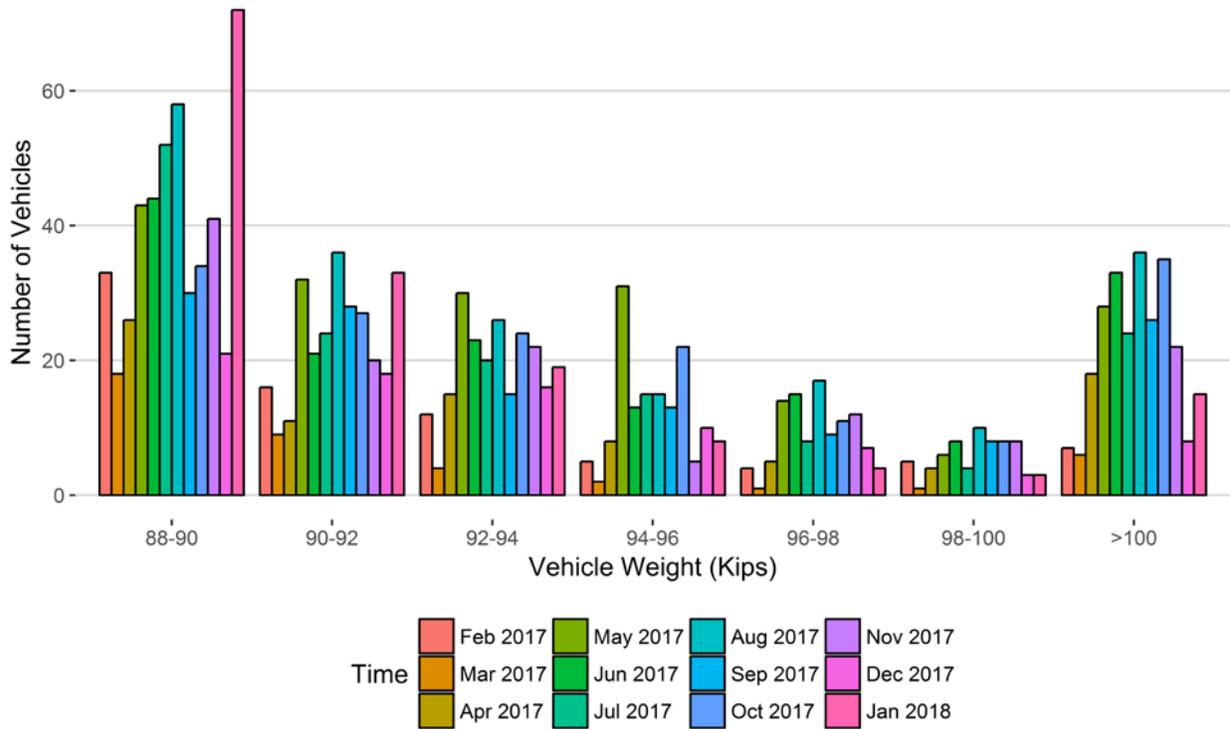


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018
88-90	15	8	6	19	28	26	33	13	12	16	9	25
90-92	13	1	5	10	12	12	19	15	7	9	5	16
92-94	10	4	4	7	9	2	7	7	8	5	5	11
94-96	3	1	0	4	7	2	6	5	2	3	1	5
96-98	1	1	4	2	4	0	5	4	2	2	2	2
98-100	0	1	4	0	3	0	3	2	0	1	1	1
>100	12	15	23	35	20	26	36	23	13	10	5	7
Total	54	31	46	77	83	68	109	69	44	46	28	67

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



Vehicle Weights (Kips)	Feb 2017	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018
88-90	33	18	26	43	44	52	58	30	34	41	21	72
90-92	16	9	11	32	21	24	36	28	27	20	18	33
92-94	12	4	15	30	23	20	26	15	24	22	16	19
94-96	5	2	8	31	13	15	15	13	22	5	10	8
96-98	4	1	5	14	15	8	17	9	11	12	7	4
98-100	5	1	4	6	8	4	10	8	8	8	3	3
>100	7	6	18	28	33	24	36	26	35	22	8	15
Total	82	41	87	184	157	147	198	129	161	130	83	154

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

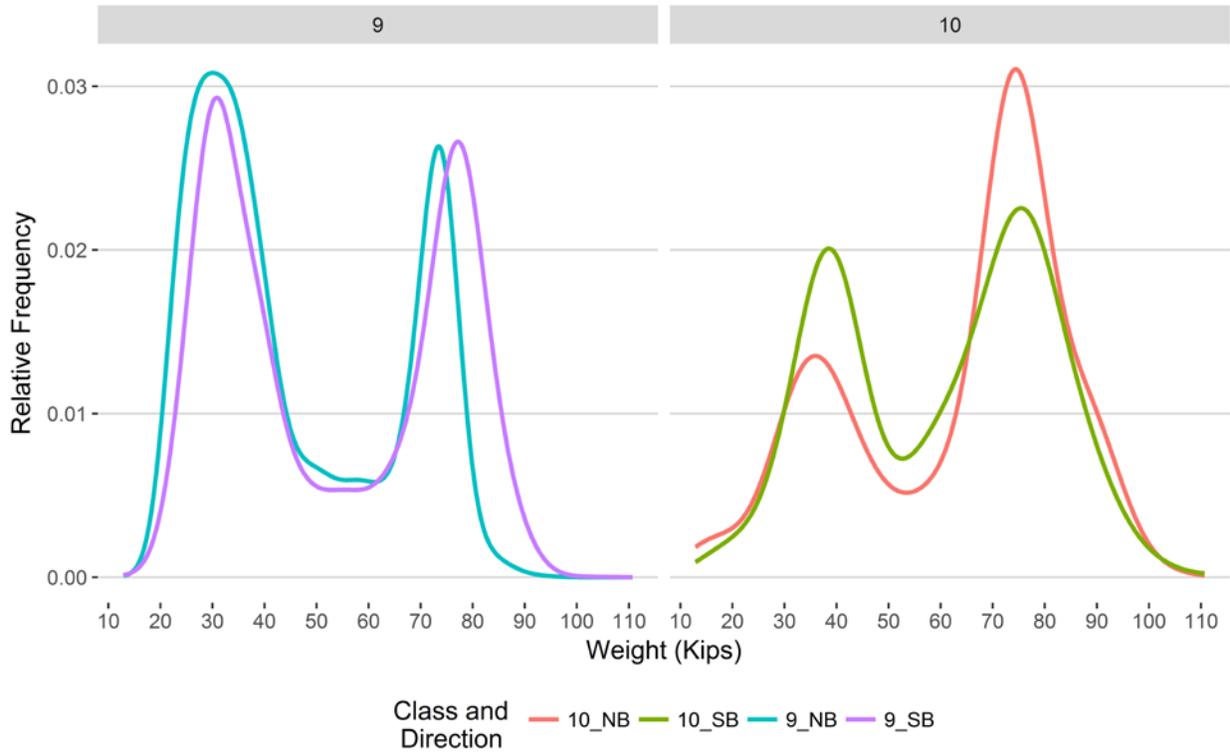


Figure 9 - Freight Percentage by Direction and Class

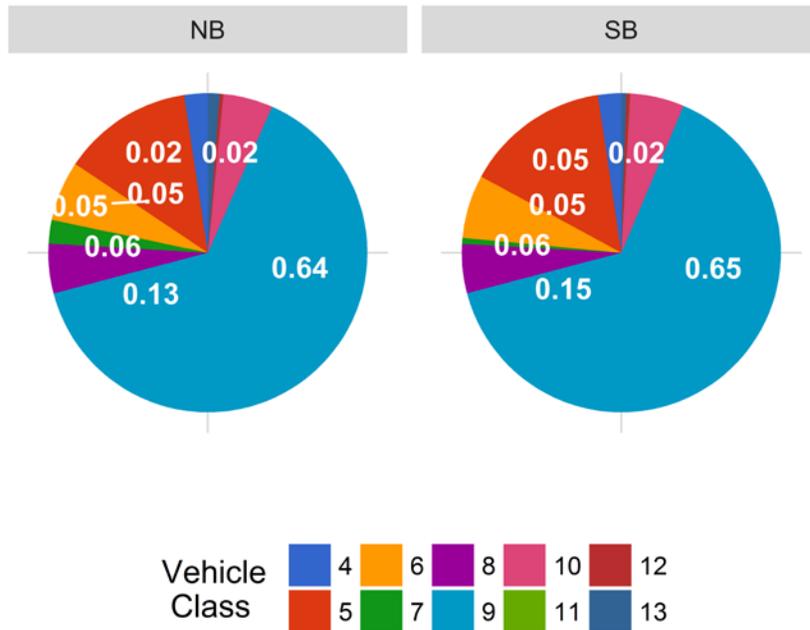


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

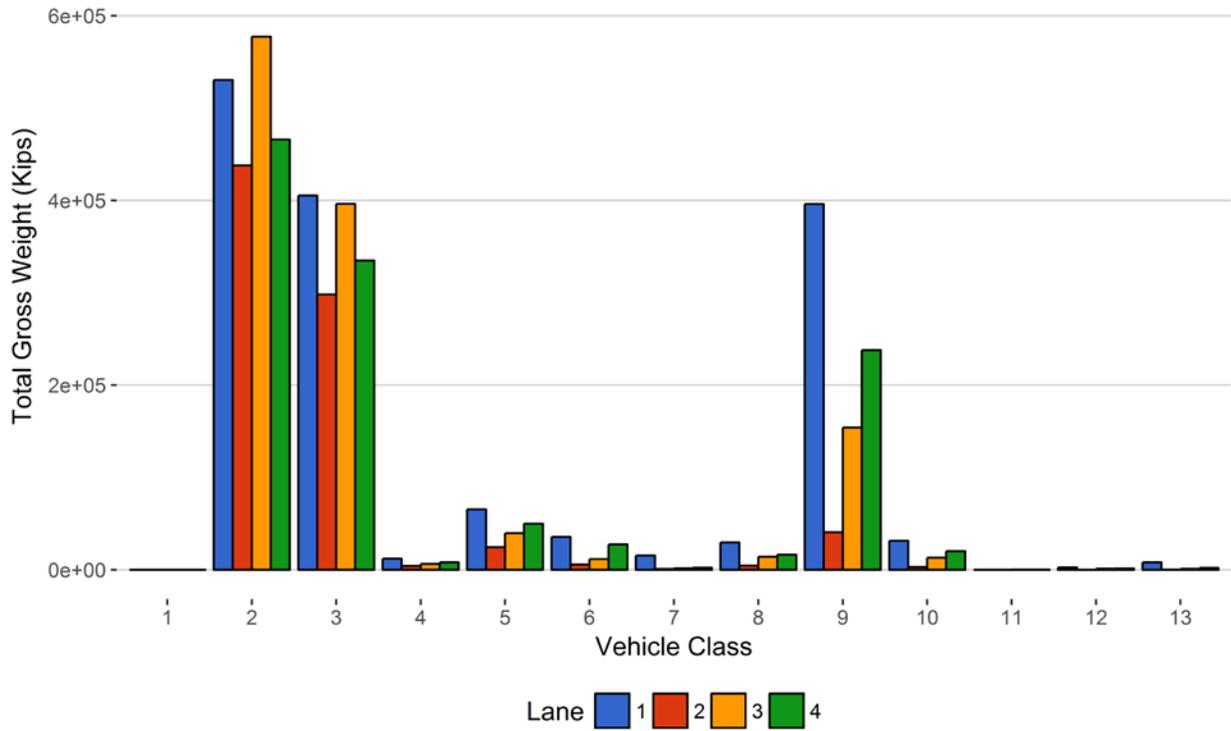


Figure 11 - Total Gross Vehicle Weight I

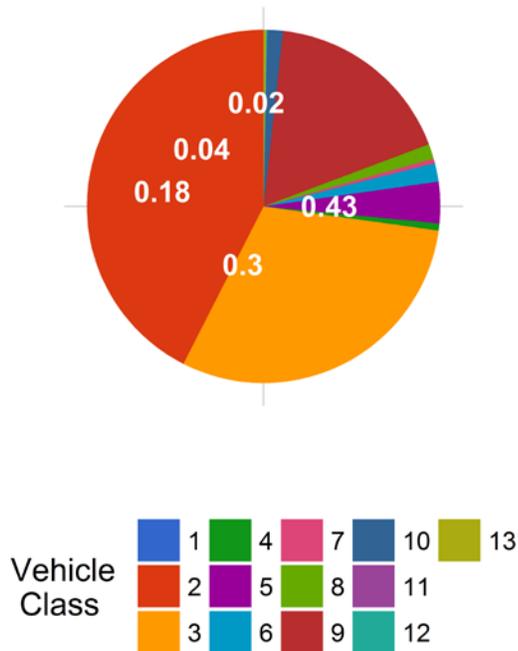


Figure 12 - Total ESALs by Class and Lane

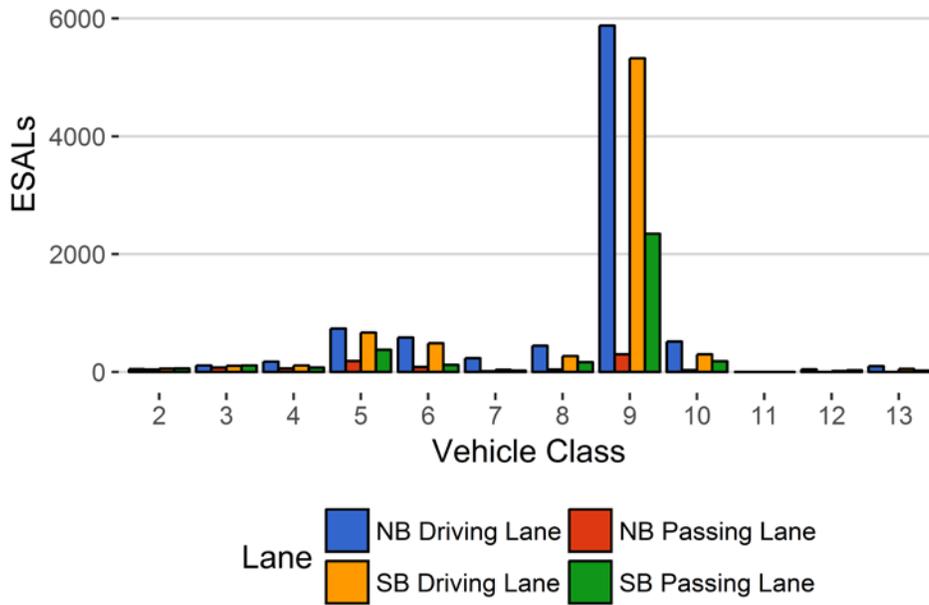
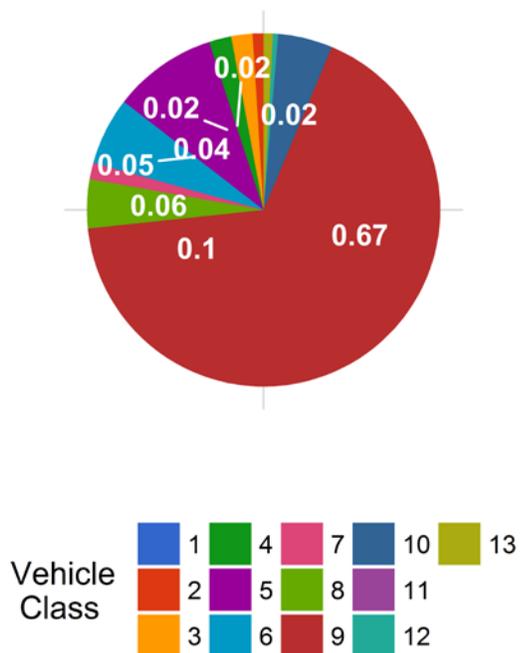


Figure 13 - ESALs by Class



**Table 1 Class 9 Front Axle Weight by Lane**

<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>
June 2015	NA	NA	10.99	0.00	10.36	0.00	11.58	0.00
July 2015	NA	NA	11.00	0.07	10.31	-0.46	11.59	0.10
August 2015	NA	NA	10.83	-1.50	10.29	-0.71	11.66	0.73
September 2015	NA	NA	10.82	-1.58	10.27	-0.86	11.57	-0.07
October 2015	NA	NA	10.73	-2.36	9.96	-3.82	11.31	-2.30
November 2015	NA	NA	10.35	-5.82	9.90	-4.48	11.38	-1.76
December 2015	NA	NA	10.02	-8.82	10.05	-3.02	11.52	-0.54
January 2016	NA	NA	9.90	-9.96	10.18	-1.79	11.46	-1.04
February 2016	NA	NA	10.08	-8.33	9.80	-5.44	11.28	-2.55
March 2016	NA	NA	10.20	-7.17	9.76	-5.76	10.92	-5.71
April 2016	NA	NA	10.38	-5.54	9.92	-4.27	11.07	-4.40
May 2016	NA	NA	10.71	-2.55	10.01	-3.40	11.23	-3.03
June 2016	NA	NA	10.79	-1.89	10.13	-2.23	11.38	-1.68
July 2016	NA	NA	10.92	-0.67	10.25	-1.02	11.54	-0.30
August 2016	NA	NA	10.92	-0.66	10.26	-1.01	11.53	-0.45
September 2016	10.31	0.00	10.71	-2.56	10.25	-1.07	11.33	-2.18
October 2016	10.25	-0.56	10.56	-3.97	9.78	-5.60	11.06	-4.48
November 2016	10.27	-0.33	10.27	-6.58	9.77	-5.71	11.11	-4.04
January 2017	10.07	-2.27	9.87	-10.18	10.04	-3.10	10.90	-5.84
February 2017	9.88	-4.13	9.88	-10.10	9.71	-6.24	10.67	-7.87
March 2017	9.94	-3.61	10.11	-8.04	9.66	-6.79	10.55	-8.88
April 2017	10.09	-2.11	10.38	-5.55	9.68	-6.54	10.66	-7.92
May 2017	10.25	-0.61	10.53	-4.22	9.90	-4.48	10.92	-5.70
June 2017	10.44	1.25	10.85	-1.33	10.01	-3.39	11.12	-3.99
July 2017	10.45	1.36	10.75	-2.23	9.97	-3.77	11.20	-3.28
August 2017	10.43	1.22	10.66	-3.04	9.79	-5.46	11.04	-4.65

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September 2017	10.20	-1.06	10.57	-3.80	9.89	-4.52	10.97	-5.27
October 2017	10.25	-0.56	10.26	-6.68	9.77	-5.71	10.89	-5.98
November 2017	10.38	0.67	10.04	-8.70	9.80	-5.41	10.91	-5.75
December 2017	10.15	-1.49	9.66	-12.14	9.79	-5.54	10.78	-6.93
January 2018	9.98	-3.20	9.67	-12.02	9.85	-4.90	10.94	-5.52

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**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	0	1	0	0	0
2	18059	559834	64.2	0	0
3	8830	273716	31.4	0	0
4	34	1062	0.1	14	0.5
5	437	13541	1.6	182	6.6
6	89	2764	0.3	137	5
7	11	344	0	24	0.9
8	72	2240	0.3	88	3.2
9	562	17436	2	2019	73.2
10	37	1135	0.1	232	8.4
11	0	3	0	0	0
12	2	75	0	24	0.9
13	5	146	0	39	1.4
<b>TOTAL</b>	<b>28139</b>	<b>872295</b>	<b>100</b>	<b>2759</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>
2018-01-12	Friday	08:50:42	10	NB	1	113.01
2018-01-05	Friday	15:27:50	10	SB	4	110.71
2018-01-04	Thursday	14:20:45	9	SB	4	105.22
2018-01-23	Tuesday	10:41:30	10	NB	1	104.4
2018-01-23	Tuesday	20:22:51	10	SB	4	101.89
2018-01-31	Wednesday	03:59:32	9	SB	3	101.58
2018-01-08	Monday	19:47:12	10	SB	4	101.04
2018-01-18	Thursday	13:17:40	9	SB	4	101.02
2018-01-10	Wednesday	08:04:28	10	NB	1	99.92
2018-01-22	Monday	15:35:35	10	SB	4	99.73

**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	548	68	12.4	15396	873	4098
5	NB	8	6681	1277	19.1	80768	9019	18768
6	NB	19	1340	212	15.8	37905	3427	8237
7	NB	11.5	269	0	0	16270	0	6588
8	NB	31	1135	689	60.7	17968	16191	2071
9	NB	33	9459	3253	34.4	348279	88545	71740
10	NB	33.5	542	67	12.4	32452	1812	8270
12	NB	36.5	36	0	0	2431	0	559
13	NB	31.5	110	0	0	8141	0	2338
<b>TOTAL</b>	****	****	<b>20120</b>	<b>5566</b>	****	<b>559609</b>	****	<b>122668</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	475	49	10.3	13665	632	3637
5	SB	8	6367	850	13.4	83292	6110	19578
6	SB	19	1323	175	13.2	36198	2855	7193
7	SB	11.5	62	0	0	3698	0	1493
8	SB	31	1023	584	57.1	16870	13362	1630
9	SB	33	7342	2059	28	332854	59030	79258
10	SB	33.5	552	47	8.5	31903	1290	7493
11	SB	36.5	3	1	33.3	110	35	19
12	SB	36.5	36	0	0	2375	0	530
13	SB	31.5	31	0	0	3027	0	1025
<b>TOTAL</b>	****	****	<b>17214</b>	<b>3765</b>	****	<b>523991</b>	****	<b>121856</b>
<b>GRAND TOTAL</b>	****	****	<b>37334</b>	<b>9331</b>	<b>319</b>	<b>1083601</b>	<b>203181</b>	<b>244524</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	0	1	0	0	1	0
2	530474	437923	577429	466022	2011849	42.5
3	405419	298127	396292	335015	1434853	30.3
4	12075	4193	6344	7952	30565	0.6
5	65362	24425	39559	49843	179189	3.8
6	35591	5742	11614	27439	80385	1.7
7	15449	821	1473	2225	19969	0.4
8	29617	4542	14046	16186	64391	1.4
9	396130	40695	154090	237795	828709	17.5
10	31330	2933	13081	20112	67456	1.4
11	0	0	53	92	145	0
12	2431	0	1147	1228	4806	0.1
13	7997	144	1002	2025	11168	0.2
<b>TOTAL</b>	<b>1531875</b>	<b>819547</b>	<b>1216130</b>	<b>1165934</b>	<b>4733485</b>	<b>100</b>
<b>GVW/LANE</b>	<b>32.36</b>	<b>17.31</b>	<b>25.69</b>	<b>24.63</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	0.5
2	51	42	59	55	207	1	8e-04
3	110	77	111	104	402	1.95	0.0031
4	177	58	75	110	420	2.03	0.82
5	737	185	376	670	1968	9.52	0.3
6	584	85	123	489	1280	6.2	0.96
7	235	13	22	41	311	1.51	1.87
8	444	43	167	270	926	4.48	0.86
9	5878	300	2345	5323	13845	67	1.65
10	516	32	182	301	1031	4.99	1.88
11	0	0	1	1	2	0.01	1.02
12	47	0	31	19	97	0.47	2.45
13	97	2	22	54	175	0.85	2.37
<b>TOTAL</b>	<b>8877</b>	<b>836</b>	<b>3514</b>	<b>7437</b>	<b>20664</b>	<b>100</b>	<b>15</b>
<b>ESALS/LANE</b>	<b>43</b>	<b>4</b>	<b>17</b>	<b>36</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>
Feb 2017	826198	29507	1220	792036	95.9	34161.9	4.1	73.5	26.5
Mar 2017	952745	30734	1335	911366	95.7	41379.5	4.3	72.6	27.4
Apr 2017	996158	33205	1495	951298	95.5	44860.4	4.5	73.9	26.1
May 2017	1073236	34620	1672	1021419	95.2	51817	4.8	73.2	26.8
Jun 2017	1080417	36014	1846	1025050	94.9	55366.6	5.1	73.5	26.5
Jul 2017	1068790	34477	1568	1020187	95.5	48603	4.5	73.1	26.9
Aug 2017	1061457	34240	1731	1007809	94.9	53647.7	5.1	72.3	27.7
Sep 2017	1024417	34147	1676	974137	95.1	50280.4	4.9	73.5	26.5
Oct 2017	1066794	34413	1775	1011755	94.8	55038.8	5.2	73.9	26.1
Nov 2017	953086	31770	1573	905896	95	47190.4	5	74	26
Dec 2017	916857	29576	1233	878647	95.8	38210.2	4.2	71.1	28.9
Jan 2018	872295	28138	1250	833551	95.6	38744	4.4	68.9	31.1
<b>TOTAL</b>	<b>11892450</b>	<b>--</b>	<b>--</b>	<b>11333151</b>	<b>--</b>	<b>559300</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>AVERA GE</b>	<b>991038</b>	<b>32570</b>	<b>1531</b>	<b>944429</b>	<b>95</b>	<b>46608</b>	<b>5</b>	<b>73</b>	<b>27</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>
Feb 2017	6812	631	2559	6447	16449	81	19	2.5
Mar 2017	8573	898	3028	6735	19234	80	20	1.2
Apr 2017	11110	1037	3116	8548	23810	83	17	0.7
May 2017	13140	1284	4010	10619	29052	82	18	1.3
Jun 2017	17094	1587	4226	12090	34997	83	17	1.6
Jul 2017	14862	1367	3640	10342	30211	83	17	0.9
Aug 2017	16521	1443	3865	10965	32795	84	16	1.7
Sep 2017	13486	1270	3745	10395	28896	83	17	1.2
Oct 2017	14796	1056	3830	10197	29879	84	16	0.7
Nov 2017	13898	810	3662	9572	27942	84	16	0.8
Dec 2017	9122	748	3027	7048	19946	81	19	1.6
Jan 2018	8928	843	3536	7448	20755	79	21	2.9
<b>TOTAL</b>	<b>148343</b>	<b>12973</b>	<b>42244</b>	<b>110406</b>	<b>313966</b>	--	--	--
<b>AVERAGE</b>	<b>12362</b>	<b>1081</b>	<b>3520</b>	<b>9200</b>	<b>26164</b>	<b>82</b>	<b>18</b>	<b>1</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>
Feb 2017	1535621	819939	1217052	1168290	4740903
Mar 2017	1414729	721217	1082889	1146332	4365168
Apr 2017	1676177	855364	1250915	1264559	5047015
May 2017	1834413	972425	1304723	1424581	5536142
Jun 2017	2048915	1078488	1505827	1584373	6217603
Jul 2017	2228949	1119563	1574829	1626819	6550161
Aug 2017	2126470	1091575	1499708	1469135	6186888
Sep 2017	2166374	1116411	1494313	1517190	6294287
Oct 2017	1995793	1061893	1411603	1508519	5977808
Nov 2017	2111653	1089943	1502804	1588535	6292934
Dec 2017	1895059	933642	1366755	1465744	5661201
Jan 2018	1643079	793869	1249765	1255341	4942054
<b>TOTAL</b>	<b>22677233</b>	<b>11654329</b>	<b>16461183</b>	<b>17019419</b>	<b>67812164</b>
<b>AVERAGE</b>	<b>1889769</b>	<b>971194</b>	<b>1371765</b>	<b>1418285</b>	<b>5651014</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>
Feb 2017	1613	0.2	4.7	136	24
Mar 2017	1721	0.2	4.2	77	23
Apr 2017	2830	0.3	6.4	133	49
May 2017	4156	0.4	8.1	261	69
Jun 2017	5870	0.6	10.7	241	64
Jul 2017	5270	0.5	11	215	54
Aug 2017	5377	0.5	10.1	308	85
Sep 2017	4168	0.4	8.3	199	60
Oct 2017	3836	0.4	7	206	56
Nov 2017	4271	0.5	9.1	177	42
Dec 2017	2385	0.3	6.3	111	17
Jan 2018	2776	0.3	7.1	224	28
<b>TOTAL</b>	<b>44273</b>	<b>--</b>	<b>--</b>	<b>2288</b>	<b>571</b>
<b>AVERAGE</b>	<b>3689.4</b>	<b>0.4</b>	<b>7.8</b>	<b>190.7</b>	<b>47.6</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>
Feb 2017	96845	104567	201412	48.1	51.9
Mar 2017	126731	118761	245492	51.6	48.4
Apr 2017	152524	135518	288042	53	47
May 2017	182090	164804	346895	52.5	47.5
Jun 2017	233945	177367	411312	56.9	43.1
Jul 2017	194424	153209	347633	55.9	44.1
Aug 2017	217682	162484	380166	57.3	42.7
Sep 2017	189502	157281	346783	54.6	45.4
Oct 2017	213041	158477	371518	57.3	42.7
Nov 2017	183851	144619	328470	56	44
Dec 2017	126740	115689	242429	52.3	47.7
Jan 2018	122668	121856	244524	50.2	49.8
<b>TOTAL</b>	<b>2040043</b>	<b>1714632</b>	<b>3754675</b>	--	--
<b>AVERAGE</b>	<b>170003.6</b>	<b>142886</b>	<b>312889.6</b>	<b>53.8</b>	<b>46.2</b>