

FEBRUARY 2018



**WIM #27  
MN 60,  
MP 64.8  
ST. JAMES, MN**

**MONTHLY  
REPORT**



*Your Destination...Our Priority*



## WIM Site Location

WIM #27 is located on MN 60 near St. James in Watonwan county.

## System Operation

WIM #27 was operational for the entire month of February 2018. Volume was computed using all monthly data.

## System Calibration

WIM #27 was most recently calibrated on 2015-06-17. 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: 140038 | Passenger Vehicles: 112090 | Heavy Commercial Vehicles: 27948

Monthly Average Daily Traffic (MADT): 5001 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 998

See Table 2 for vehicle class breakdown

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

**Volume trends.** EB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Wednesdays. WB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Wednesdays (see Figure 3 and 4).

### Passenger Vehicles (PVs)

**Volume trends.** On an average 24-hour day (see Figure 5), EB PVs generally reached peak volume levels between 02 PM and 04 PM. Similarly, WB PVs peaked in volume between 02 PM and 04 PM

### Heavy Commercial Vehicles (HCVs)

**Volume trends.** On an average 24-hour day, HCVs traveling EB typically reached peak volume levels between 02 PM and 04 PM, while volume going WB 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 27948 HCVs, 6735 of them were overweight<sup>3</sup>. These overweight HCVs contributed to 5.2% of total monthly volume, and 26% of total monthly HCV volume. EB overweight vehicles typically reached highest numbers on Thursdays, with lowest volumes reported on Saturdays. WB overweight vehicles tended to reach highest volumes on Thursdays, 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 71.6% of all overweight vehicles traveling EB 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 January.

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 ,1353 EB vehicles exceeded 88,000 pounds (816 vehicles were Class 9's; 288 vehicles were Class 13's). Of vehicles traveling WB,

263 EB vehicles exceeded 88,000 pounds (114 vehicles were Class 9's; 100 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from February 2018.

**Loaded vs. Unloaded HCVs.** Figure 10 shows the GVW distributions of Class 9s and 10s in February 2018. Data suggests that there were greater numbers of fully\_loaded Class 9's than empty Class 9's traveling EB, while there were more fully\_loaded Class 9's than empty traveling WB. Data also suggests that there were more fully\_loaded Class 10's than empty traveling in the EB direction. In the WB direction, there were more fully\_loaded class 10 vehicles.

**Freight Totals.** A total of 325611 tons of freight was recorded to have crossed the WIM. More freight was shipped EB (58.9%) than WB (41.1%). See Table 4 and Figure 11 for more freight information.

## Infrastructure Considerations

**Bridge.** Bridge No. 93716, an arch pipe, is approximately 3.0 miles west of WIM #27 and Bridge No. 83030 is approximately 8.1 miles east of WIM #27. WIM #27 recorded a total of 140038 vehicles with a combined GVW of 1964488 kips (1 kip = 1,000 pounds = 0.5 tons) in February 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

**Pavement Design.** A total of 32632 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 62.5% of all ESALs were recorded EB while 37.5% was observed WB. In particular, 85% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 61% 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).

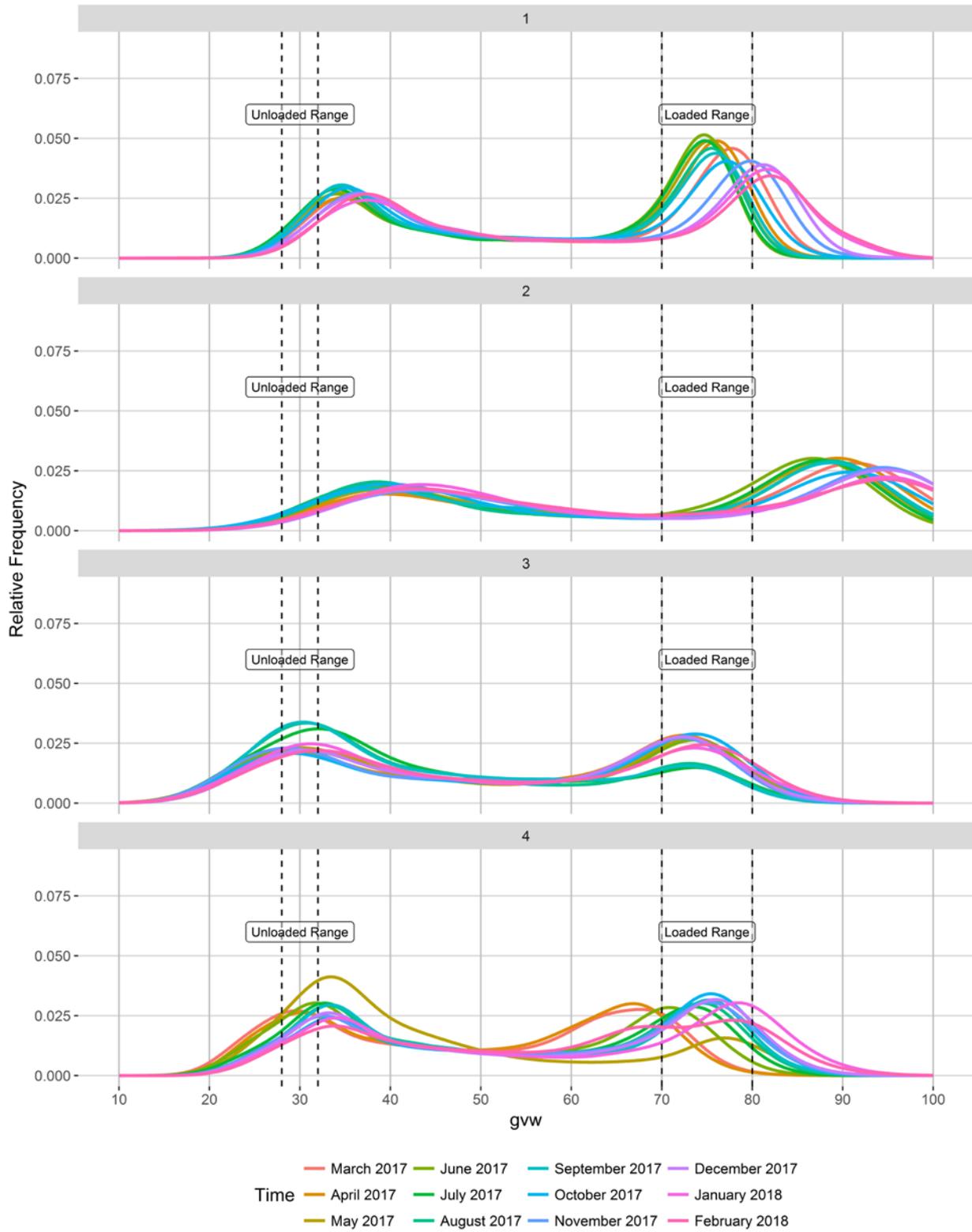
*WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>*

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.

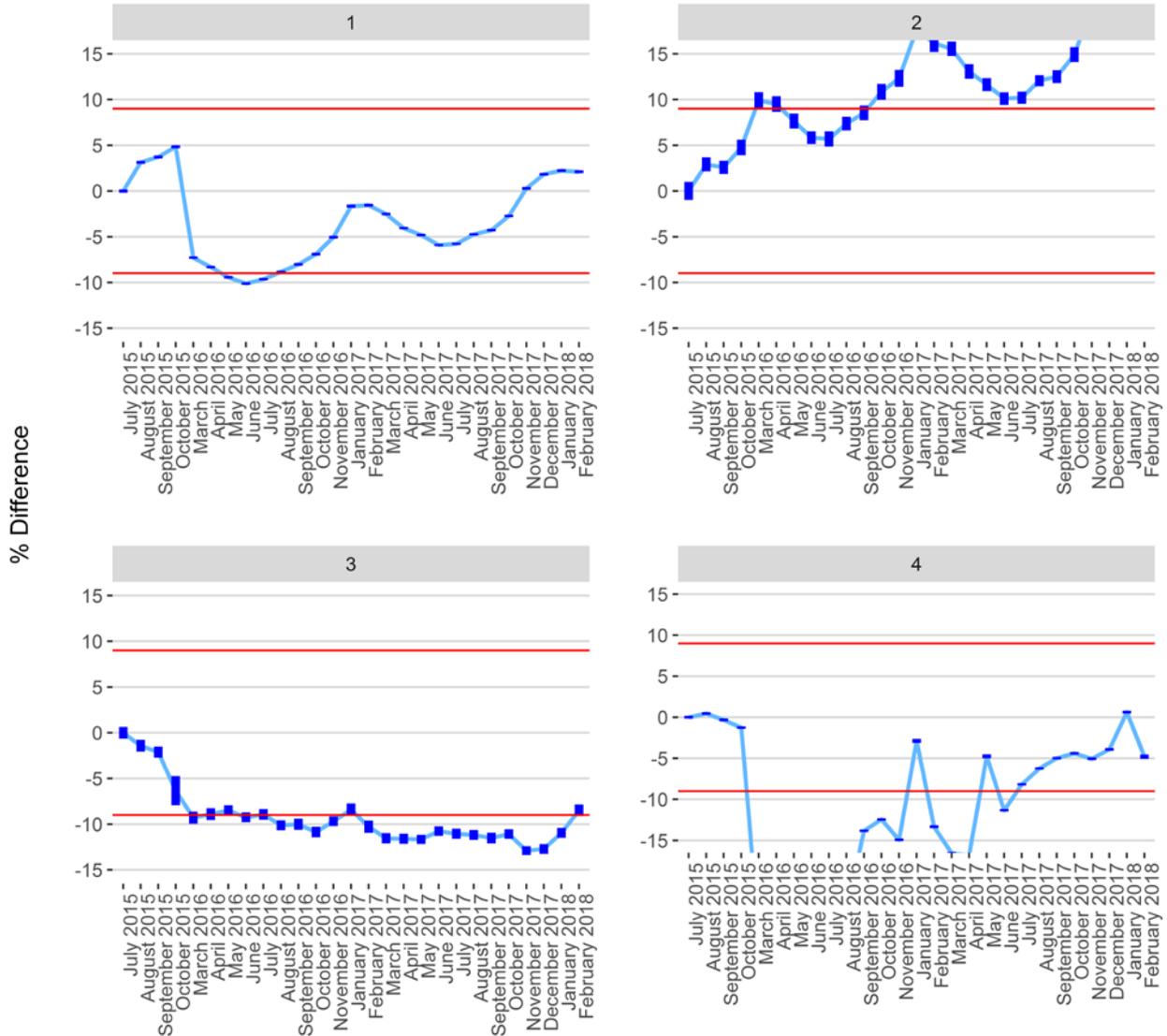
**To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to [ADArequest.dot@state.mn.us](mailto:ADArequest.dot@state.mn.us). Please request at least one week in advance.**

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

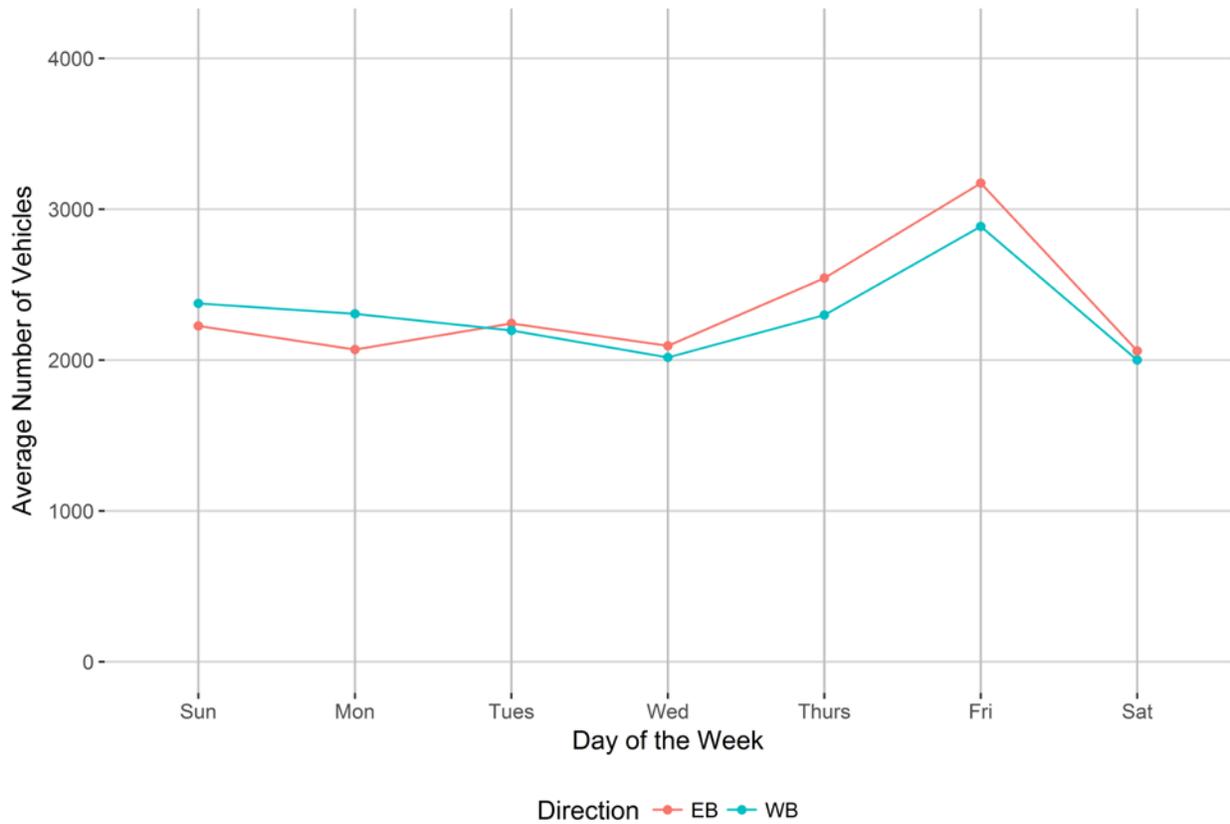


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

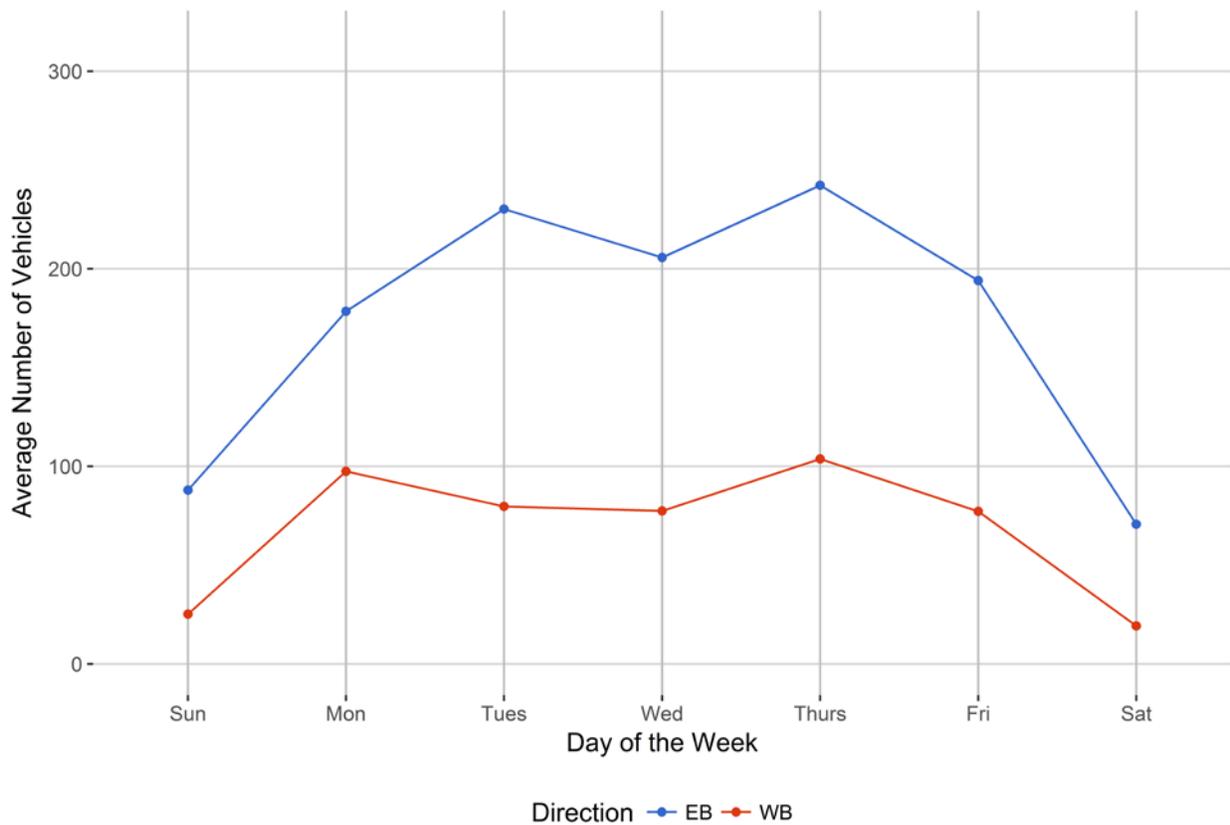


Figure 4 - Passenger Vehicles vs. Hour of the Day

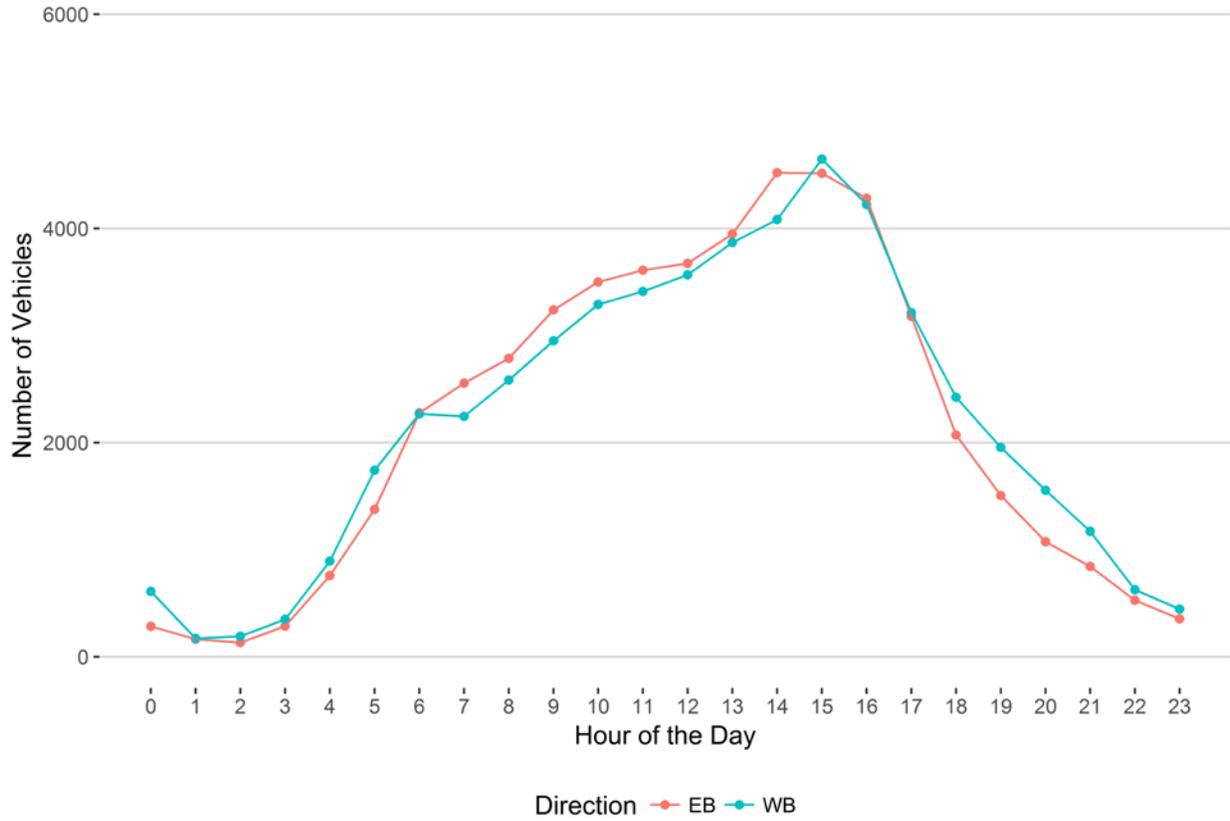


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

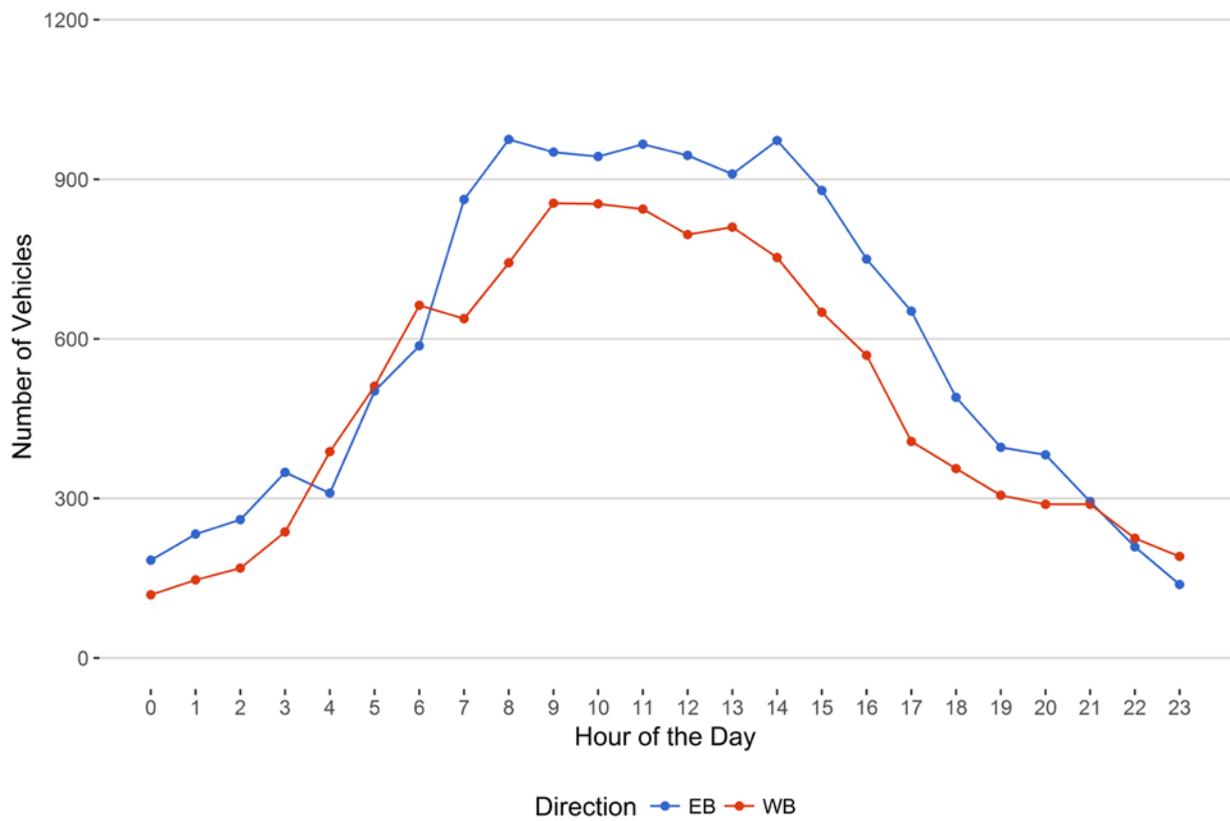


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

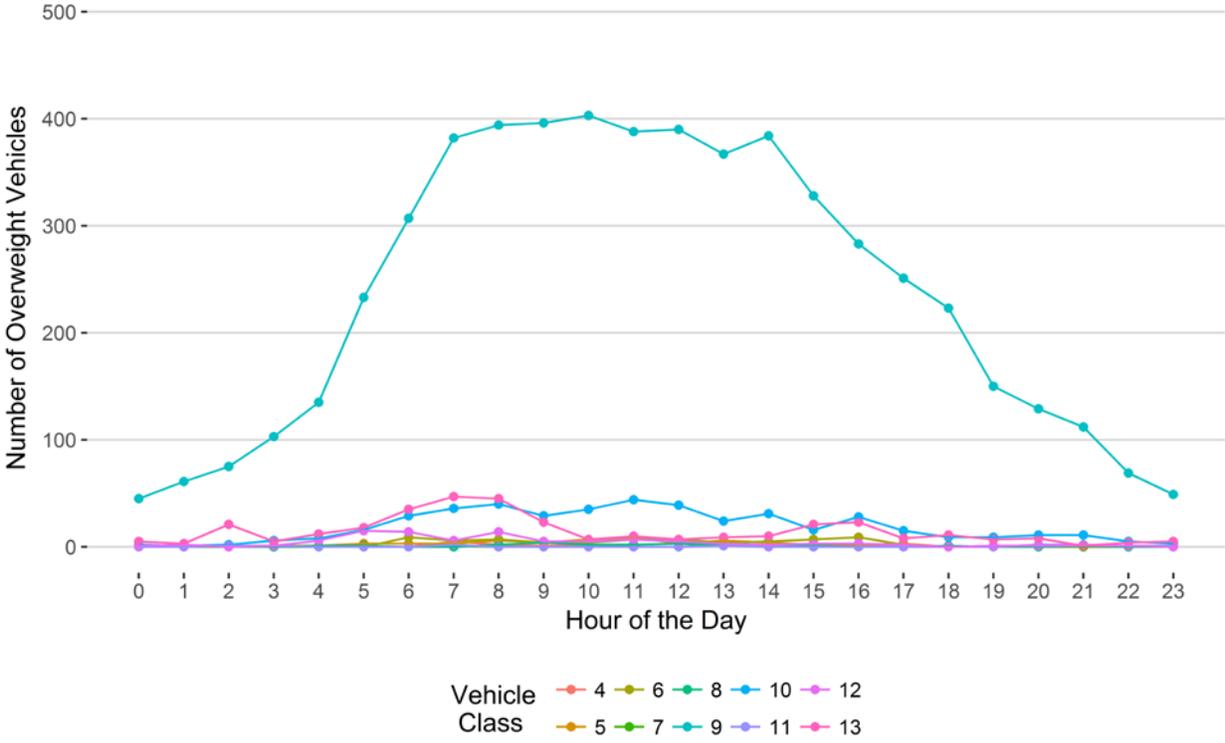


Figure 7 - Overweight Vehicles by Direction  
Hour of the Day

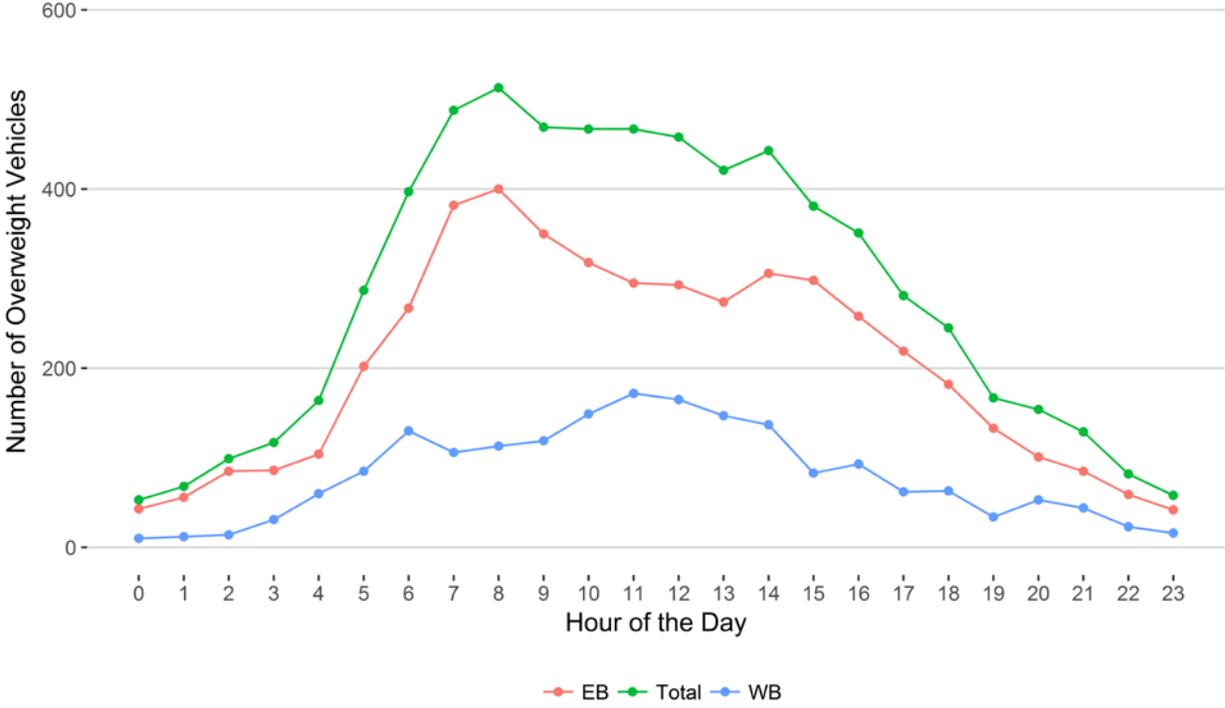
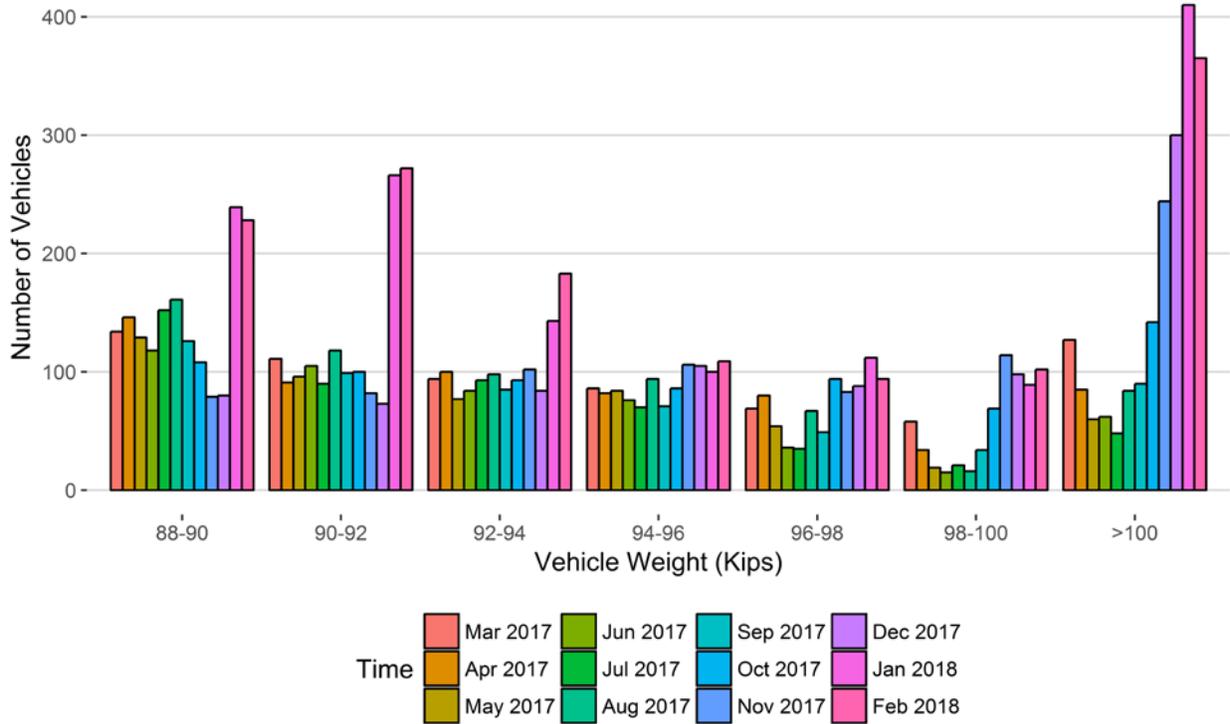
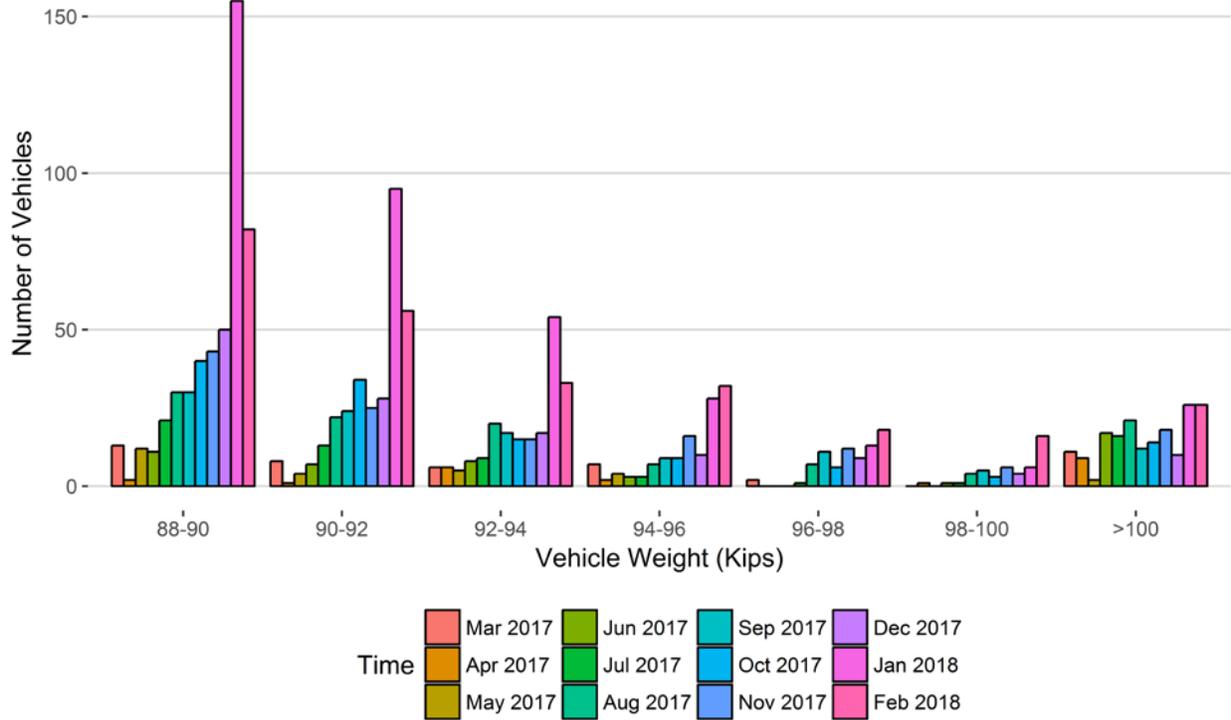


Figure 8 - Histogram of EB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
88-90	134	146	129	118	152	161	126	108	79	80	239	228
90-92	111	91	96	105	90	118	99	100	82	73	266	272
92-94	94	100	77	84	93	98	85	93	102	84	143	183
94-96	86	82	84	76	70	94	71	86	106	105	100	109
96-98	69	80	54	36	35	67	49	94	83	88	112	94
98-100	58	34	19	15	21	16	34	69	114	98	89	102
>100	127	85	60	62	48	84	90	142	244	300	410	365
Total	679	618	519	496	509	638	554	692	810	828	1359	1353

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



Vehicle Weights (Kips)	Mar 2017	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018
88-90	13	2	12	11	21	30	30	40	43	50	155	82
90-92	8	1	4	7	13	22	24	34	25	28	95	56
92-94	6	6	5	8	9	20	17	15	15	17	54	33
94-96	7	2	4	3	3	7	9	9	16	10	28	32
96-98	2	0	0	0	1	7	11	6	12	9	13	18
98-100	0	1	0	1	1	4	5	3	6	4	6	16
>100	11	9	2	17	16	21	12	14	18	10	26	26
Total	47	21	27	47	64	111	108	121	135	128	377	263

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

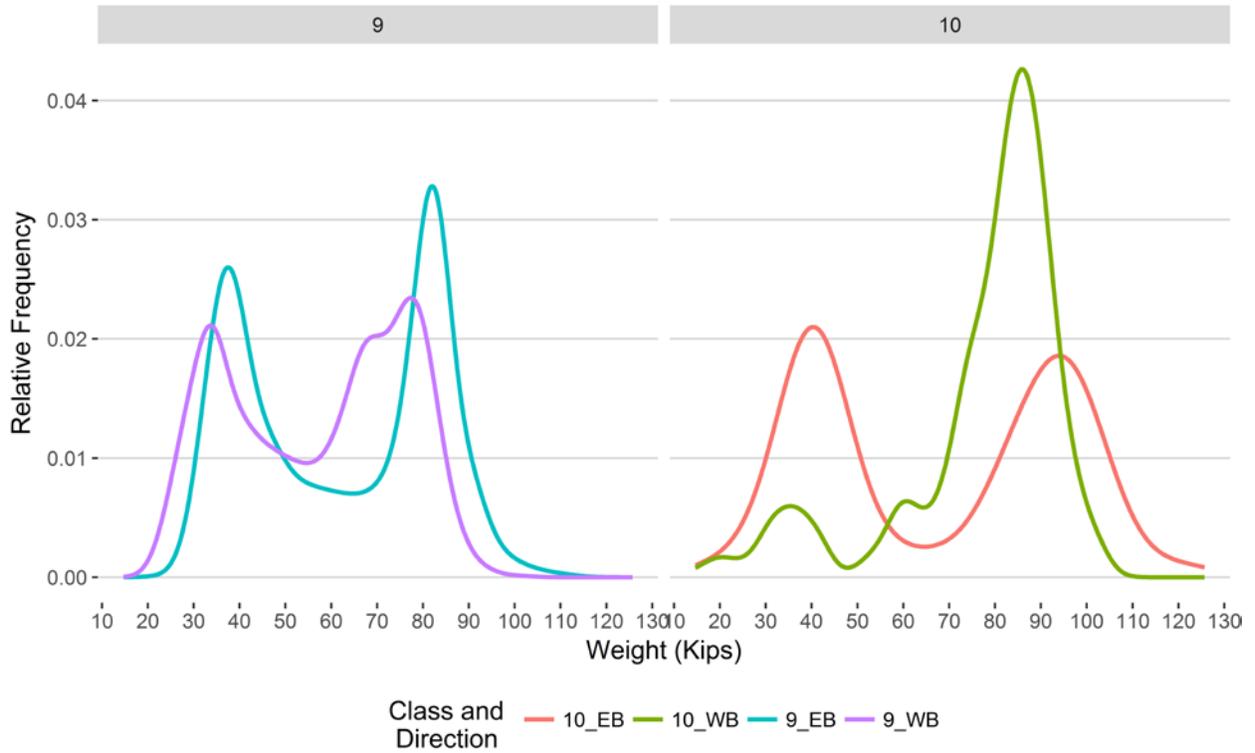


Figure 9 - Freight Percentage by Direction and Class

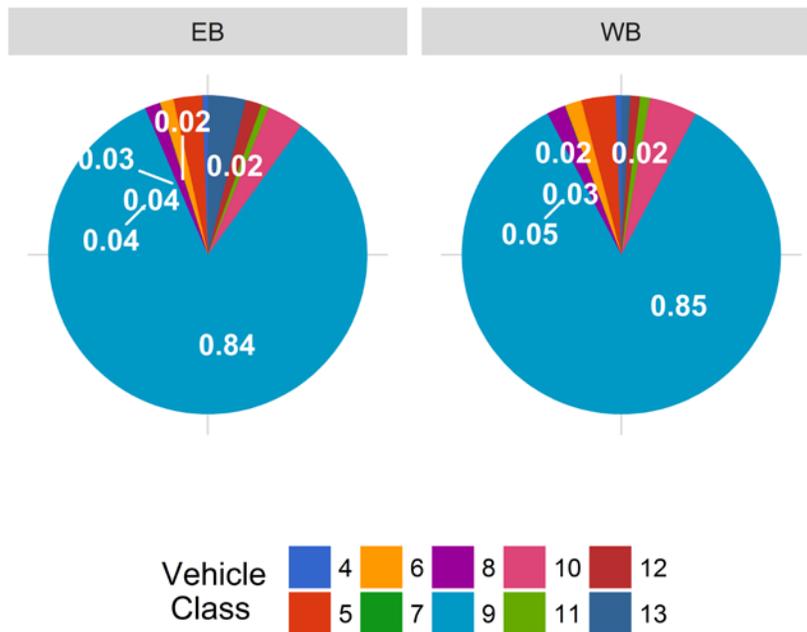


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

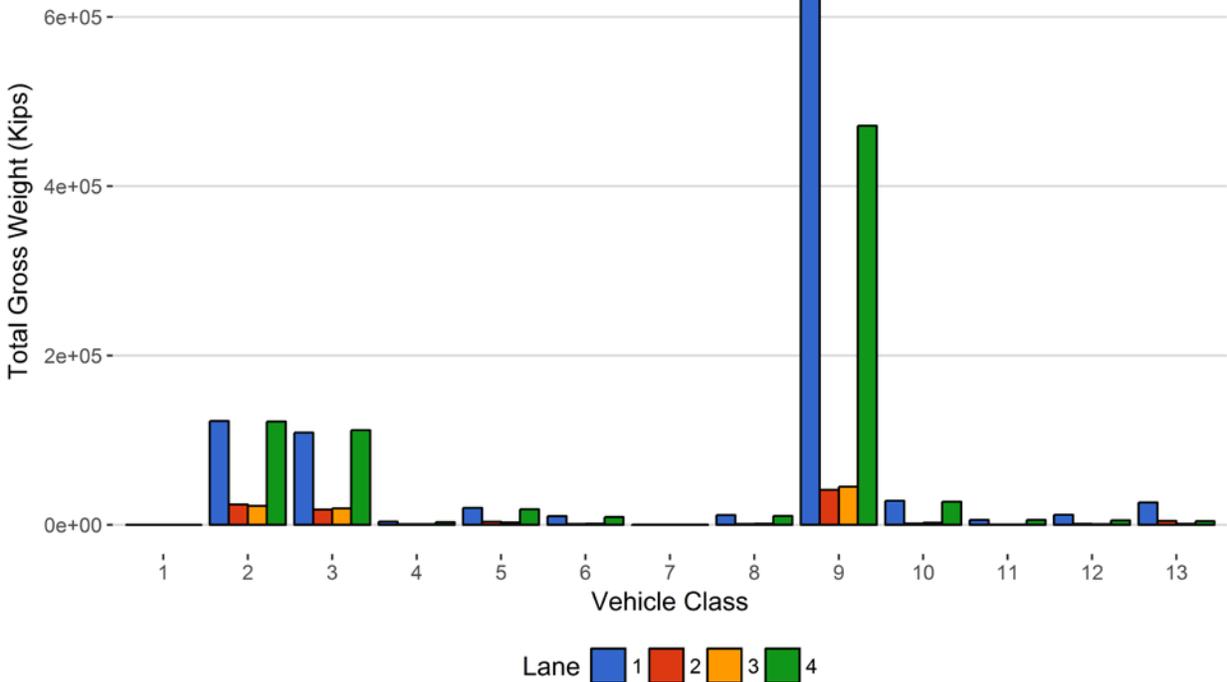


Figure 11 - Total Gross Vehicle Weight I

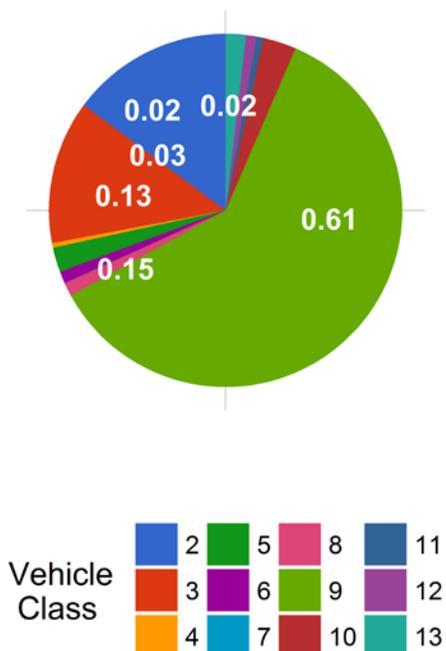


Figure 12 - Total ESALs by Class and Lane

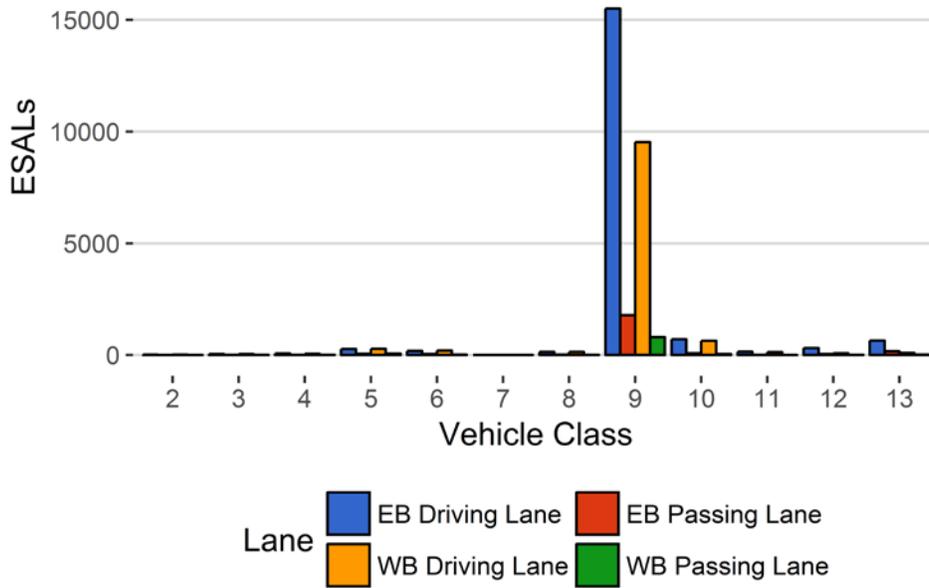
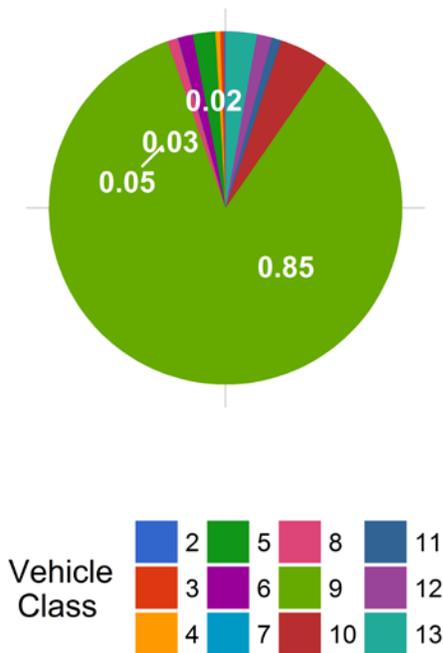


Figure 13 - ESALs by Class



**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>
July 2015	11.23	0.00	11.34	0.00	12.02	0.00	11.77	0.00
August 2015	11.58	3.14	11.67	2.91	11.85	-1.42	11.83	0.45
September 2015	11.64	3.73	11.63	2.59	11.77	-2.12	11.74	-0.31
October 2015	11.77	4.84	11.88	4.77	11.26	-6.34	11.63	-1.26
March 2016	10.41	-7.28	12.46	9.93	10.90	-9.29	8.69	-26.23
April 2016	10.29	-8.32	12.41	9.51	10.95	-8.90	8.97	-23.79
May 2016	10.17	-9.43	12.20	7.65	11.00	-8.51	8.92	-24.24
June 2016	10.09	-10.11	12.00	5.83	10.91	-9.26	8.54	-27.43
July 2016	10.14	-9.64	11.98	5.69	10.95	-8.93	8.69	-26.23
August 2016	10.23	-8.84	12.17	7.38	10.81	-10.12	9.00	-23.54
September 2016	10.33	-8.02	12.30	8.54	10.82	-10.01	10.15	-13.83
October 2016	10.45	-6.90	12.56	10.85	10.72	-10.86	10.31	-12.44
November 2016	10.66	-5.04	12.73	12.33	10.86	-9.69	10.02	-14.93
January 2017	11.04	-1.66	13.34	17.68	11.01	-8.41	11.44	-2.87
February 2017	11.05	-1.55	13.17	16.16	10.79	-10.28	10.20	-13.33
March 2017	10.94	-2.52	13.10	15.55	10.63	-11.54	9.82	-16.56
April 2017	10.77	-4.06	12.82	13.08	10.63	-11.60	9.80	-16.77
May 2017	10.69	-4.81	12.65	11.63	10.62	-11.66	11.21	-4.76
June 2017	10.56	-5.91	12.48	10.11	10.73	-10.76	10.44	-11.33
July 2017	10.58	-5.78	12.49	10.22	10.69	-11.05	10.81	-8.17
August 2017	10.69	-4.74	12.70	12.07	10.68	-11.18	11.04	-6.24
September 2017	10.75	-4.28	12.75	12.51	10.64	-11.51	11.19	-4.99
October 2017	10.92	-2.73	13.03	14.92	10.69	-11.08	11.26	-4.39
November 2017	11.26	0.29	13.63	20.20	10.47	-12.89	11.18	-5.06
December 2017	11.43	1.83	13.73	21.08	10.49	-12.71	11.31	-3.91
January	11.48	2.24	13.94	23.01	10.70	-10.96	11.85	0.62

---

2018								
February	11.46	2.10	13.98	23.31	11.00	-8.49	11.21	-4.81
2018								

---

**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	0	0	0	0
2	2519	70530	50.4	0	0
3	1484	41560	29.7	0	0
4	10	289	0.2	20	0.3
5	110	3076	2.2	60	0.9
6	27	747	0.5	73	1.1
7	0	13	0	2	0
8	27	745	0.5	20	0.3
9	761	21300	15.2	5657	84
10	32	886	0.6	449	6.7
11	8	230	0.2	11	0.2
12	10	278	0.2	98	1.5
13	14	383	0.3	345	5.1
<b>TOTAL</b>	<b>5001</b>	<b>140038</b>	<b>100</b>	<b>6735</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>
2018-02-19	Monday	06:28:23	10	EB	2	125.72
2018-02-02	Friday	09:20:22	10	EB	2	122.39
2018-02-12	Monday	11:35:37	10	EB	2	120.65
2018-02-02	Friday	09:27:16	10	EB	2	120.4
2018-02-13	Tuesday	14:08:33	10	EB	2	120.32
2018-02-15	Thursday	06:13:47	10	WB	3	119.95
2018-02-12	Monday	07:36:42	10	EB	2	119.78
2018-02-22	Thursday	08:50:35	10	EB	2	119.74
2018-02-14	Wednesday	07:36:48	9	EB	2	118.25
2018-02-21	Wednesday	11:35:07	9	EB	2	117.24

**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	EB	15	148	13	8.8	4263	175	1119
5	EB	8	1515	65	4.3	22959	471	5680
6	EB	19	356	22	6.2	10650	390	2152
7	EB	11.5	6	0	0	355	0	143
8	EB	31	358	81	22.6	10572	1885	992
9	EB	33	10746	523	4.9	655014	16248	158828
10	EB	33.5	439	19	4.3	29362	487	7646
11	EB	36.5	108	2	1.9	6094	68	1113
12	EB	36.5	166	1	0.6	12957	33	3467
13	EB	31.5	298	2	0.7	30895	56	10785
<b>TOTAL</b>	<b>****</b>	<b>****</b>	<b>14140</b>	<b>728</b>	<b>****</b>	<b>783120</b>	<b>****</b>	<b>191924</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	WB	15	120	16	13.3	3456	221	948
5	WB	8	1341	77	5.7	20485	562	5187
6	WB	19	338	72	21.3	9066	1249	2006
7	WB	11.5	6	0	0	285	0	108
8	WB	31	334	111	33.2	8587	2980	837
9	WB	33	9030	1268	14	479806	36686	111830
10	WB	33.5	384	19	4.9	29162	511	8467
11	WB	36.5	106	1	0.9	6122	35	1145
12	WB	36.5	92	2	2.2	5952	62	1334
13	WB	31.5	58	0	0	5477	0	1825
<b>TOTAL</b>	<b>****</b>	<b>****</b>	<b>11809</b>	<b>1566</b>	<b>****</b>	<b>568400</b>	<b>****</b>	<b>133687</b>
<b>GRAND TOTAL</b>	<b>****</b>	<b>****</b>	<b>25949</b>	<b>2294</b>	<b>150</b>	<b>1351520</b>	<b>62119</b>	<b>325611</b>

**Table 5 Gross Vehicle Weight by Class and Lane**

<i>Vehicle Class</i>	<i>EB Driving Lane</i>	<i>EB Passing Lane</i>	<i>WB Passing Lane</i>	<i>WB Driving Lane</i>	<i>Total</i>	<i>Percentage</i>
2	122668	23951	22329	122110	291058	14.8
3	108874	17933	19351	111755	257913	13.1
4	3741	696	643	3034	8115	0.4
5	19887	3544	2735	18312	44478	2.3
6	10158	882	1267	9048	21354	1.1
7	236	119	59	226	640	0
8	11510	946	1205	10363	24024	1.2
9	629984	41278	44965	471528	1187754	60.5
10	28416	1433	2405	27268	59523	3
11	5914	248	360	5798	12320	0.6
12	11875	1115	687	5328	19004	1
13	26398	4554	1053	4423	36428	1.9
<b>TOTAL</b>	<b>979661</b>	<b>96699</b>	<b>97058</b>	<b>789193</b>	<b>1962611</b>	<b>100</b>
<b>GVW/LANE</b>	<b>49.92</b>	<b>4.93</b>	<b>4.95</b>	<b>40.21</b>	<b>100</b>	<b>0.01</b>

**Table 6 ESALs by Class and Lane and Flexible ESAL Factors**

<i>Vehicle Class</i>	<i>EB Driving Lane</i>	<i>EB Passing Lane</i>	<i>WB Passing Lane</i>	<i>WB Driving Lane</i>	<i>Total</i>	<i>Percentage</i>	<i>Flexible ESAL Factor</i>
2	17	6	3	19	45	0.14	0.0014
3	45	11	7	48	112	0.34	0.0059
4	73	6	9	57	145	0.45	1.08
5	271	55	60	279	666	2.05	0.47
6	180	43	22	203	447	1.38	1.29
7	6	2	1	5	15	0.05	1.94
8	140	18	10	138	307	0.94	0.89
9	15503	1781	796	9526	27607	85.01	2.8
10	706	77	47	639	1469	4.52	3.55
11	146	8	5	127	286	0.88	2.59
12	313	45	13	81	451	1.39	3.39
13	642	168	21	95	927	2.85	5.07
<b>TOTAL</b>	<b>18042</b>	<b>2220</b>	<b>994</b>	<b>11219</b>	<b>32476</b>	<b>100</b>	<b>23</b>
<b>ESALS/LANE</b>	<b>55.6</b>	<b>6.8</b>	<b>3.1</b>	<b>34.5</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>
Mar 2017	176306	5687	1106	142009	80.5	34297.2	19.5	92.9	7.1
Apr 2017	185976	6199	1050	154489	83.1	31487.5	16.9	92.1	7.9
May 2017	206168	6651	913	177864	86.3	28304.2	13.7	89.9	10.1
Jun 2017	217516	7250	1243	180239	82.9	37276.6	17.1	91.8	8.2
Jul 2017	230124	7423	1161	194135	84.4	35988.7	15.6	92.3	7.7
Aug 2017	241768	7799	1271	202353	83.7	39415	16.3	91.4	8.6
Sep 2017	204930	6831	1176	169636	82.8	35294.3	17.2	92.3	7.7
Oct 2017	202263	6525	1219	164489	81.3	37774.5	18.7	91.1	8.9
Nov 2017	185838	6195	1101	152807	82.2	33031.5	17.8	91.4	8.6
Dec 2017	177308	5720	956	147682	83.3	29625.9	16.7	91.7	8.3
Jan 2018	150101	4842	998	119156	79.4	30945.3	20.6	91.5	8.5
Feb 2018	140038	5001	998	112090	80	27948.4	20	91.7	8.3
<b>TOTAL</b>	<b>2318336</b>	<b>--</b>	<b>--</b>	<b>1916949</b>	<b>--</b>	<b>401389</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>AVERAGE</b>	<b>193195</b>	<b>6344</b>	<b>1099</b>	<b>159746</b>	<b>82</b>	<b>33449</b>	<b>18</b>	<b>92</b>	<b>8</b>

## ESALS

<i>Month</i>	<i>ESALS EB Passing Lane</i>	<i>ESALS EB Driving Lane</i>	<i>ESALS WB Driving Lane</i>	<i>ESALS WB Passing Lane</i>	<i>Total ESALS</i>	<i>Driving Lane ESALS %</i>	<i>Passing Lane ESALS %</i>	<i>Pavement Life Decrease Months</i>
Mar 2017	17942	2033	1039	8696	29709	90	10	2.6
Apr 2017	15966	1867	950	6934	25717	89	11	2
May 2017	15934	1804	1013	3773	22525	87	13	1.3
Jun 2017	15010	1768	1383	10942	29104	89	11	0.7
Jul 2017	14669	1830	848	12554	29901	91	9	0.5
Aug 2017	15617	2371	944	14616	33548	90	10	0.9
Sep 2017	14566	1734	786	13856	30942	92	8	1
Oct 2017	16018	2029	1382	14486	33915	90	10	1.8
Nov 2017	17031	2164	1100	12578	32873	90	10	4.1
Dec 2017	16997	2090	1002	12066	32154	90	10	5.4
Jan 2018	19812	2473	1222	14703	38210	90	10	15.5
Feb 2018	18052	2347	1003	11230	32632	90	10	20.1
<b>TOTAL</b>	<b>197614</b>	<b>24508</b>	<b>12673</b>	<b>136433</b>	<b>371228</b>	--	--	--
<b>AVERAGE</b>	<b>16468</b>	<b>2042</b>	<b>1056</b>	<b>11369</b>	<b>30936</b>	<b>90</b>	<b>10</b>	<b>5</b>

## Gross Vehicle Weight

<i>Month</i>	<i>GVW EB Passing Lane</i>	<i>GVW EB Driving Lane</i>	<i>GVW WB Passing Lane</i>	<i>GVW WB Driving Lane</i>	<i>Total GVW Kips</i>
Mar 2017	1078220	101733	118530	938490	2236973
Apr 2017	979933	97771	97329	789455	1964488
May 2017	1151180	113013	119700	944222	2328116
Jun 2017	1128186	125217	125409	839245	2218058
Jul 2017	1191812	137732	145538	626646	2101729
Aug 2017	1171599	142151	163762	1069962	2547475
Sep 2017	1201258	156331	160033	1169717	2687339
Oct 2017	1261836	183803	169415	1233730	2848784
Nov 2017	1142132	137670	139643	1114926	2534370
Dec 2017	1134750	132557	157514	1084975	2509797
Jan 2018	1103714	127455	138168	976942	2346279
Feb 2018	1080273	116954	121419	937730	2256376
<b>TOTAL</b>	<b>13624895</b>	<b>1572388</b>	<b>1656460</b>	<b>11726041</b>	<b>28579784</b>
<b>AVERAGE</b>	<b>1135408</b>	<b>131032</b>	<b>138038</b>	<b>977170</b>	<b>2381649</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>
Mar 2017	4057	2.4	12.1	728	196
Apr 2017	2888	1.6	9.5	641	129
May 2017	2648	1.4	10	546	81
Jun 2017	2602	1.3	7.4	549	95
Jul 2017	2977	1.3	8.4	579	87
Aug 2017	4016	1.7	10.5	756	127
Sep 2017	3822	1.9	11.1	670	143
Oct 2017	5170	2.8	15.1	814	228
Nov 2017	6117	3.5	19.7	949	384
Dec 2017	6391	3.7	22.2	957	412
Jan 2018	8282	5.7	27.8	1737	532
Feb 2018	6759	5.2	26	1616	509
<b>TOTAL</b>	<b>55729</b>	<b>--</b>	<b>--</b>	<b>10542</b>	<b>2923</b>
<b>AVERAGE</b>	<b>4644.1</b>	<b>2.7</b>	<b>15</b>	<b>878.5</b>	<b>243.6</b>

## Freight

<i>Month</i>	<i>EB Freight Tons</i>	<i>WB Freight Tons</i>	<i>Total Freight</i>	<i>EB Freight %</i>	<i>WB Freight %</i>
Mar 2017	211493	133788	345281	61.3	38.7
Apr 2017	199679	109693	309372	64.5	35.5
May 2017	203966	55463	259429	78.6	21.4
Jun 2017	196773	150979	347753	56.6	43.4
Jul 2017	192246	159063	351308	54.7	45.3
Aug 2017	206671	176440	383111	53.9	46.1
Sep 2017	186208	163597	349805	53.2	46.8
Oct 2017	198006	179656	377662	52.4	47.6
Nov 2017	197631	156250	353880	55.8	44.2
Dec 2017	190642	145269	335911	56.8	43.2
Jan 2018	211839	163825	375664	56.4	43.6
Feb 2018	191924	133687	325611	58.9	41.1
<b>TOTAL</b>	<b>2387078</b>	<b>1727710</b>	<b>4114788</b>	--	--
<b>AVERAGE</b>	<b>198923.2</b>	<b>143975.8</b>	<b>342899</b>	<b>58.6</b>	<b>41.4</b>