

AUGUST 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 August 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: 610595 | Passenger Vehicles: 562401 | Heavy Commercial Vehicles: 48194

Monthly Average Daily Traffic (MADT): 19697 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1555

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 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 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 48194 HCVs, 5421 of them were overweight³. These overweight HCVs contributed to 0.9% of total monthly volume, and 11.4% of total monthly HCV volume. EB overweight vehicles typically reached highest numbers on Tuesdays, with lowest volumes reported on Sundays. WB overweight vehicles tended to reach highest volumes on Mondays, 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 63.6% 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 August.

WIMs are currently used as a screening tool for weight enforcement, and it is estimated that the WIM scales can measure gross vehicle weights (GVW) within 90-95% of static weight scale measurements. Due to the possibility of measurement error, vehicles exceeding 10% of their legal weight limits (or 1.1 times their legal weight limits) are considered overweight in this report⁴.

Using normal load limits ,1705 EB vehicles exceeded 88,000 pounds (1164 vehicles were Class 9's; 283 vehicles were Class 10's). Of vehicles traveling WB,

120 EB vehicles exceeded 88,000 pounds (72 vehicles were Class 13's; 40 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from August 2018.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in August 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 fully_loaded Class 9's than empty 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 410424 tons of freight was recorded to have crossed the WIM. More freight was shipped WB (57.7%) than EB (42.3%). 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 610595 vehicles with a combined GVW of 4669506 kips (1 kip = 1,000 pounds = 0.5 tons) in August 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 33422 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 56.5% of all ESALs were recorded EB while 43.5% was observed WB. In particular, 51% of all ESALs were generated by the Class 9's (Class 9's

were also responsible for generating 20% 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).

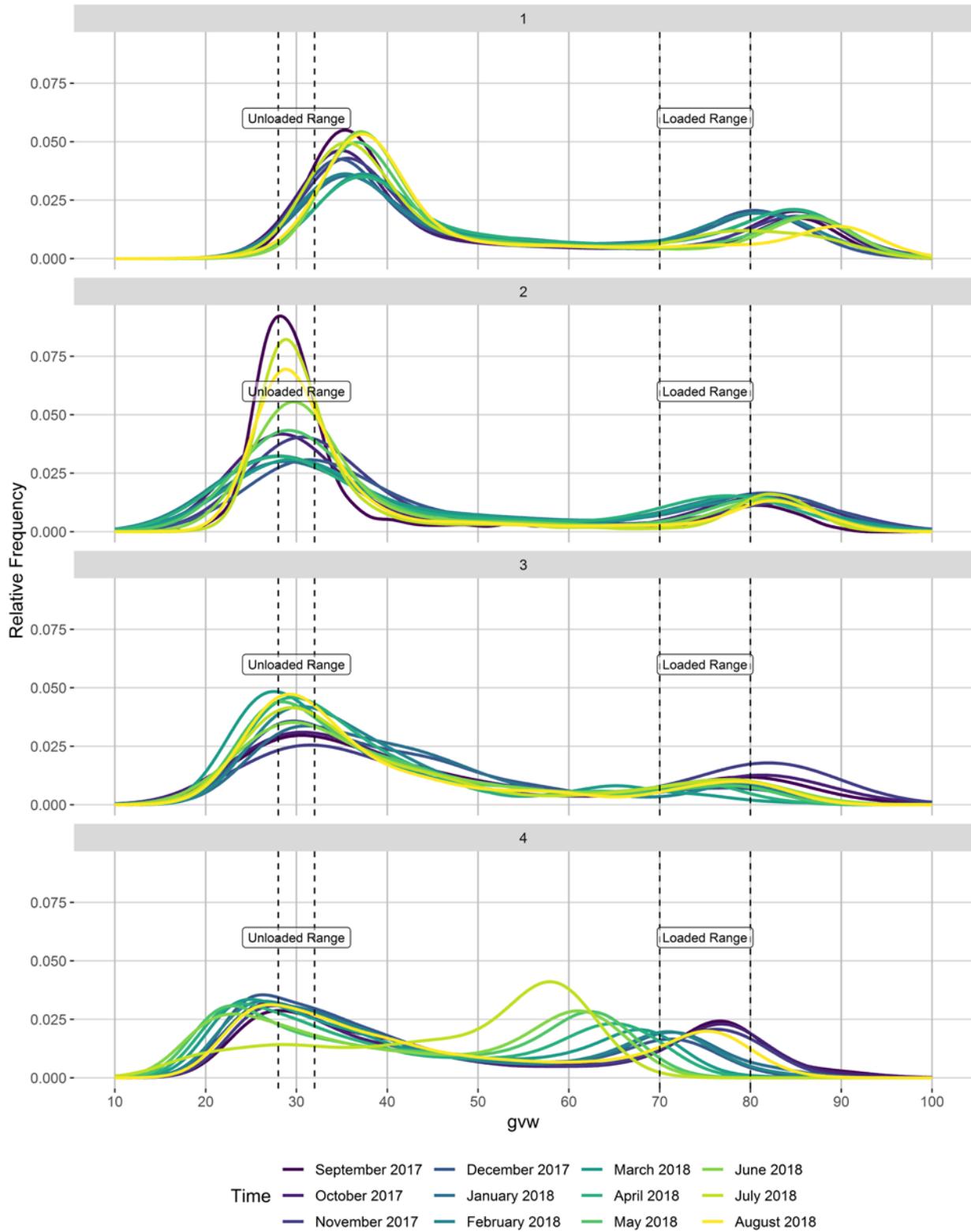
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

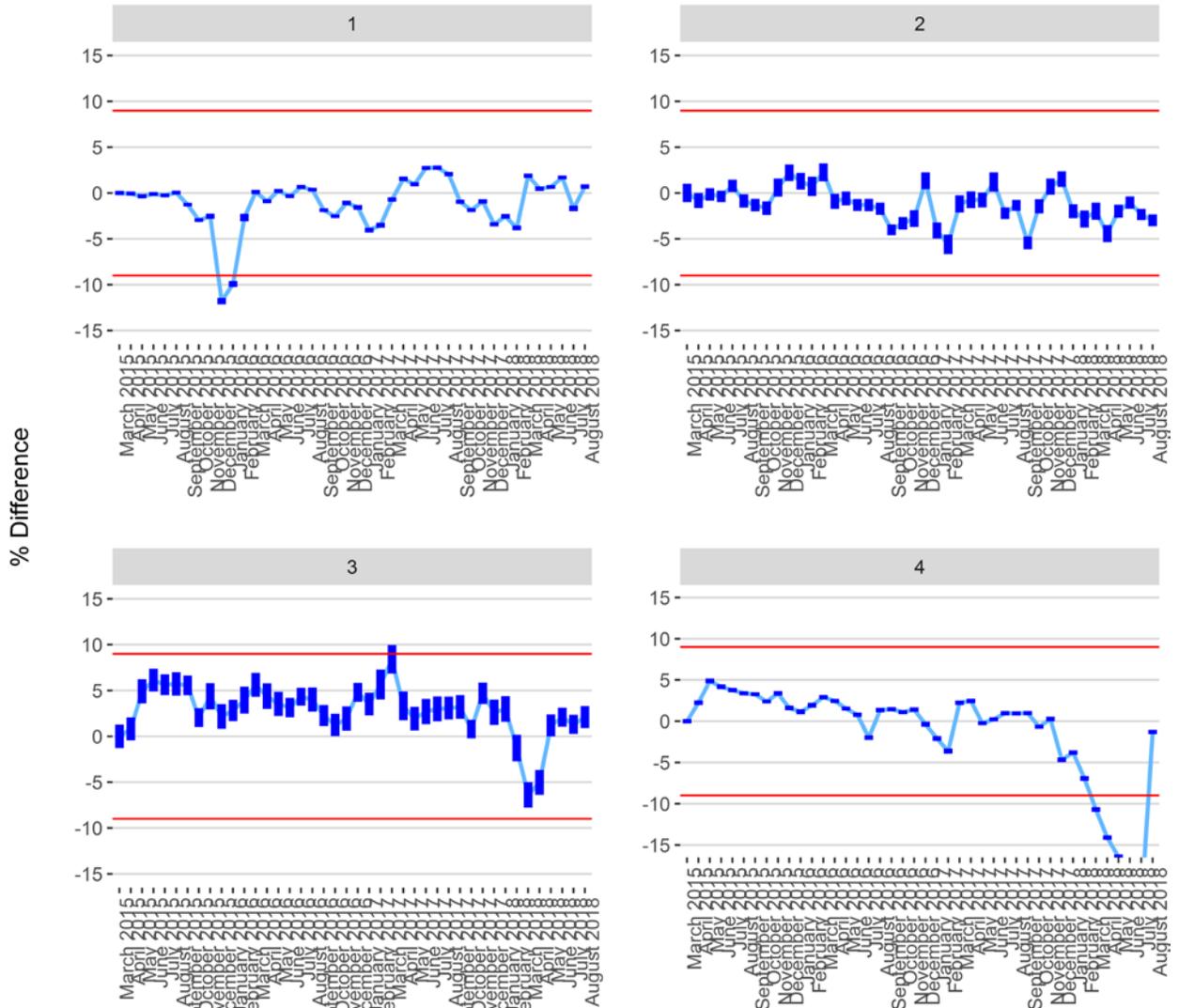
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

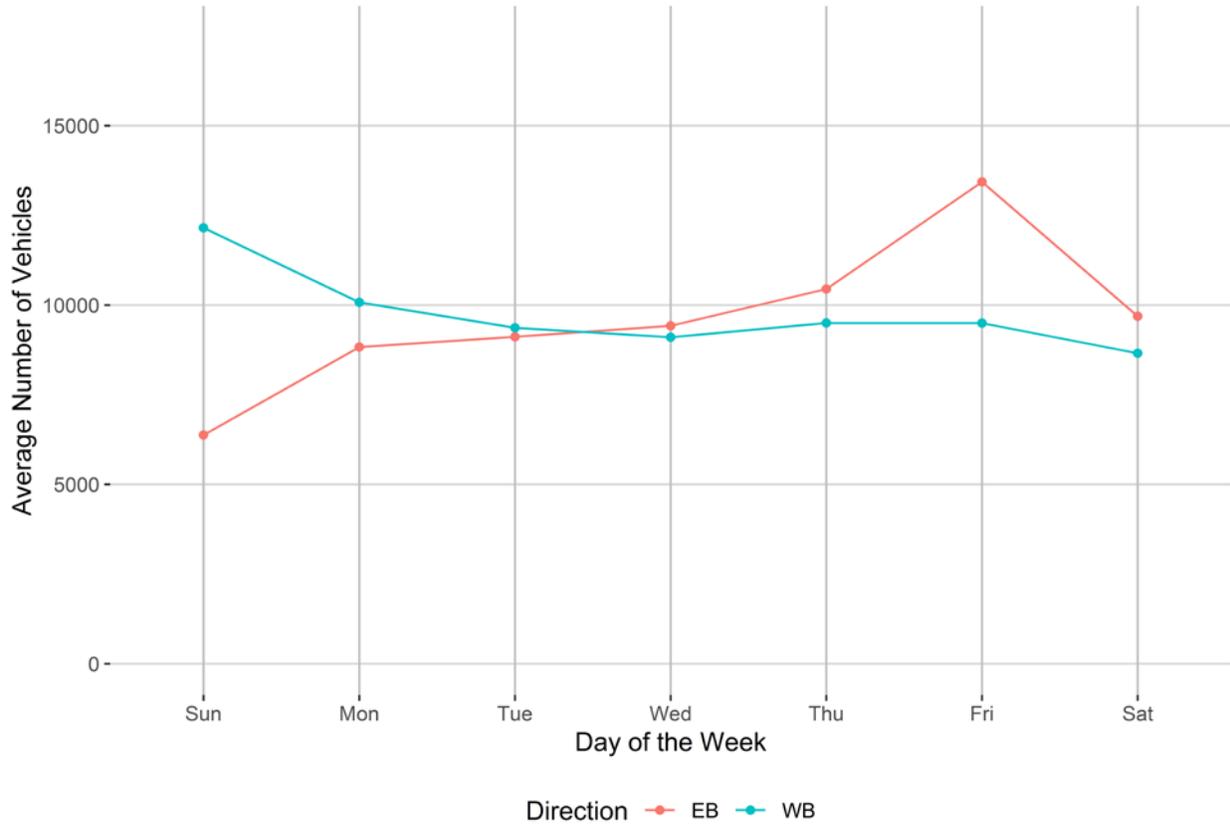


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

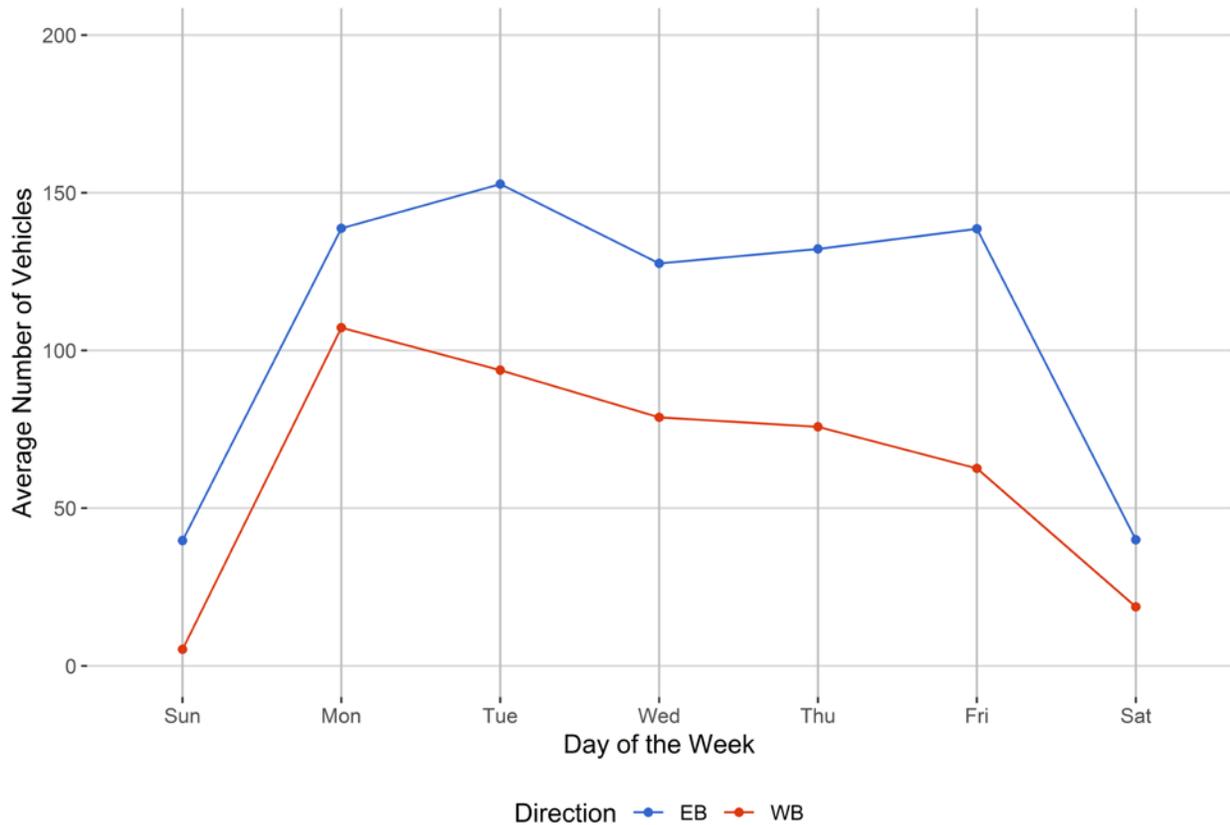


Figure 4 - Passenger Vehicles vs. Hour of the Day

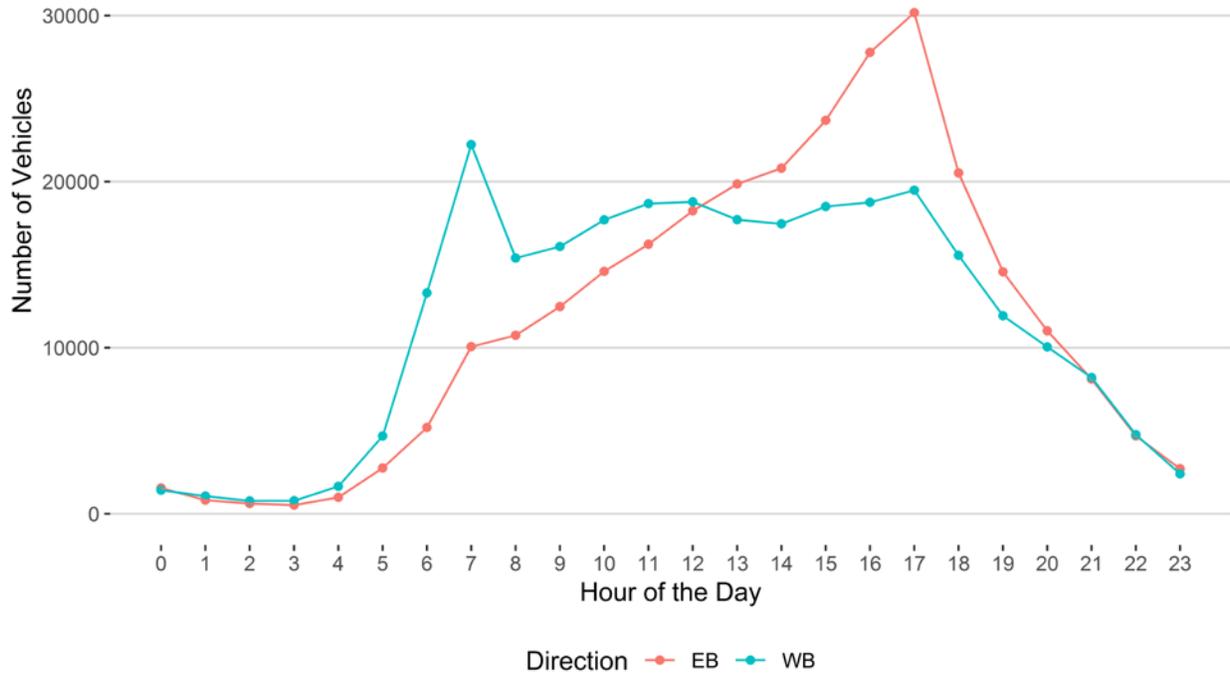


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

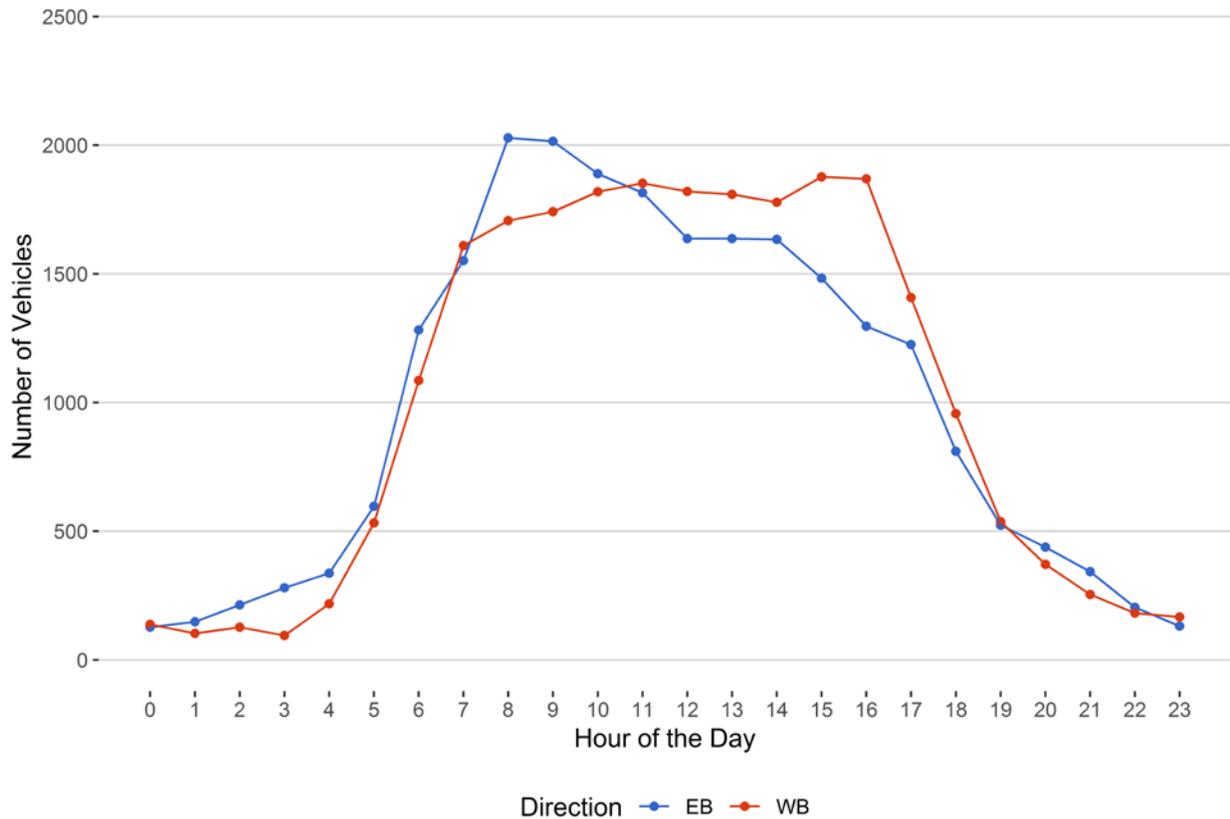


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

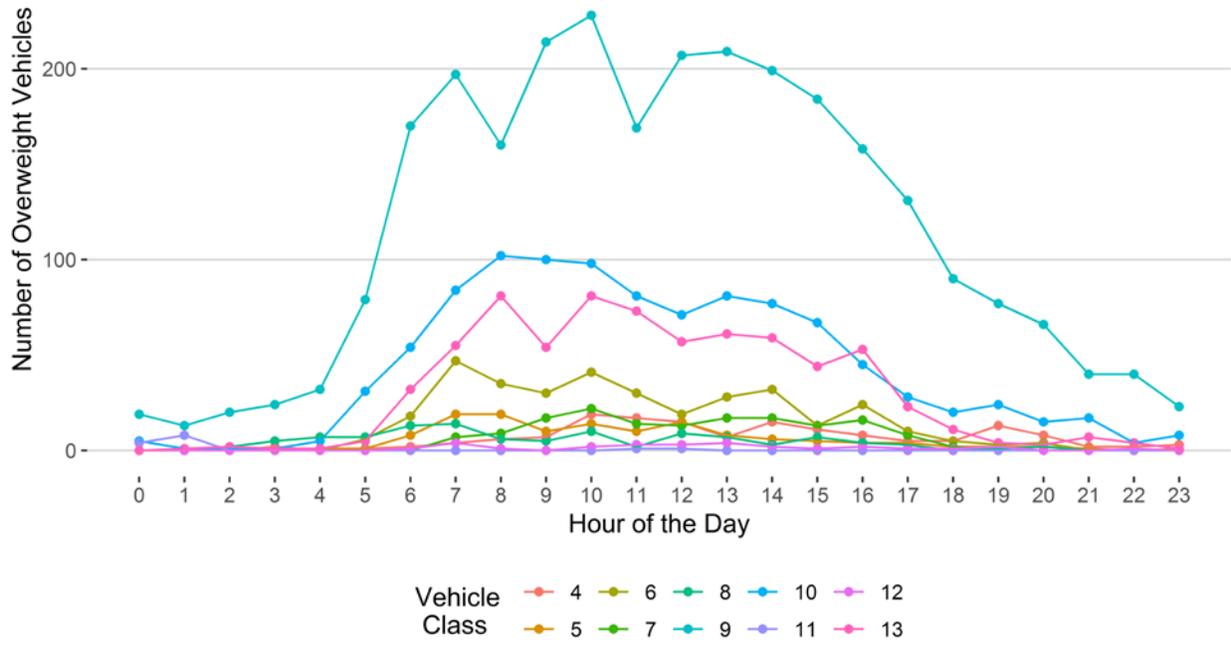


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

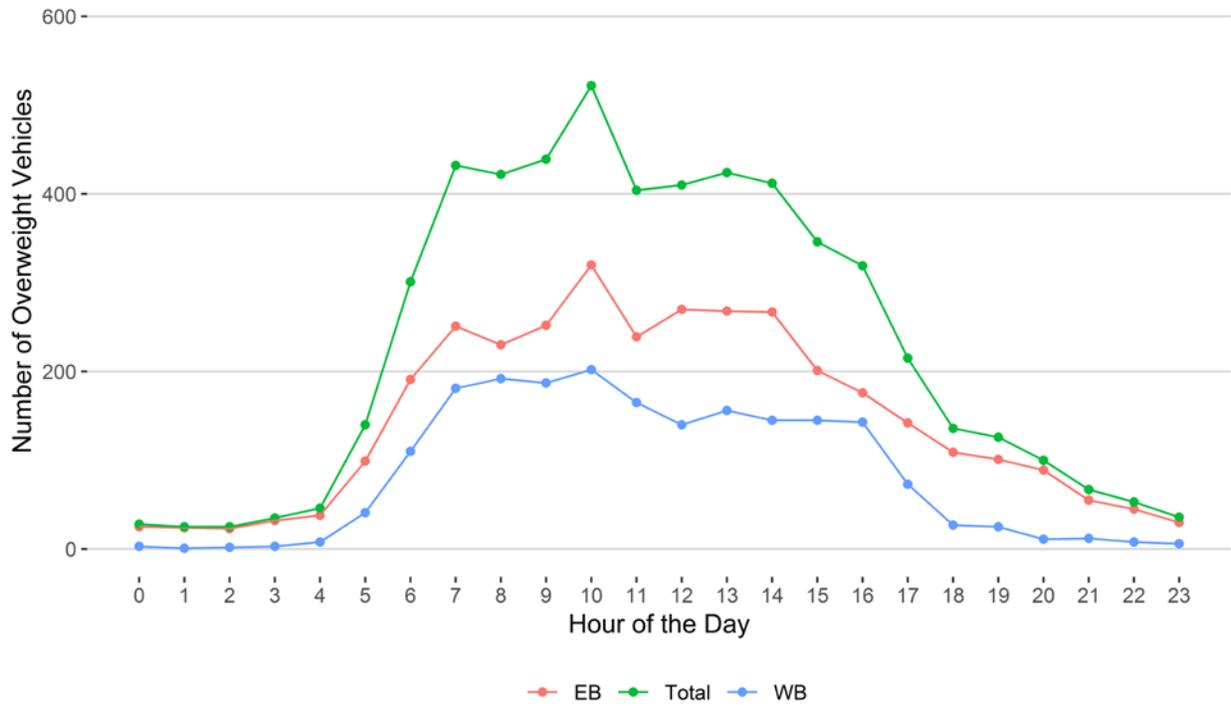
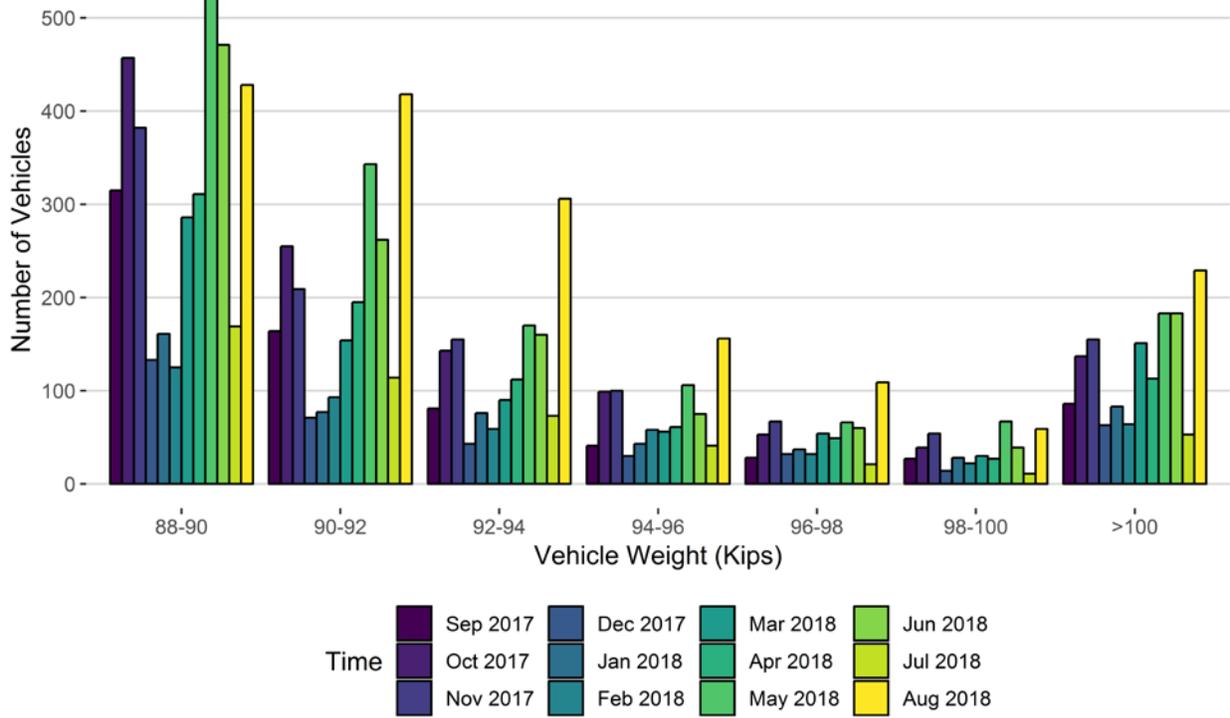
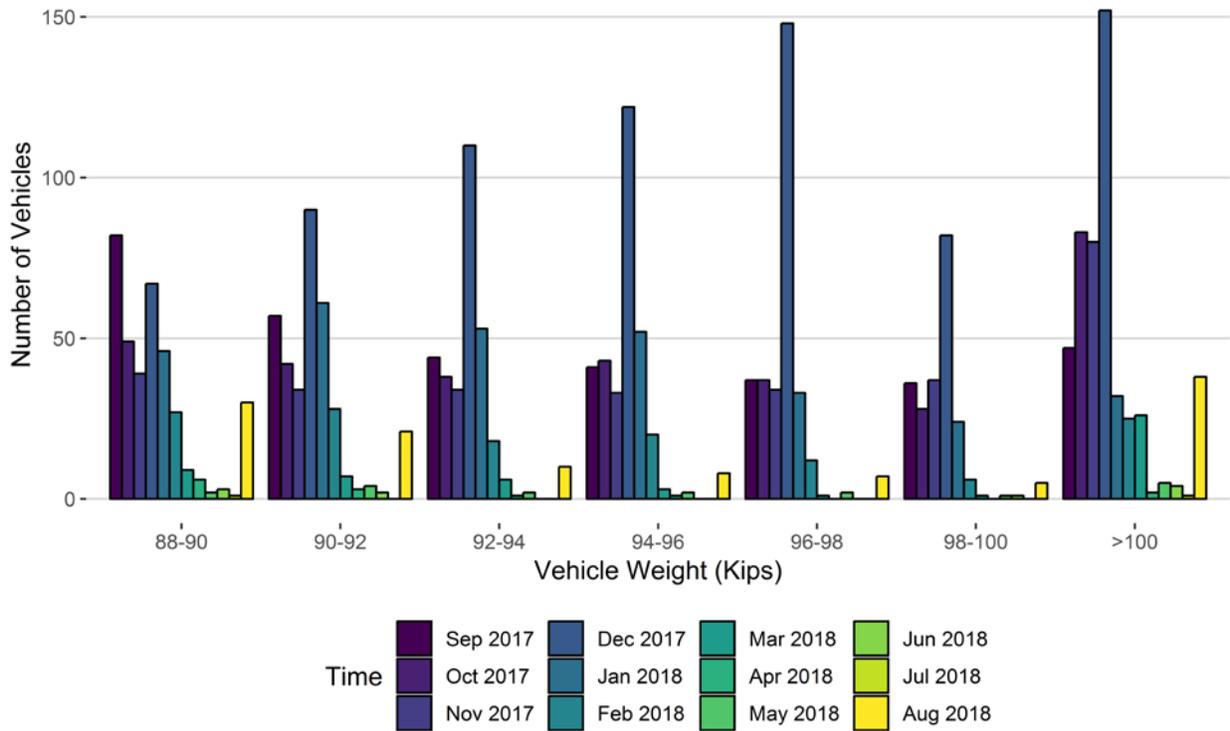


Figure 8 - Histogram of EB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018
88-90	315	457	382	133	161	125	286	311	524	471	169	428
90-92	164	255	209	71	77	93	154	195	343	262	114	418
92-94	81	143	155	43	76	59	90	112	170	160	73	306
94-96	41	99	100	30	43	58	56	61	106	75	41	156
96-98	28	53	67	32	37	32	54	49	66	60	21	109
98-100	27	39	54	14	28	22	30	27	67	39	11	59
>100	86	137	155	63	83	64	151	113	183	183	53	229
Total	742	1183	1122	386	505	453	821	868	1459	1250	482	1705

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



Vehicle Weights (Kips)	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018
88-90	82	49	39	67	46	27	9	6	2	3	1	30
90-92	57	42	34	90	61	28	7	3	4	2	0	21
92-94	44	38	34	110	53	18	6	1	2	0	0	10
94-96	41	43	33	122	52	20	3	1	2	0	0	8
96-98	37	37	34	148	33	12	1	0	2	0	0	7
98-100	36	28	37	82	24	6	1	0	1	1	0	5
>100	47	83	80	152	32	25	26	2	5	4	1	38
Total	344	320	291	771	301	136	53	13	18	10	2	119

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

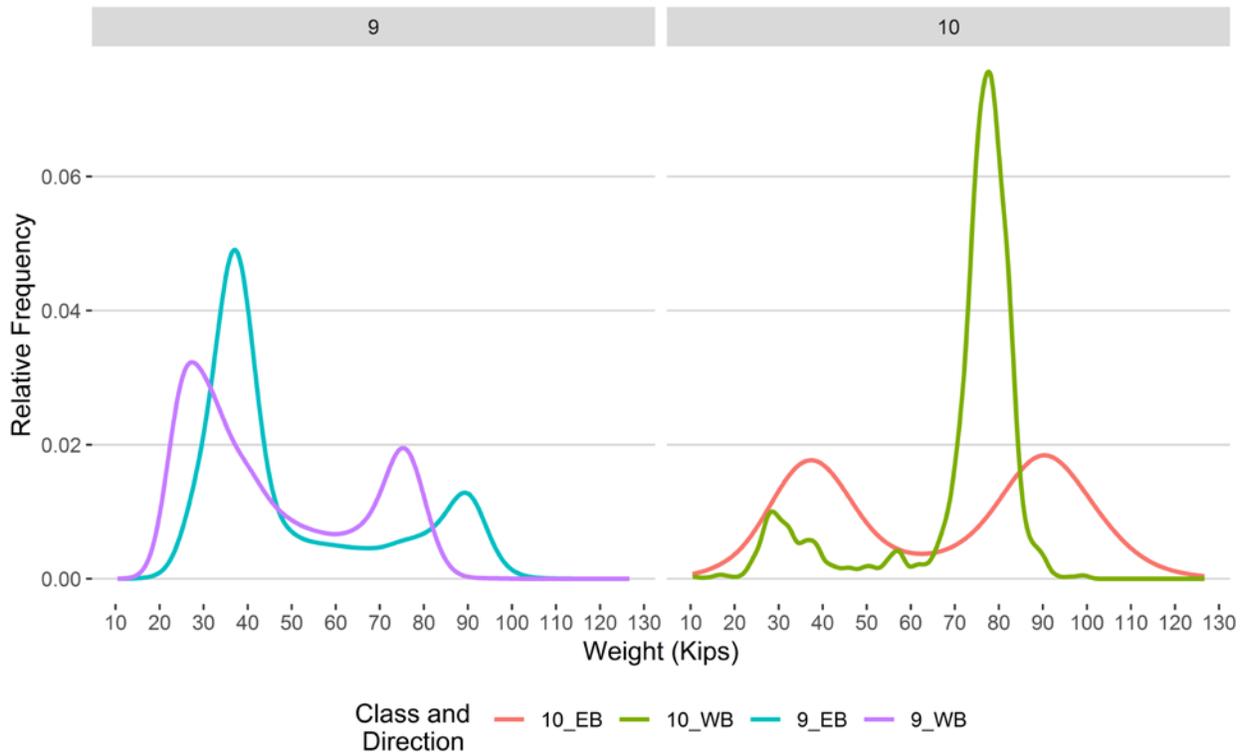


Figure 9 - Freight Percentage by Direction and Class

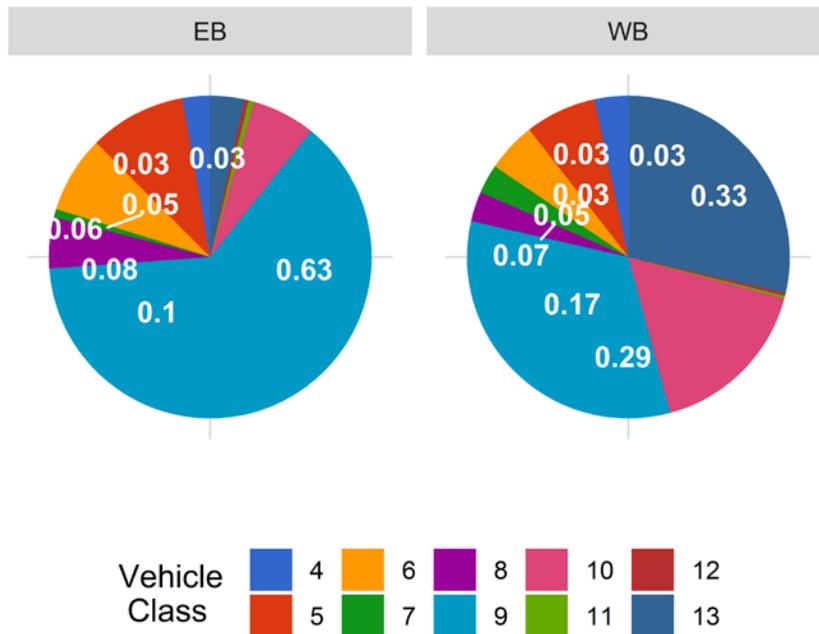


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

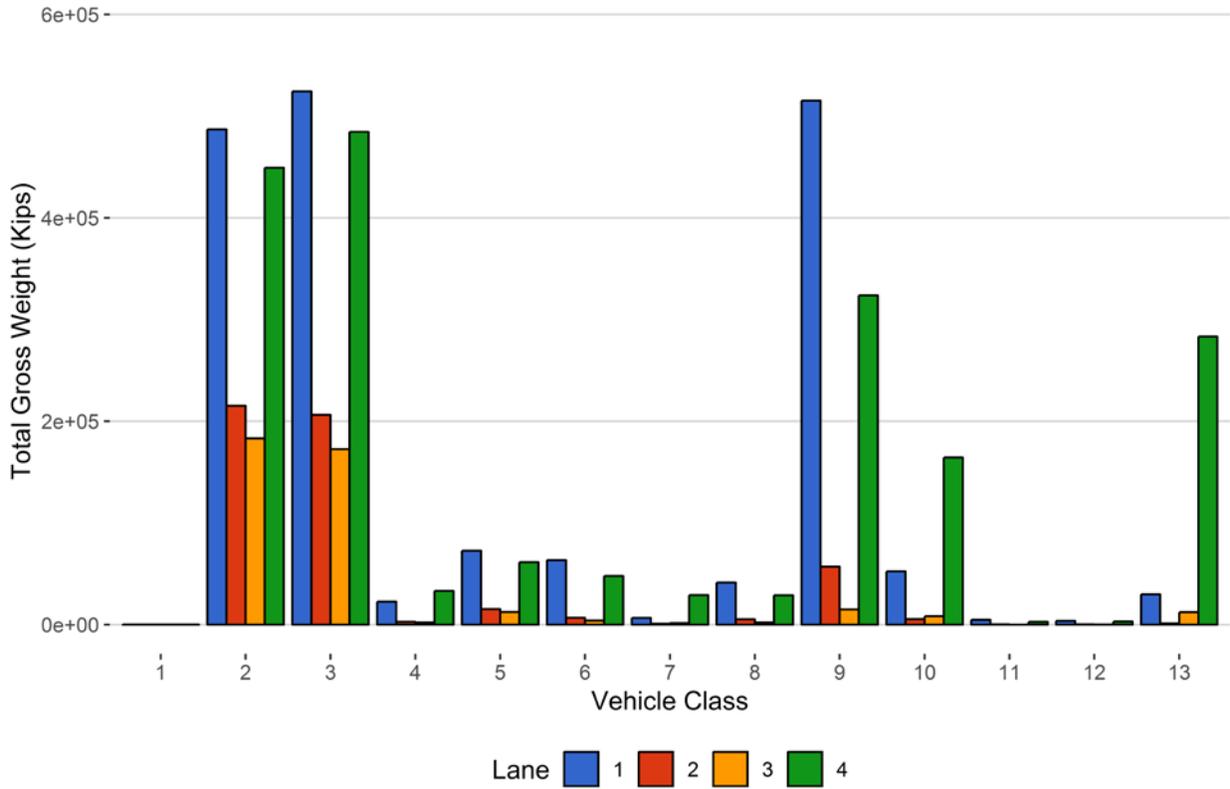


Figure 11 - Total Gross Vehicle Weight t

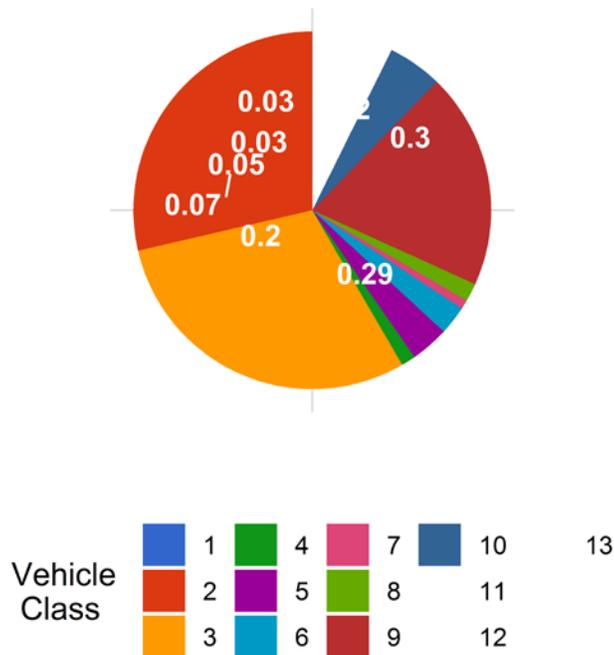


Figure 12 - Total ESALs by Class and Lane

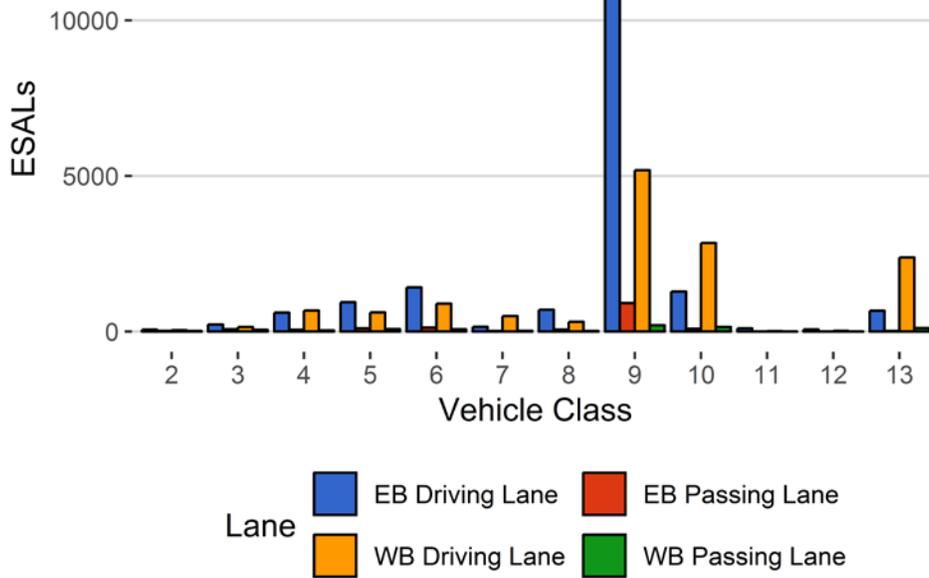


Figure 13 - ESALs by Class

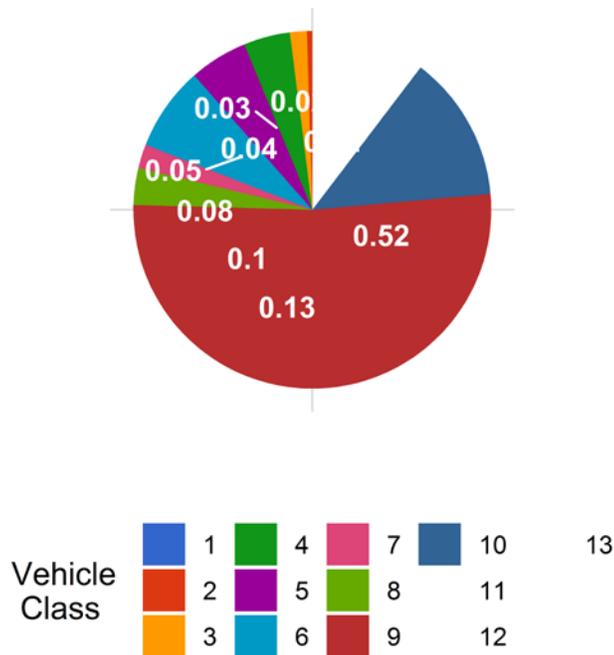


Table 1 Class 9 Front Axle Weight by Lane

<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
August 2018	12.67	0.70	11.37	-2.98	11.17	2.11	10.67	-1.31

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	10	298	0	0	0
2	10943	339220	55.6	0	0
3	7190	222882	36.5	0	0
4	61	1897	0.3	153	2.8
5	400	12388	2	133	2.5
6	122	3782	0.6	347	6.4
7	22	686	0.1	155	2.9
8	82	2542	0.4	109	2
9	612	18980	3.1	2749	50.7
10	108	3334	0.5	1020	18.8
11	6	184	0	14	0.3
12	4	128	0	28	0.5
13	138	4273	0.7	713	13.2
TOTAL	19697	610595	100	5421	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>
2018-08-30	Thursday	20:09:18	10	EB	1	126.7
2018-08-21	Tuesday	17:48:02	10	EB	1	121.61
2018-08-27	Monday	11:06:34	10	EB	1	120.91
2018-08-30	Thursday	20:41:07	10	EB	1	120.52
2018-08-17	Friday	09:18:31	10	EB	1	118.83
2018-08-13	Monday	09:20:06	10	EB	1	116.73
2018-08-24	Friday	17:22:54	10	EB	1	115.74
2018-08-16	Thursday	15:39:22	10	EB	1	115.65
2018-08-14	Tuesday	15:26:36	10	EB	1	115.2
2018-08-23	Thursday	20:01:04	10	EB	1	114.1

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	834	101	12.1	23828	1352	6417
5	EB	8	6367	549	8.6	83876	3959	18666
6	EB	19	2125	55	2.6	69013	942	14842
7	EB	11.5	127	0	0	7465	0	3002
8	EB	31	1401	487	34.8	36314	10144	3990
9	EB	33	11430	1651	14.4	523494	48730	100393
10	EB	33.5	867	116	13.4	54326	3307	14584
11	EB	36.5	107	40	37.4	3961	936	758
12	EB	36.5	67	10	14.9	3583	252	751
13	EB	31.5	319	0	0	30871	0	10411
TOTAL	****	****	23644	3009	****	836732	****	173814
<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	1044	124	11.9	33605	1569	9903
5	WB	8	5894	1380	23.4	63719	9810	13803
6	WB	19	1618	229	14.2	47636	3898	10623
7	WB	11.5	552	4	0.7	30346	42	12022
8	WB	31	1115	708	63.5	15475	15363	1429
9	WB	33	7356	2740	37.2	264352	74403	56012
10	WB	33.5	2433	198	8.1	166933	5597	46030
11	WB	36.5	75	36	48	1710	919	143
12	WB	36.5	60	8	13.3	2931	170	517
13	WB	31.5	3910	0	0	295421	0	86128
TOTAL	****	****	24057	5427	****	922129	****	236610
GRAND TOTAL	****	****	47701	8436	358	1758861	181393	410424

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	109	52	46	142	348	0
2	487061	215112	183128	449344	1334644	28.6
3	524442	206223	172476	484593	1387734	29.8
4	22564	2617	2037	33137	60355	1.3
5	72623	15211	12255	61273	161363	3.5
6	63273	6682	3843	47691	121489	2.6
7	6537	928	1398	28990	37852	0.8
8	41315	5142	2064	28775	77296	1.7
9	515327	56897	14968	323787	910980	19.5
10	52290	5343	8188	164343	230163	4.9
11	4722	175	0	2629	7527	0.2
12	3559	275	100	3001	6936	0.1
13	29666	1206	12152	283269	326292	7
TOTAL	1823489	515864	412654	1910973	4662980	100
GVW/LANE	39.11	11.06	8.85	40.98	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	0.0034
2	66	28	21	44	159	0.48	0.001
3	227	74	56	152	508	1.53	0.0046
4	614	56	37	681	1389	4.2	1.48
5	942	105	81	615	1743	5.26	0.29
6	1422	124	76	901	2522	7.62	1.35
7	158	23	26	504	711	2.15	2.08
8	702	65	19	318	1104	3.33	0.88
9	10860	918	204	5184	17166	51.85	1.83
10	1285	94	151	2849	4380	13.23	2.65
11	109	4	0	16	129	0.39	1.4
12	72	3	2	30	106	0.32	1.61
13	675	20	111	2383	3190	9.63	1.51
TOTAL	17133	1513	783	13677	33106	100	15
ESALS/LANE	51.8	4.6	2.4	41.3	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>
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
Aug 2018	610595	19697	1555	562401	92.1	48194.3	7.9	88.8	11.2
TOTAL	6131477	-	-	5711699	-	419778	-	-	-
AVERAGE	510956	16783	1149	475975	93	34981	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>
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
Aug 2018	17346	1529	783	13764	33422	93	7	40.7
TOTAL	174792	14465	7265	83006	279528	-	-	-
AVERAGE	14566	1205	605	6917	23294	92	8	24

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>
Sep 2017	1215655	297399	260387	1046064	2819505
Oct 2017	1146958	274818	231235	944277	2597288
Nov 2017	1366796	300326	243593	971462	2882177
Dec 2017	1429509	300988	258663	955064	2944223
Jan 2018	1919649	486092	384335	1105460	3895536
Feb 2018	1873989	527355	405817	977118	3784280
Mar 2018	1484105	532750	442390	949621	3408866
Apr 2018	1827123	516522	412675	1913186	4669506
May 2018	1696672	438152	373450	1711459	4219734
Jun 2018	1784400	439650	370191	1734206	4328447
Jul 2018	1508075	372555	315789	1404211	3600629
Aug 2018	1274512	341067	275284	1133309	3024172
TOTAL	18527443	4827673	3973810	14845437	42174362
AVERAGE	1543954	402306	331151	1237120	3514530

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>
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
Aug 2018	5463	0.9	11.4	1825	331
TOTAL	49026	-	-	13363	2635
AVERAGE	4085.5	0.8	11.5	1113.6	219.6

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>
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
Aug 2018	173814	236610	410424	42.3	57.7
TOTAL	1808091	1357654	3165746	-	-
AVERAGE	150674.3	113137.9	263812.1	60.9	39.1