

JULY 2018



**WIM #43
US 10,
MP 7.5
MOORHEAD,
MINNESOTA**

**MONTHLY
REPORT**



Your Destination...Our Priority



WIM Site Location

WIM #43 is located on US 10 near Moorhead in Clay county.

System Operation

WIM #43 was operational for the entire month of July 2018. Volume was computed using all monthly data.

System Calibration

WIM #43 was most recently calibrated on 2015-02-04. Table 1 summarizes the front axle weights of class 9s by lane ¹. Table 1 indicates that the class 9 front axle weights were all within +/- 9% of baseline calibration values for all lanes except lane 4. Figure 1 shows the distribution of gross vehicle weights (GVW) in Class 9 vehicles at this site for the last 12 months of operation ². Figure 2 depicts the average front axle weight as a percent difference from the first full month following calibration.

Summary of Volume Statistics

Total Monthly Volume: 631964 | Passenger Vehicles: 606994 | Heavy Commercial Vehicles: 24970

Monthly Average Daily Traffic (MADT): 20386 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 805

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 Sundays. WB 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), EB PVs generally reached peak volume levels between 03 PM and 05 PM. Similarly, WB PVs peaked in volume between 07 AM and 05 PM

Heavy Commercial Vehicles (HCVs)

Volume trends. On an average 24-hour day, HCVs traveling EB typically reached peak volume levels between 03 PM and 05 PM, while volume going WB peaked between 07 AM and 05 PM. See Figure 6. Out of all HCVs, the two highest traffic volumes were generated by Class 9's and Class 5's.

Overweight HCVs

Volume trends. Of a total of 24970 HCVs, 2044 of them were overweight³. These overweight HCVs contributed to 0.3% of total monthly volume, and 8.8% of total monthly HCV volume. EB overweight vehicles typically reached highest numbers on Mondays, with lowest volumes reported on Saturdays. WB overweight vehicles tended to reach highest volumes on Tuesdays, with lowest volumes reported on NAs. 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 91.8% 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 October.

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 report⁴.

Using normal load limits ,483 EB vehicles exceeded 88,000 pounds (288 vehicles were Class 9's; 108 vehicles were Class 10's). Of vehicles traveling WB,

2 EB vehicles exceeded 88,000 pounds (1 vehicles were Class 10's; 1 vehicles were Class 13's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from July 2018.

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

Freight Totals. A total of 133712 tons of freight was recorded to have crossed the WIM. More freight was shipped EB (83.3%) than WB (16.7%). See Table 4 and Figure 11 for more freight information.

Infrastructure Considerations

Bridge. Bridge No. 8528 (a box culvert) is approximately 1.3 miles east of WIM #43. Bridges No. 14001 and 5854 are approximately 0.8 miles west of WIM #43. US 10 also crosses the Buffalo River, specifically via Bridges No. 14001 (carrying EB traffic) and 5854 (carrying WB traffic). WIM #43 recorded a total of 631964 vehicles with a combined GVW of 3408866 kips (1 kip = 1,000 pounds = 0.5 tons) in July 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 12378 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 89.1% of all ESALs were recorded EB while 10.9% was observed WB. In particular, 59% of all ESALs were generated by the Class 9's (Class 9's

were also responsible for generating 12% of total GVW observed this month). See Table 6 and Figures 14-15 for more information on ESALs (Table 6 also provides flexible ESAL factors for each vehicle class using a terminal serviceability of 2.5 and a structural number of 5).

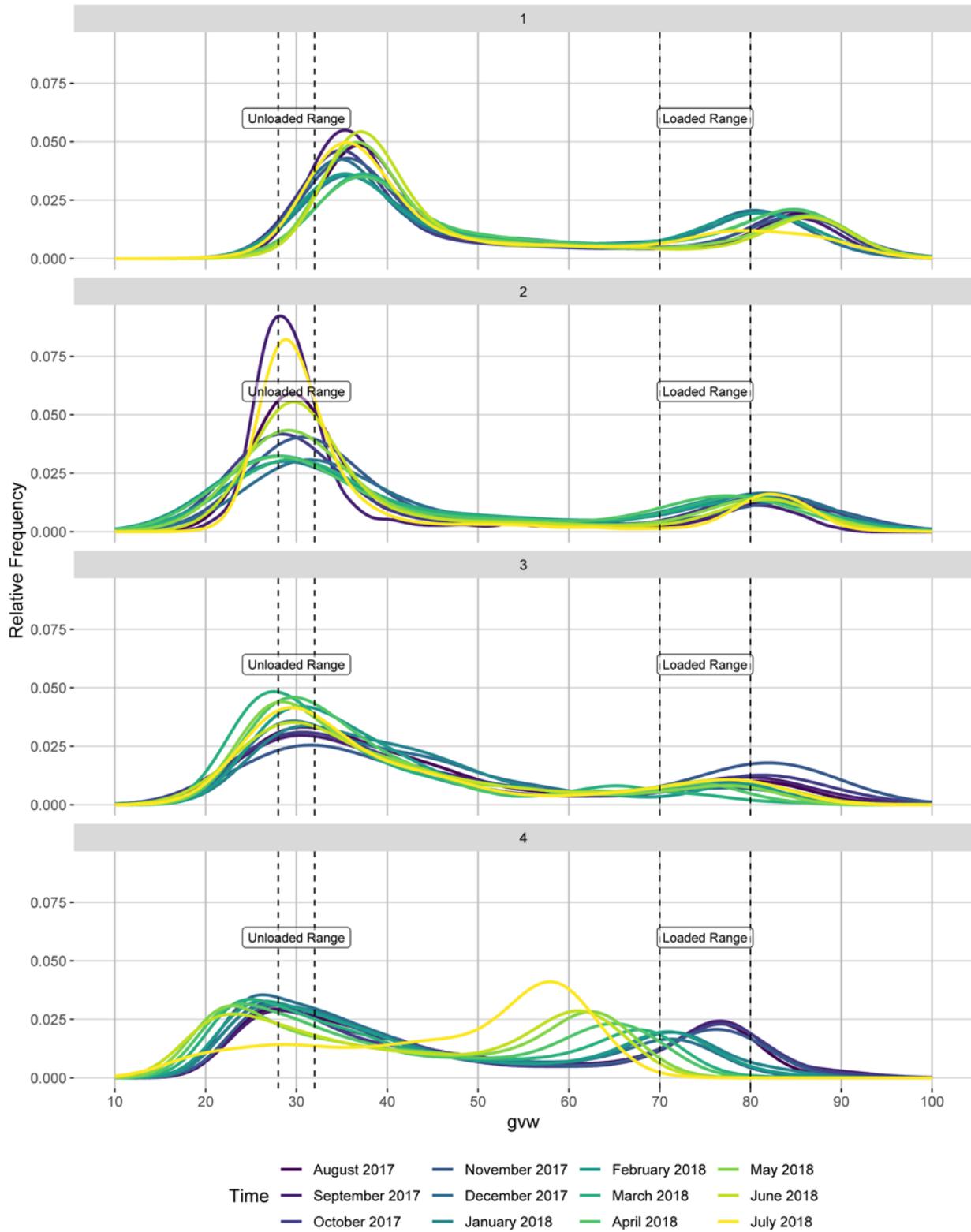
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

MnDOT's vehicle classification scheme and vehicle class groupings for traffic forecasting can be found at: <http://www.dot.state.mn.us/traffic/data/data-products.html#weight>

- ¹ Front axle weights of Class 9s are monitored on a monthly basis to assure performance between calibrations. The current goal of the WIM scale calibration is to have each individual axle weight stay within a range of ±9% of baseline calibration values
- ² Previous WIM research indicates that unloaded Class 9s typically weigh 28-32 kips, while loaded Class 9s generally fall in the 70-80 kip range. More recent data from several WIM sites suggests that the unloaded Class 9 range may have moved a little higher over time (due to increased presence of sleeper cabs, etc.), although these ranges are also thought to be site-specific.
- ³ An HCV is considered overweight during normal load limits in this report if they satisfy any of the following 1) exceed a gross vehicle weight (GVW) of 80,000 pounds, 2) exceed any of the legal weight maximums on any axle configurations (legal maximums are: single axle = 20,000 pounds; tandem axles spaced 8' or less = 34,000 pounds; tridem axles spaced 9' or less = 43,000 pounds; quad axles spaced 13' or less = 51,000 pounds). Monthly reports use this standard regardless of the time of year however, the Winter Load Increase (WLI) allows a 10% across the board increase in axle and gross vehicle weights without a permit on US, state routes, and county roads. An HCV is considered overweight during Winter Load Increase(WLI) if they satisfy any of the following 1) exceed a gross vehicle weight (GVW) of 88,000 pounds, 2) exceed any of the legal weight maximums on any axle configurations (legal maximums are: single axle = 22,000 pounds; tandem axles spaced 8' or less = 37,400 pounds; tridem axles spaced 9' or less = 47,300 pounds; quad axles spaced 13' or less = 56,100 pounds). An overweight HCV is only included once in the overweight volume calculations regardless of how many of the aforementioned conditions are violated. For information on MN weight limit dates and statutes: http://www.mrr.dot.state.mn.us/research/seasonal_load_limits/sllindex.asp
- ⁴ For example, Class 9s and 10s can legally have gross vehicle weights up to 80,000 lbs (with the exception of permitted loads) during normal load limits. To account for measurement error on the WIM scales, those exceeding 10% of the legal GVW maximum (or 1.1 times the legal GVW) should be screened (e.g., 80,000 lbs + 8,000 lbs = 88,000 lbs). Similarly during WLI vehicles weighing 96,800 lbs should be screened.

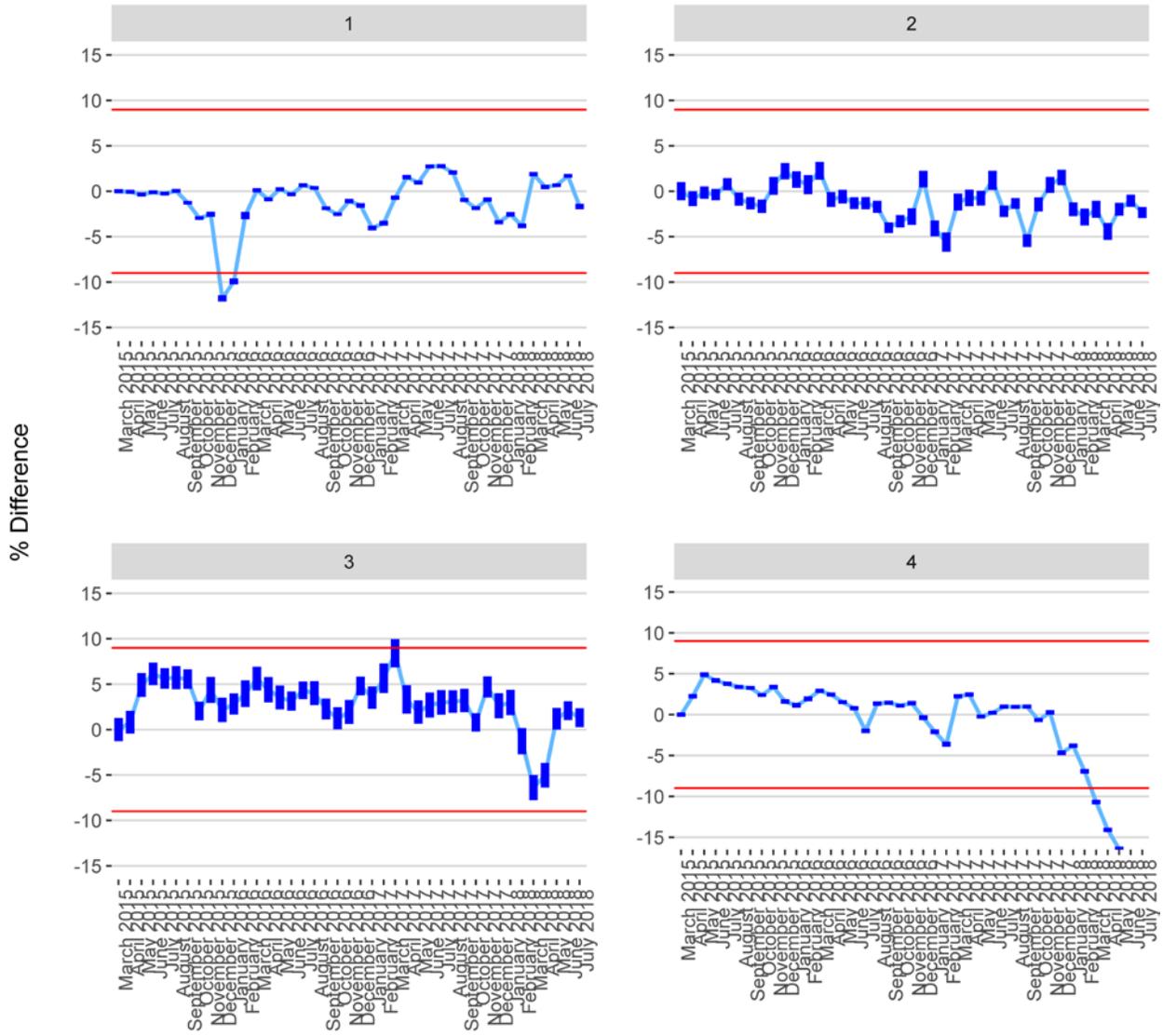
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

Figure 1 - Monthly Class 9 GWW 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

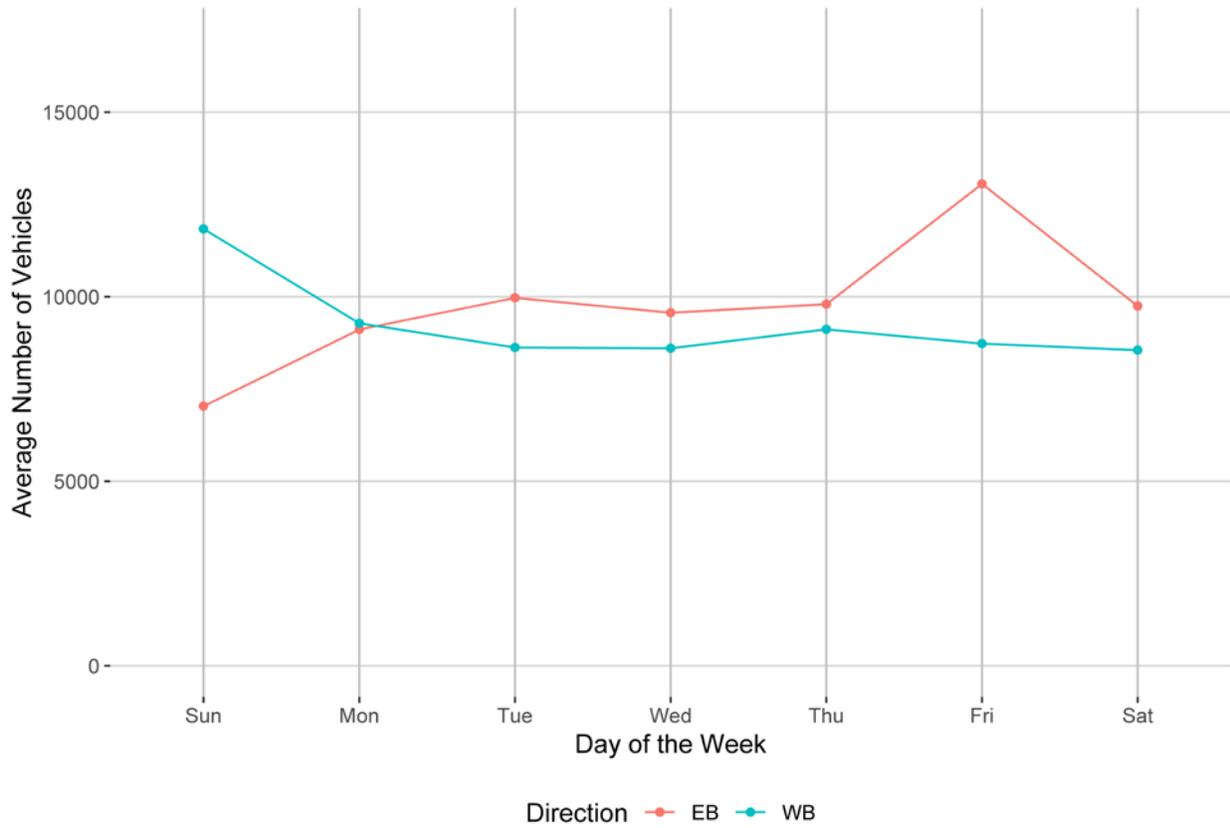


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

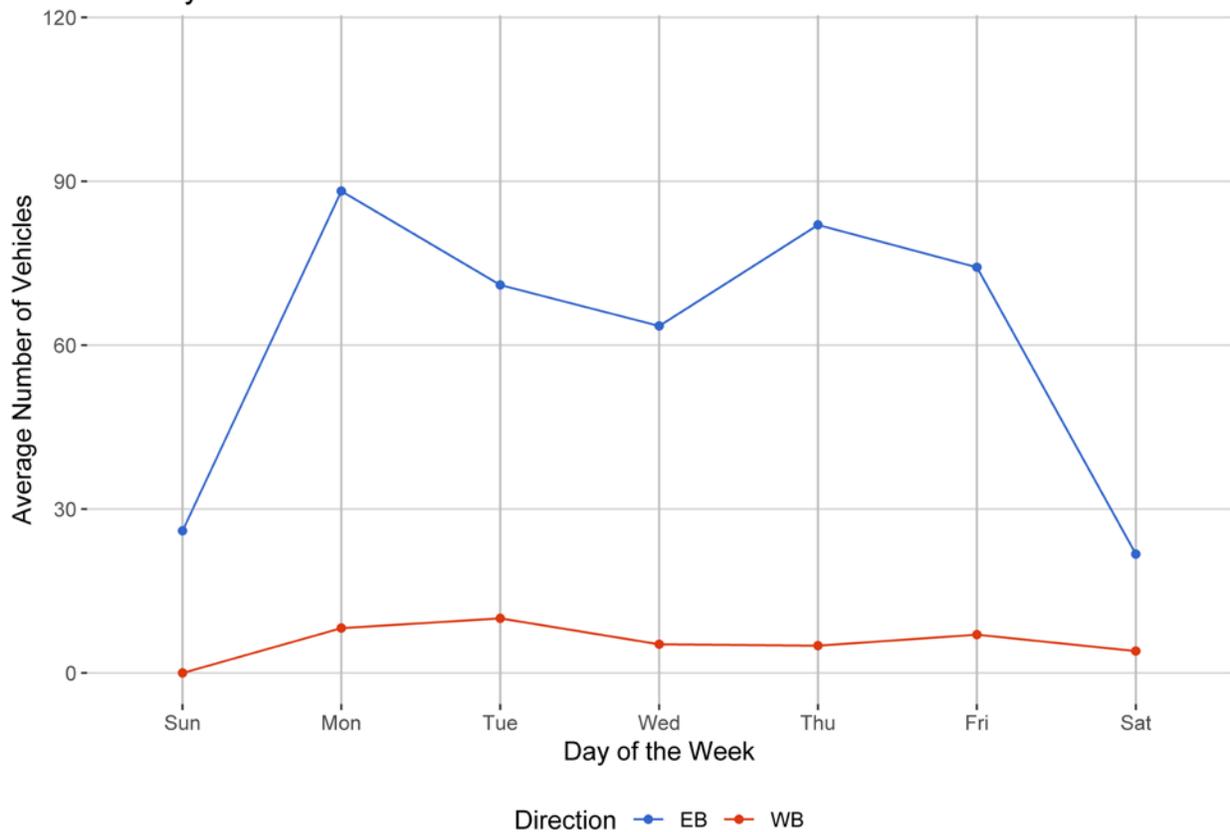


Figure 4 - Passenger Vehicles vs. Hour of the Day

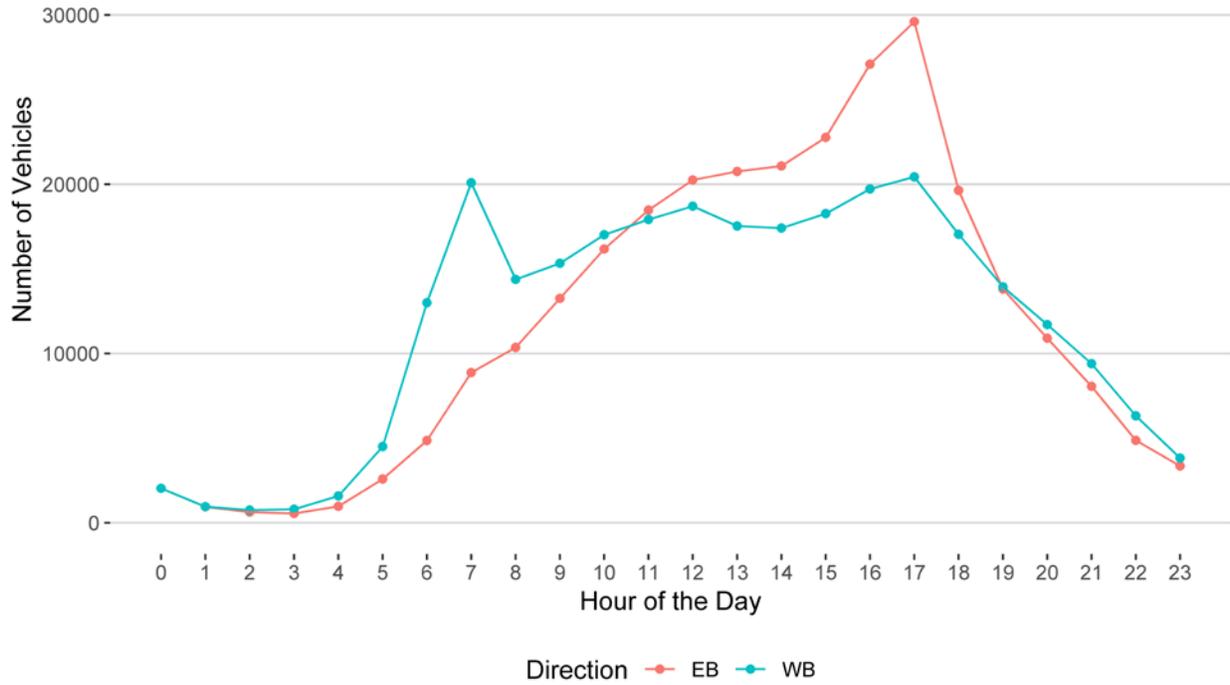


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

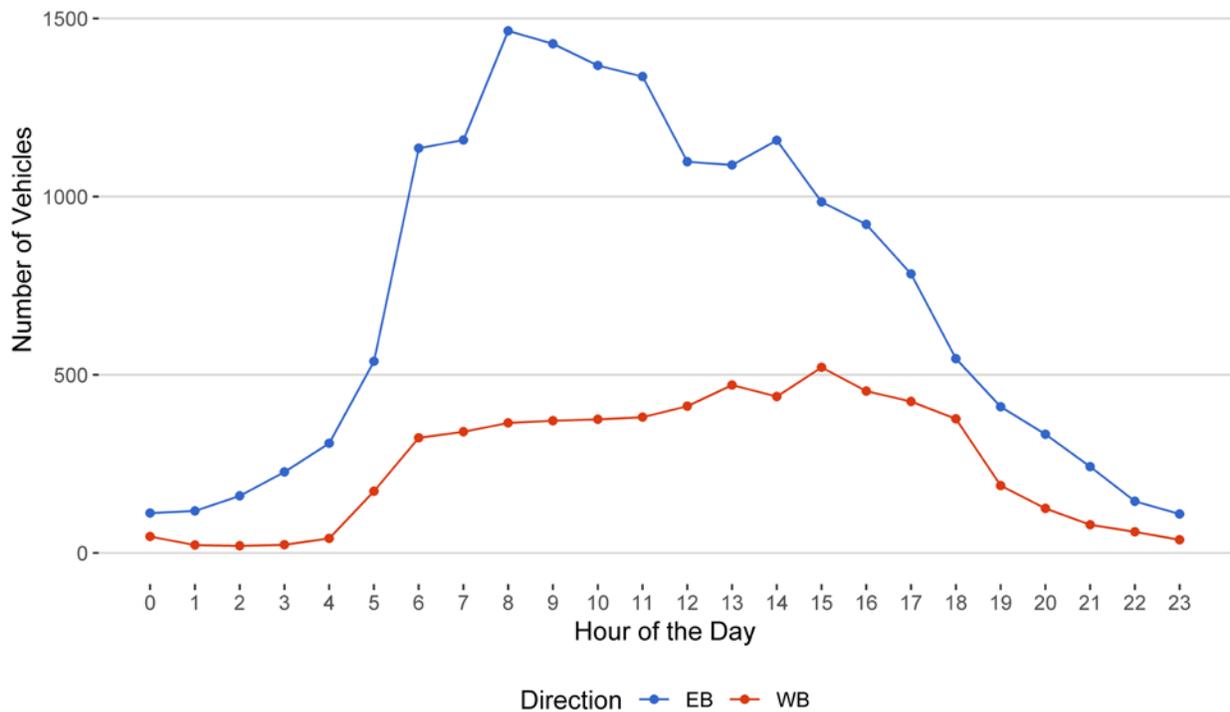


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

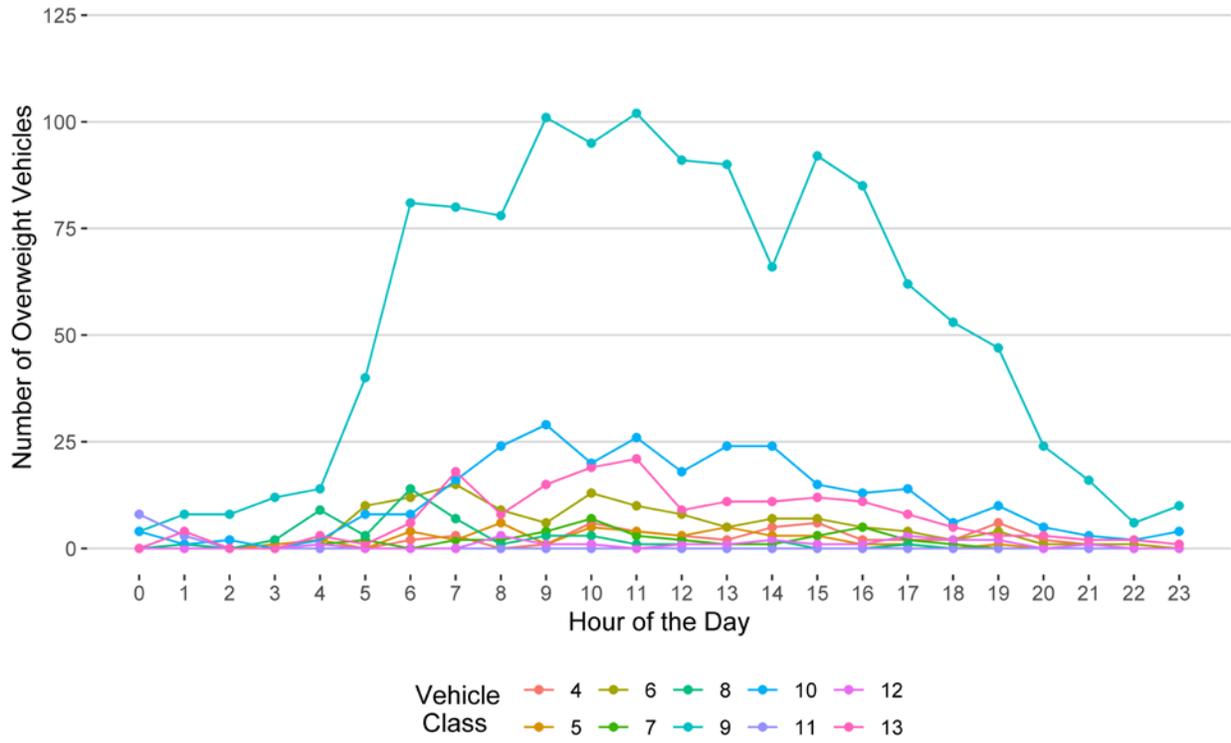


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

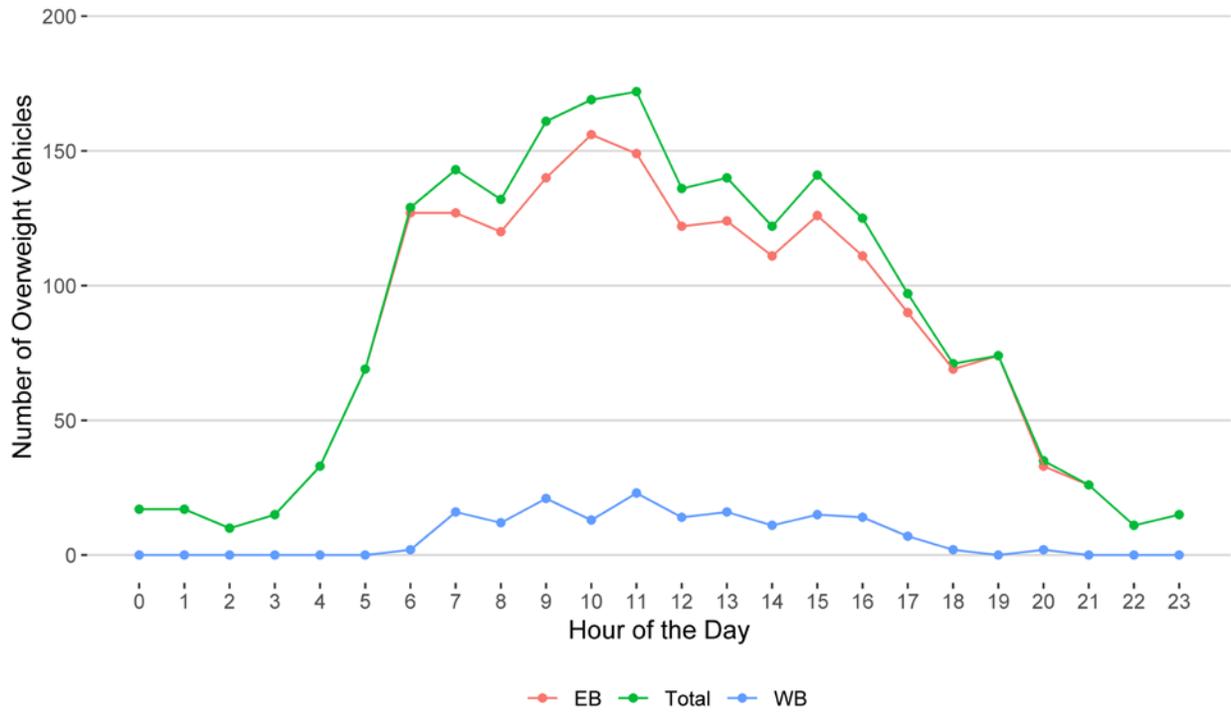
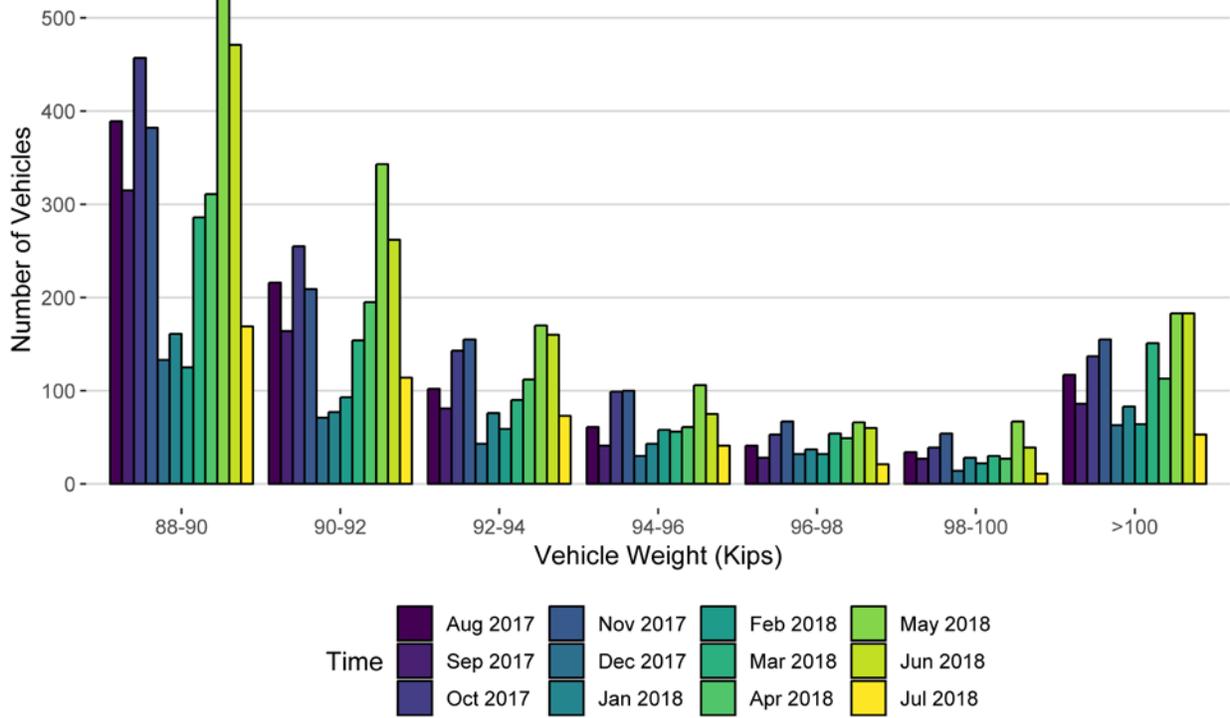
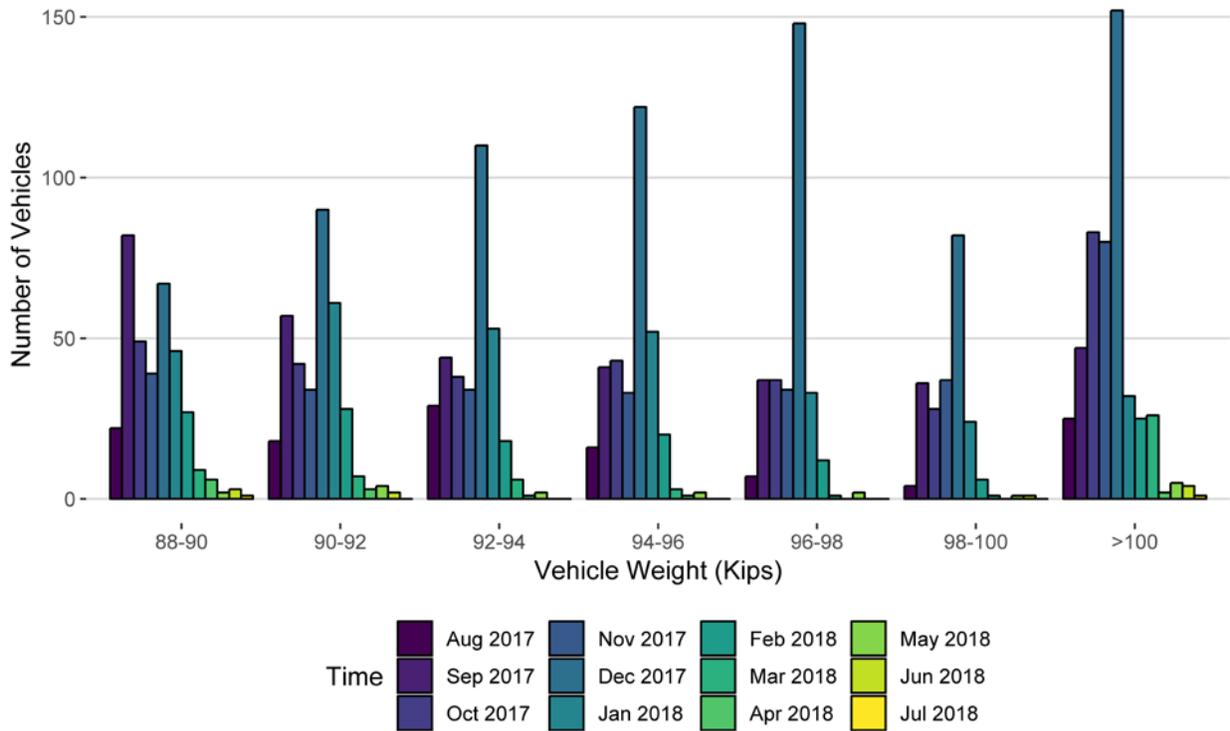


Figure 8 - Histogram of EB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018
88-90	389	315	457	382	133	161	125	286	311	524	471	169
90-92	216	164	255	209	71	77	93	154	195	343	262	114
92-94	102	81	143	155	43	76	59	90	112	170	160	73
94-96	61	41	99	100	30	43	58	56	61	106	75	41
96-98	41	28	53	67	32	37	32	54	49	66	60	21
98-100	34	27	39	54	14	28	22	30	27	67	39	11
>100	117	86	137	155	63	83	64	151	113	183	183	53
Total	960	742	1183	1122	386	505	453	821	868	1459	1250	482

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



Vehicle Weights (Kips)	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018
88-90	22	82	49	39	67	46	27	9	6	2	3	1
90-92	18	57	42	34	90	61	28	7	3	4	2	0
92-94	29	44	38	34	110	53	18	6	1	2	0	0
94-96	16	41	43	33	122	52	20	3	1	2	0	0
96-98	7	37	37	34	148	33	12	1	0	2	0	0
98-100	4	36	28	37	82	24	6	1	0	1	1	0
>100	25	47	83	80	152	32	25	26	2	5	4	1
Total	121	344	320	291	771	301	136	53	13	18	10	2

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

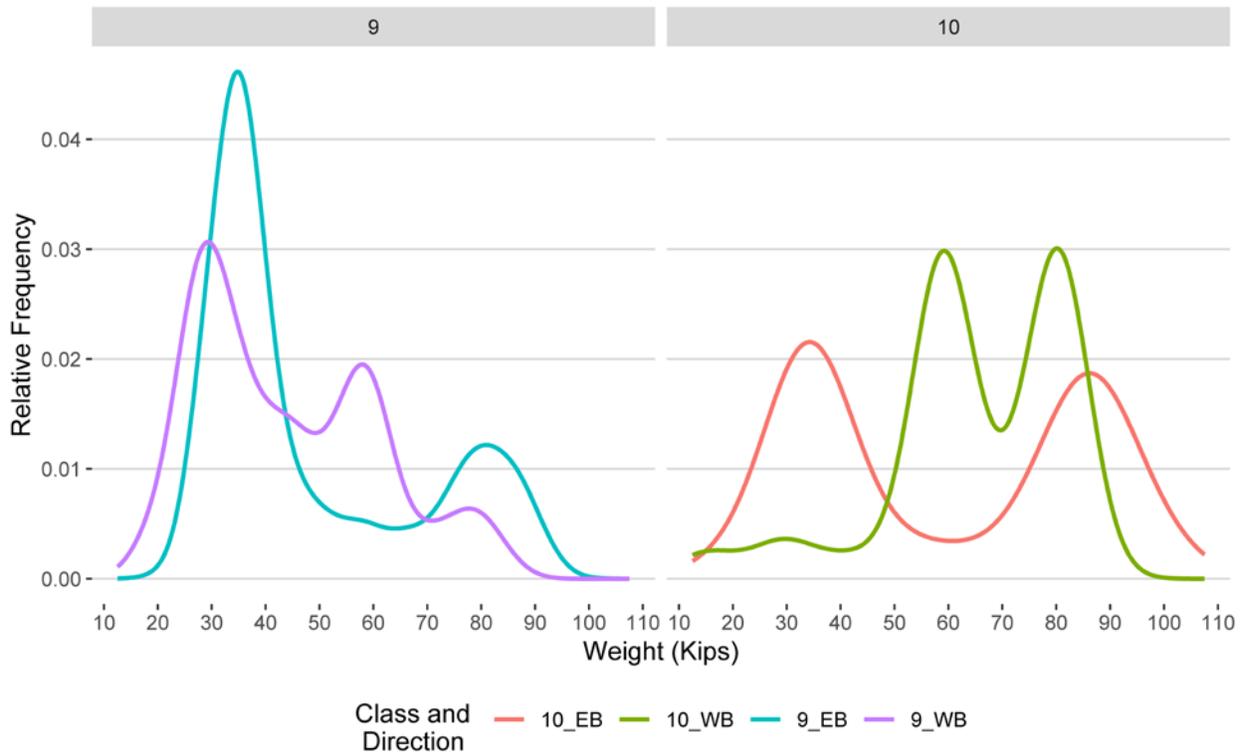


Figure 9 - Freight Percentage by Direction and Class

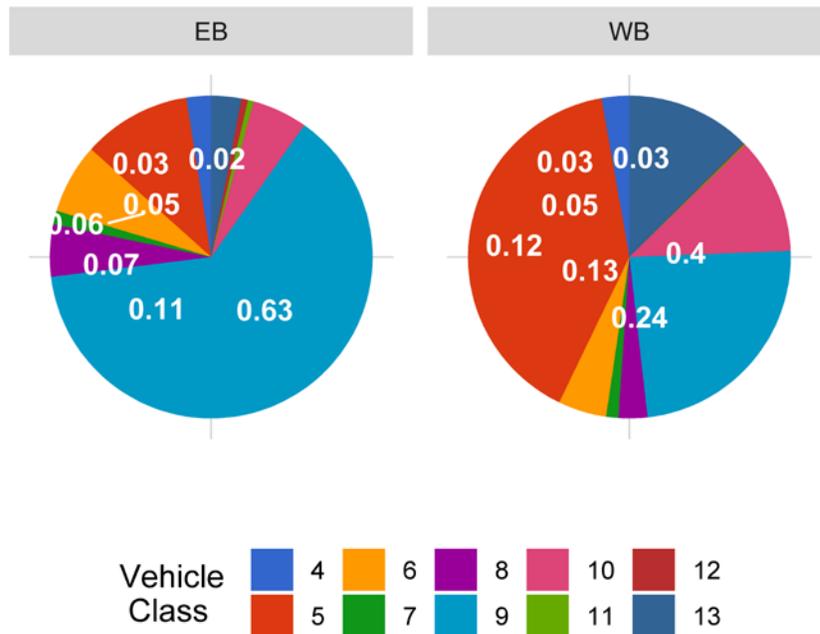


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

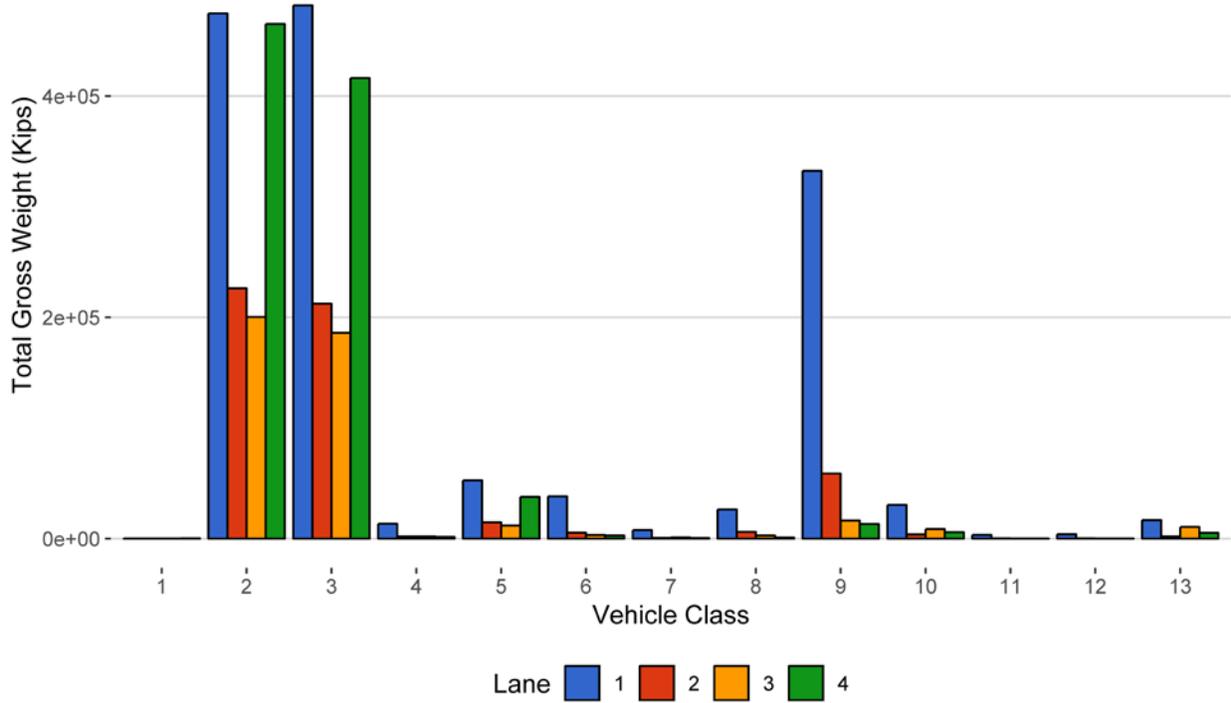


Figure 11 - Total Gross Vehicle Weight t

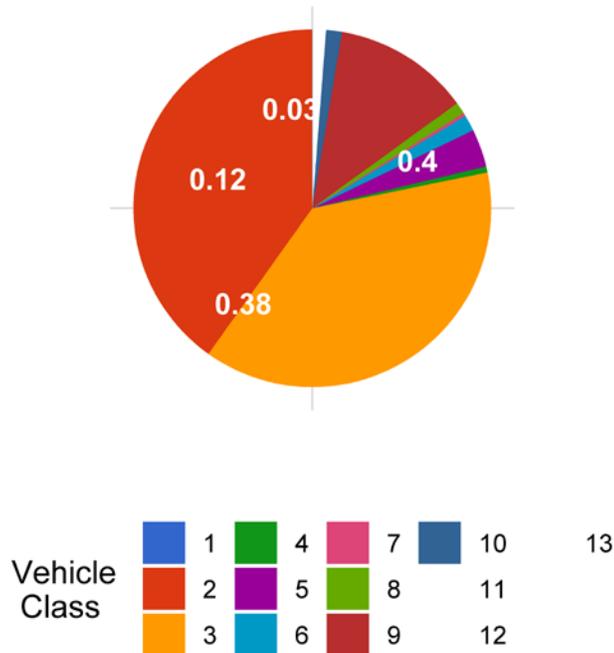


Figure 12 - Total ESALs by Class and Lane

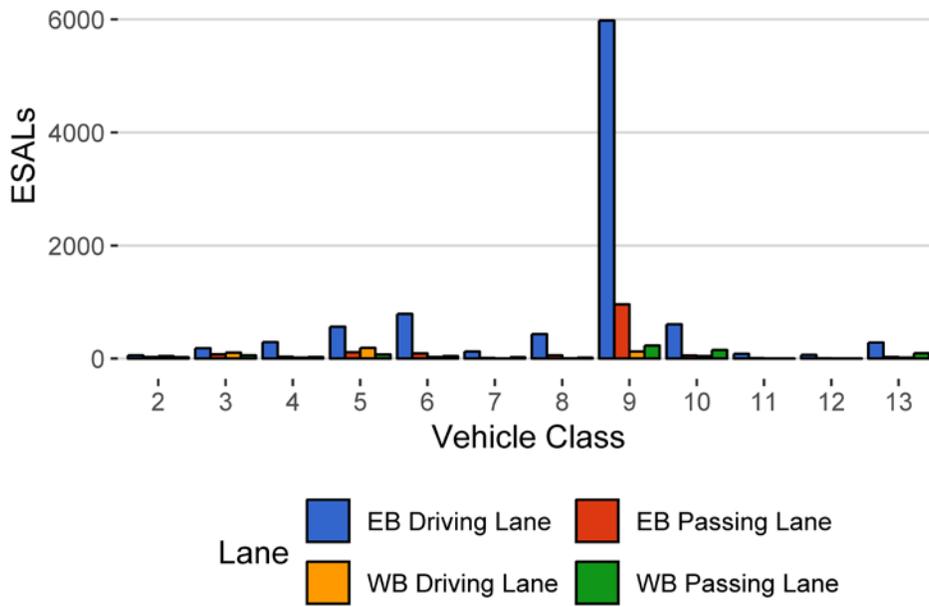


Figure 13 - ESALs by Class

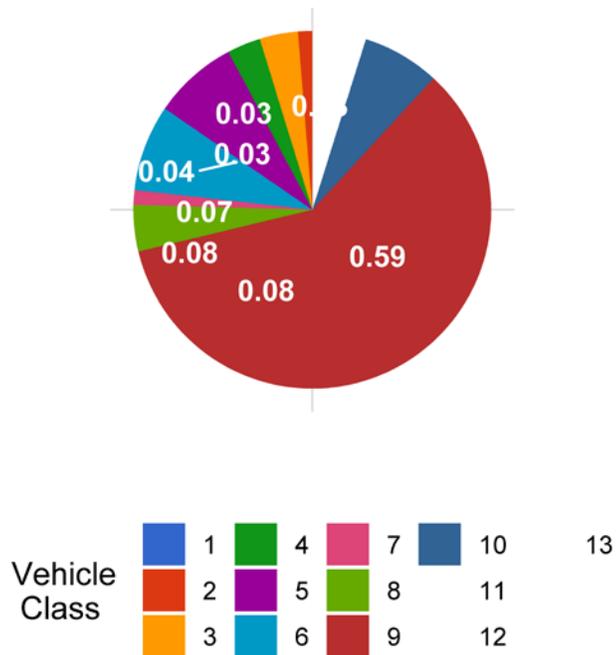


Table 1 Class 9 Front Axle Weight by Lane

<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>
March 2015	12.58	0.00	11.72	0.00	10.94	0.00	10.81	0.00
April 2015	12.58	-0.06	11.63	-0.82	11.03	0.81	11.05	2.25
May 2015	12.54	-0.36	11.70	-0.16	11.47	4.90	11.34	4.88
June 2015	12.57	-0.11	11.68	-0.38	11.61	6.13	11.26	4.17
July 2015	12.55	-0.25	11.81	0.79	11.55	5.63	11.22	3.77
August 2015	12.59	0.04	11.62	-0.86	11.56	5.72	11.18	3.38
September 2015	12.42	-1.27	11.57	-1.32	11.55	5.56	11.16	3.26
October 2015	12.21	-2.95	11.53	-1.66	11.16	2.04	11.07	2.39
November 2015	12.26	-2.55	11.79	0.60	11.41	4.37	11.18	3.37
December 2015	11.10	-11.79	11.98	2.22	11.18	2.18	10.99	1.62
January 2016	11.33	-9.93	11.87	1.28	11.25	2.82	10.93	1.14
February 2016	12.25	-2.68	11.81	0.72	11.37	3.95	11.02	1.94
March 2016	12.60	0.11	11.99	2.26	11.55	5.61	11.13	2.92
April 2016	12.47	-0.88	11.62	-0.91	11.42	4.39	11.08	2.45
May 2016	12.61	0.22	11.65	-0.59	11.32	3.54	10.98	1.54
June 2016	12.54	-0.34	11.57	-1.30	11.28	3.14	10.90	0.78
July 2016	12.67	0.66	11.57	-1.31	11.41	4.33	10.60	-1.98
August 2016	12.63	0.37	11.52	-1.72	11.38	4.01	10.96	1.35
September 2016	12.35	-1.88	11.25	-4.02	11.18	2.26	10.97	1.46
October 2016	12.26	-2.54	11.34	-3.30	11.07	1.24	10.93	1.10
November 2016	12.45	-1.08	11.40	-2.79	11.15	1.94	10.96	1.41
December 2016	12.39	-1.56	11.88	1.33	11.46	4.80	10.77	-0.36
January 2017	12.07	-4.05	11.24	-4.09	11.32	3.53	10.59	-2.09
February 2017	12.14	-3.51	11.07	-5.59	11.56	5.66	10.42	-3.61
March 2017	12.49	-0.72	11.58	-1.19	11.86	8.40	11.05	2.24

April 2017	12.78	1.54	11.64	-0.73	11.30	3.31	11.08	2.46
May 2017	12.70	0.96	11.63	-0.76	11.15	1.94	10.79	-0.24
June 2017	12.93	2.73	11.86	1.19	11.23	2.71	10.84	0.23
July 2017	12.93	2.77	11.46	-2.21	11.26	2.99	10.92	0.97
August 2017	12.84	2.05	11.56	-1.35	11.27	3.08	10.92	0.96
September 2017	12.46	-0.96	11.08	-5.44	11.29	3.21	10.92	0.99
October 2017	12.35	-1.86	11.55	-1.45	11.02	0.78	10.74	-0.67
November 2017	12.47	-0.91	11.80	0.69	11.45	4.70	10.84	0.27
December 2017	12.15	-3.41	11.90	1.51	11.22	2.62	10.31	-4.67
January 2018	12.26	-2.55	11.49	-1.99	11.26	2.98	10.40	-3.80
February 2018	12.10	-3.81	11.39	-2.84	10.80	-1.28	10.06	-6.93
March 2018	12.82	1.88	11.49	-1.99	10.24	-6.39	9.66	-10.70
April 2018	12.64	0.47	11.20	-4.43	10.39	-5.03	9.29	-14.10
May 2018	12.67	0.66	11.49	-1.98	11.07	1.19	9.04	-16.43
June 2018	12.80	1.69	11.60	-1.05	11.16	2.08	8.86	-18.02
July 2018	12.37	-1.68	11.45	-2.34	11.08	1.30	8.36	-22.67

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	12	371	0.1	0	0
2	12086	374652	59.3	0	0
3	7483	231972	36.7	0	0
4	23	721	0.1	47	2.3
5	328	10164	1.6	43	2.1
6	54	1672	0.3	121	5.9
7	7	207	0	36	1.8
8	41	1259	0.2	50	2.4
9	305	9459	1.5	1265	61.9
10	28	853	0.1	278	13.6
11	3	86	0	11	0.5
12	2	74	0	20	1
13	15	475	0.1	173	8.5
TOTAL	20386	631964	100	2044	100

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>
2018-07-05	Thursday	21:15:43	10	EB	1	107.52
2018-07-05	Thursday	21:15:49	10	EB	1	106.95
2018-07-04	Wednesday	19:49:22	10	EB	1	105.61
2018-07-07	Saturday	15:25:12	10	EB	1	105.39
2018-07-04	Wednesday	15:00:44	10	EB	1	104.05
2018-07-07	Saturday	12:02:28	10	EB	1	102.83
2018-07-05	Thursday	09:27:47	10	EB	1	102.81
2018-07-23	Monday	06:59:33	10	EB	1	102.8
2018-07-11	Wednesday	16:46:48	10	EB	1	102.34
2018-07-08	Sunday	18:14:14	10	EB	1	101.44

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	557	81	14.5	14269	1039	3564
5	EB	8	5011	508	10.1	63649	3661	13813
6	EB	19	1349	62	4.6	42298	1064	8923
7	EB	11.5	165	0	0	8387	0	3245
8	EB	31	1020	431	42.3	23246	9115	2494
9	EB	33	8138	1855	22.8	335920	55232	64290
10	EB	33.5	574	125	21.8	30679	3575	7819
11	EB	36.5	75	30	40	2795	731	576
12	EB	36.5	66	2	3	4054	66	859
13	EB	31.5	221	1	0.5	18540	31	5805
TOTAL	****	****	17176	3095	****	543839	****	111388
<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	114	16	14	3210	202	870
5	WB	8	4450	1225	27.5	40804	8677	7502
6	WB	19	207	23	11.1	5628	356	1066
7	WB	11.5	28	0	0	1515	0	597
8	WB	31	152	117	77	1227	2338	71
9	WB	33	667	244	36.6	22706	6694	4374
10	WB	33.5	220	17	7.7	13933	393	3566
11	WB	36.5	5	4	80	37	112	0
12	WB	36.5	3	2	66.7	50	64	7
13	WB	31.5	221	0	0	15503	0	4271
TOTAL	****	****	6067	1648	****	104614	****	22324
GRAND TOTAL	****	****	23243	4743	480	648453	93350	133712

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	112	51	57	201	421	0
2	474723	226296	200236	465220	1366475	40.1
3	482057	212394	186007	416350	1296808	38.1
4	13429	1879	1862	1550	18720	0.5
5	52649	14661	11755	37726	116792	3.4
6	38152	5210	3167	2817	49346	1.4
7	7699	688	1041	474	9902	0.3
8	26337	6024	2694	871	35926	1.1
9	332367	58784	16274	13126	420552	12.3
10	30452	3802	8592	5735	48581	1.4
11	3360	166	76	73	3675	0.1
12	3860	261	50	64	4235	0.1
13	16651	1920	10414	5089	34074	1
TOTAL	1481848	532137	442224	949297	3405507	100
GVW/LANE	43.51	15.63	12.99	27.88	100	0

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	0.0029
2	59	30	24	46	158	1.28	9e-04
3	185	77	59	105	426	3.47	0.004
4	293	32	29	18	372	3.02	1.11
5	565	112	71	192	940	7.65	0.2
6	792	93	46	29	959	7.81	1.24
7	126	10	24	3	163	1.33	1.68
8	434	58	18	4	515	4.19	0.88
9	5981	960	233	125	7299	59.39	1.66
10	609	56	152	45	862	7.01	2.17
11	87	9	0	0	96	0.78	2.24
12	66	6	0	0	72	0.59	1.93
13	285	29	96	17	427	3.48	1.91
TOTAL	9481	1471	752	585	12290	100	15
ESALS/LANE	77.1	12	6.1	4.8	100	-	-

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>
Aug 2017	572828	18478	1444	528060	92.2	44768.4	7.8	85.8	14.2
Sep 2017	543718	18124	1510	498405	91.7	45313.1	8.3	89.3	10.7
Oct 2017	530968	17128	1588	481744	90.7	49224.1	9.3	89.2	10.8
Nov 2017	460963	15365	1276	422680	91.7	38282.8	8.3	89.8	10.2
Dec 2017	444435	14337	931	415573	93.5	28862	6.5	89.1	10.9
Jan 2018	421505	13597	893	393834	93.4	27670.6	6.6	89.4	10.6
Feb 2018	399681	14274	911	374175	93.6	25505.8	6.4	89.4	10.6
Mar 2018	441933	14256	921	413379	93.5	28553.8	6.5	90.2	9.8
Apr 2018	464908	15497	959	436131	93.8	28777.1	6.2	89.8	10.2
May 2018	584842	18866	1279	545195	93.2	39647	6.8	86.8	13.2
Jun 2018	595965	19866	1159	561188	94.2	34777.4	5.8	84.2	15.8
Jul 2018	631964	20386	805	606994	96	24969.5	4	77.4	22.6
TOTAL	6093710	-	-	5677358	-	416352	-	-	-
AVERAGE	507809	16681	1140	473113	93	34696	7	88	12

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>
Aug 2017	16579	2177	798	12514	32068	91	9	21.3
Sep 2017	15635	1102	785	14097	31618	94	6	17.1
Oct 2017	19830	1849	879	14888	37446	93	7	23
Nov 2017	16359	1194	817	10596	28965	93	7	29.8
Dec 2017	10498	1048	518	6237	18301	91	9	12.9
Jan 2018	10573	891	407	5804	17674	93	7	21.9
Feb 2018	9827	797	311	4654	15589	93	7	21.3
Mar 2018	13593	813	233	3935	18574	94	6	28.9
Apr 2018	14038	759	286	3390	18474	94	6	26.8
May 2018	19915	1449	633	3295	25292	92	8	29.1
Jun 2018	17634	1549	856	1756	21795	89	11	25.5
Jul 2018	9545	1486	759	589	12378	82	18	16.5
TOTAL	174025	15113	7280	81755	278174	-	-	-
AVERAGE	14502	1260	607	6813	23181	92	8	23

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>
Aug 2017	1215655	297399	260387	1046064	2819505
Sep 2017	1146958	274818	231235	944277	2597288
Oct 2017	1366796	300326	243593	971462	2882177
Nov 2017	1429509	300988	258663	955064	2944223
Dec 2017	1919649	486092	384335	1105460	3895536
Jan 2018	1873989	527355	405817	977118	3784280
Feb 2018	1484105	532750	442390	949621	3408866
Mar 2018	1654557	563627	405742	1708224	4332151
Apr 2018	1696672	438152	373450	1711459	4219734
May 2018	1784400	439650	370191	1734206	4328447
Jun 2018	1508075	372555	315789	1404211	3600629
Jul 2018	1274512	341067	275284	1133309	3024172
TOTAL	18354877	4874778	3966877	14640475	41837008
AVERAGE	1529573	406231	330573	1220040	3486417

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>
Aug 2017	5332	0.9	11.9	1093	180
Sep 2017	5227	1	11.6	1087	196
Oct 2017	7072	1.3	14.4	1505	287
Nov 2017	5725	1.3	15	1413	326
Dec 2017	3501	0.8	12.1	1157	311
Jan 2018	2988	0.7	10.8	806	167
Feb 2018	2472	0.6	9.7	591	119
Mar 2018	3071	0.7	10.7	874	208
Apr 2018	3136	0.7	10.9	881	142
May 2018	4427	0.8	11.4	1479	256
Jun 2018	3884	0.7	11.5	1260	227
Jul 2018	2060	0.4	8.8	485	65
TOTAL	48895	-	-	12631	2484
AVERAGE	4074.6	0.8	11.6	1052.6	207

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>
Aug 2017	174415	190942	365356	47.7	52.3
Sep 2017	158341	222318	380659	41.6	58.4
Oct 2017	202975	224828	427804	47.4	52.6
Nov 2017	163802	166130	329932	49.6	50.4
Dec 2017	115489	96584	212072	54.5	45.5
Jan 2018	114301	79373	193674	59	41
Feb 2018	105266	64764	170030	61.9	38.1
Mar 2018	136515	61298	197813	69	31
Apr 2018	144385	57829	202213	71.4	28.6
May 2018	202268	76571	278839	72.5	27.5
Jun 2018	179547	49025	228572	78.6	21.4
Jul 2018	111388	22324	133712	83.3	16.7
TOTAL	1808692	1311986	3120677	-	-
AVERAGE	150724.3	109332.1	260056.4	61.4	38.6