

**APRIL 2018**



**WIM #49  
I-90,  
MP 42.6  
WORTHINGTON,  
MN**

**MONTHLY  
REPORT**



*Your Destination...Our Priority*



## WIM Site Location

WIM #49 is located on I-90 near Worthington in Nobles county.

## System Operation

WIM #49 was operational for the entire month of April 2018. Volume was computed using all monthly data.

## System Calibration

WIM #49 was most recently calibrated on 2017-12-15. 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: 267156 | Passenger Vehicles: 219578 | Heavy Commercial Vehicles: 47578

Monthly Average Daily Traffic (MADT): 8905 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1586

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 Tuesdays. 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 03 PM and 05 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 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 5's.

## Overweight HCVs

**Volume trends.** Of a total of 47578 HCVs, 8693 of them were overweight<sup>3</sup>. These overweight HCVs contributed to 3.4% of total monthly volume, and 19.2% 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 Sundays. 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 75.6% of all overweight vehicles traveling WB 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 ,179 EB vehicles exceeded 88,000 pounds (124 vehicles were Class 9's; 29 vehicles were Class 13's). Of vehicles traveling WB,

908 EB vehicles exceeded 88,000 pounds (745 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 April 2018.

**Loaded vs. Unloaded HCVs.** Figure 10 shows the GVW distributions of Class 9s and 10s in April 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 532521 tons of freight was recorded to have crossed the WIM. More freight was shipped WB (58.1%) than EB (41.9%). See Table 4 and Figure 11 for more freight information.

## Infrastructure Considerations

**Bridge.** Bridge No. 53815 and 53816 (Prestressed Beam Span) are approximately .18 miles east of WIM #49. Bridge No. 53813 and 53814 (Prestressed Beam Span) are approximately .43 miles west of WIM #49. WIM #49 recorded a total of 267156 vehicles with a combined GVW of 3411124 kips (1 kip = 1,000 pounds = 0.5 tons) in April 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

**Pavement Design.** A total of 51324 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 61.3% of all ESALs were recorded WB while 38.7% was observed EB. In particular, 87% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 60% 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).

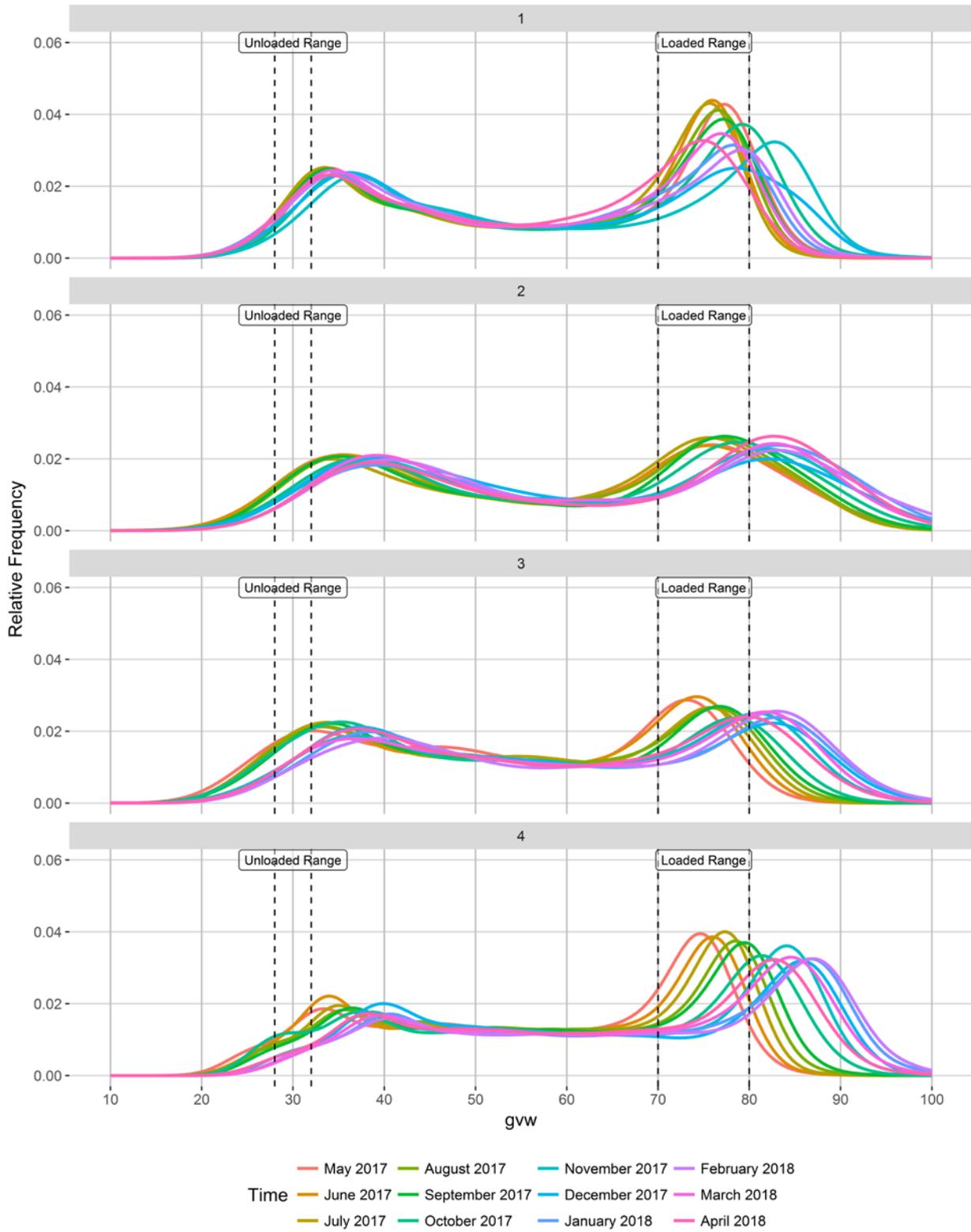
*WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>*

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.

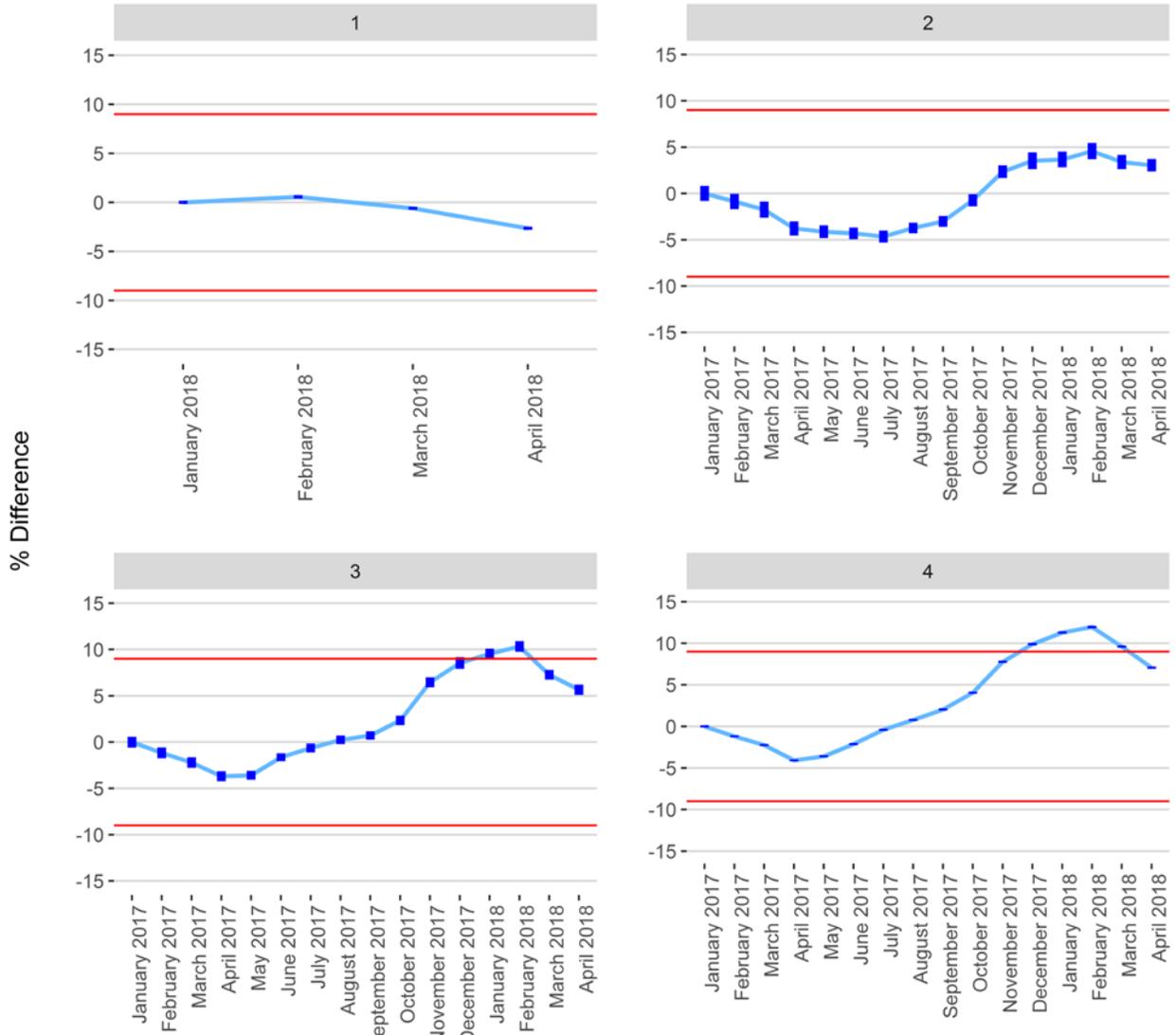
**To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to [ADArequest.dot@state.mn.us](mailto:ADArequest.dot@state.mn.us). Please request at least one week in advance.**

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

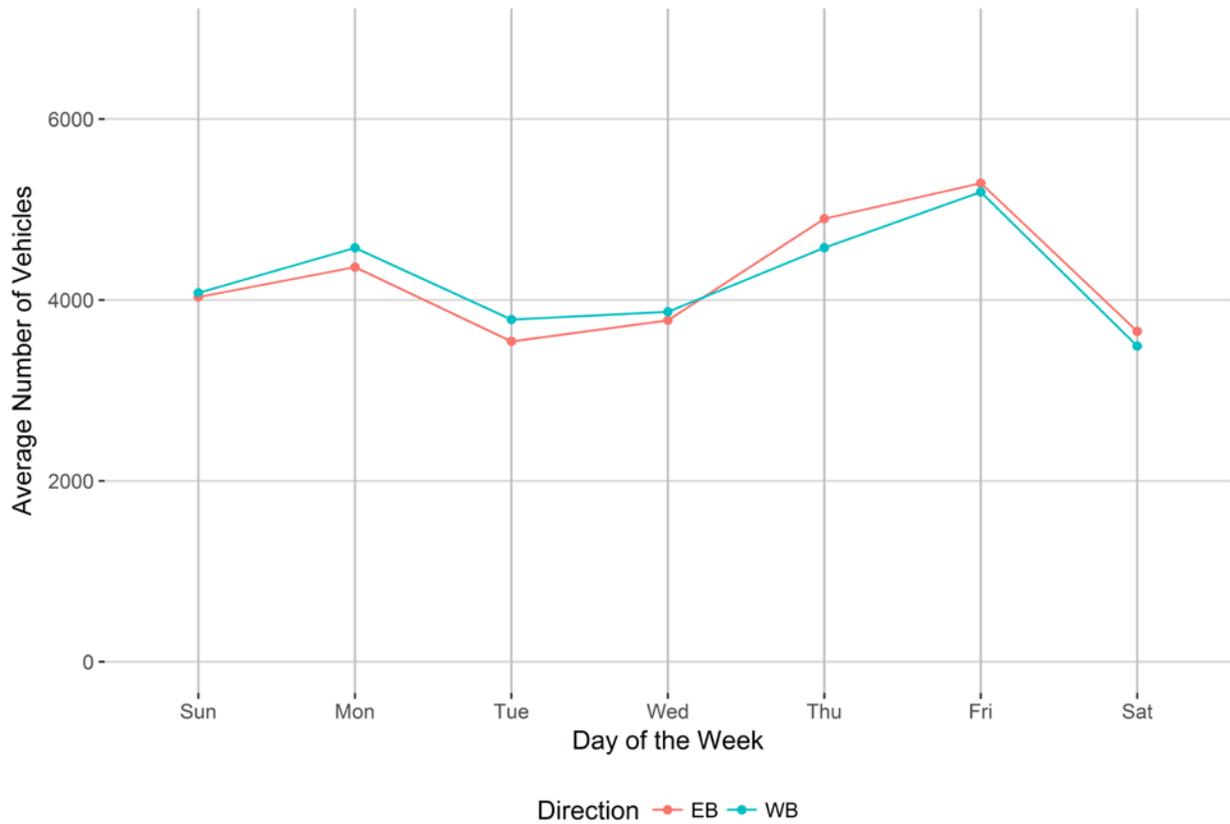


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

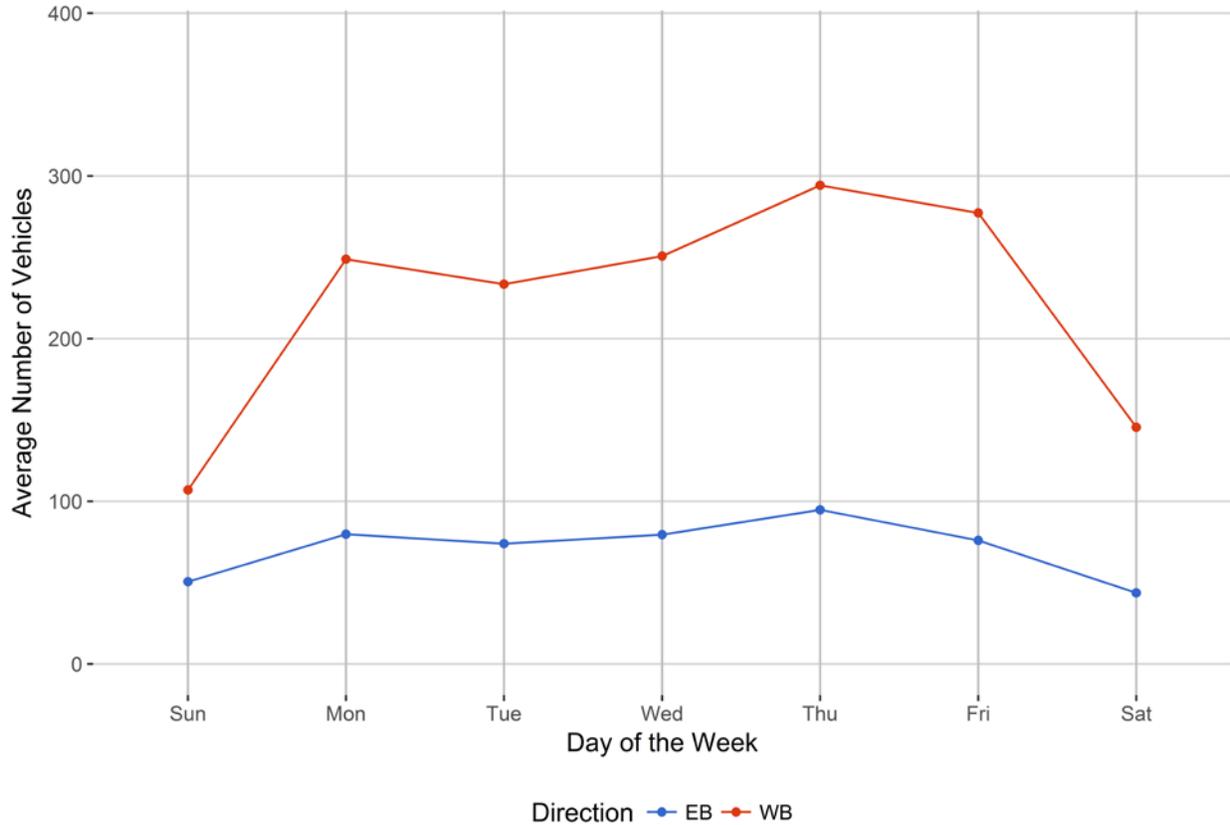


Figure 4 - Passenger Vehicles vs. Hour of the Day

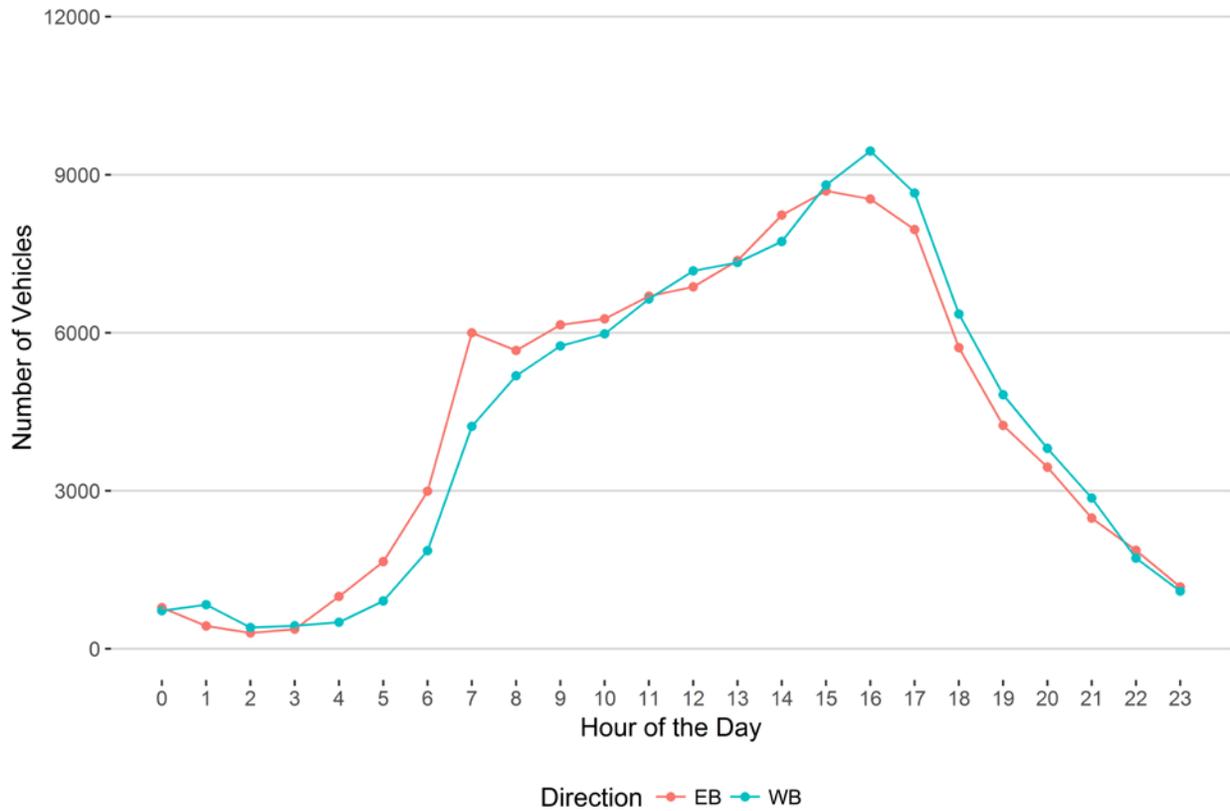


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

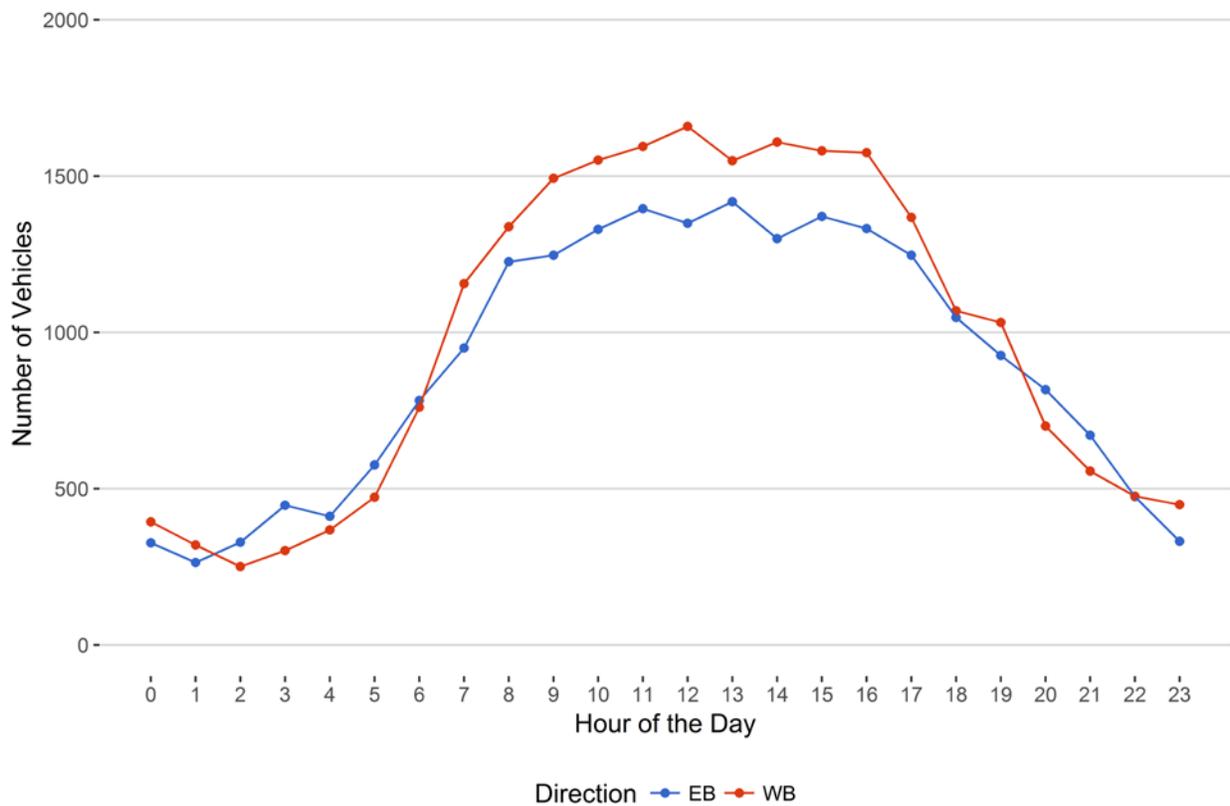


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

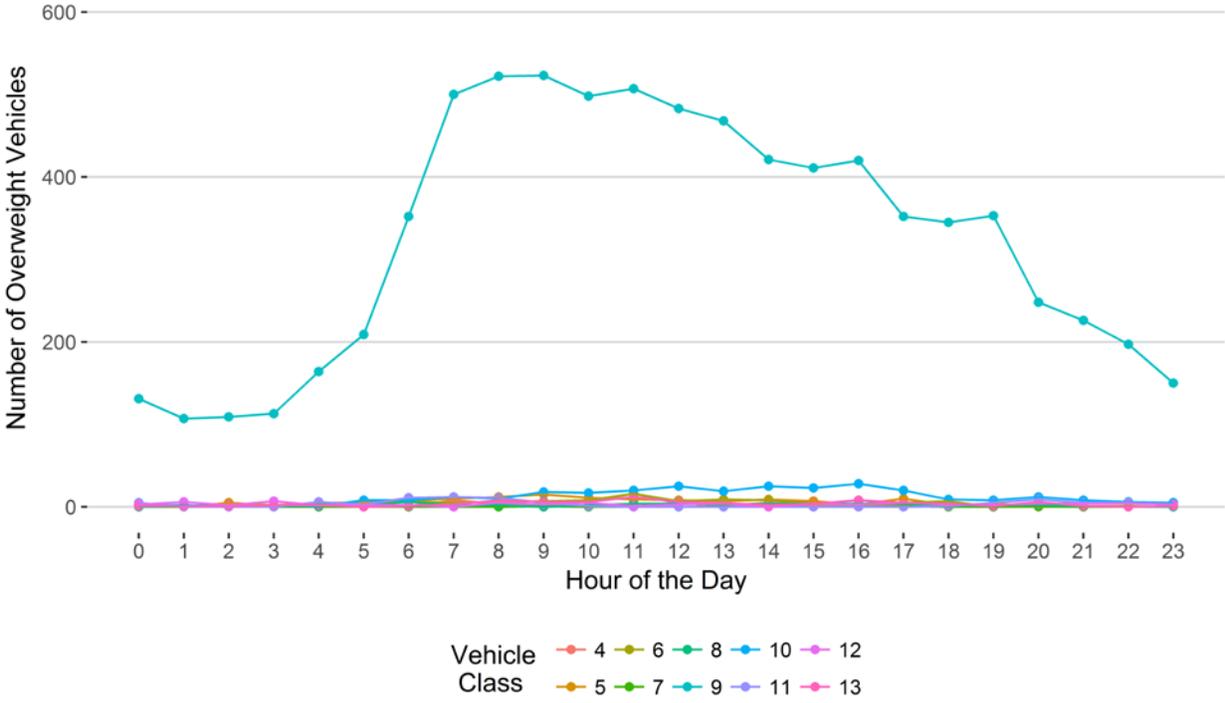


Figure 7 - Overweight Vehicles by Direction  
Hour of the Day

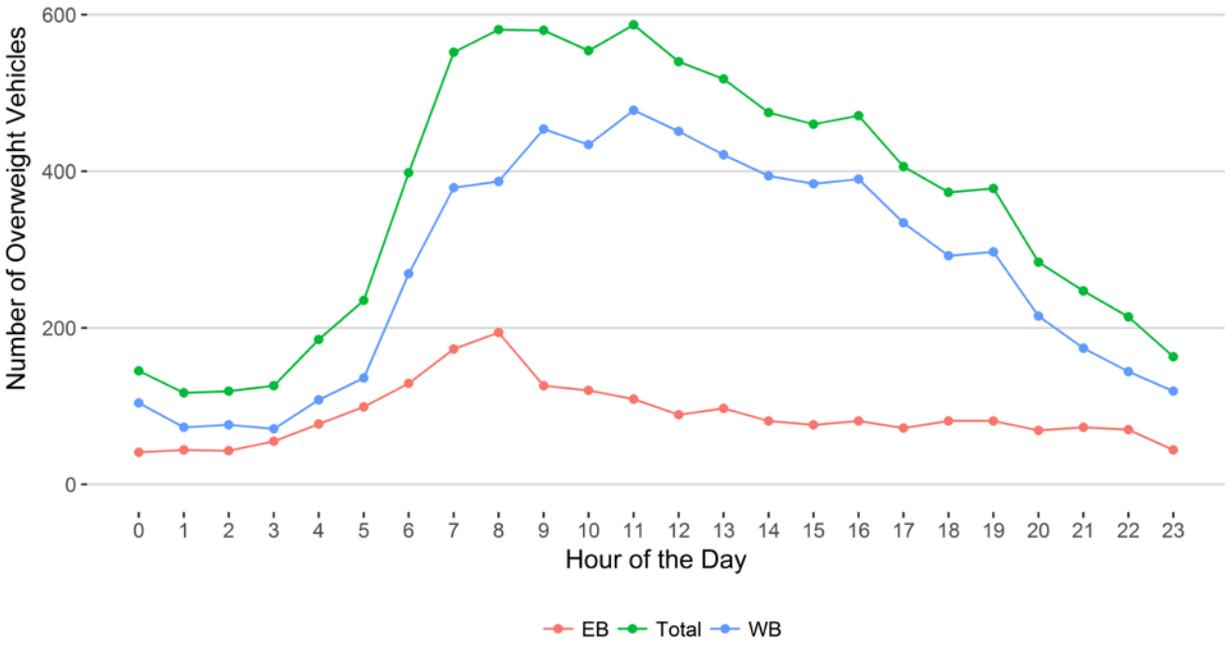
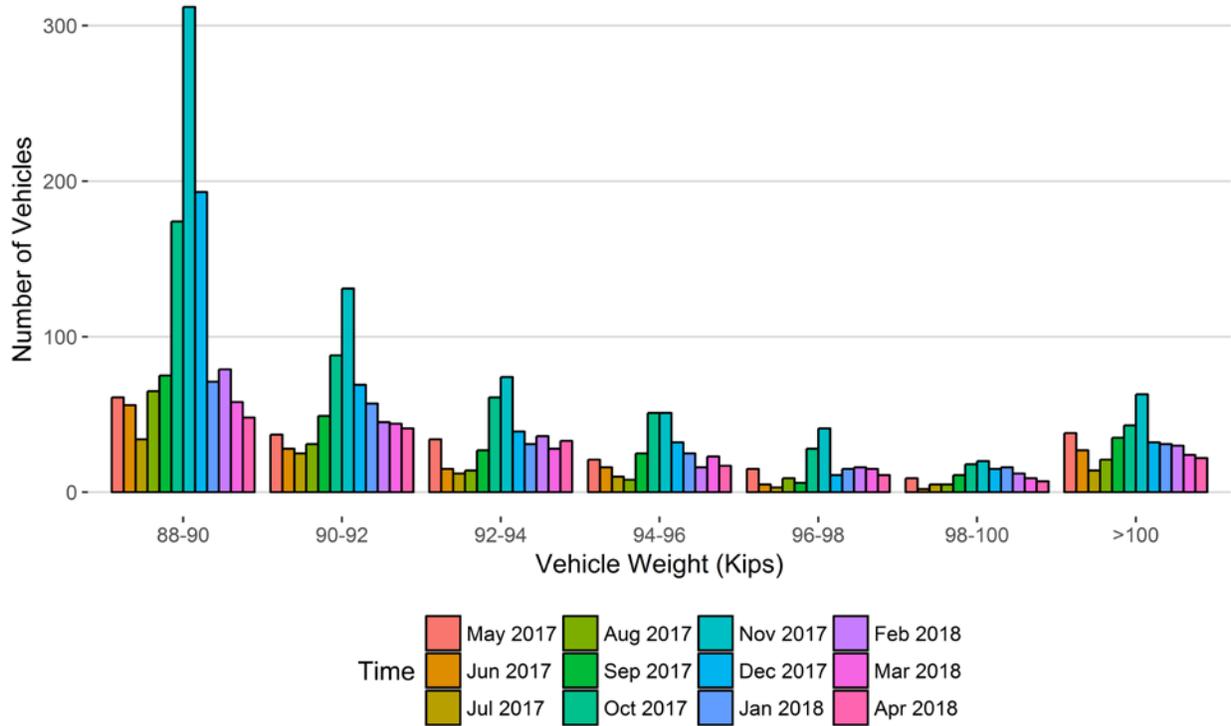
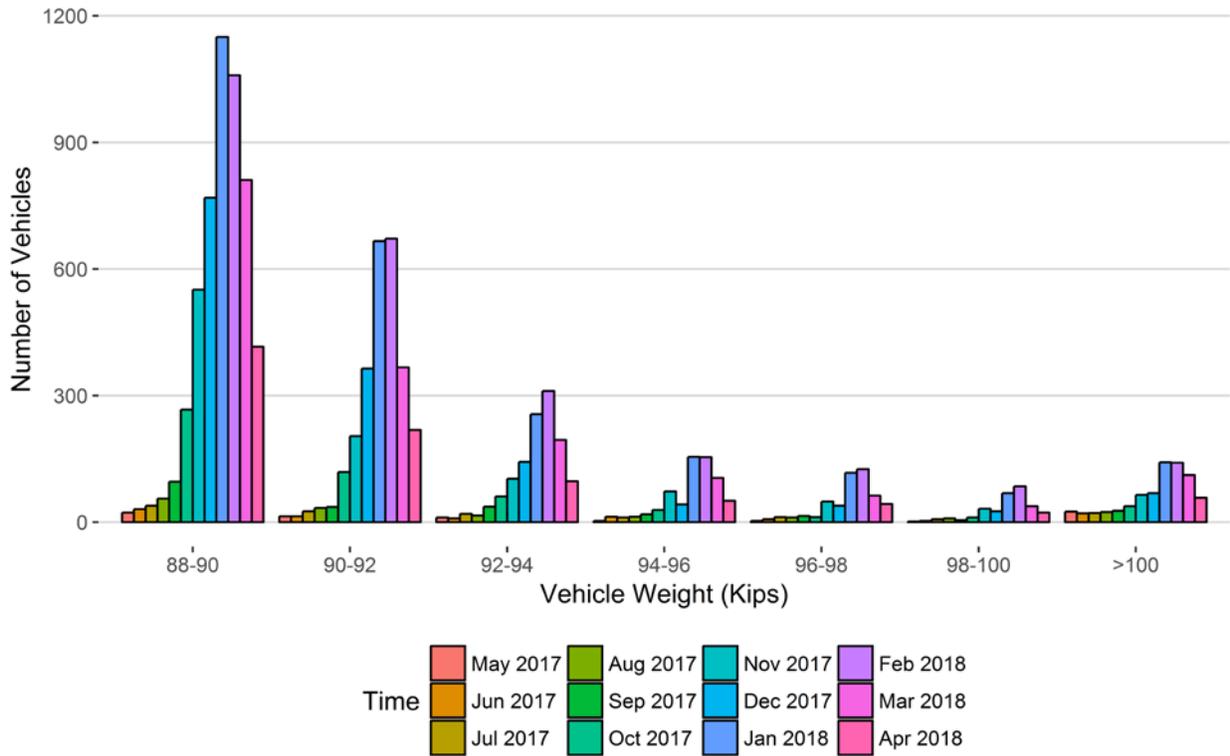


Figure 8 - Histogram of EB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
88-90	61	56	34	65	75	174	312	193	71	79	58	48
90-92	37	28	25	31	49	88	131	69	57	45	44	41
92-94	34	15	12	14	27	61	74	39	31	36	28	33
94-96	21	16	10	8	25	51	51	32	25	16	23	17
96-98	15	5	3	9	6	28	41	11	15	16	15	11
98-100	9	2	5	5	11	18	20	15	16	12	9	7
>100	38	27	14	21	35	43	63	32	31	30	24	22
Total	215	149	103	153	228	463	692	391	246	234	201	179

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



Vehicle Weights (Kips)	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
88-90	23	31	39	56	96	267	551	769	1150	1059	811	416
90-92	14	14	26	34	36	119	204	364	666	672	367	219
92-94	11	9	20	16	37	61	103	143	256	311	195	97
94-96	3	13	11	13	19	29	73	42	155	154	105	51
96-98	3	7	12	11	15	12	49	39	117	126	63	43
98-100	2	3	7	9	5	11	32	26	69	85	38	23
>100	25	21	22	24	27	38	65	69	142	141	112	58
Total	81	98	137	163	235	537	1077	1452	2555	2548	1691	907

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

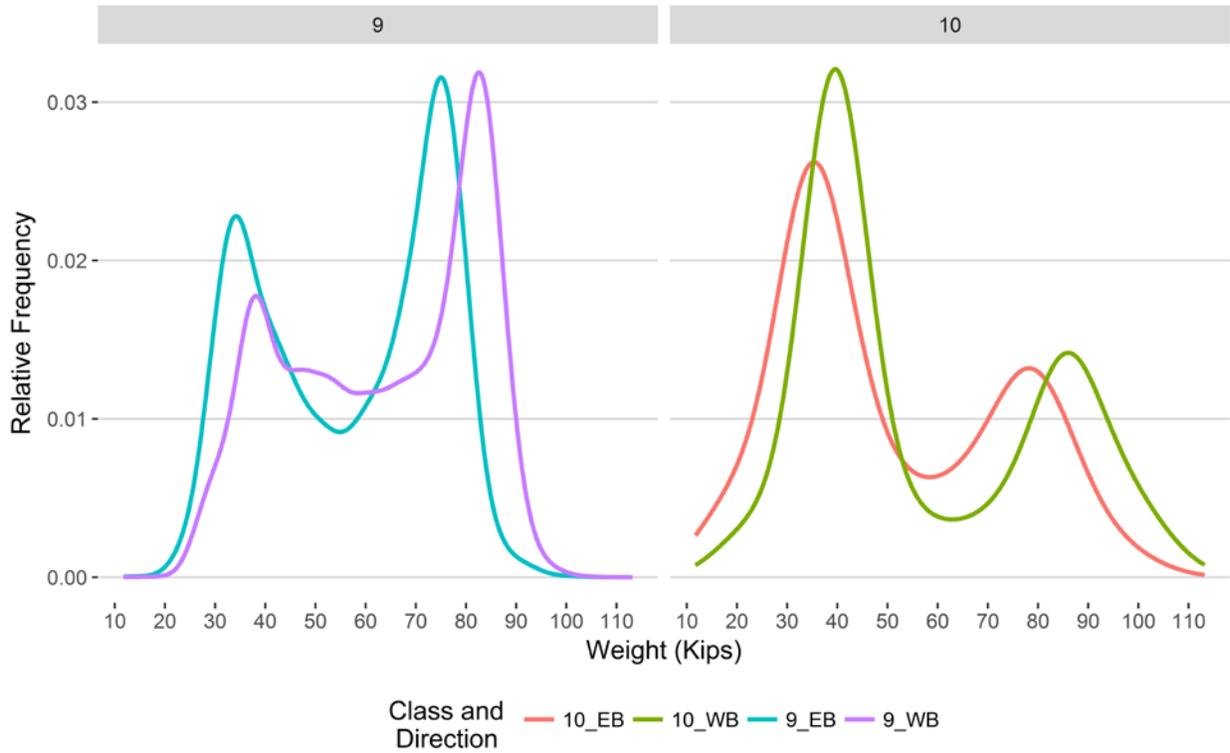


Figure 9 - Freight Percentage by Direction and Class

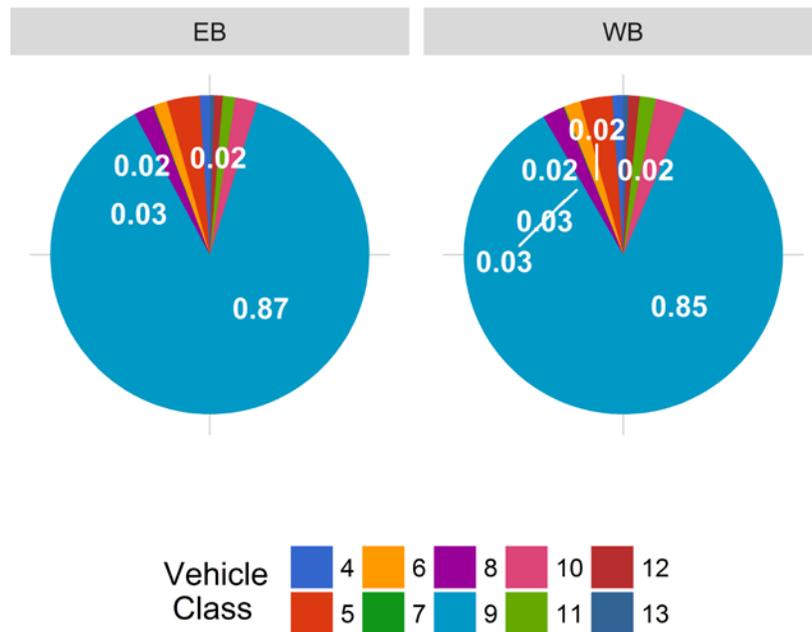


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

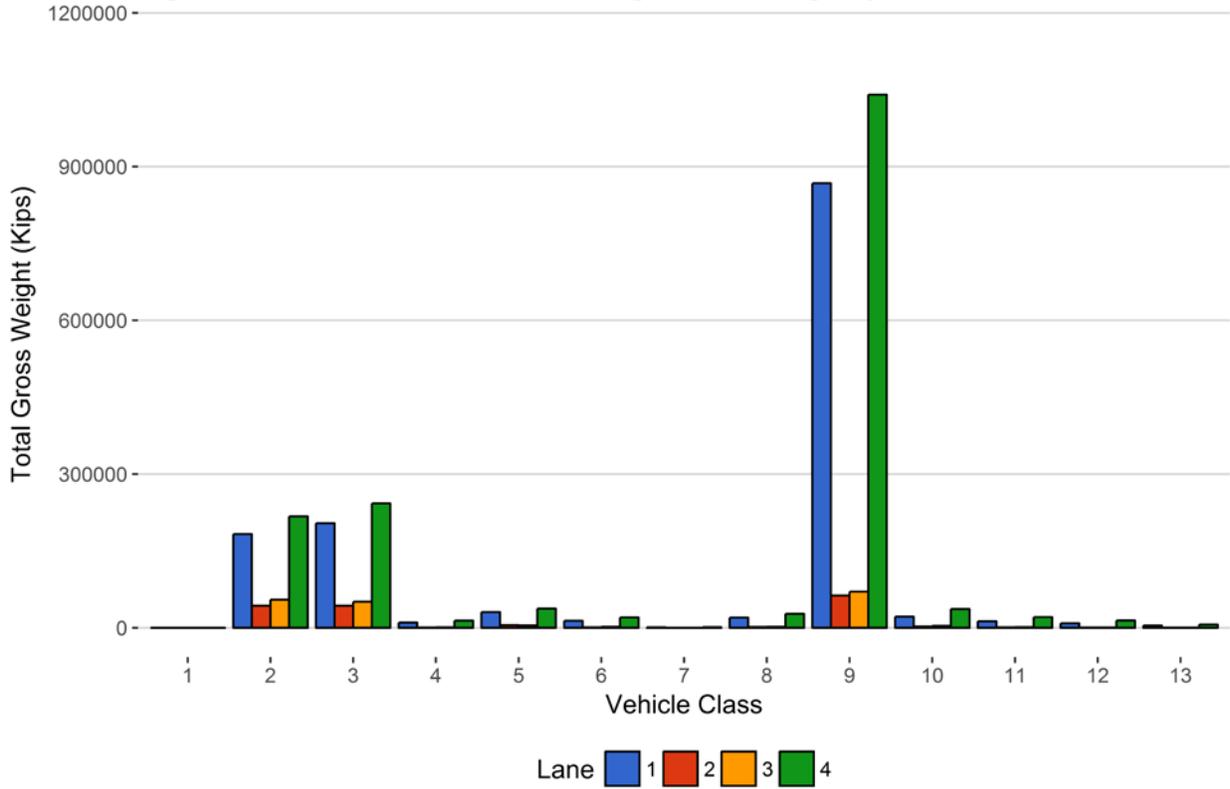


Figure 11 - Total Gross Vehicle Weight I

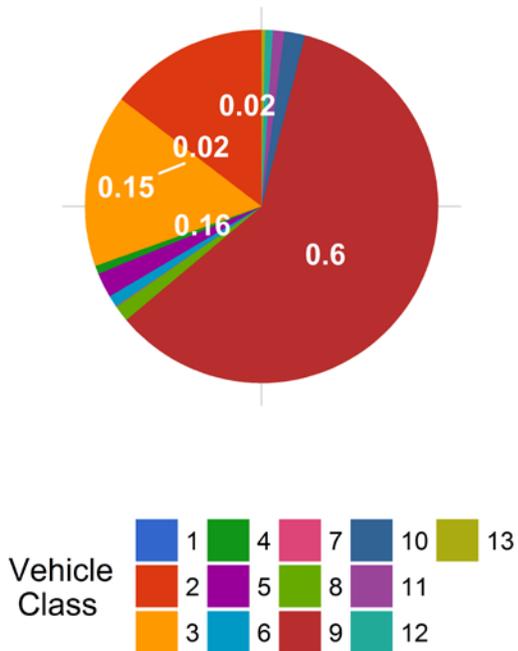


Figure 12 - Total ESALs by Class and Lane

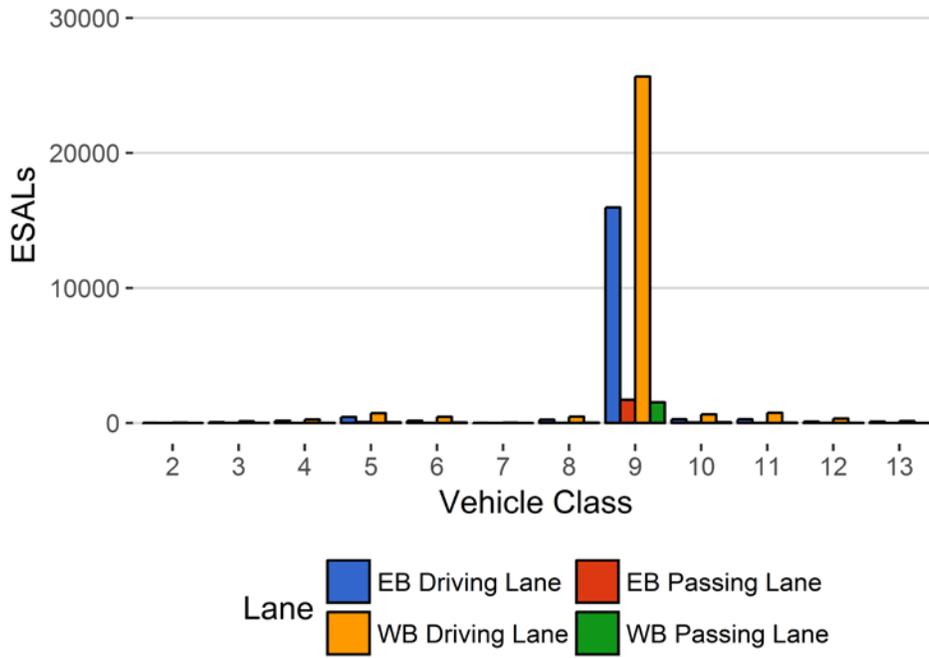
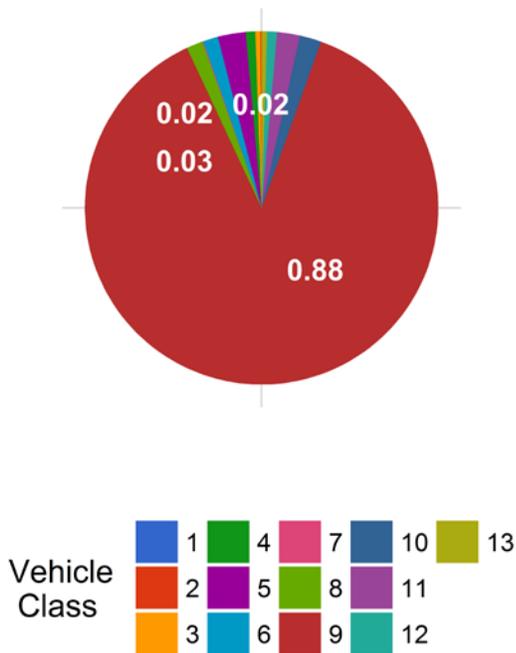


Figure 13 - ESALs by Class



**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>
January 2017	NA	NA	11.56	0.00	11.42	0.00	11.52	0.00
February 2017	NA	NA	11.46	-0.87	11.29	-1.15	11.38	-1.19
March 2017	NA	NA	11.36	-1.75	11.17	-2.20	11.26	-2.24
April 2017	NA	NA	11.13	-3.78	11.00	-3.69	11.05	-4.08
May 2017	NA	NA	11.09	-4.13	11.02	-3.59	11.11	-3.60
June 2017	NA	NA	11.07	-4.31	11.24	-1.64	11.28	-2.13
July 2017	NA	NA	11.02	-4.66	11.35	-0.64	11.48	-0.40
August 2017	NA	NA	11.13	-3.73	11.45	0.24	11.61	0.78
September 2017	NA	NA	11.21	-3.01	11.51	0.71	11.76	2.04
October 2017	NA	NA	11.48	-0.73	11.69	2.33	11.99	4.06
November 2017	NA	NA	11.83	2.35	12.16	6.46	12.42	7.77
December 2017	NA	NA	11.97	3.54	12.40	8.54	12.66	9.89
January 2018	10.89	0.00	11.99	3.67	12.51	9.54	12.82	11.29
February 2018	10.95	0.56	12.09	4.57	12.60	10.32	12.90	11.95
March 2018	10.82	-0.60	11.96	3.40	12.25	7.26	12.63	9.61
April 2018	10.60	-2.64	11.92	3.05	12.07	5.66	12.34	7.06

**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	1	19	0	0	0
2	4369	131067	49.1	0	0
3	2950	88491	33.1	0	0
4	33	1000	0.4	61	0.7
5	191	5737	2.1	135	1.6
6	45	1347	0.5	98	1.1
7	2	51	0	5	0.1
8	51	1533	0.6	51	0.6
9	1185	35559	13.3	7809	89.8
10	41	1243	0.5	289	3.3
11	20	601	0.2	82	0.9
12	13	380	0.1	77	0.9
13	4	127	0	86	1
<b>TOTAL</b>	<b>8905</b>	<b>267156</b>	<b>100</b>	<b>8693</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>
2018-04-05	Thursday	16:34:19	10	WB	4	113.21
2018-04-13	Friday	16:20:37	10	WB	4	109.19
2018-04-03	Tuesday	17:16:57	9	EB	2	109.05
2018-04-03	Tuesday	15:33:59	9	EB	2	108.59
2018-04-26	Thursday	18:48:04	10	WB	4	108.56
2018-04-04	Wednesday	08:47:51	9	EB	2	108.08
2018-04-18	Wednesday	11:25:07	9	WB	3	107.93
2018-04-06	Friday	07:44:19	9	EB	2	107.6
2018-04-11	Wednesday	06:13:25	9	WB	3	107.17
2018-04-04	Wednesday	12:29:18	10	WB	4	107.02

**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	408	72	17.6	10000	889	2480
5	EB	8	2665	643	24.1	30863	4531	7343
6	EB	19	576	194	33.7	11303	3319	2022
7	EB	11.5	22	0	0	962	0	355
8	EB	31	659	280	42.5	14693	6625	1472
9	EB	33	16289	1918	11.8	873840	56859	199798
10	EB	33.5	476	116	24.4	21051	3147	4496
11	EB	36.5	262	42	16	12197	1413	2084
12	EB	36.5	163	5	3.1	9204	146	1718
13	EB	31.5	52	0	0	4499	0	1430
<b>TOTAL</b>	<b>****</b>	<b>****</b>	<b>21572</b>	<b>3270</b>	<b>****</b>	<b>988611</b>	<b>****</b>	<b>223199</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	542	63	11.6	13921	839	3368
5	WB	8	2785	152	5.5	40967	1125	9951
6	WB	19	704	29	4.1	21458	517	4316
7	WB	11.5	26	0	0	1184	0	442
8	WB	31	797	225	28.2	23740	5071	3004
9	WB	33	17490	860	4.9	1085749	25360	268479
10	WB	33.5	705	52	7.4	38684	1348	8404
11	WB	36.5	309	2	0.6	21860	56	5327
12	WB	36.5	198	4	2	14796	104	3858
13	WB	31.5	69	0	0	6516	0	2171
<b>TOTAL</b>	<b>****</b>	<b>****</b>	<b>23625</b>	<b>1387</b>	<b>****</b>	<b>1268875</b>	<b>****</b>	<b>309322</b>
<b>GRAND TOTAL</b>	<b>****</b>	<b>****</b>	<b>45197</b>	<b>4657</b>	<b>238</b>	<b>2257486</b>	<b>111350</b>	<b>532521</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>
1	11	1	1	10	23	0
2	182685	43036	54835	217433	497990	14.6
3	204135	42992	50803	242821	540750	15.9
4	10223	666	975	13786	25649	0.8
5	30421	4973	4573	37519	77486	2.3
6	13713	908	1745	20229	36596	1.1
7	962	0	50	1134	2146	0.1
8	19998	1320	1642	27170	50129	1.5
9	867698	63001	70547	1040563	2041808	59.9
10	21751	2446	3610	36423	64230	1.9
11	12764	846	1010	20906	35526	1
12	8689	661	619	14281	24250	0.7
13	4326	173	252	6265	11015	0.3
<b>TOTAL</b>	<b>1377377</b>	<b>161024</b>	<b>190661</b>	<b>1678538</b>	<b>3407599</b>	<b>100</b>
<b>GVW/LANE</b>	<b>40.42</b>	<b>4.73</b>	<b>5.6</b>	<b>49.26</b>	<b>100</b>	<b>0</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>
1	0	0	0	0	0	0	0.0526
2	15	6	8	32	61	0.12	0.001
3	66	21	21	125	233	0.45	0.0056
4	172	9	11	254	445	0.87	0.94
5	442	71	62	729	1304	2.54	0.48
6	181	24	42	458	706	1.38	1.1
7	18	0	1	26	45	0.09	1.76
8	248	21	27	469	765	1.49	1.05
9	15961	1722	1534	25656	44873	87.59	2.66
10	273	44	57	637	1011	1.97	1.71
11	267	16	30	756	1069	2.09	3.7
12	107	12	13	330	461	0.9	2.51
13	98	6	3	151	258	0.5	3.95
<b>TOTAL</b>	<b>17848</b>	<b>1951</b>	<b>1809</b>	<b>29623</b>	<b>51231</b>	<b>100</b>	<b>20</b>
<b>ESALS/LANE</b>	<b>34.8</b>	<b>3.8</b>	<b>3.5</b>	<b>57.8</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>
May 2017	347497	11210	1922	287902	82.9	59594.9	17.1	93.2	6.8
Jun 2017	407006	13567	2133	343015	84.3	63990.6	15.7	92.1	7.9
Jul 2017	441067	14228	1980	379680	86.1	61387.2	13.9	92	8
Aug 2017	448501	14468	2187	380719	84.9	67782	15.1	91.4	8.6
Sep 2017	377524	12584	2057	315802	83.7	61721.5	16.3	92	8
Oct 2017	347110	11197	2003	285006	82.1	62103.7	17.9	92.6	7.4
Nov 2017	308779	10293	1764	255866	82.9	52913.4	17.1	93.2	6.8
Dec 2017	274327	8849	1455	229224	83.6	45103	16.4	93.6	6.4
Jan 2018	242457	7821	1502	195903	80.8	46554.3	19.2	93.8	6.2
Feb 2018	220990	7892	1584	176648	79.9	44341.7	20.1	93.4	6.6
Mar 2018	280298	9042	1611	230353	82.2	49945.1	17.8	93.2	6.8
Apr 2018	267156	8905	1586	219578	82.2	47578.5	17.8	92.6	7.4
<b>TOTAL</b>	<b>3962712</b>	<b>--</b>	<b>--</b>	<b>3299696</b>	<b>--</b>	<b>663016</b>	<b>--</b>	<b>--</b>	<b>--</b>
<b>AVERAGE</b>	<b>330226</b>	<b>10838</b>	<b>1815</b>	<b>274975</b>	<b>83</b>	<b>55251</b>	<b>17</b>	<b>93</b>	<b>7</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>
May 2017	27803	1856	1325	23251	54235	94	6	2.3
Jun 2017	26754	3436	1736	24916	56843	91	9	1.4
Jul 2017	24850	2101	1660	25421	54032	93	7	1.8
Aug 2017	28422	3815	2188	28759	63184	90	10	2
Sep 2017	27300	2308	1952	28402	59963	93	7	2.8
Oct 2017	30927	2292	1781	33278	68278	94	6	6.2
Nov 2017	30014	1995	1818	33423	67251	94	6	12.4
Dec 2017	18313	1169	1522	26742	47746	94	6	20.9
Jan 2018	20474	1415	2110	34986	58984	94	6	30.4
Feb 2018	18539	1460	2079	31208	53286	93	7	35.5
Mar 2018	20570	1668	2103	34246	58587	94	6	20.2
Apr 2018	17863	1980	1824	29657	51324	93	7	12.1
<b>TOTAL</b>	<b>291829</b>	<b>25495</b>	<b>22098</b>	<b>354291</b>	<b>693713</b>	--	--	--
<b>AVERAGE</b>	<b>24319</b>	<b>2125</b>	<b>1842</b>	<b>29524</b>	<b>57809</b>	<b>93</b>	<b>7</b>	<b>12</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>
May 2017	1414968	113169	175879	1708692	3412708
Jun 2017	1241034	103408	149769	1460708	2954919
Jul 2017	1505144	150289	200019	1792971	3648423
Aug 2017	1378927	161549	190965	1679683	3411124
Sep 2017	1930859	199473	230908	1872309	4233548
Oct 2017	2027536	257078	312474	2033339	4630426
Nov 2017	2010100	281883	325984	2066789	4684756
Dec 2017	2159200	302701	348466	2194196	5004563
Jan 2018	1980511	242897	280810	2018643	4522861
Feb 2018	1978058	217867	250525	2078389	4524840
Mar 2018	1785461	186160	211393	1888009	4071023
Apr 2018	1236687	118699	157811	1457196	2970393
<b>TOTAL</b>	<b>20648485</b>	<b>2335173</b>	<b>2835004</b>	<b>22250923</b>	<b>48069585</b>
<b>AVERAGE</b>	<b>1720707</b>	<b>194598</b>	<b>236250</b>	<b>1854244</b>	<b>4005799</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>
May 2017	5740	1.7	9.9	303	80
Jun 2017	5245	1.3	8.4	250	56
Jul 2017	5495	1.3	9.1	241	49
Aug 2017	8117	1.9	12.3	319	60
Sep 2017	9421	2.6	15.7	463	78
Oct 2017	13619	4.1	22.7	1001	110
Nov 2017	14594	4.9	28.4	1774	183
Dec 2017	9587	4.2	25.7	1846	144
Jan 2018	11324	4.9	25.2	2802	259
Feb 2018	10541	5.4	26.8	2785	271
Mar 2018	10805	4.1	22.8	1892	183
Apr 2018	8708	3.4	19.2	1087	111
<b>TOTAL</b>	<b>113196</b>	<b>--</b>	<b>--</b>	<b>14763</b>	<b>1584</b>
<b>AVERAGE</b>	<b>9433</b>	<b>3.3</b>	<b>18.9</b>	<b>1230.2</b>	<b>132</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>
May 2017	317884	294604	612488	51.9	48.1
Jun 2017	322551	307287	629838	51.2	48.8
Jul 2017	303599	305570	609169	49.8	50.2
Aug 2017	338549	341446	679995	49.8	50.2
Sep 2017	325609	329272	654880	49.7	50.3
Oct 2017	348879	359241	708120	49.3	50.7
Nov 2017	311790	342391	654181	47.7	52.3
Dec 2017	198068	263968	462036	42.9	57.1
Jan 2018	236169	334184	570353	41.4	58.6
Feb 2018	210407	293452	503859	41.8	58.2
Mar 2018	243395	341854	585249	41.6	58.4
Apr 2018	223199	309322	532521	41.9	58.1
<b>TOTAL</b>	<b>3380098</b>	<b>3822590</b>	<b>7202688</b>	--	--
<b>AVERAGE</b>	<b>281674.8</b>	<b>318549.2</b>	<b>600224</b>	<b>46.6</b>	<b>53.4</b>