

FEBRUARY 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 February 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. 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: 399681 | Passenger Vehicles: 374175 | Heavy Commercial Vehicles: 25506

Monthly Average Daily Traffic (MADT): 14274 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 911

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 Fridays, with lowest volumes reported on Sundays (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 06 AM and 04 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 06 AM 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 25506 HCVs, 2457 of them were overweight³. These overweight HCVs contributed to 0.6% of total monthly volume, and 9.7% of total monthly HCV volume. EB overweight vehicles typically reached highest numbers on Wednesdays, with lowest volumes reported on Sundays. 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 80.1% 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 June.

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 ,454 EB vehicles exceeded 88,000 pounds (276 vehicles were Class 9's; 110 vehicles were Class 10's). Of vehicles traveling WB,

137 EB vehicles exceeded 88,000 pounds (108 vehicles were Class 13's; 26 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 170030 tons of freight was recorded to have crossed the WIM. More freight was shipped EB (61.9%) than WB (38.1%). 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 399681 vehicles with a combined GVW of 2597288 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 15589 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 68.2% of all ESALs were recorded EB while 31.8% was observed WB. In particular, 67% of all ESALs were generated by the Class 9's (Class 9's

were also responsible for generating 23% 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).

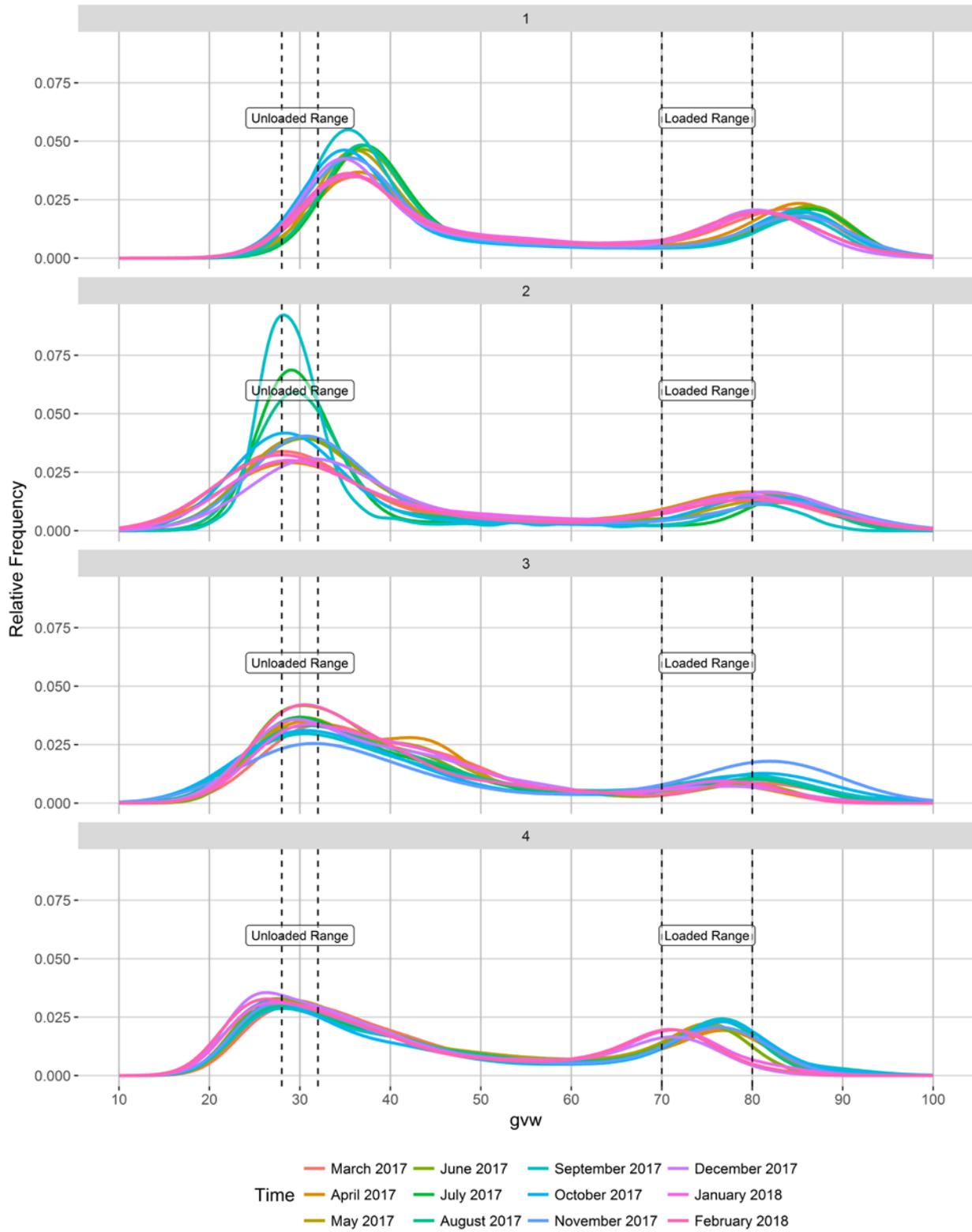
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

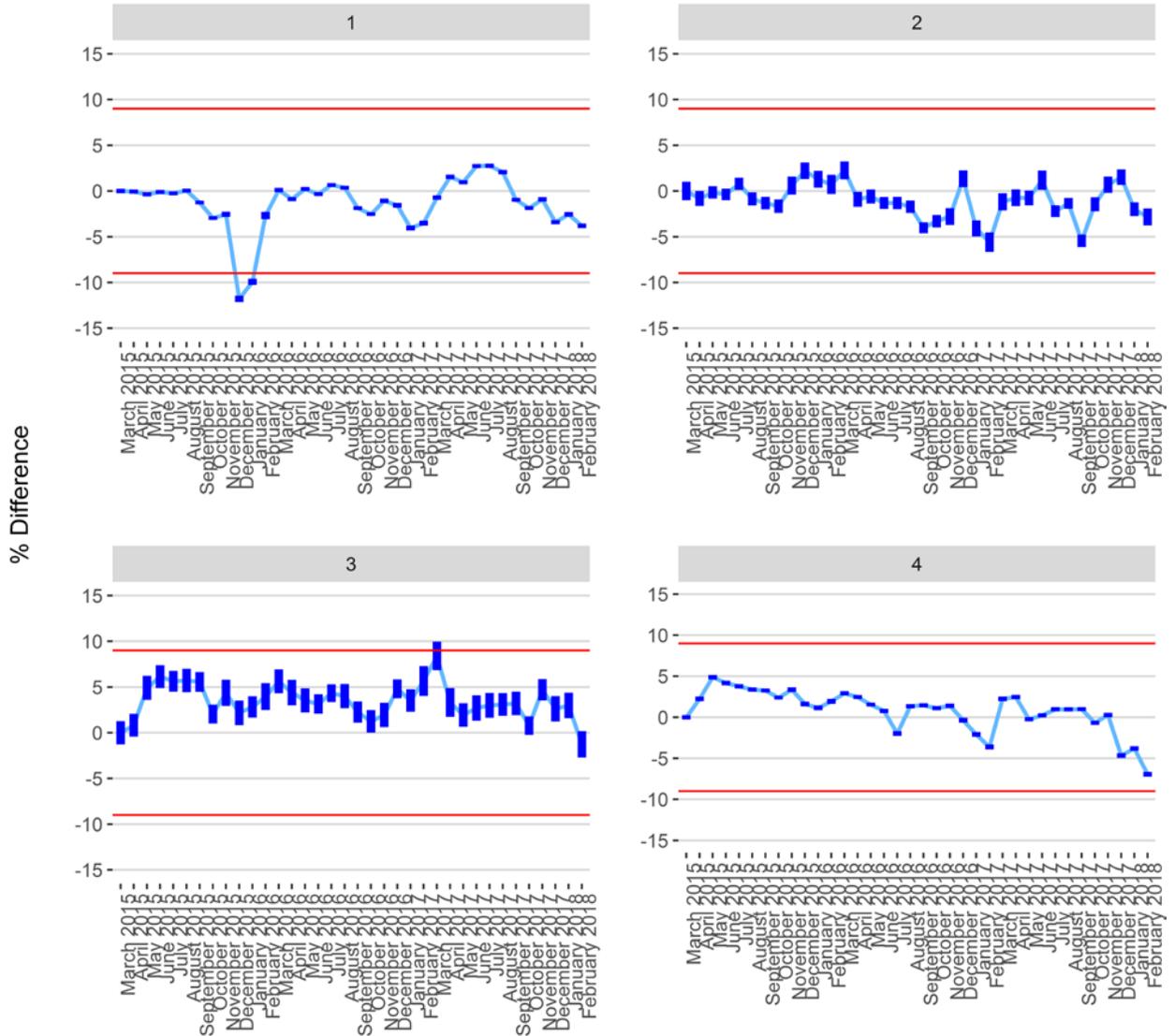
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

Figure 1 - Monthly Class 9 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

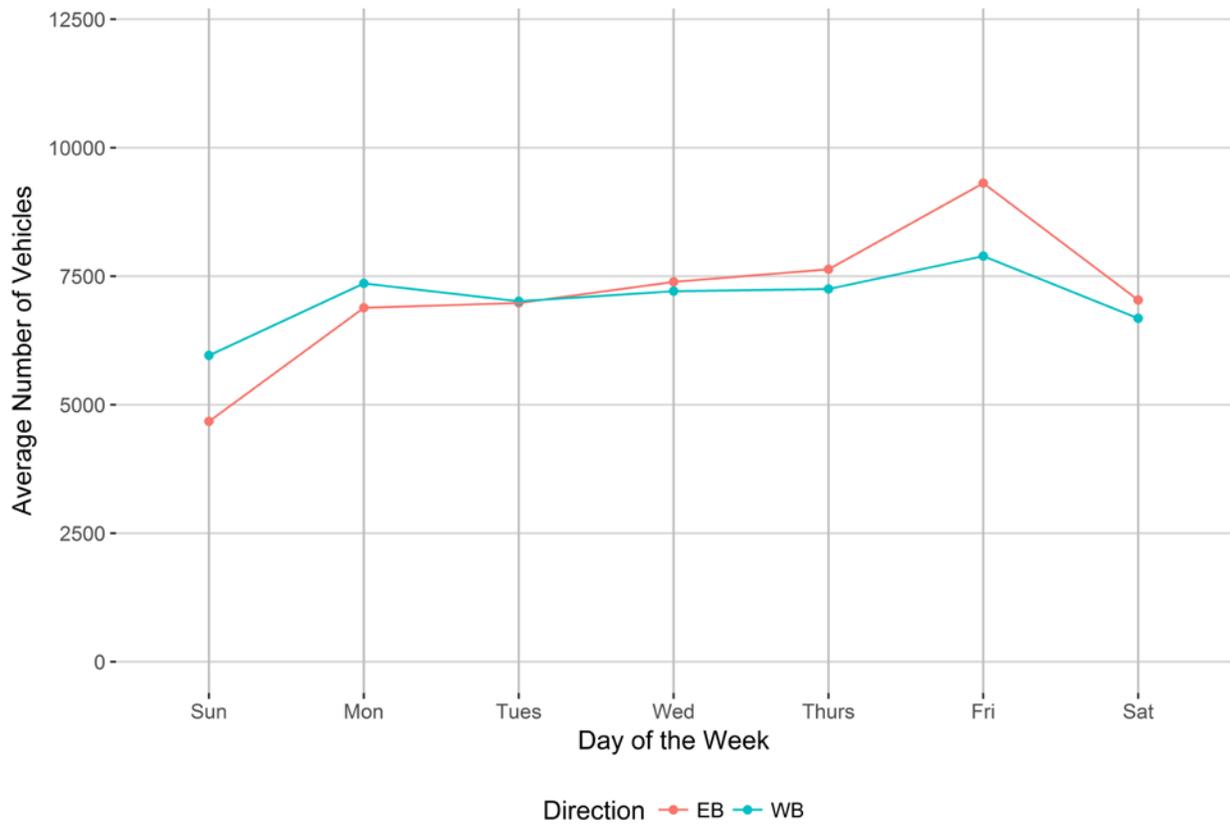


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

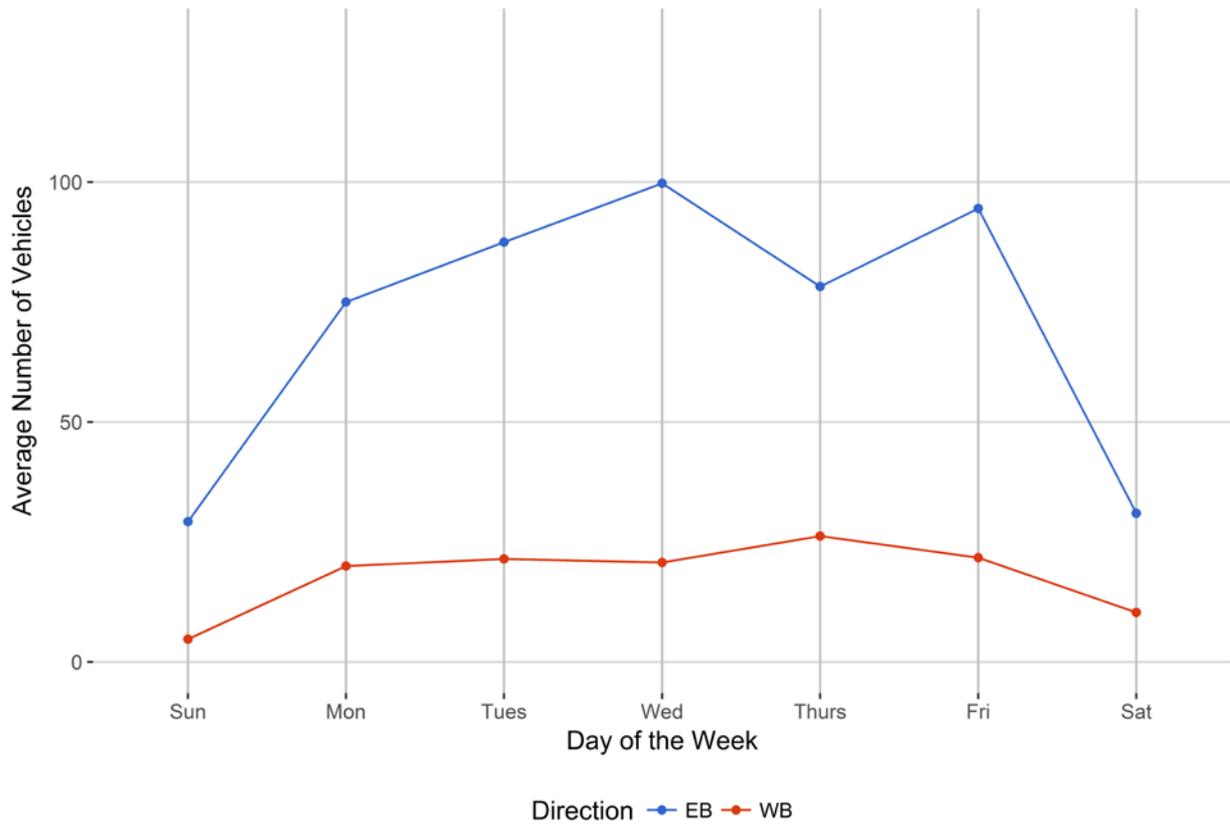


Figure 4 - Passenger Vehicles vs. Hour of the Day

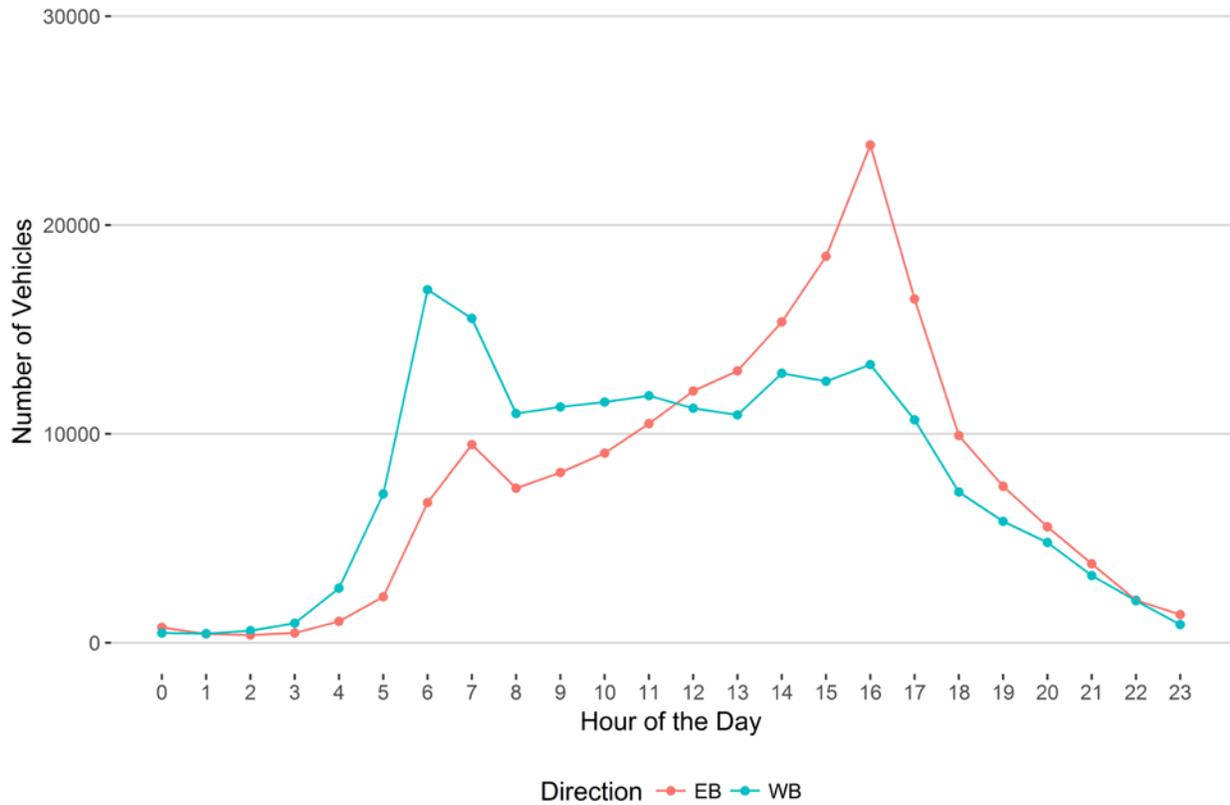


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

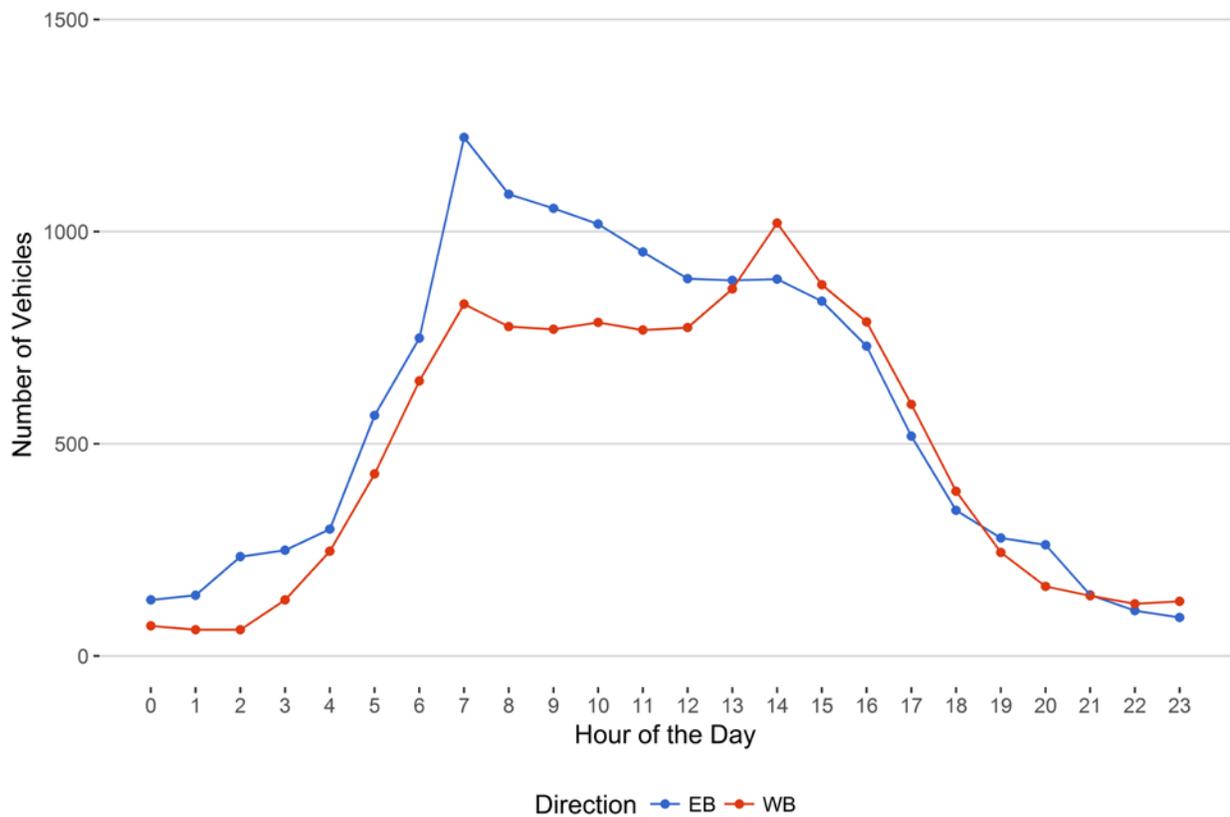


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

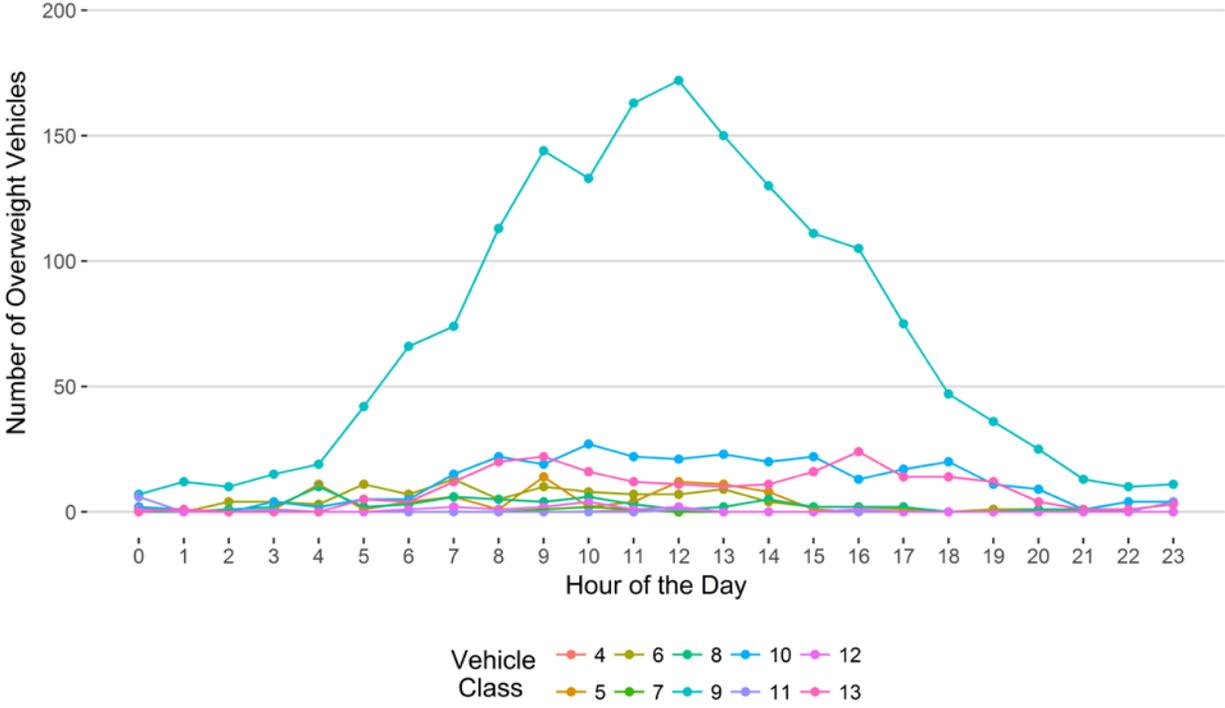


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

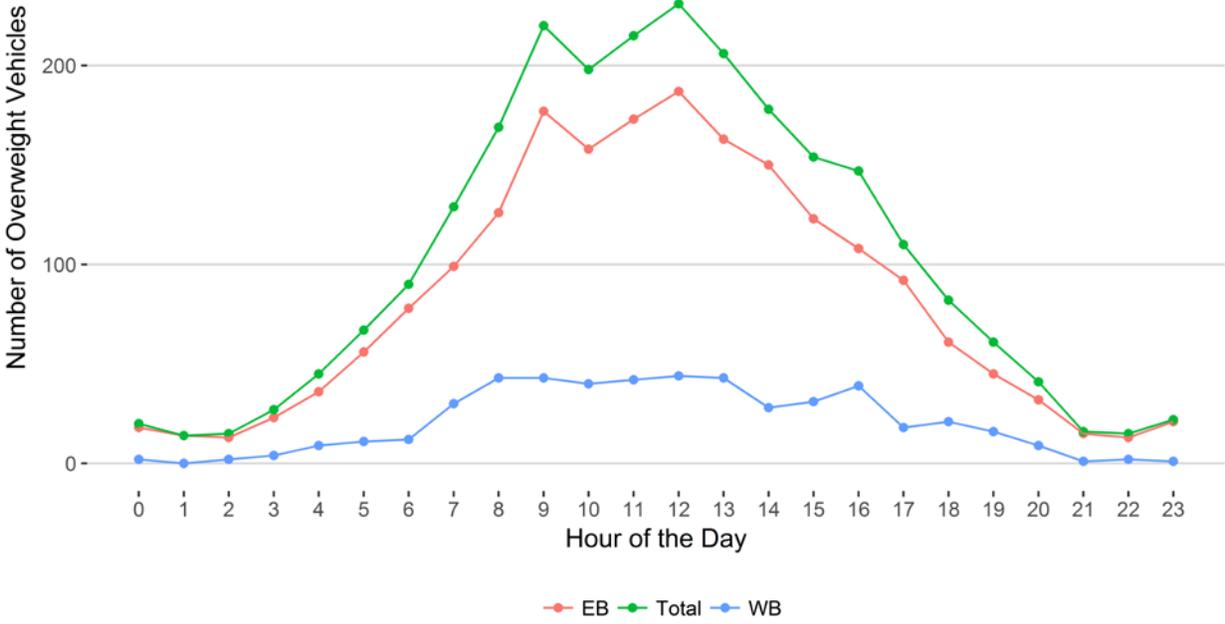
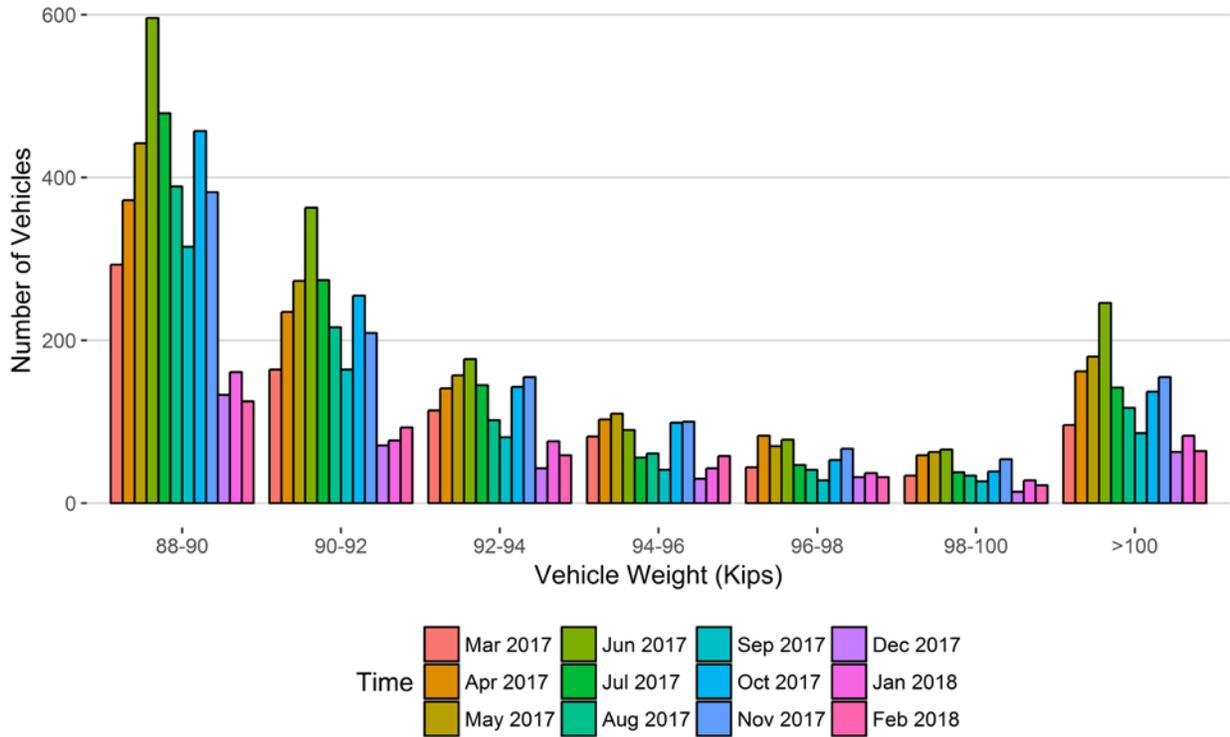
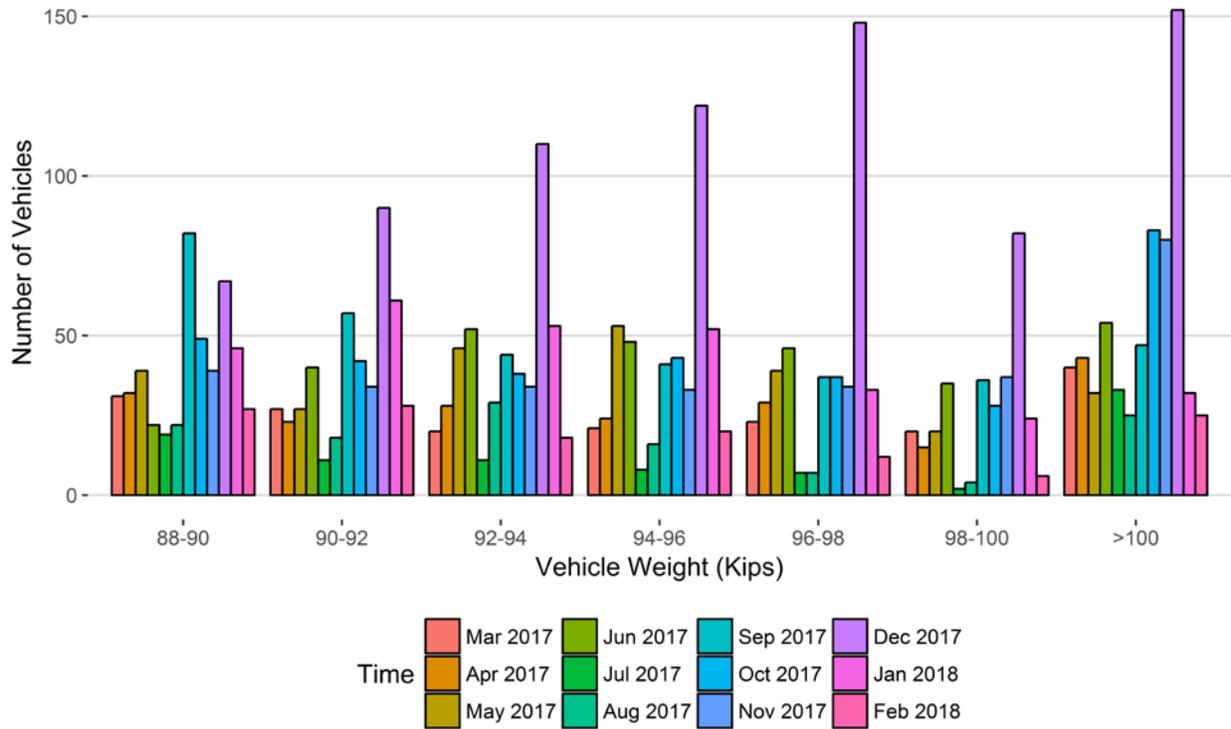


Figure 8 - Histogram of EB Vehicles Over 88,000 Pounds for Current Month



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	293	372	442	596	479	389	315	457	382	133	161	125
90-92	164	235	273	363	274	216	164	255	209	71	77	93
92-94	114	141	157	177	145	102	81	143	155	43	76	59
94-96	82	103	110	90	56	61	41	99	100	30	43	58
96-98	44	83	70	78	47	41	28	53	67	32	37	32
98-100	34	59	63	66	38	34	27	39	54	14	28	22
>100	96	162	180	246	142	117	86	137	155	63	83	64
Total	827	1155	1295	1616	1181	960	742	1183	1122	386	505	453

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	31	32	39	22	19	22	82	49	39	67	46	27
90-92	27	23	27	40	11	18	57	42	34	90	61	28
92-94	20	28	46	52	11	29	44	38	34	110	53	18
94-96	21	24	53	48	8	16	41	43	33	122	52	20
96-98	23	29	39	46	7	7	37	37	34	148	33	12
98-100	20	15	20	35	2	4	36	28	37	82	24	6
>100	40	43	32	54	33	25	47	83	80	152	32	25
Total	182	194	256	297	91	121	344	320	291	771	301	136

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

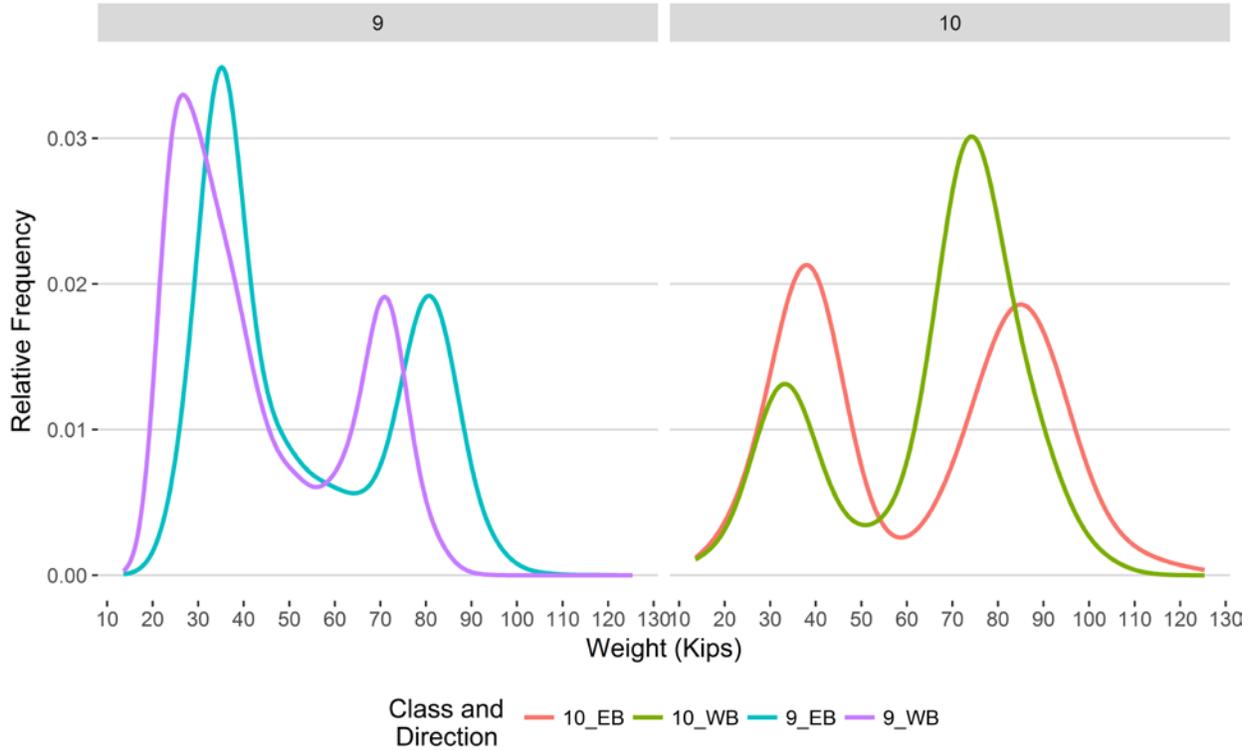


Figure 9 - Freight Percentage by Direction and Class

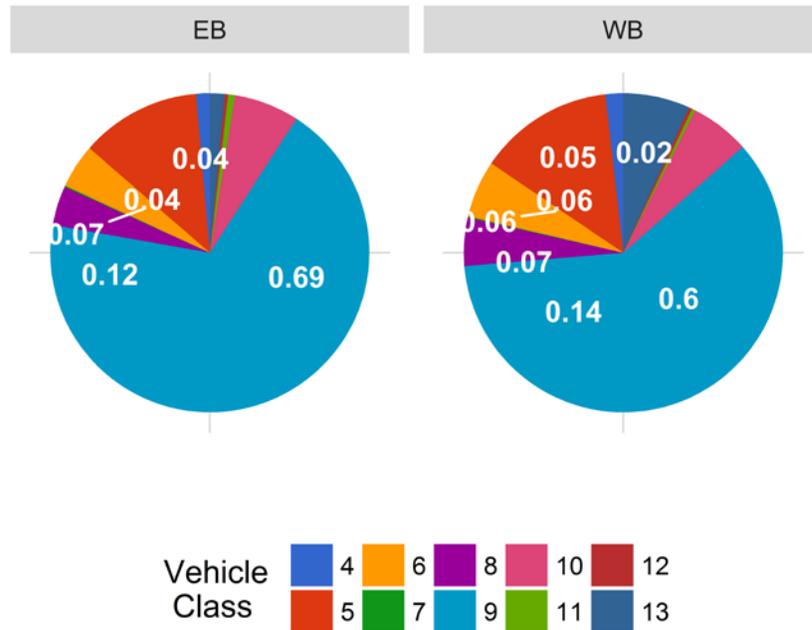


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

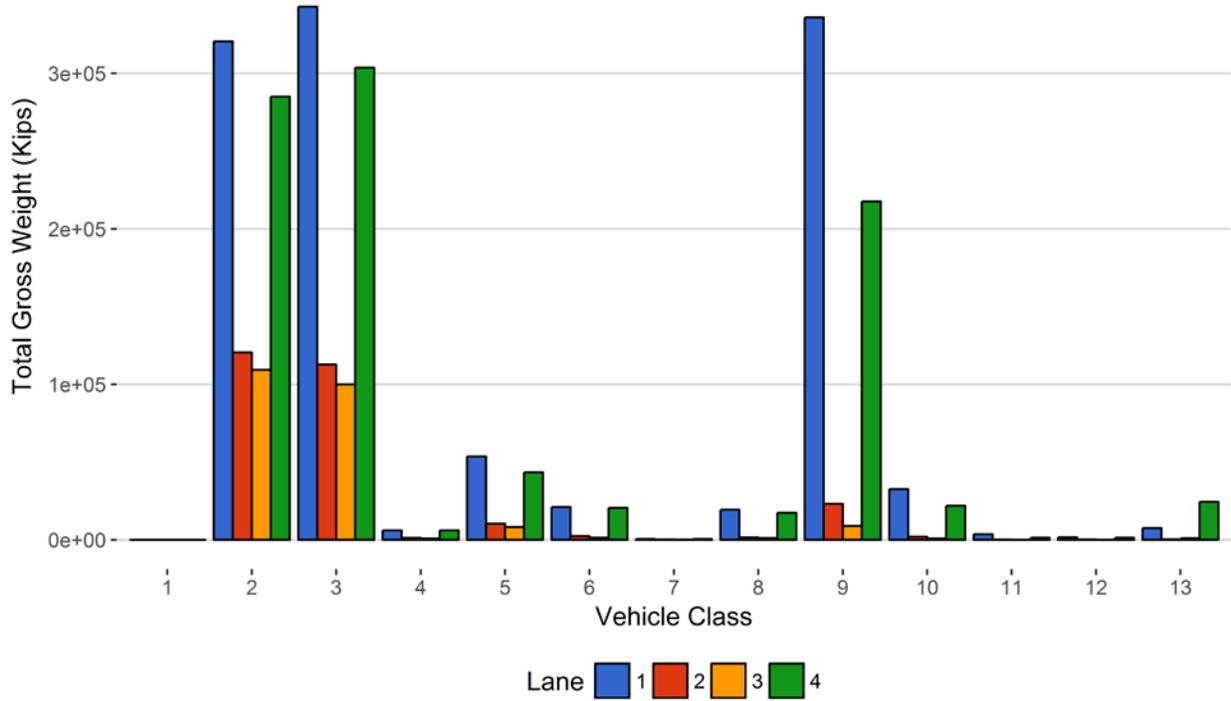


Figure 11 - Total Gross Vehicle Weight I

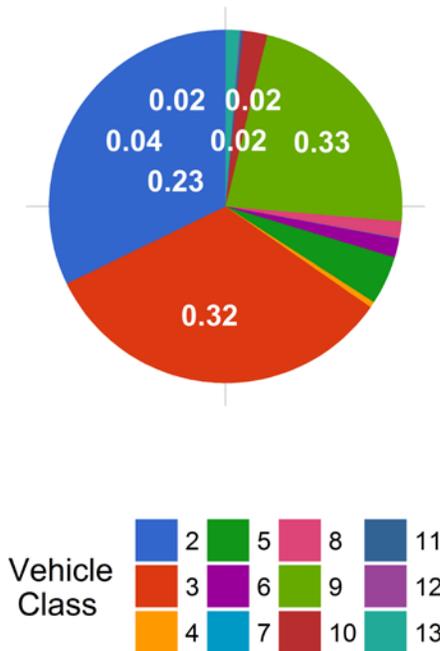


Figure 12 - Total ESALs by Class and Lane

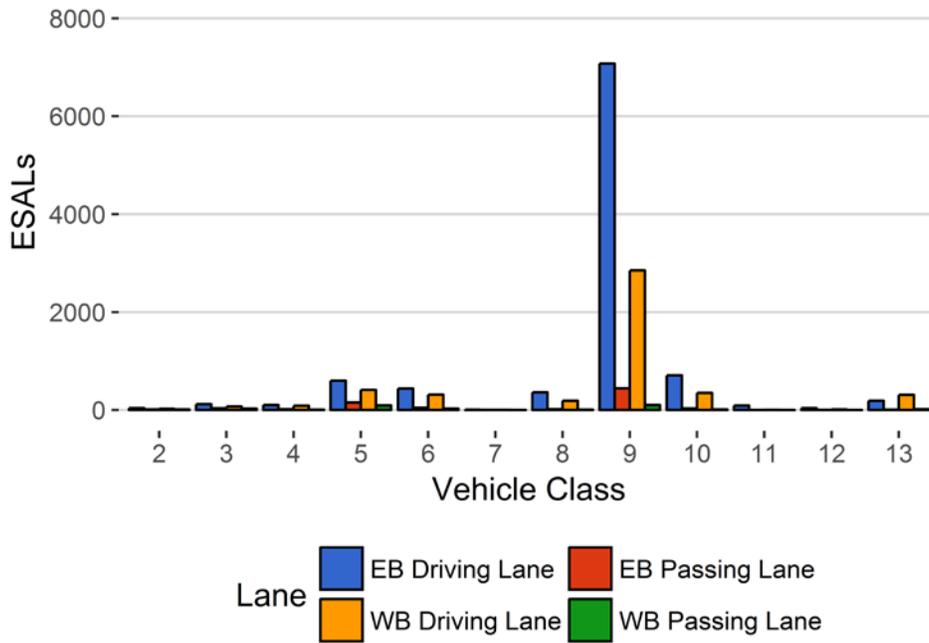


Figure 13 - ESALs by Class

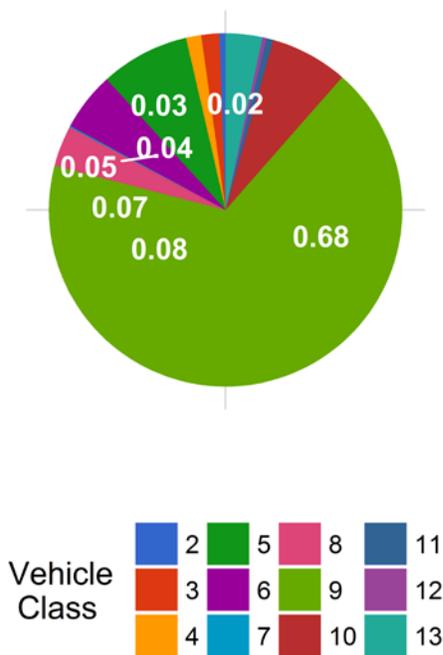


Table 1 Class 9 Front Axle Weight by Lane

<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>
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

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	7994	223843	56	0	0
3	5369	150332	37.6	0	0
4	19	535	0.1	4	0.2
5	317	8870	2.2	78	3.2
6	53	1483	0.4	101	4.1
7	1	23	0	4	0.2
8	44	1230	0.3	58	2.4
9	425	11909	3	1683	68.5
10	32	906	0.2	289	11.8
11	4	101	0	12	0.5
12	2	49	0	15	0.6
13	14	400	0.1	213	8.7
TOTAL	14274	399681	100	2457	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>
2018-02-22	Thursday	11:34:02	10	EB	1	125.37
2018-02-26	Monday	17:33:20	10	EB	1	121.55
2018-02-13	Tuesday	14:44:45	10	EB	1	116.8
2018-02-09	Friday	12:37:38	10	EB	1	116.6
2018-02-22	Thursday	12:56:28	9	EB	1	115.91
2018-02-13	Tuesday	10:43:32	10	EB	1	114.31
2018-02-16	Friday	15:00:30	10	EB	1	112.13
2018-02-26	Monday	14:42:42	10	EB	1	110.8
2018-02-16	Friday	14:53:58	10	EB	1	110.4
2018-02-21	Wednesday	15:35:34	10	EB	1	108.27

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	271	67	24.7	6400	868	1670
5	EB	8	4656	701	15.1	58937	5028	13649
6	EB	19	720	52	7.2	22530	918	4919
7	EB	11.5	12	0	0	680	0	271
8	EB	31	596	138	23.2	18094	2719	1948
9	EB	33	6701	1098	16.4	326694	32435	70897
10	EB	33.5	551	57	10.3	32984	1573	8218
11	EB	36.5	66	3	4.5	3545	99	623
12	EB	36.5	25	1	4	1740	35	432
13	EB	31.5	81	0	0	7831	0	2640
TOTAL	****	****	13679	2117	****	479435	****	105266
<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	261	92	35.2	5675	1120	1570
5	WB	8	4164	1210	29.1	43239	8394	9804
6	WB	19	755	214	28.3	18329	3483	4025
7	WB	11.5	11	0	0	512	0	193
8	WB	31	627	372	59.3	9567	8774	831
9	WB	33	5141	2057	40	171389	55077	34809
10	WB	33.5	350	48	13.7	21218	1371	5550
11	WB	36.5	34	15	44.1	782	507	44
12	WB	36.5	24	2	8.3	1236	70	216
13	WB	31.5	317	0	0	25429	0	7722
TOTAL	****	****	11684	4010	****	297377	****	64764
GRAND TOTAL	****	****	25363	6127	363	776812	122472	170030

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	320547	120484	109235	285103	835369	32.2
3	342980	112778	99946	303707	859411	33.1
4	6113	1156	743	6052	14063	0.5
5	53590	10375	8207	43427	115599	4.5
6	21052	2395	1320	20492	45259	1.7
7	516	165	58	454	1193	0
8	19323	1490	1044	17297	39154	1.5
9	336032	23096	8859	217607	585595	22.6
10	32619	1939	751	21837	57146	2.2
11	3583	61	0	1290	4933	0.2
12	1600	175	0	1306	3081	0.1
13	7537	293	992	24437	33260	1.3
TOTAL	1145492	274407	231155	943010	2594064	100
GVW/LANE	44.16	10.58	8.91	36.35	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>
2	38	14	12	24	88	0.57	8e-04
3	119	35	29	72	254	1.64	0.0034
4	104	17	8	87	216	1.39	0.81
5	601	155	94	413	1263	8.15	0.29
6	441	48	27	315	830	5.36	1.13
7	10	3	1	6	20	0.13	1.57
8	361	17	9	190	578	3.73	0.95
9	7075	443	102	2849	10469	67.57	1.77
10	707	33	12	349	1102	7.11	2.44
11	90	1	0	7	98	0.63	1.87
12	39	6	0	12	56	0.36	2.05
13	187	8	16	309	520	3.36	2.57
TOTAL	9772	780	310	4632	15494	100	15
ESALS/LANE	63.1	5	2	29.9	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>
Mar 2017	465357	15012	1009	434076	93.3	31281.1	6.7	90.5	9.5
Apr 2017	488539	16285	1139	454362	93	34177.1	7	89.7	10.3
May 2017	561395	18110	1453	516354	92	45041.3	8	89.1	10.9
Jun 2017	559773	18659	1524	514056	91.8	45717.4	8.2	91.9	8.1
Jul 2017	585047	18872	1372	542522	92.7	42524.9	7.3	88.3	11.7
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
TOTAL	6034209	--	--	5575841	--	458369	--	--	--
AVERAGE	502851	16520	1254	464653	92	38197	8	89	11

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	14180	800	340	7387	22707	95	5	26.1
Apr 2017	16232	1057	343	8444	26076	95	5	32.2
May 2017	18132	1483	537	11291	31443	94	6	23.9
Jun 2017	21224	974	445	11784	34427	96	4	26.4
Jul 2017	17260	1506	635	11781	31183	93	7	25.3
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
TOTAL	186328	14878	6813	119477	327497	--	--	--
AVERAGE	15527	1240	568	9956	27291	93	7	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>
Mar 2017	1215655	297399	260387	1046064	2819505
Apr 2017	1146958	274818	231235	944277	2597288
May 2017	1398878	313632	277100	1179484	3169094
Jun 2017	1520118	358341	292712	1292218	3463389
Jul 2017	1787908	492278	378306	1574381	4232873
Aug 2017	1942194	392446	326223	1676176	4337040
Sep 2017	1757274	474905	375892	1727042	4335113
Oct 2017	1654557	563627	405742	1708224	4332151
Nov 2017	1696672	438152	373450	1711459	4219734
Dec 2017	1784400	439650	370191	1734206	4328447
Jan 2018	1508075	372555	315789	1404211	3600629
Feb 2018	1274512	341067	275284	1133309	3024172
TOTAL	18687203	4758870	3882312	17131050	44459435
AVERAGE	1557267	396573	323526	1427587	3704953

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	4132	0.9	13.2	1009	190
Apr 2017	5102	1.1	15	1349	279
May 2017	5628	1	12.5	1551	295
Jun 2017	5859	1.1	12.8	1920	403
Jul 2017	5175	0.9	12.2	1280	216
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
TOTAL	58213	--	--	14761	2969
AVERAGE	4851.1	1	12.6	1230.1	247.4

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	144778	91495	236273	61.3	38.7
Apr 2017	165098	111120	276218	59.8	40.2
May 2017	198381	175651	374033	53	47
Jun 2017	205673	184506	390179	52.7	47.3
Jul 2017	170681	187124	357805	47.7	52.3
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
TOTAL	1919200	1794837	3714037	--	--
AVERAGE	159933.3	149569.7	309503.1	53	47