

MARCH 2019



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

**MONTHLY
REPORT**



Your Destination...Our Priority



WIM Site Location

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

System Operation

WIM #27 was operational for the entire month of March 2019. Volume was computed using all monthly data.

System Calibration

WIM #27 was most recently calibrated on 2018-04-18. Table 1 summarizes the front axle weights of class 9s by lane ¹. 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: 167692 | Passenger Vehicles: 136965 | Heavy Commercial Vehicles: 30727

Monthly Average Daily Traffic (MADT): 5409 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 991

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 Mondays. WB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Mondays (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 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 03 PM and 05 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 30727 HCVs, 6660 of them were overweight ³. These overweight HCVs contributed to 4.3% of total monthly volume, and 23.5% 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 Tuesdays, 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 95.7% 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 November.

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 ⁴.

Using normal load limits ,1956 EB vehicles exceeded 88,000 pounds (1243 vehicles were Class 9's; 280 vehicles were Class 13's). Of vehicles traveling WB,

26 EB vehicles exceeded 88,000 pounds (13 vehicles were Class 13's; 9 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from March 2019.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in March 2019. Data suggests that there were greater numbers of fully_loaded Class 9's than empty 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 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 318703 tons of freight was recorded to have crossed the WIM. More freight was shipped EB (74.9%) than WB (25.1%). See Table 4 and Figure 11 for more freight information.

Infrastructure Considerations

Bridge. Bridge No. 93716, an arch pipe, is approximately 3.0 miles west of WIM #27 and Bridge No. 83030 is approximately 8.1 miles east of WIM #27. WIM #27 recorded a total of 167692 vehicles with a combined GVW of 2089466 kips (1 kip = 1,000 pounds = 0.5 tons) in March 2019. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 44414 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 87% of all ESALs were recorded EB while 13% was observed WB. In particular, 59% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 57% 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).

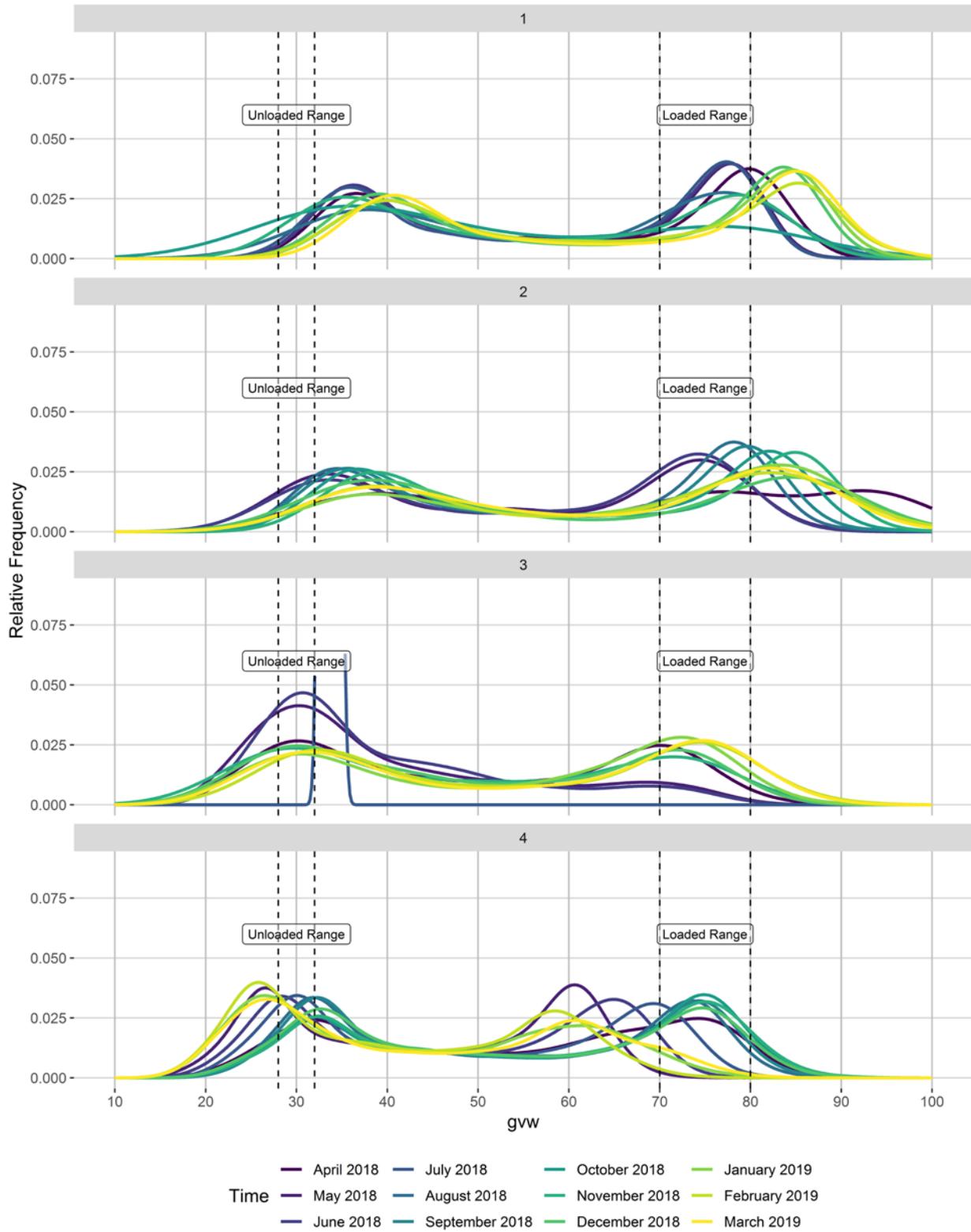
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

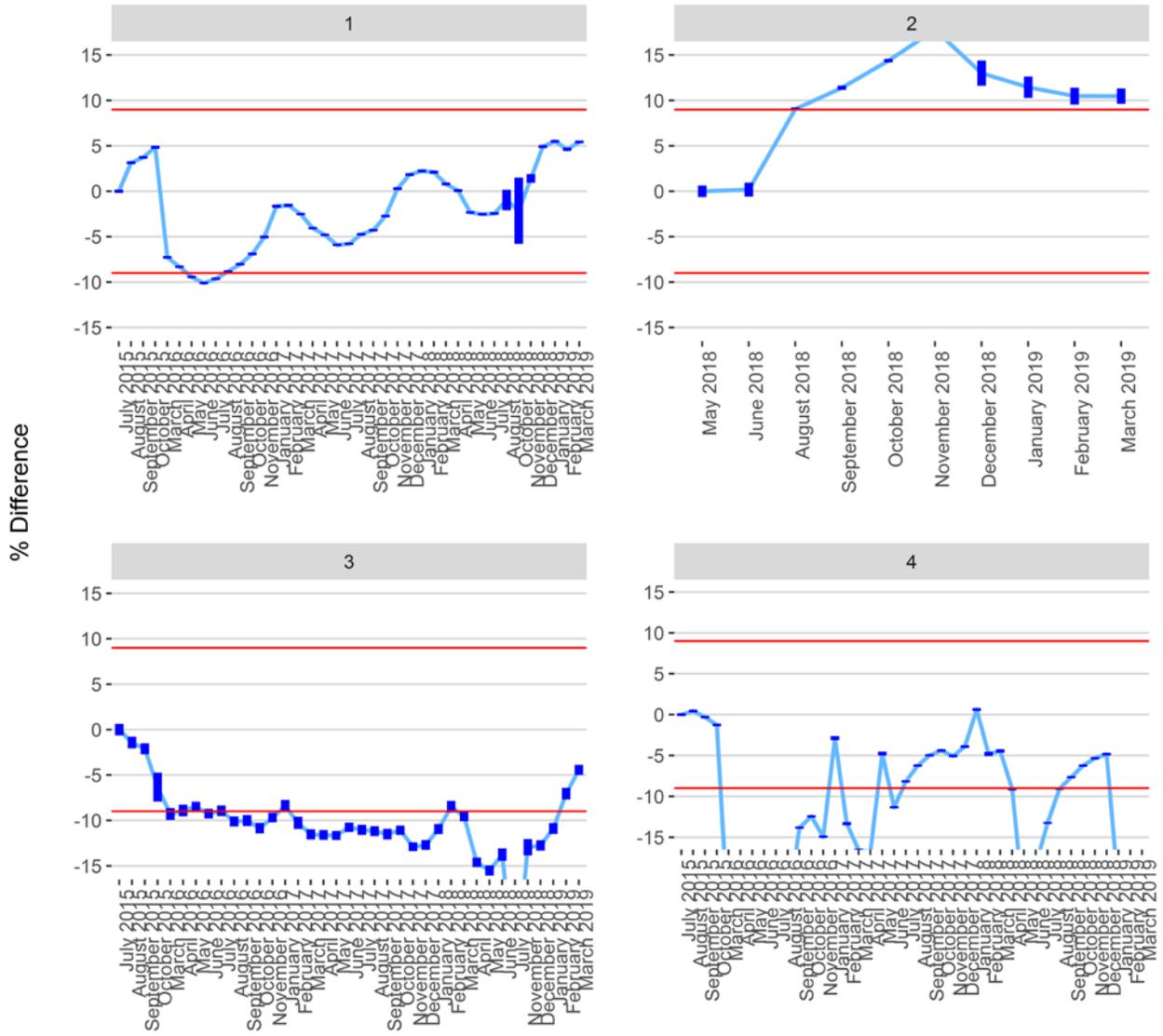
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

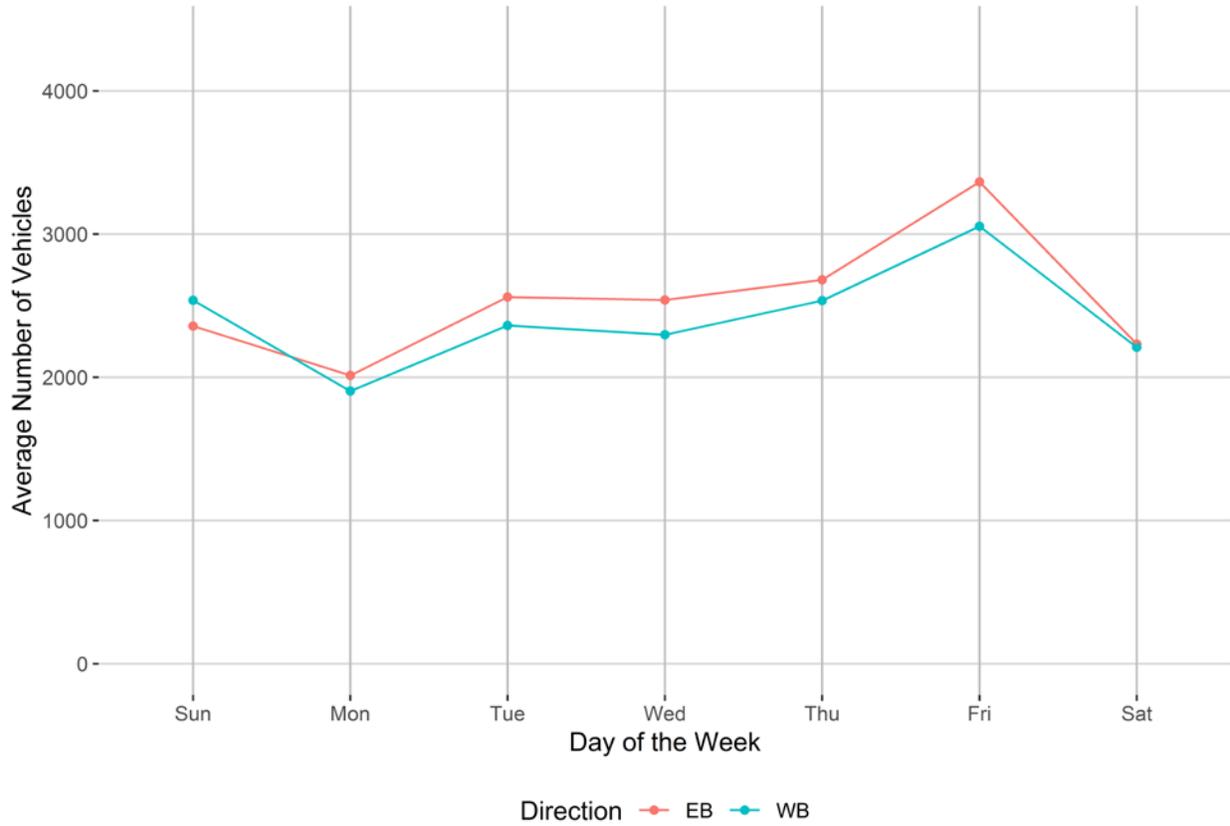


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

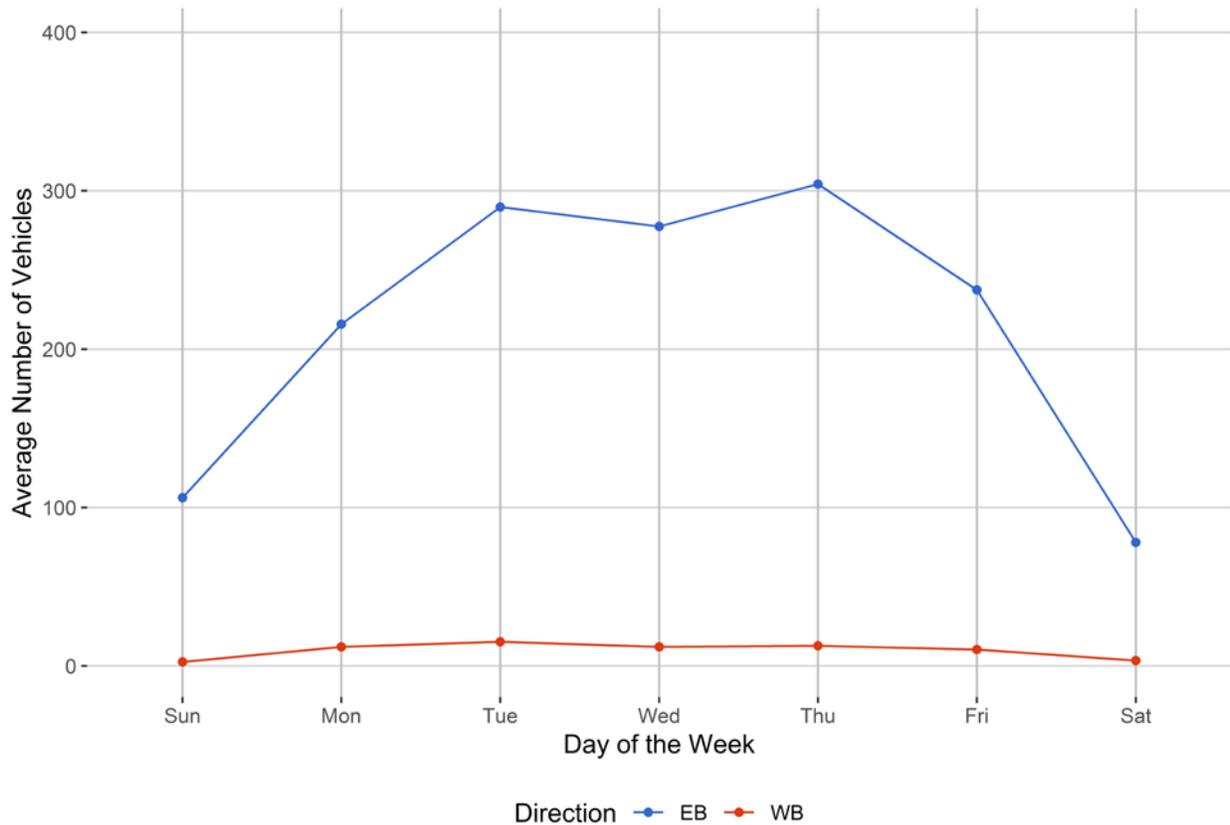


Figure 4 - Passenger Vehicles vs. Hour of the Day

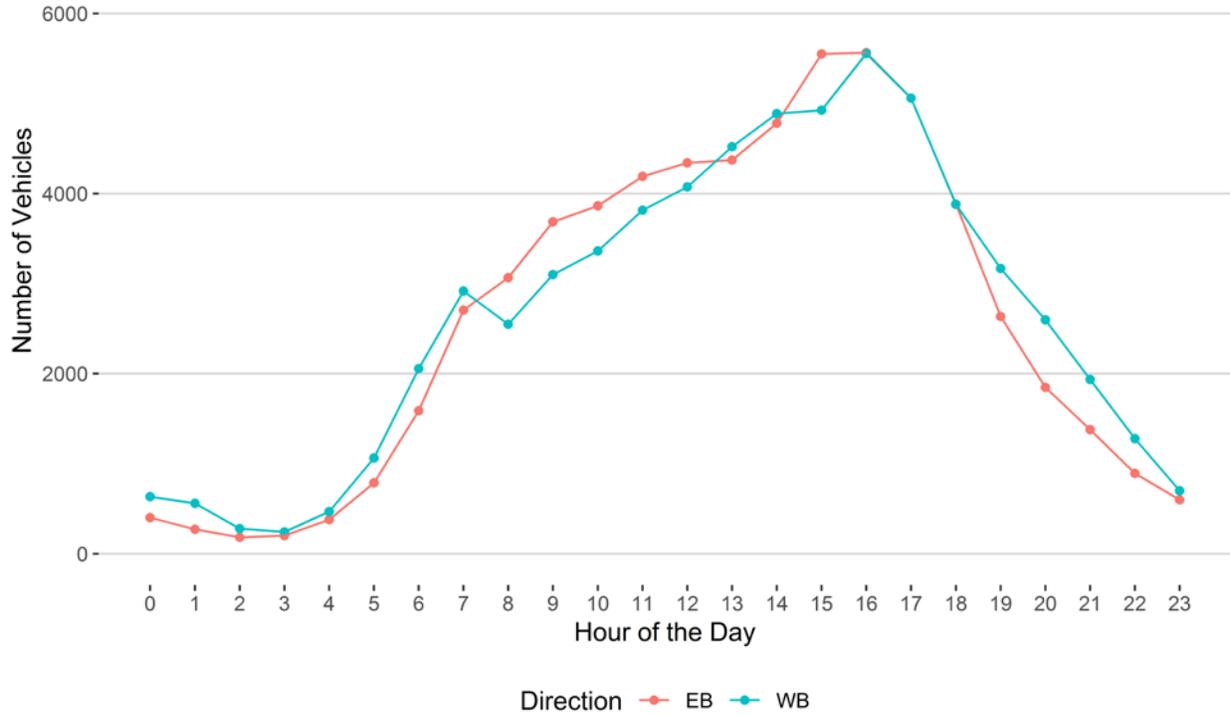


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

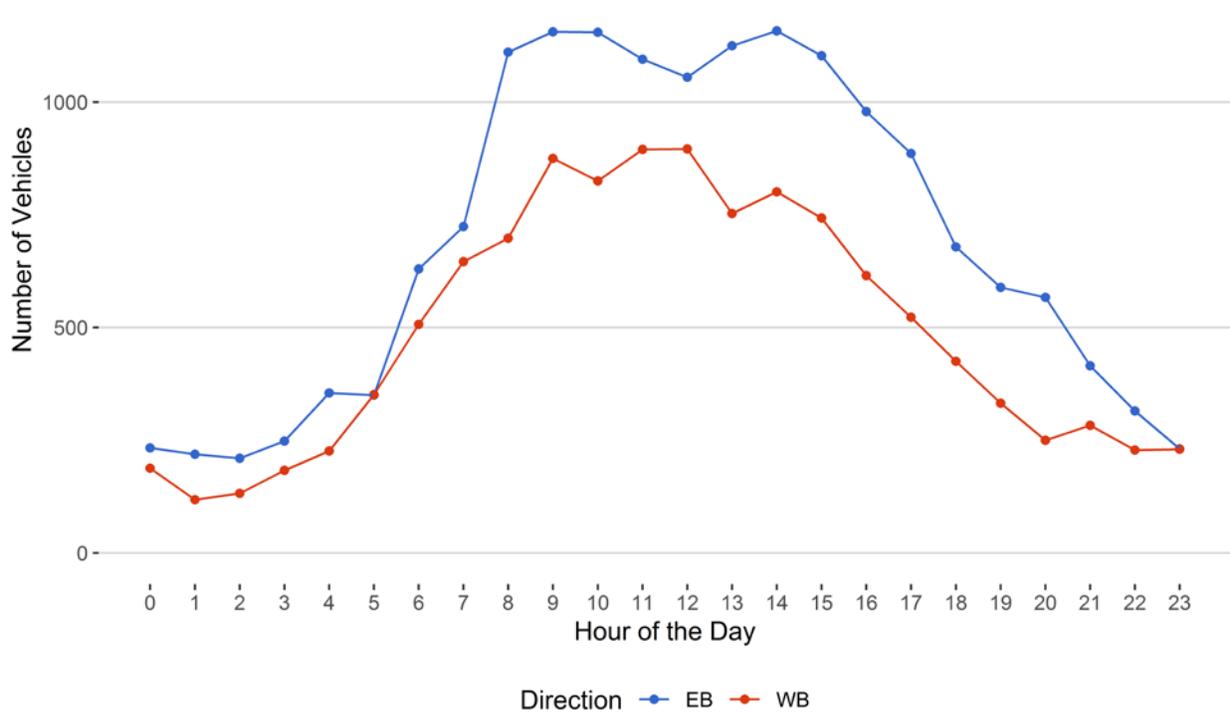


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

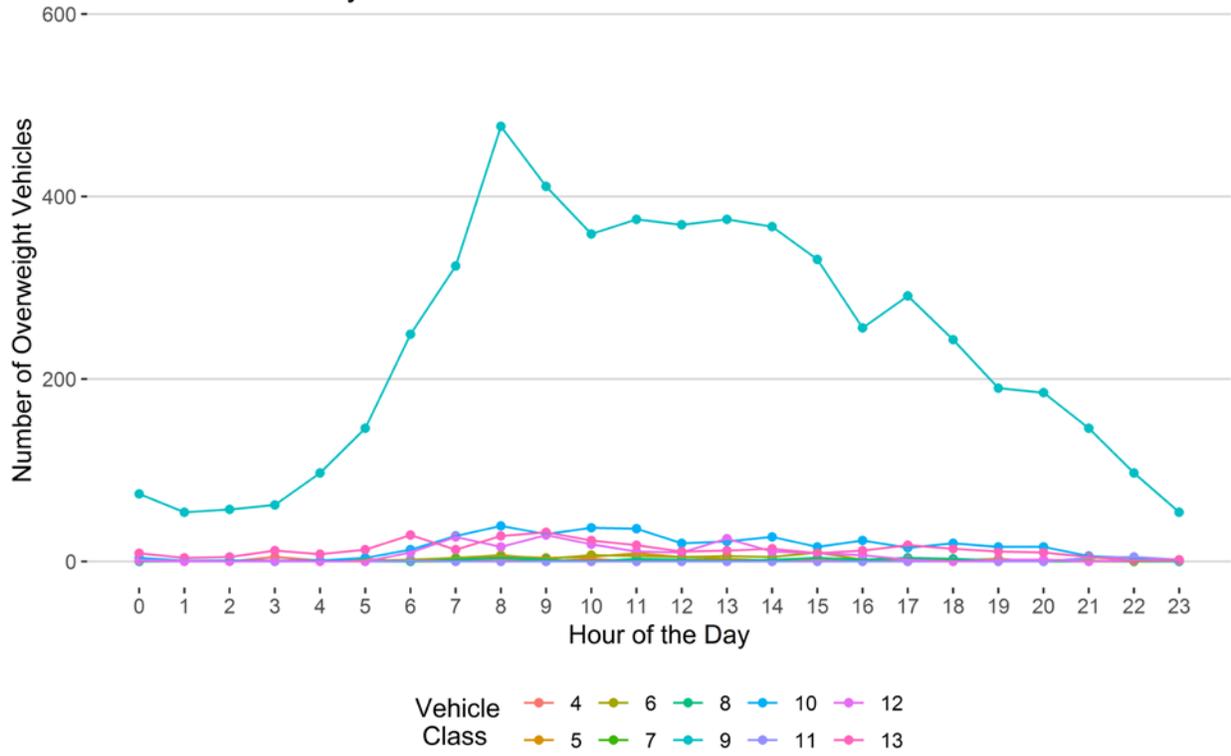


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

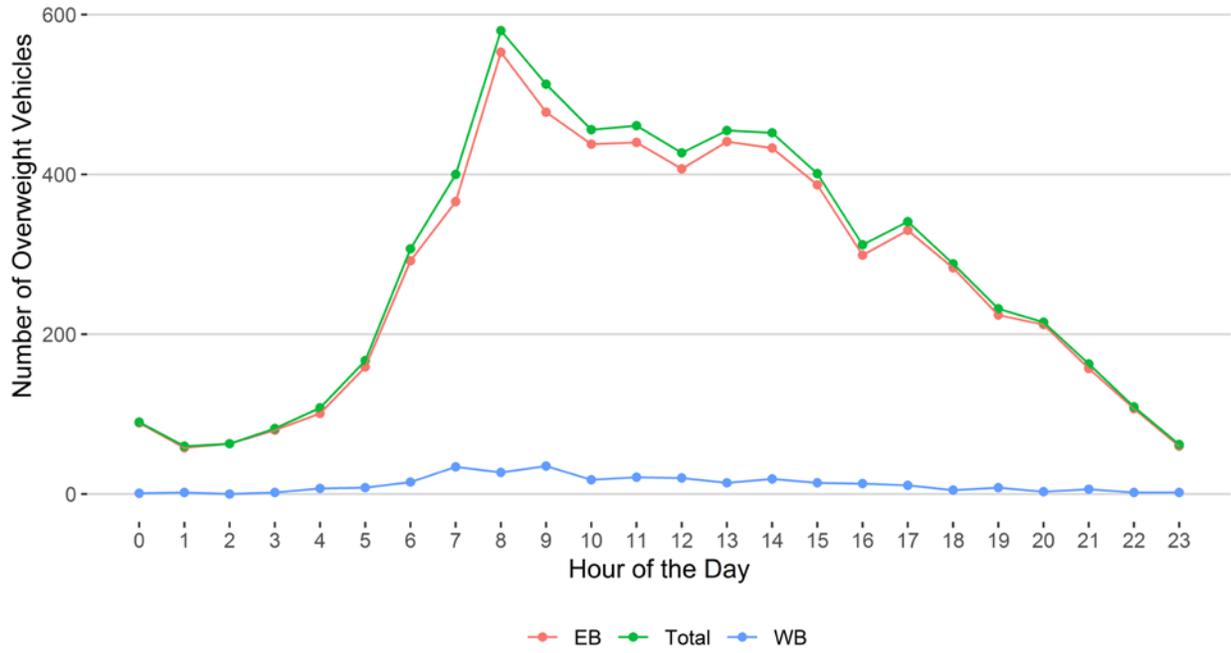
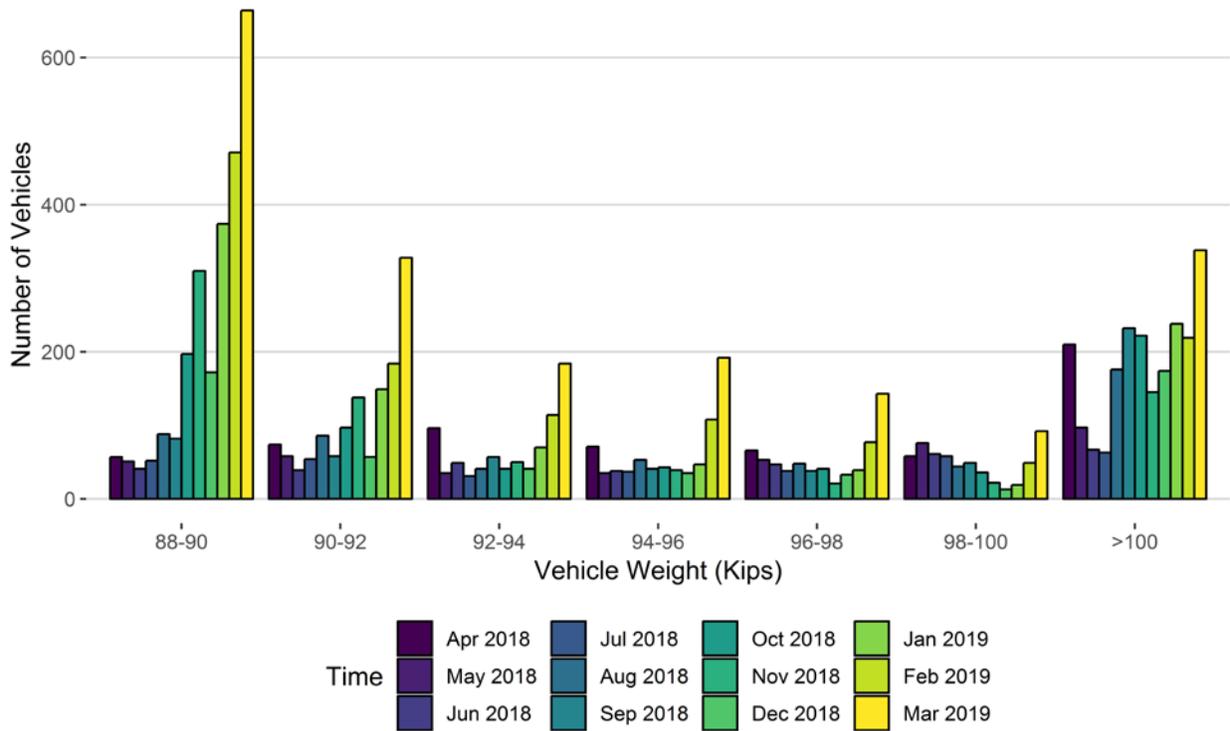
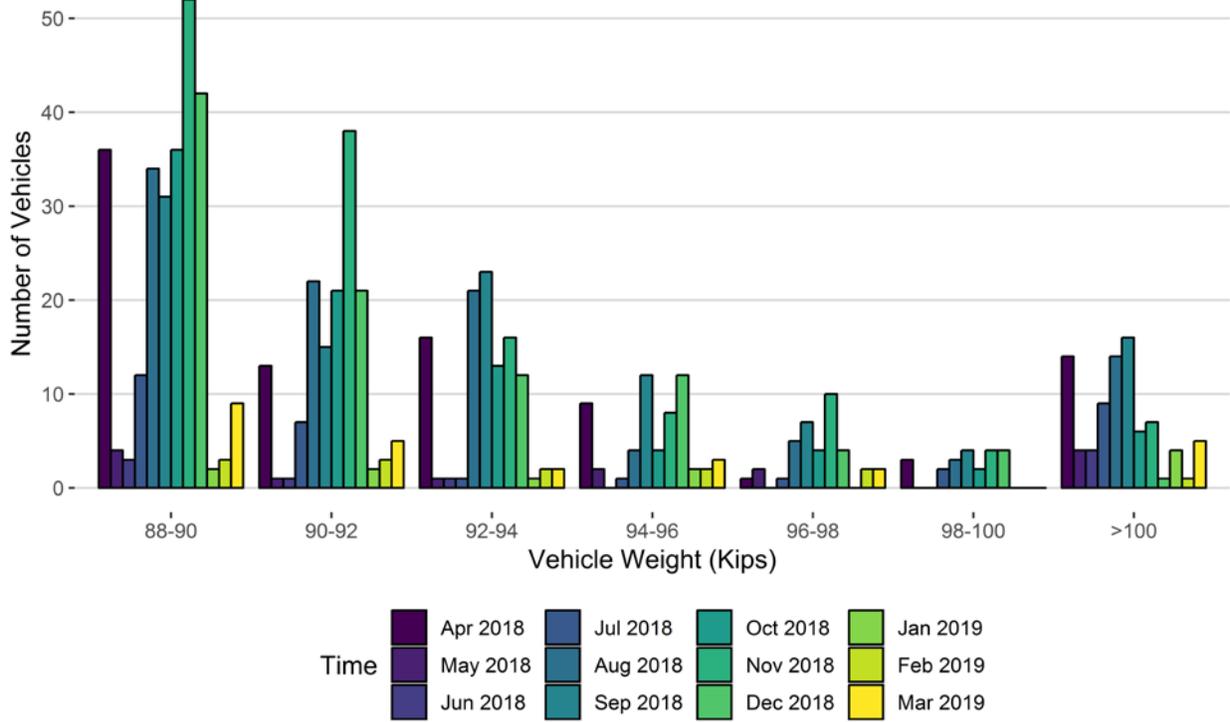


Figure 8 - Histogram of EB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019
88-90	57	51	41	52	88	82	197	310	172	374	471	664
90-92	74	58	39	54	86	58	97	138	57	149	184	328
92-94	96	35	49	31	41	57	41	50	41	70	114	184
94-96	71	35	38	37	53	41	43	39	35	47	108	192
96-98	66	53	47	38	48	38	41	21	33	39	77	143
98-100	58	76	61	58	44	49	36	22	13	19	49	92
>100	210	97	67	63	176	232	222	145	174	238	219	338
Total	632	405	342	333	536	557	677	725	525	936	1222	1941

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



Vehicle Weights (Kips)	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019
88-90	36	4	3	12	34	31	36	52	42	2	3	9
90-92	13	1	1	7	22	15	21	38	21	2	3	5
92-94	16	1	1	1	21	23	13	16	12	1	2	2
94-96	9	2	0	1	4	12	4	8	12	2	2	3
96-98	1	2	0	1	5	7	4	10	4	0	2	2
98-100	3	0	0	2	3	4	2	4	4	0	0	0
>100	14	4	4	9	14	16	6	7	1	4	1	5
Total	92	14	9	33	103	108	86	135	96	11	13	26

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

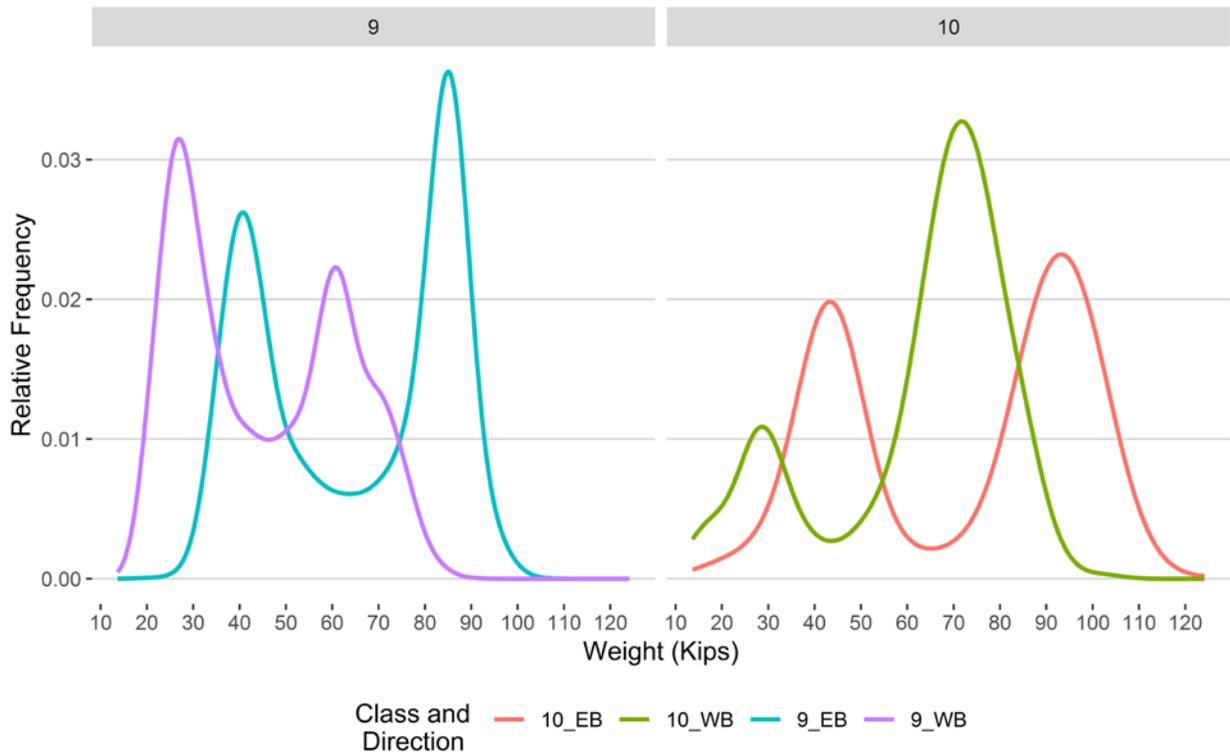


Figure 9 - Freight Percentage by Direction and Class

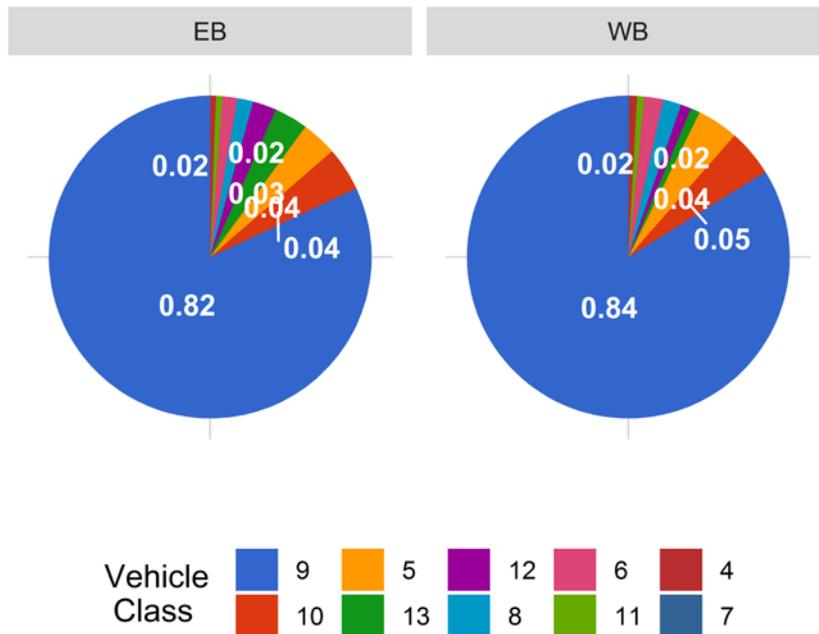


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

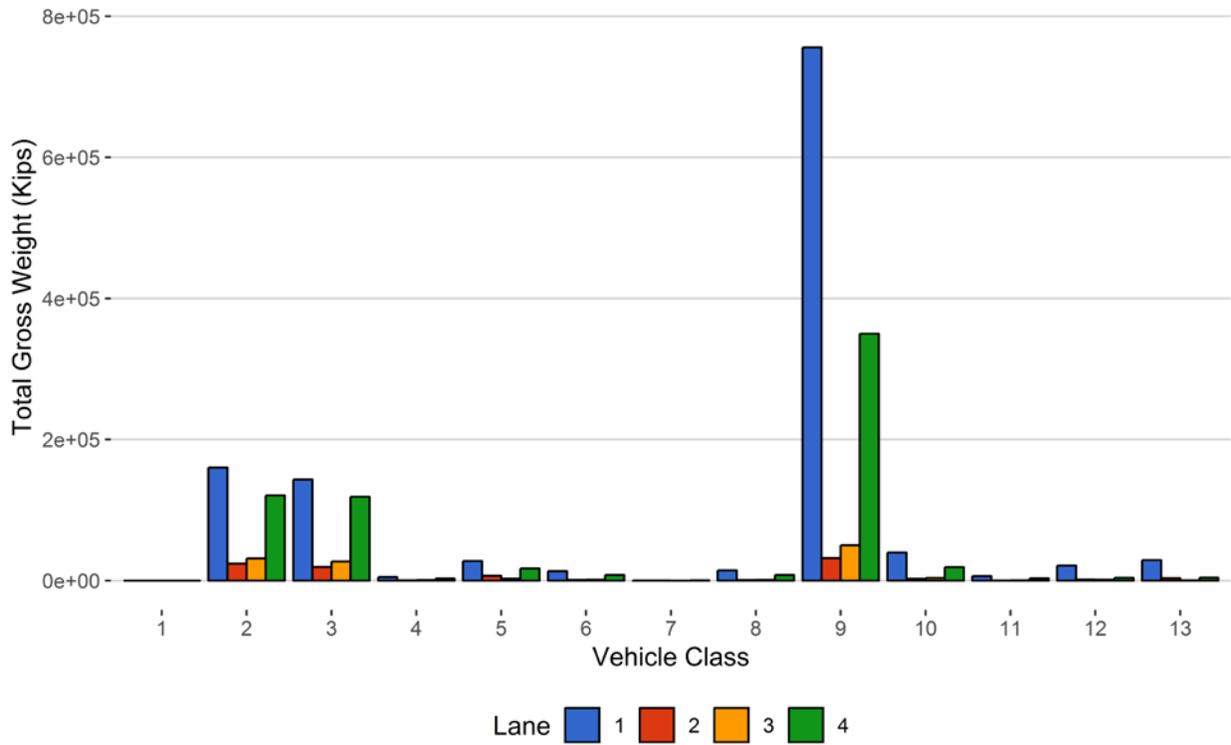


Figure 11 - Total Gross Vehicle Weight t

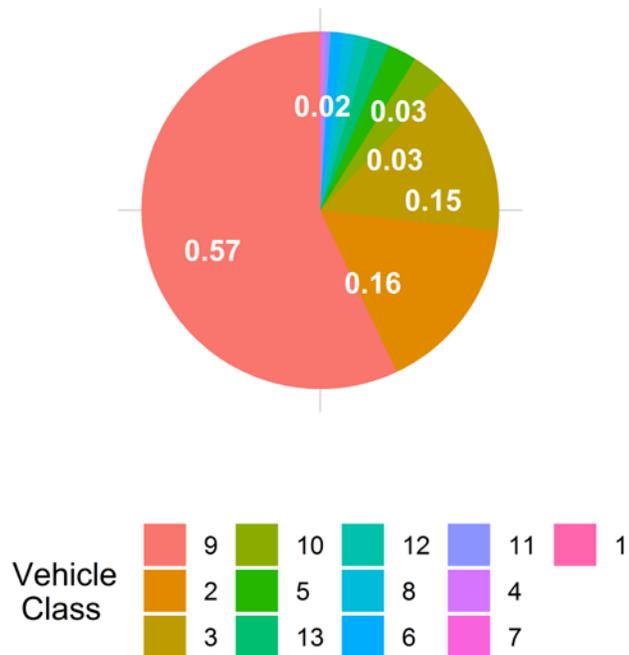


Figure 12 - Total ESALs by Class and Lane

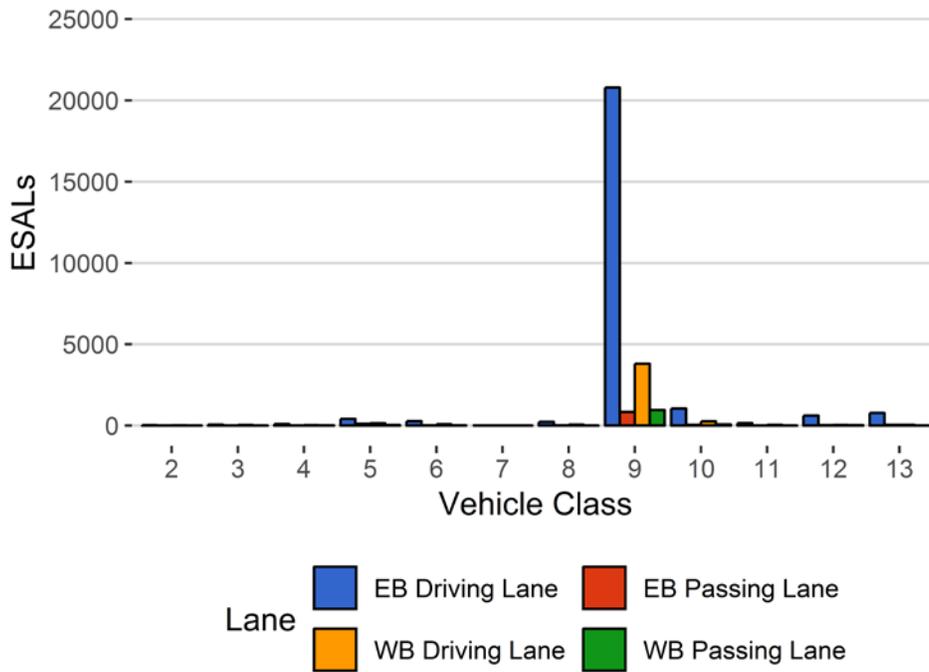


Figure 13 - ESALs by Class

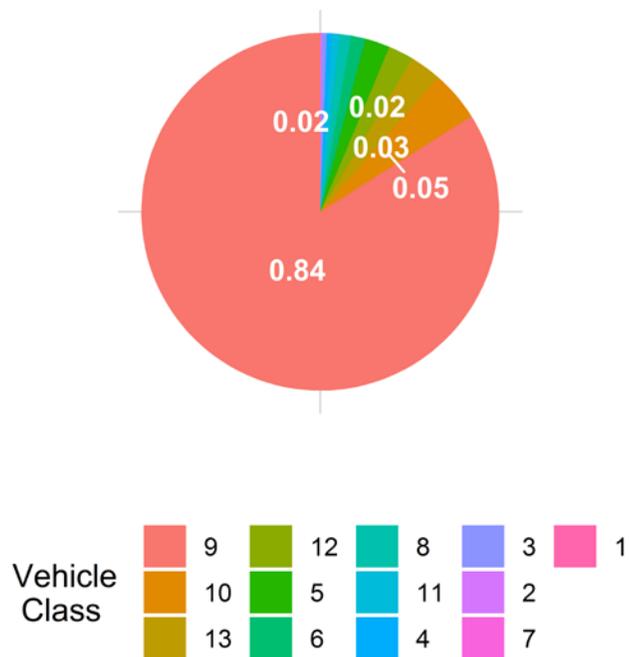


Table 1 Class 9 Front Axle Weight by Lane

<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>
July 2015	11.23	0.00	NA	NA	12.02	0.00	11.77	0.00
August 2015	11.58	3.14	NA	NA	11.85	-1.42	11.83	0.45
September 2015	11.64	3.73	NA	NA	11.77	-2.12	11.74	-0.31
October 2015	11.77	4.84	NA	NA	11.26	-6.34	11.63	-1.26
March 2016	10.41	-7.28	NA	NA	10.90	-9.29	8.69	-26.23
April 2016	10.29	-8.32	NA	NA	10.95	-8.90	8.97	-23.79
May 2016	10.17	-9.43	NA	NA	11.00	-8.51	8.92	-24.24
June 2016	10.09	-10.11	NA	NA	10.91	-9.26	8.54	-27.43
July 2016	10.14	-9.64	NA	NA	10.95	-8.93	8.69	-26.23
August 2016	10.23	-8.84	NA	NA	10.81	-10.12	9.00	-23.54
September 2016	10.33	-8.02	NA	NA	10.82	-10.01	10.15	-13.83
October 2016	10.45	-6.90	NA	NA	10.72	-10.86	10.31	-12.44
November 2016	10.66	-5.04	NA	NA	10.86	-9.69	10.02	-14.93
January 2017	11.04	-1.66	NA	NA	11.01	-8.41	11.44	-2.87
February 2017	11.05	-1.55	NA	NA	10.79	-10.28	10.20	-13.33
March 2017	10.94	-2.52	NA	NA	10.63	-11.54	9.82	-16.56
April 2017	10.77	-4.06	NA	NA	10.63	-11.60	9.80	-16.77
May 2017	10.69	-4.81	NA	NA	10.62	-11.66	11.21	-4.76
June 2017	10.56	-5.91	NA	NA	10.73	-10.76	10.44	-11.33
July 2017	10.58	-5.78	NA	NA	10.69	-11.05	10.81	-8.17
August 2017	10.69	-4.74	NA	NA	10.68	-11.18	11.04	-6.24
September 2017	10.75	-4.28	NA	NA	10.64	-11.51	11.19	-4.99
October 2017	10.92	-2.73	NA	NA	10.69	-11.08	11.26	-4.39
November 2017	11.26	0.29	NA	NA	10.47	-12.89	11.18	-5.06
December 2017	11.43	1.83	NA	NA	10.49	-12.71	11.31	-3.91
January	11.48	2.24	NA	NA	10.70	-10.96	11.85	0.62

2018								
February 2018	11.46	2.10	NA	NA	11.00	-8.49	11.21	-4.81
March 2018	11.32	0.80	NA	NA	10.87	-9.56	11.25	-4.44
April 2018	11.23	0.07	NA	NA	10.26	-14.62	10.71	-9.08
May 2018	10.97	-2.33	10.73	0.00	10.16	-15.52	8.99	-23.61
June 2018	10.94	-2.54	10.75	0.18	10.37	-13.77	9.61	-18.39
July 2018	10.95	-2.45	NA	NA	8.76	-27.15	10.21	-13.25
August 2018	11.12	-0.96	11.70	9.05	NA	NA	10.71	-9.07
October 2018	10.99	-2.14	12.27	14.38	NA	NA	11.04	-6.24
November 2018	11.38	1.41	12.64	17.79	10.47	-12.95	11.15	-5.34
December 2018	11.78	4.92	12.12	13.00	10.49	-12.76	11.21	-4.83
January 2019	11.84	5.50	11.96	11.45	10.71	-10.89	9.24	-21.53
February 2019	11.75	4.62	11.85	10.48	11.17	-7.06	8.89	-24.48
March 2019	11.84	5.42	11.85	10.47	11.49	-4.43	9.54	-18.98

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	2	0	0	0
2	2741	84974	50.7	0	0
3	1677	51989	31	0	0
4	12	371	0.2	24	0.4
5	125	3888	2.3	54	0.8
6	29	886	0.5	66	1
7	0	12	0	3	0
8	25	783	0.5	31	0.5
9	733	22731	13.6	5589	83.9
10	33	1029	0.6	381	5.7
11	6	183	0.1	15	0.2
12	13	389	0.2	184	2.8
13	15	456	0.3	313	4.7
TOTAL	5409	167692	100	6660	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>
2019-03-18	Monday	14:41:44	10	EB	2	124.14
2019-03-06	Wednesday	07:31:05	10	EB	1	110.3
2019-03-04	Monday	08:39:31	10	EB	1	109.51
2019-03-03	Sunday	18:06:28	10	EB	1	109.23
2019-03-12	Tuesday	17:18:05	10	EB	1	109.04
2019-03-04	Monday	09:43:40	10	EB	1	108.49
2019-03-06	Wednesday	12:32:17	10	EB	1	108.35
2019-03-08	Friday	09:07:10	10	EB	1	108.01
2019-03-06	Wednesday	08:41:05	10	EB	1	108
2019-03-16	Saturday	06:29:17	10	EB	1	106.82

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	182	21	11.5	5046	289	1316
5	EB	8	2099	41	2	34069	303	8803
6	EB	19	445	8	1.8	14181	126	2939
7	EB	11.5	3	0	0	154	0	60
8	EB	31	416	79	19	13658	1611	1606
9	EB	33	12112	165	1.4	782588	5073	194168
10	EB	33.5	588	20	3.4	41703	502	11338
11	EB	36.5	107	0	0	6252	0	1173
12	EB	36.5	275	1	0.4	22743	22	6371
13	EB	31.5	361	69	19.1	31226	1145	11014
TOTAL	****	****	16588	404	****	951622	****	238787
<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	160	48	30	3144	595	732
5	WB	8	1483	263	17.7	17878	1848	4059
6	WB	19	371	176	47.4	6217	2820	1256
7	WB	11.5	8	0	0	397	0	152
8	WB	31	305	206	67.5	3579	5096	255
9	WB	33	8832	3249	36.8	314334	85840	65047
10	WB	33.5	360	60	16.7	21088	1536	5519
11	WB	36.5	62	0	0	3428	0	583
12	WB	36.5	83	0	0	5073	0	1022
13	WB	31.5	59	0	0	4439	0	1290
TOTAL	****	****	11723	4002	****	379576	****	79915
GRAND TOTAL	****	****	28311	4406	275	1331198	106804	318703

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	1	2	0	0	3	0
2	160273	23919	31318	120863	336373	16.2
3	143130	19310	27062	118706	308208	14.8
4	5024	311	748	2992	9074	0.4
5	27721	6651	2699	17028	54098	2.6
6	13299	1008	1203	7834	23343	1.1
7	130	24	0	397	551	0
8	14397	872	909	7765	23943	1.1
9	755936	31725	50134	350040	1187834	57
10	39742	2464	3563	19061	64829	3.1
11	6207	46	275	3153	9680	0.5
12	21221	1544	1232	3841	27838	1.3
13	28991	3381	372	4067	36810	1.8
TOTAL	1216070	91255	119514	655746	2082585	100
GVW/LANE	58.39	4.38	5.74	31.49	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	0.3333
2	26	5	4	13	48	0.15	0.0013
3	69	10	11	35	125	0.4	0.0053
4	97	3	14	30	144	0.46	0.85
5	412	108	43	147	710	2.26	0.4
6	274	21	21	91	407	1.29	1
7	3	0	0	6	9	0.03	1.41
8	230	15	10	62	317	1.01	0.88
9	20784	836	956	3800	26377	83.98	2.52
10	1050	57	72	260	1439	4.58	3.02
11	163	0	5	56	224	0.71	2.55
12	614	31	28	40	713	2.27	3.89
13	783	51	8	56	898	2.86	4.18
TOTAL	24506	1137	1172	4595	31410	100	21
ESALS/LANE	78	3.6	3.7	14.6	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>
Apr 2018	165715	5524	1050	134201	81	31514.1	19	91.5	8.5
May 2018	207718	6701	1087	174027	83.8	33690.6	16.2	91.7	8.3
Jun 2018	213966	7132	1169	178902	83.6	35064.1	16.4	93.5	6.5
Jul 2018	224589	7245	1193	187591	83.5	36998	16.5	99.8	0.2
Aug 2018	220967	7128	1271	181570	82.2	39396.8	17.8	50.3	49.7
Sep 2018	182915	6097	1161	148079	81	34835.9	19	45.5	54.5
Oct 2018	187358	6044	1146	151826	81	35532	19	49.1	50.9
Nov 2018	178317	5944	956	149623	83.9	28694.4	16.1	65.1	34.9
Dec 2018	167266	5396	909	139093	83.2	28172.8	16.8	91.7	8.3
Jan 2019	144335	4656	951	114866	79.6	29469	20.4	93.7	6.3
Feb 2019	129514	4626	925	103624	80	25889.8	20	92.1	7.9
Mar 2019	167692	5409	991	136965	81.7	30726.7	18.3	91.4	8.6
TOTAL	2190352	-	-	1800367	-	389984	-	-	-
AVERAGE	182529	5992	1067	150031	82	32499	18	80	20

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>
Apr 2018	16746	1881	1202	11196	31025	90	10	4.2
May 2018	16376	979	1737	4705	23796	89	11	2.1
Jun 2018	14800	727	1342	6525	23394	91	9	1.9
Jul 2018	16921	0	9	10572	27502	100	0	1.7
Aug 2018	251	26582	0	14273	41106	35	65	11
Sep 2018	0	211935	0	12648	224583	6	94	15.3
Oct 2018	64	63810	1	14608	78483	19	81	9.9
Nov 2018	2583	1168550	295	13398	1184826	1	99	14.7
Dec 2018	15873	578548	780	11257	606458	4	96	4.7
Jan 2019	19913	106314	845	4721	131793	19	81	6.3
Feb 2019	17996	30201	939	2581	51717	40	60	25.5
Mar 2019	24521	14098	1197	4598	44414	66	34	29.8
TOTAL	146045	2203625	8347	111081	2469097	-	-	-
AVERAGE	12170	183635	696	9257	205758	47	53	11

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>
Apr 18	1063047	114734	126699	906030	2210510
May 18	1202778	121874	163857	794674	2283183
Jun 18	1116868	95255	124481	879493	2216097
Jul 18	1338183	368	2272	1217015	2557839
Aug 18	16791	1381273	24	1330177	2728265
Sep 18	44	1368941	18	1126942	2495945
Oct 18	5928	1219407	64	1155637	2381036
Nov 18	213558	895490	45406	1067537	2221991
Dec 18	936084	155229	108977	929969	2130259
Jan 19	1044413	70226	87357	662346	1864342
Feb 19	928605	63483	81834	471789	1545712
Mar 19	1216422	96811	120190	656042	2089466
TOTAL	9082722	5583090	861181	11197651	26724644
AVERAGE	756893	465258	71765	933138	2227054

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>
Apr 2018	5347	3.4	17.5	724	285
May 2018	3103	1.6	9.4	424	177
Jun 2018	2700	1.4	8.6	357	132
Jul 2018	3120	1.5	8.8	367	132
Aug 2018	4961	2.4	13.2	830	388
Sep 2018	6349	3.6	17.7	1374	825
Oct 2018	6442	3.8	19.6	918	383
Nov 2018	7311	4.6	23.9	2103	1234
Dec 2018	6426	4.1	22.5	1191	706
Jan 2019	5368	4.1	19.6	1056	357
Feb 2019	4531	4.1	20	1266	297
Mar 2019	6744	4.4	23.7	1982	448
TOTAL	62402	-	-	12592	5364
AVERAGE	5200.2	3.2	17	1049.3	447

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>
Apr 2018	192828	145227	338055	57	43
May 2018	196583	85794	282376	69.6	30.4
Jun 2018	177370	102298	279667	63.4	36.6
Jul 2018	193176	140629	333805	57.9	42.1
Aug 2018	207876	169241	377118	55.1	44.9
Sep 2018	207918	146232	354150	58.7	41.3
Oct 2018	195900	165435	361335	54.2	45.8
Nov 2018	148576	155750	304326	48.8	51.2
Dec 2018	160150	138035	298185	53.7	46.3
Jan 2019	197061	80711	277772	70.9	29.1
Feb 2019	176154	53112	229266	76.8	23.2
Mar 2019	238787	79915	318703	74.9	25.1
TOTAL	2292380	1462378	3754758	-	-
AVERAGE	191031.7	121864.8	312896.5	61.8	38.2