

SEPTEMBER 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 September 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: 206755 | Passenger Vehicles: 167936 | Heavy Commercial Vehicles: 38819

Monthly Average Daily Traffic (MADT): 6853 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1294

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 Wednesdays. 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 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 38819 HCVs, 6043 of them were overweight ³. These overweight HCVs contributed to 3% of total monthly volume, and 15.8% of total monthly

HCV volume. EB overweight vehicles typically reached highest numbers on Tuesdays, with lowest volumes reported on Saturdays. WB overweight vehicles tended to reach highest volumes on Wednesdays, 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 80.3% 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 ,497 EB vehicles exceeded 88,000 pounds (225 vehicles were Class 9's; 123 vehicles were Class 13's). Of vehicles traveling WB,

72 EB vehicles exceeded 88,000 pounds (54 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 September 2019.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in September 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 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 392986 tons of freight was recorded to have crossed the WIM. More freight was shipped EB (54.9%) than WB (45.1%). 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 206755 vehicles with a combined GVW of 2741511 kips (1 kip = 1,000 pounds = 0.5 tons) in September 2019. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 35998 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 58.9% of all ESALs were recorded EB while 41.1% was observed WB. In particular, 82% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 55% 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:

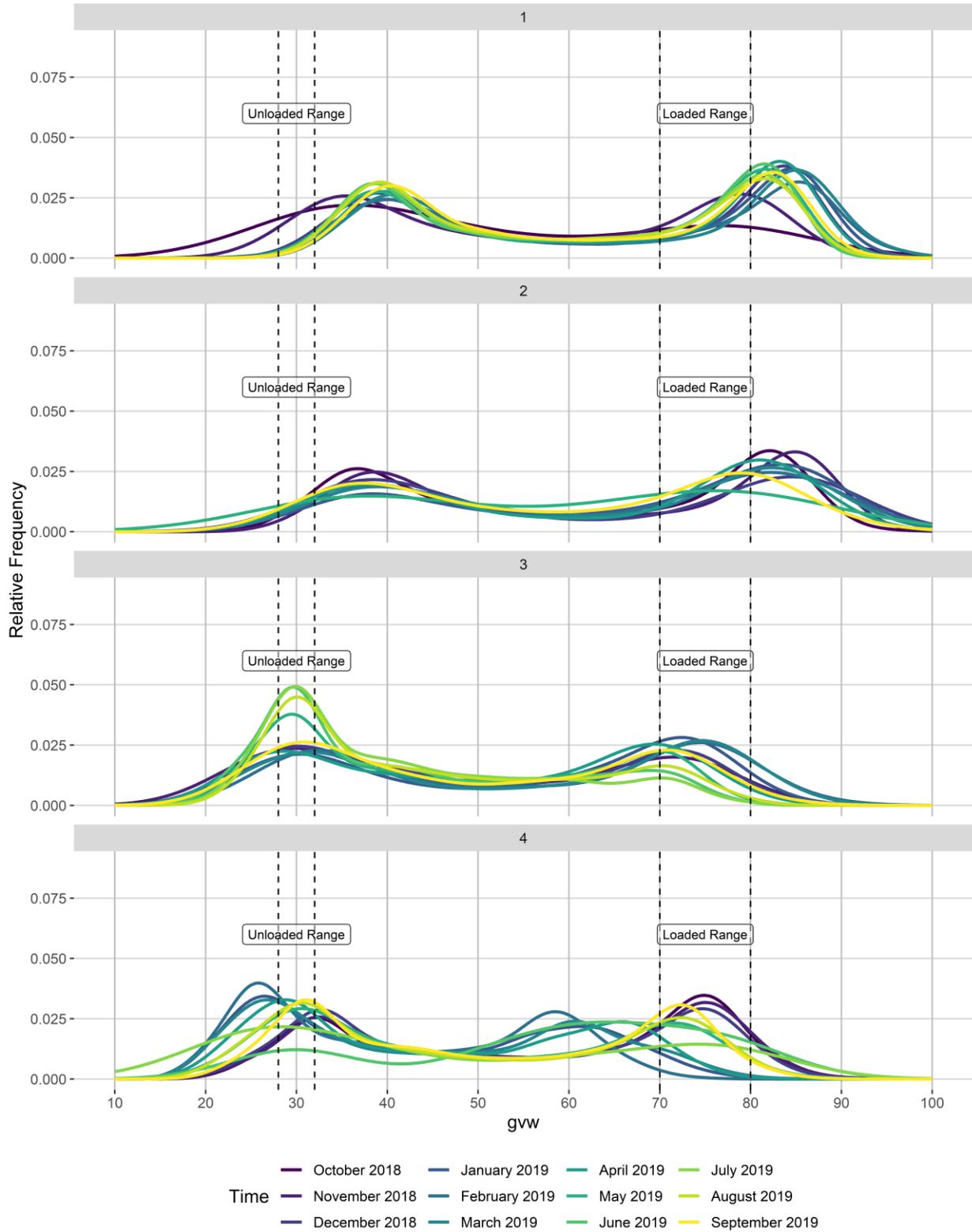
<http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html> MnDOT's vehicle

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.

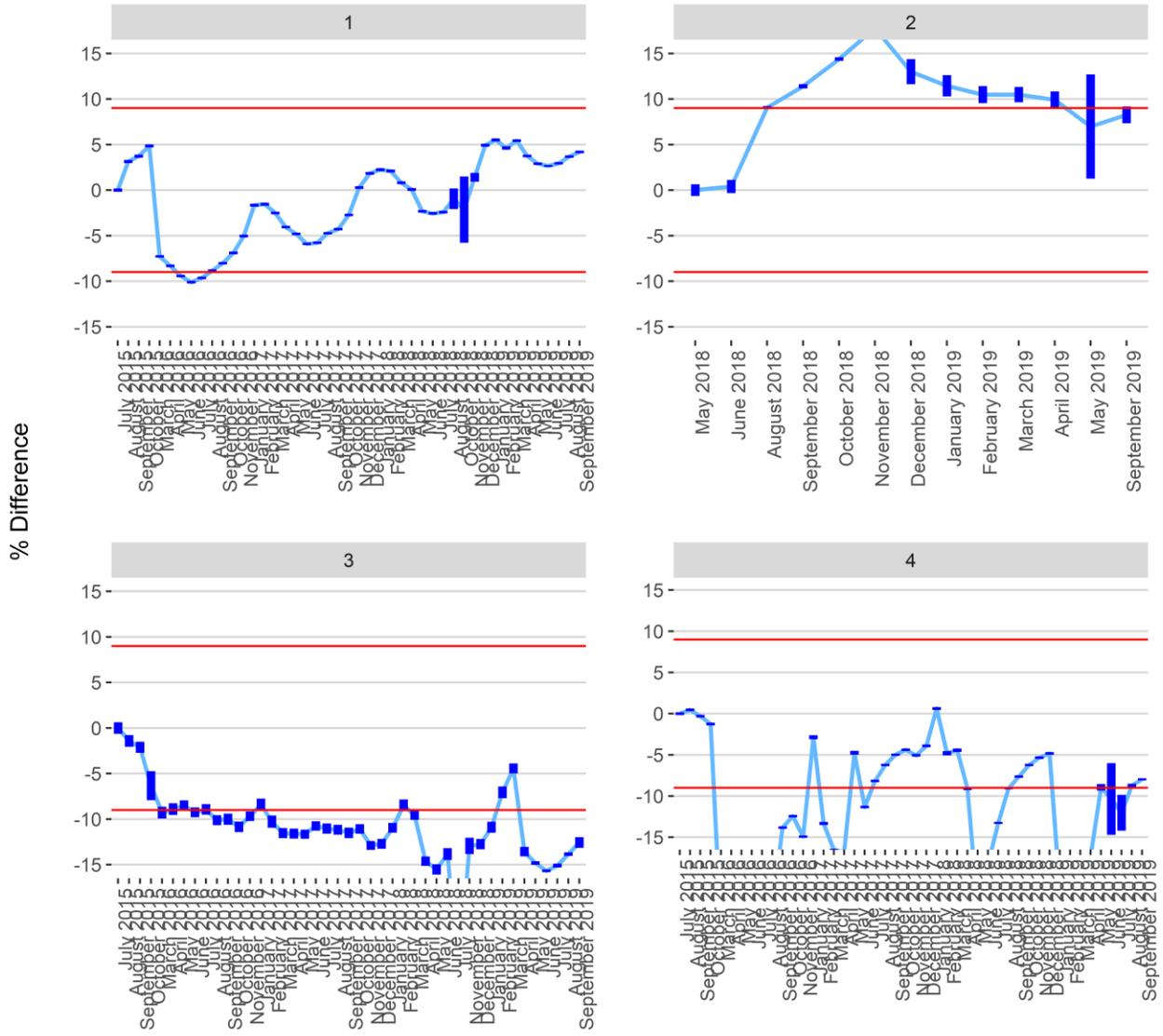
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

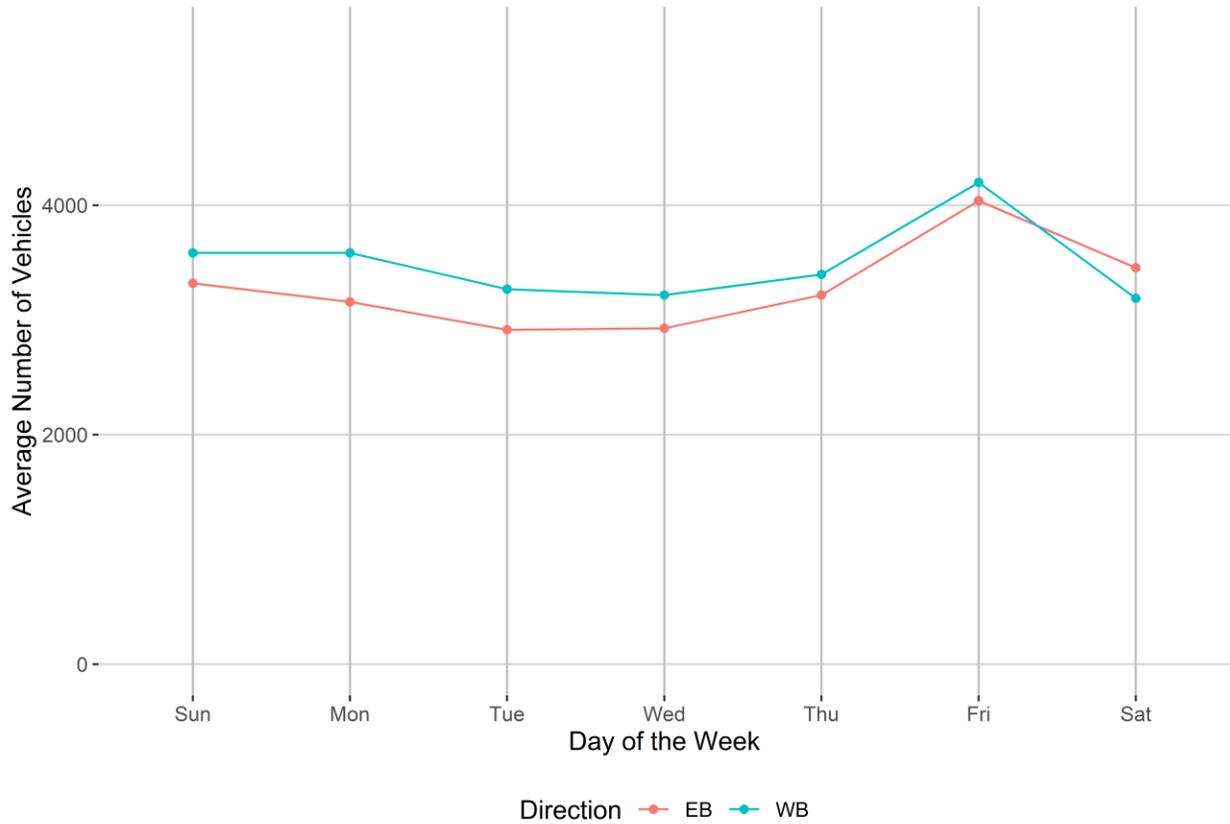


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

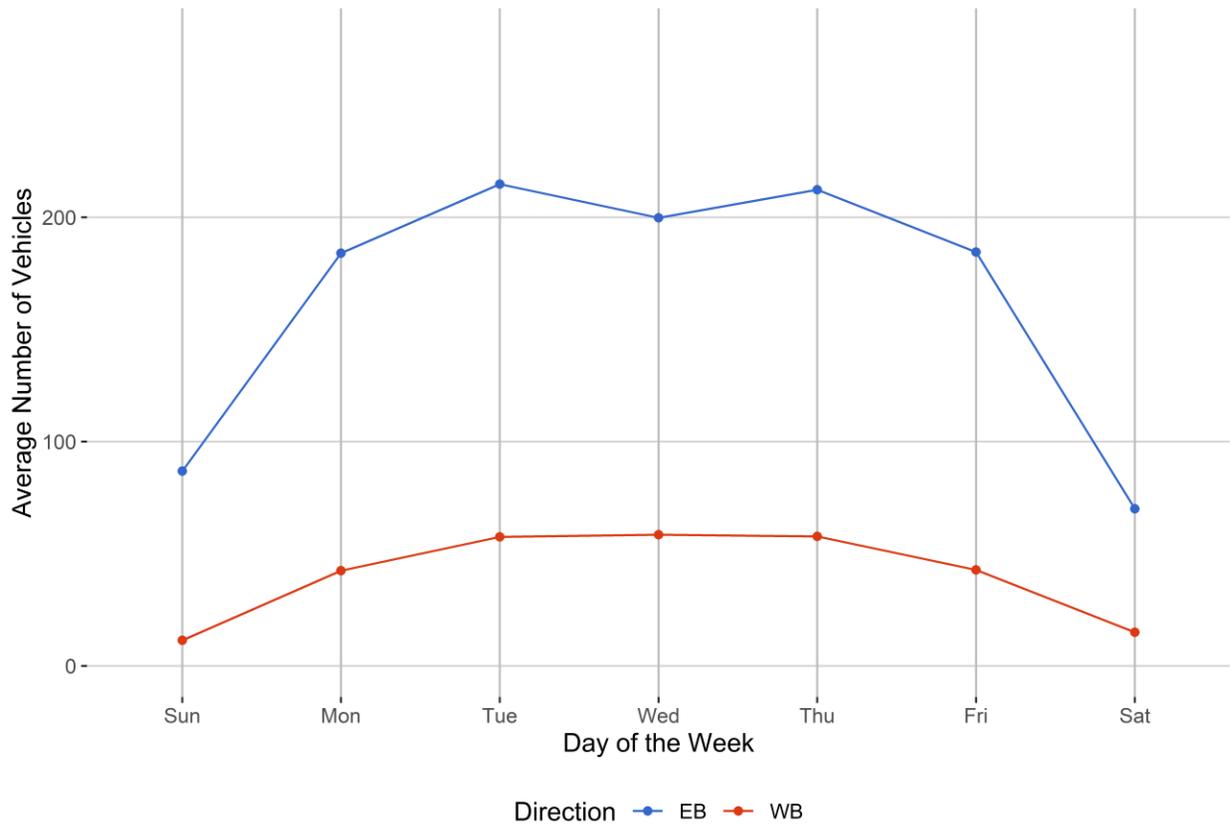


Figure 4 - Passenger Vehicles vs. Hour of the Day

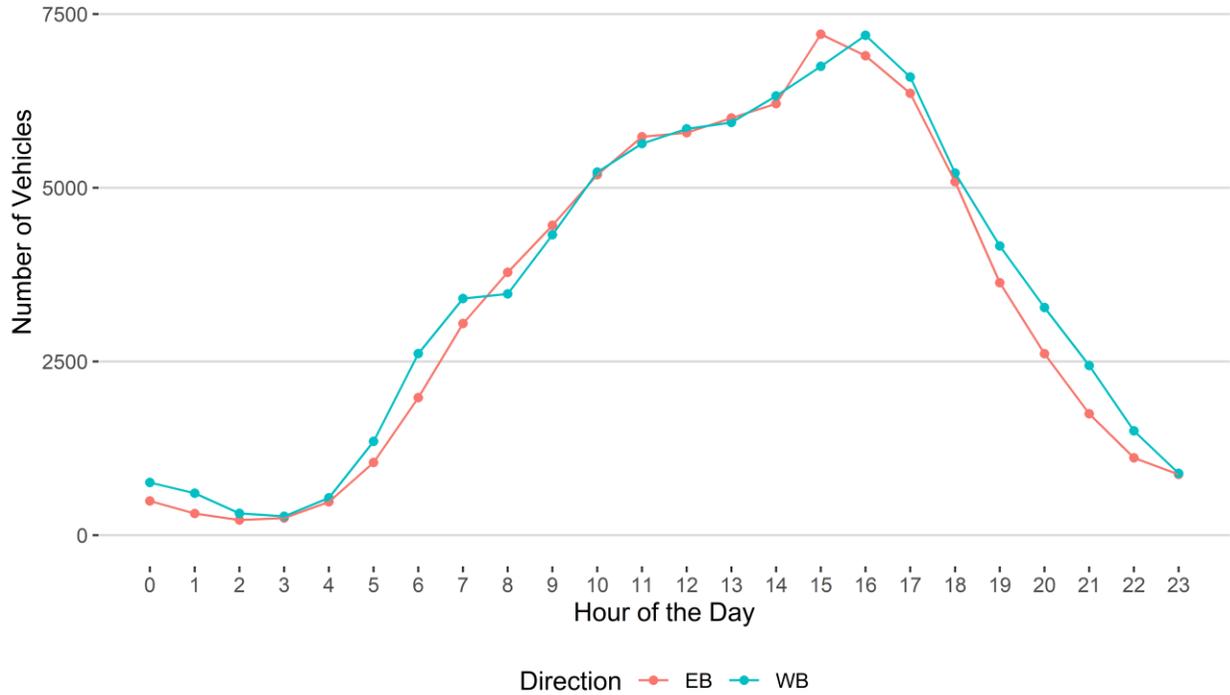


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

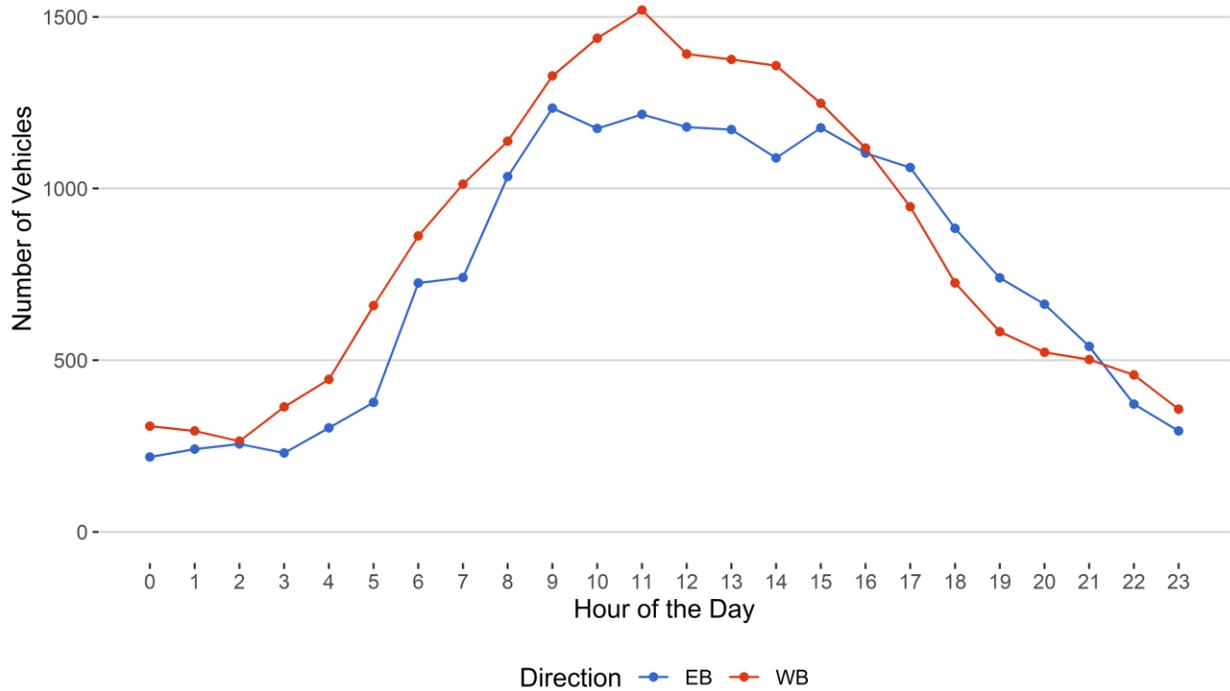


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

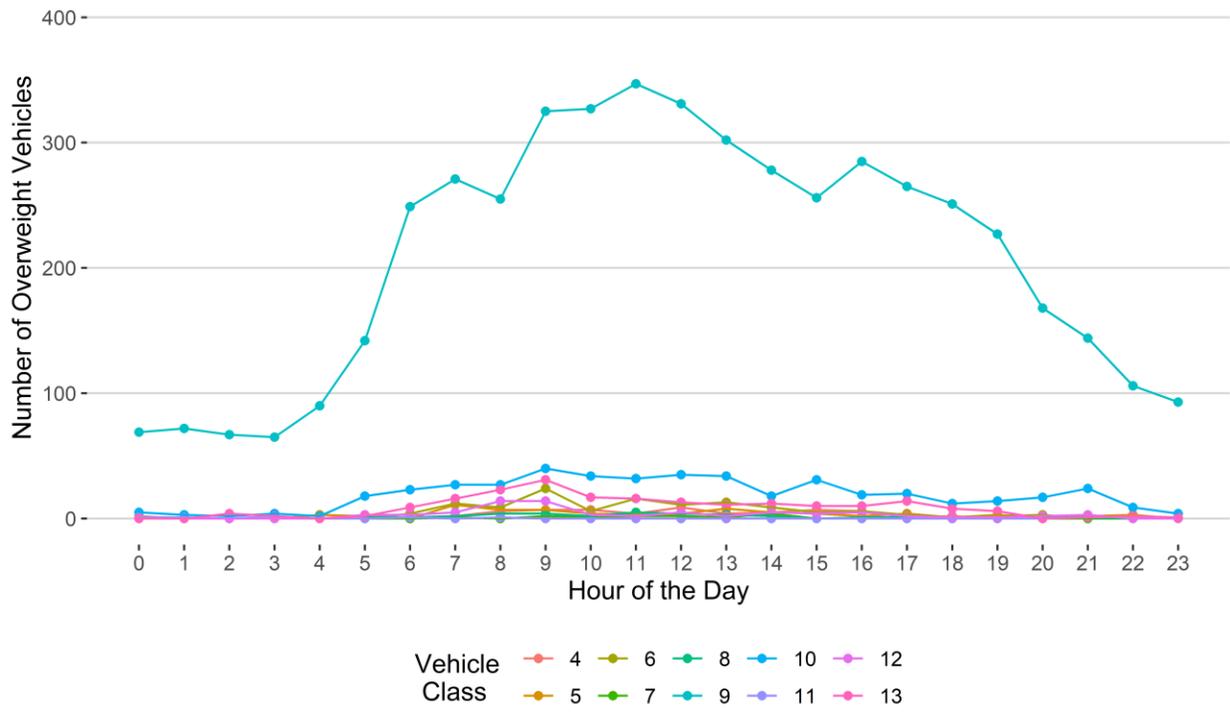


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

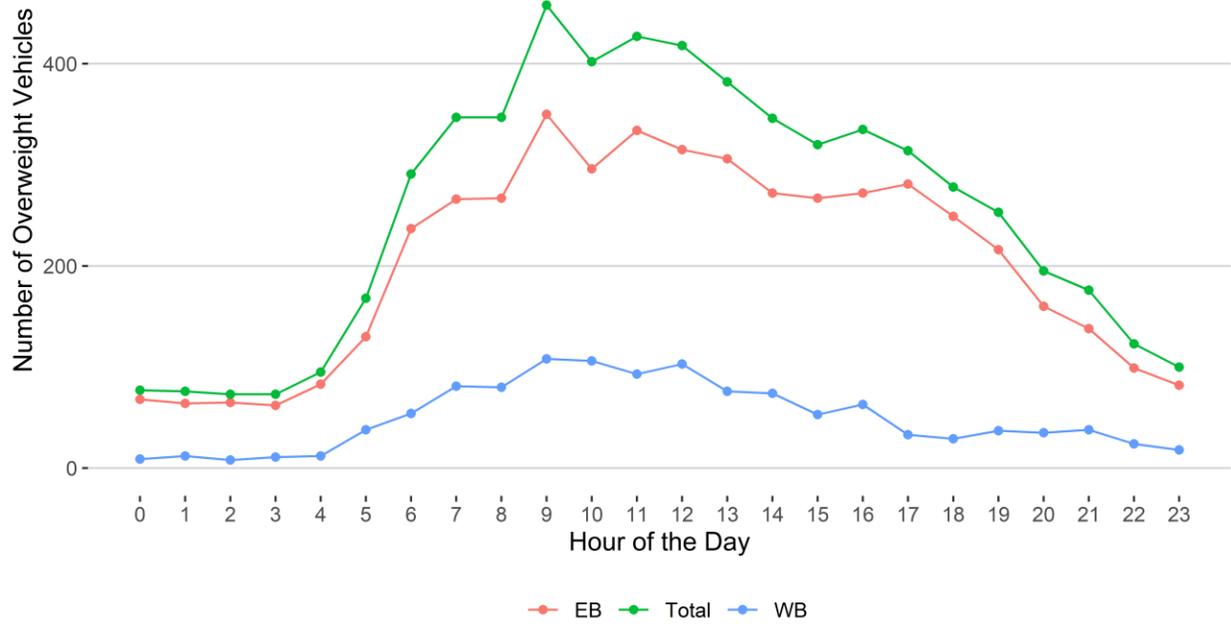
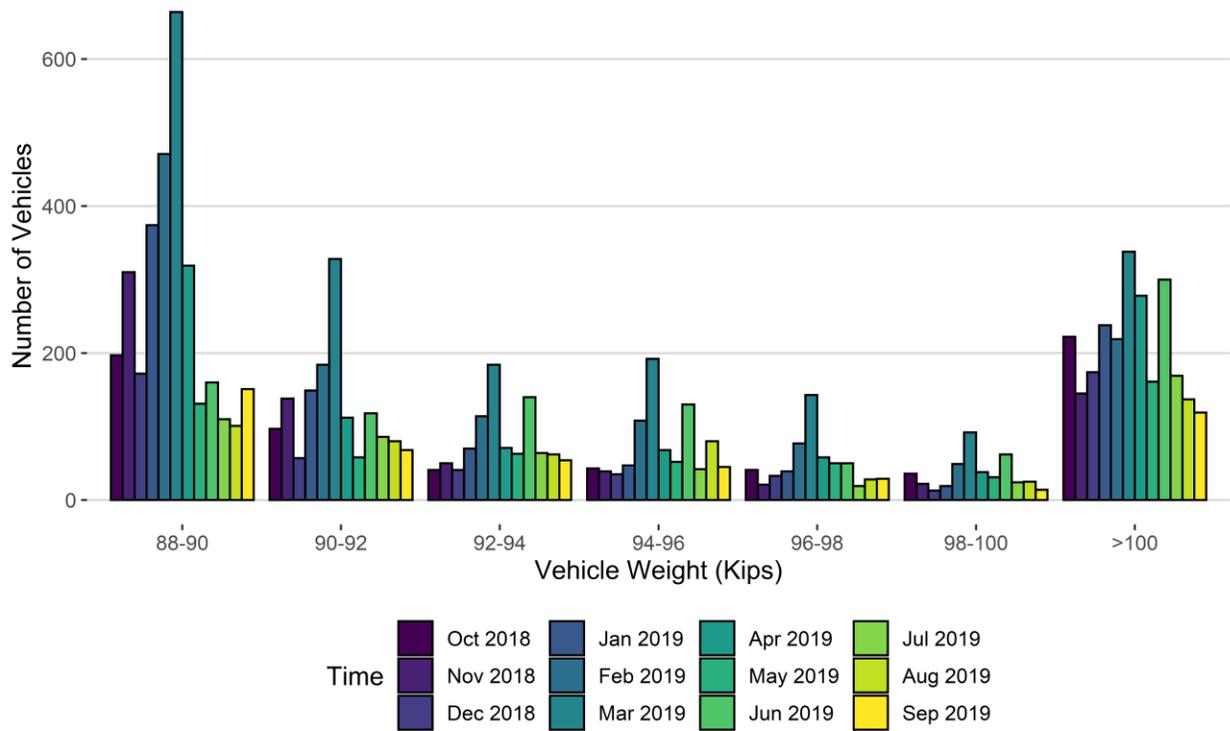
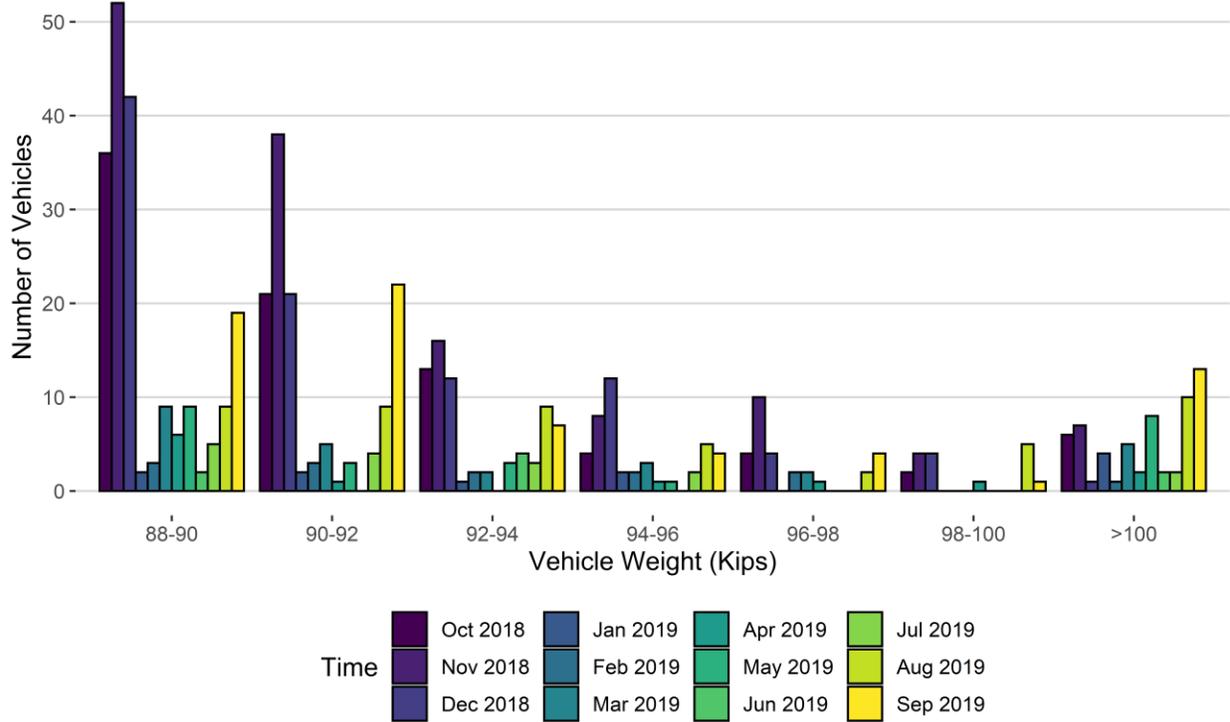


Figure 8 - Histogram of EB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019
88-90	197	310	172	374	471	664	319	131	160	110	101	151
90-92	97	138	57	149	184	328	112	58	118	86	80	68
92-94	41	50	41	70	114	184	71	63	140	64	62	54
94-96	43	39	35	47	108	192	68	52	130	42	80	45
96-98	41	21	33	39	77	143	58	50	50	19	28	29
98-100	36	22	13	19	49	92	38	31	62	24	25	14
>100	222	145	174	238	219	338	278	161	300	169	137	119
Total	677	725	525	936	1222	1941	944	546	960	514	513	480

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



Vehicle Weights (Kips)	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019	Aug 2019	Sep 2019
88-90	36	52	42	2	3	9	6	9	2	5	9	19
90-92	21	38	21	2	3	5	1	3	0	4	9	22
92-94	13	16	12	1	2	2	0	3	4	3	9	7
94-96	4	8	12	2	2	3	1	1	0	2	5	4
96-98	4	10	4	0	2	2	1	0	0	0	2	4
98-100	2	4	4	0	0	0	1	0	0	0	5	1
>100	6	7	1	4	1	5	2	8	2	2	10	13
Total	86	135	96	11	13	26	12	24	8	16	49	70

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

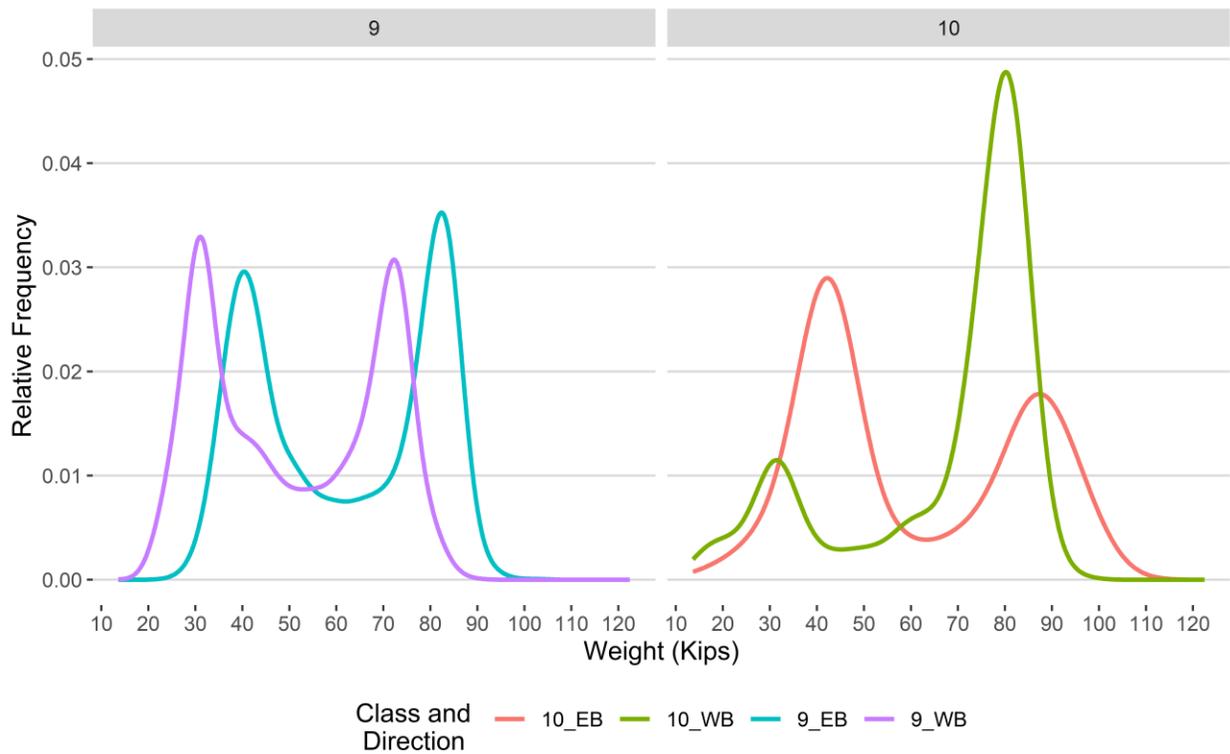


Figure 9 - Freight Percentage by Direction and Class

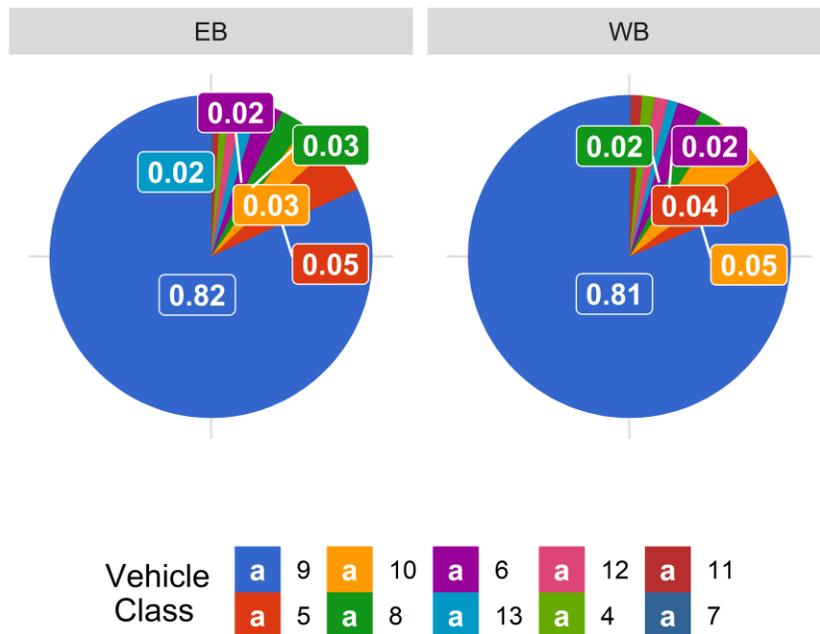


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

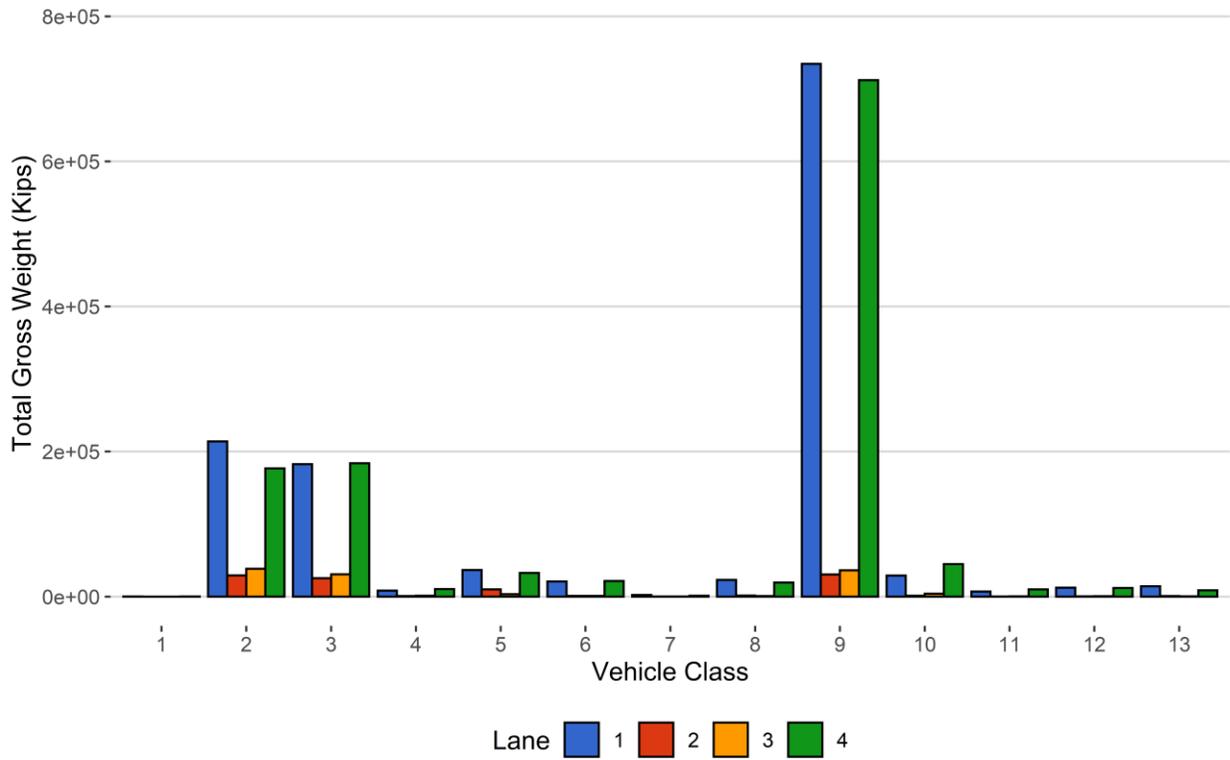


Figure 11 - Total Gross Vehicle Weight t

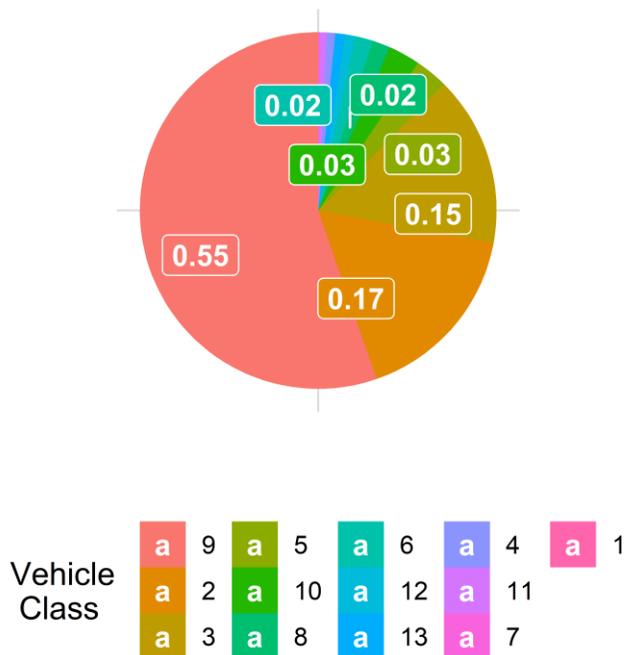


Figure 12 - Total ESALs by Class and Lane

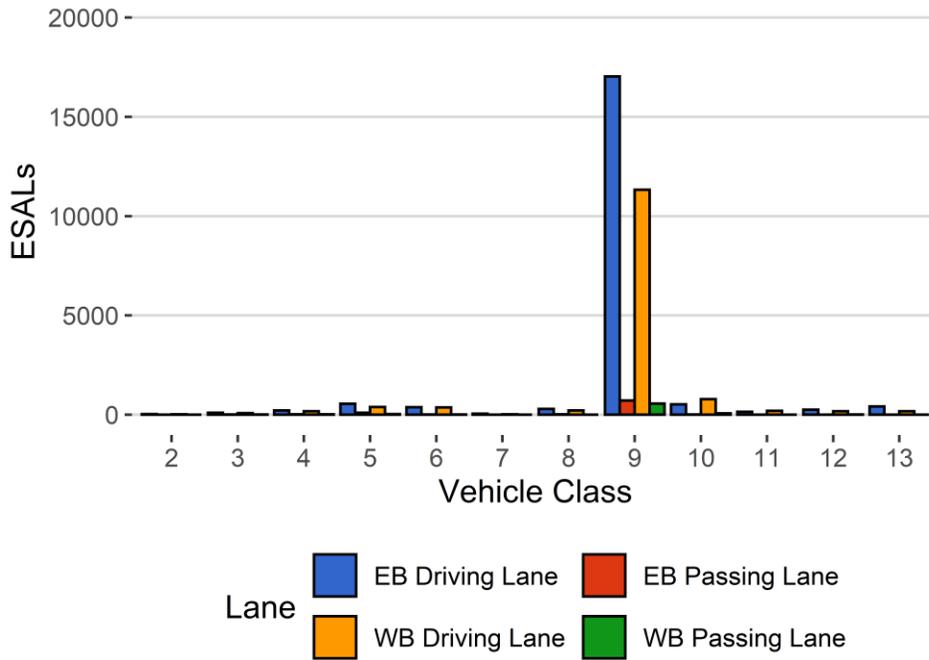


Figure 13 - ESALs by Class

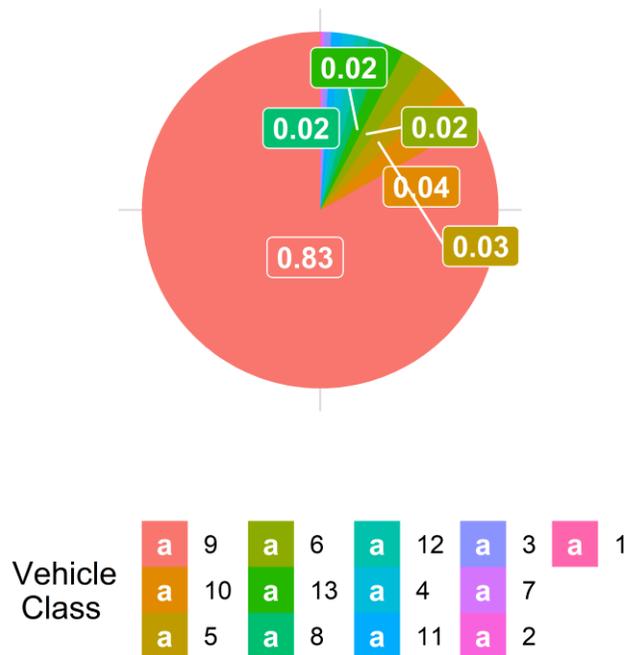


Table 1 Class 9 Front Axle Weight by Lane

<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	-2.56	10.77	0.39	10.36	-13.85	9.62	-18.28
July 2018	10.95	-2.42	NA	NA	8.76	-27.15	10.21	-13.26
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
April 2019	11.65	3.74	11.79	9.92	10.39	-13.57	9.73	-17.34
May 2019	11.55	2.90	11.48	6.98	10.24	-14.82	10.72	-8.94
June 2019	11.52	2.65	NA	NA	10.14	-15.68	10.55	-10.36
July 2019	11.56	2.94	NA	NA	10.21	-15.10	10.36	-12.03
August 2019	11.64	3.68	NA	NA	10.36	-13.84	10.74	-8.74
September 2019	11.70	4.19	11.62	8.27	10.51	-12.57	10.84	-7.97

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	2	54	0	0	0
2	3549	106456	51.5	0	0
3	2048	61427	29.7	0	0
4	24	731	0.4	66	1.1
5	183	5484	2.7	74	1.2
6	50	1492	0.7	124	2.1
7	2	70	0	15	0.2
8	46	1392	0.7	33	0.5
9	915	27451	13.3	4985	82.5
10	41	1238	0.6	454	7.5
11	11	316	0.2	10	0.2
12	13	385	0.2	74	1.2
13	9	260	0.1	208	3.4
TOTAL	6892	206755	100	6043	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>
2019-09-11	Wednesday	17:31:37	9	EB	2	122.45
2019-09-06	Friday	20:40:38	10	EB	1	104.32
2019-09-13	Friday	13:51:39	9	EB	2	103.82
2019-09-21	Saturday	12:50:34	9	EB	1	103.73
2019-09-10	Tuesday	11:05:15	9	WB	4	103.64
2019-09-06	Friday	07:58:05	9	EB	1	102.79
2019-09-25	Wednesday	11:52:57	9	EB	2	102.71
2019-09-25	Wednesday	14:55:22	9	EB	2	102.57
2019-09-23	Monday	12:17:13	9	EB	1	100.65
2019-09-16	Monday	11:09:23	10	EB	1	100.15

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	298	16	5.4	8860	226	2315
5	EB	8	2924	89	3	46056	649	11688
6	EB	19	674	8	1.2	21587	140	4466
7	EB	11.5	38	0	0	2288	0	925
8	EB	31	704	173	24.6	20895	3637	2217
9	EB	33	12416	228	1.8	758019	7071	177908
10	EB	33.5	500	30	6	29369	798	6812
11	EB	36.5	132	5	3.8	7013	106	1189
12	EB	36.5	187	1	0.5	12677	19	2944
13	EB	31.5	152	15	9.9	14813	195	5249
TOTAL	****	****	18025	565	****	921578	****	215713
<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	422	46	10.9	10929	608	2644
5	WB	8	2479	318	12.8	33531	2326	8121
6	WB	19	796	264	33.2	17954	4551	3923
7	WB	11.5	31	1	3.2	1387	10	521
8	WB	31	667	373	55.9	11194	8995	1040
9	WB	33	14628	4012	27.4	631992	116469	140832
10	WB	33.5	720	109	15.1	45651	2969	12591
11	WB	36.5	179	3	1.7	10197	63	1887
12	WB	36.5	192	0	0	12523	0	2758
13	WB	31.5	104	0	0	9185	0	2955
TOTAL	****	****	20218	5126	****	784544	****	177272
GRAND TOTAL	****	****	38243	5691	216	1706122	148833	392986

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	53	5	1	17	77	0
2	213931	29166	38421	176787	458305	16.8
3	182590	25397	30674	183904	422566	15.4
4	8269	817	1111	10426	20623	0.8
5	36725	9980	3244	32612	82562	3
6	20766	961	975	21530	44232	1.6
7	2256	32	160	1237	3684	0.1
8	23080	1452	739	19450	44722	1.6
9	734600	30490	36354	712108	1513552	55.3
10	28919	1248	3886	44734	78787	2.9
11	7062	57	276	9984	17380	0.6
12	12308	388	539	11985	25219	0.9
13	14185	823	412	8773	24193	0.9
TOTAL	1284745	100817	116792	1233548	2735902	100
GVW/LANE	46.96	3.68	4.27	45.09	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	0.0185
2	34	5	5	22	66	0.19	0.0013
3	103	13	11	83	210	0.59	0.007
4	212	18	24	180	435	1.22	1.21
5	552	103	32	390	1077	3.02	0.4
6	376	14	12	372	774	2.17	1.05
7	49	0	3	25	77	0.22	2.13
8	297	22	6	214	538	1.51	0.79
9	17028	720	564	11328	29640	83.21	2.19
10	520	18	72	783	1393	3.91	2.28
11	148	1	4	199	352	0.99	2.23
12	253	7	9	173	443	1.24	2.3
13	419	8	6	181	614	1.72	4.62
TOTAL	19992	932	748	13948	35620	100	19
ESALS/LANE	56.1	2.6	2.1	39.2	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>
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
Apr 2019	181026	6034	1016	150536	83.2	30489.7	16.8	89.4	10.6
May 2019	213594	6890	1085	179966	84.3	33628	15.7	67.9	32.1
Jun 2019	228705	7624	1036	197617	86.4	31087.6	13.6	67.8	32.2
Jul 2019	240734	7766	1013	209341	87	31392.7	13	69.4	30.6
Aug 2019	253765	8186	1244	215193	84.8	38572.2	15.2	76.7	23.3
Sep 2019	206755	6853	1294	167936	81.2	38818.6	18.8	93.5	6.5
TOTAL	2299061	-	-	1916586	-	382474	-	-	-
AVERAGE	191588	6286	1047	159716	83	31873	17	79	21

###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>
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
Apr 2019	22506	9489	954	4149	37098	72	28	10.2
May 2019	23198	77	5065	1377	29717	83	17	5
Jun 2019	44270	0	10778	53	55101	80	20	4.2
Jul 2019	21800	0	6454	162	28416	77	23	4.9
Aug 2019	22546	0	6633	5013	34192	81	19	5.8
Sep 2019	20003	1217	803	13976	35998	94	6	6.8
TOTAL	235274	1972303	34744	75891	2318212	-	-	-
AVERAGE	19606	164359	2895	6324	193184	53	47	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>
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
Apr 19	1244314	120017	125942	627946	2118218
May 19	1475893	3230	746759	115061	2340943
Jun 19	2969408	16	1530595	6134	4506154
Jul 19	1515563	35	795934	18538	2330070
Aug 19	1591834	48	686107	529080	2807070
Sep 19	1285187	103428	118216	1234680	2741511
TOTAL	14427210	2727420	4447382	7474760	29076771
AVERAGE	1202267	227285	370615	622897	2423064

###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>
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
Apr 2019	6228	3.7	22	982	341
May 2019	5775	2.9	18.6	576	205
Jun 2019	11140	2.7	19.8	988	368

Jul 2019	5399	2.5	18.8	546	195
Aug 2019	6051	2.5	16.4	582	180
Sep 2019	6074	3	15.8	569	160
TOTAL	77489	-	-	12759	4874
AVERAGE	6457.4	3.5	20.1	1063.2	406.2

###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>
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
Apr 2019	238316	71312	309628	77	23
May 2019	241828	82288	324116	74.6	25.4
Jun 2019	471667	114813	586480	80.4	19.6
Jul 2019	230355	56870	287225	80.2	19.8
Aug 2019	243224	124422	367646	66.2	33.8
Sep 2019	215713	177272	392986	54.9	45.1
TOTAL	2757732	1299936	4057668	-	-
AVERAGE	229811	108328	338139	67.7	32.3