

APRIL 2019



**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 April 2019. 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. 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: 482019 | Passenger Vehicles: 444670 | Heavy Commercial Vehicles: 37349

Monthly Average Daily Traffic (MADT): 16067 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1245

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 Mondays, with lowest volumes reported on Saturdays (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 03 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 03 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 37349 HCVs, 4580 of them were overweight ³. These overweight HCVs contributed to 1% of total monthly volume, and 12.3% 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 Saturdays. 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 85.8% of all overweight vehicles traveling EB this month (see Figure 7 & 8). Figure 9 shows the number of vehicles exceeding 88,000 pounds that crossed the WIM over the last 12 months. The highest number of 88,000+ vehicles within the last 12 months occurred in October.

WIMs are currently used as a screening tool for weight enforcement, and it is estimated that the WIM scales can measure gross vehicle weights (GVW) within 90-95% of static weight scale measurements. Due to the possibility of measurement error, vehicles exceeding 10% of their legal weight limits (or 1.1 times their legal weight limits) are considered overweight in this report ⁴.

Using normal load limits ,2192 EB vehicles exceeded 88,000 pounds (1648 vehicles were Class 9's; 322 vehicles were Class 10's). Of vehicles traveling WB,

95 EB vehicles exceeded 88,000 pounds (76 vehicles were Class 13's; 19 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from April 2019.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in April 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 291849 tons of freight was recorded to have crossed the WIM. More freight was shipped EB (63.3%) than WB (36.7%). See Table 4 and Figure 11 for more freight information.

Infrastructure Considerations

Bridge. Bridge No. 8528 (a box culvert) is approximately 1.3 miles east of WIM #43. Bridges No. 14001 and 5854 are approximately 0.8 miles west of WIM #43. US 10 also crosses the Buffalo River, specifically via Bridges No. 14001 (carrying EB traffic) and 5854 (carrying WB traffic). WIM #43 recorded a total of 482019 vehicles with a combined GVW of 3543029 kips (1 kip = 1,000 pounds = 0.5 tons) in April 2019. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 28125 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 73.6% of all ESALs were recorded EB while 26.4% was observed WB. In particular, 66% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 25% 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).

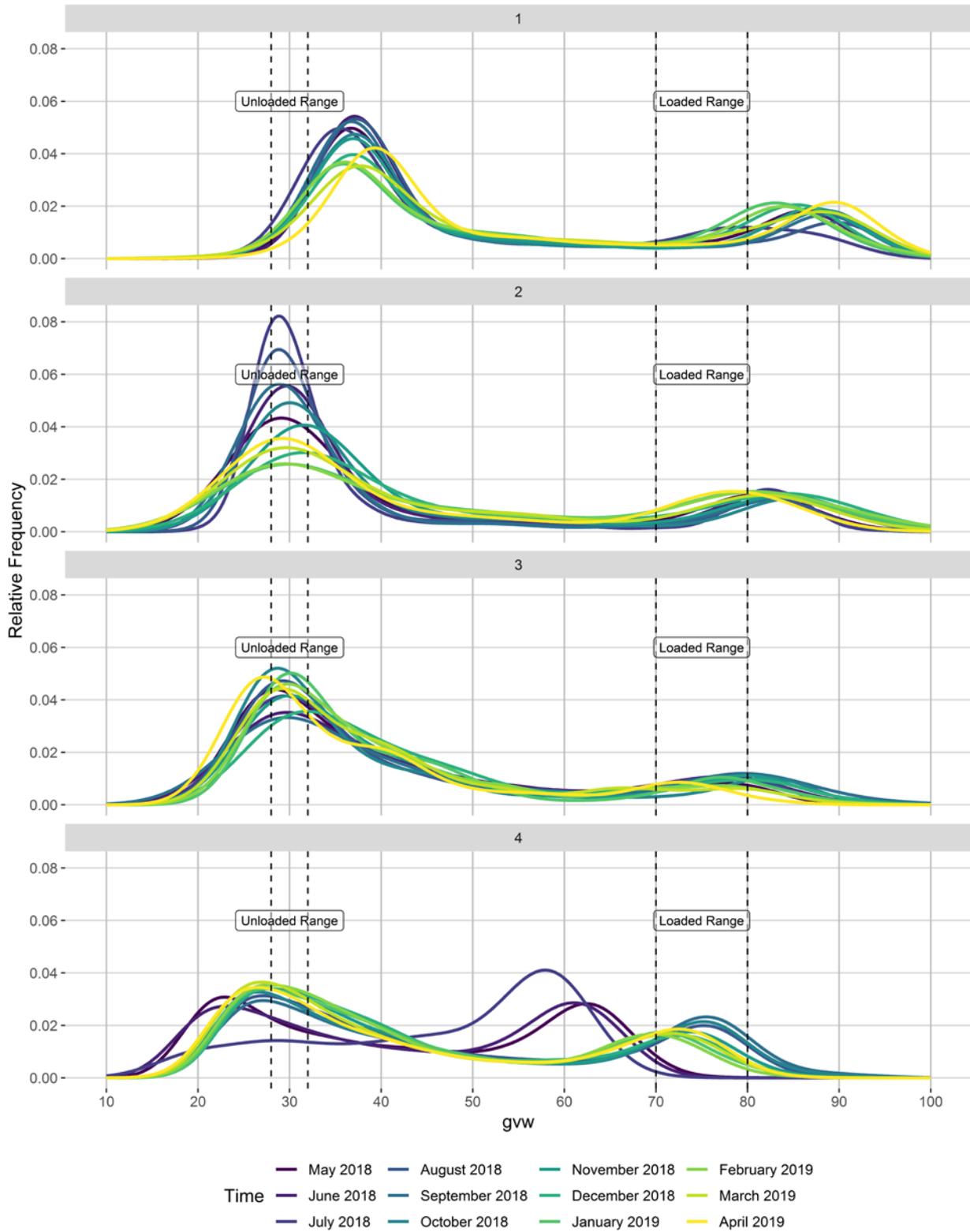
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

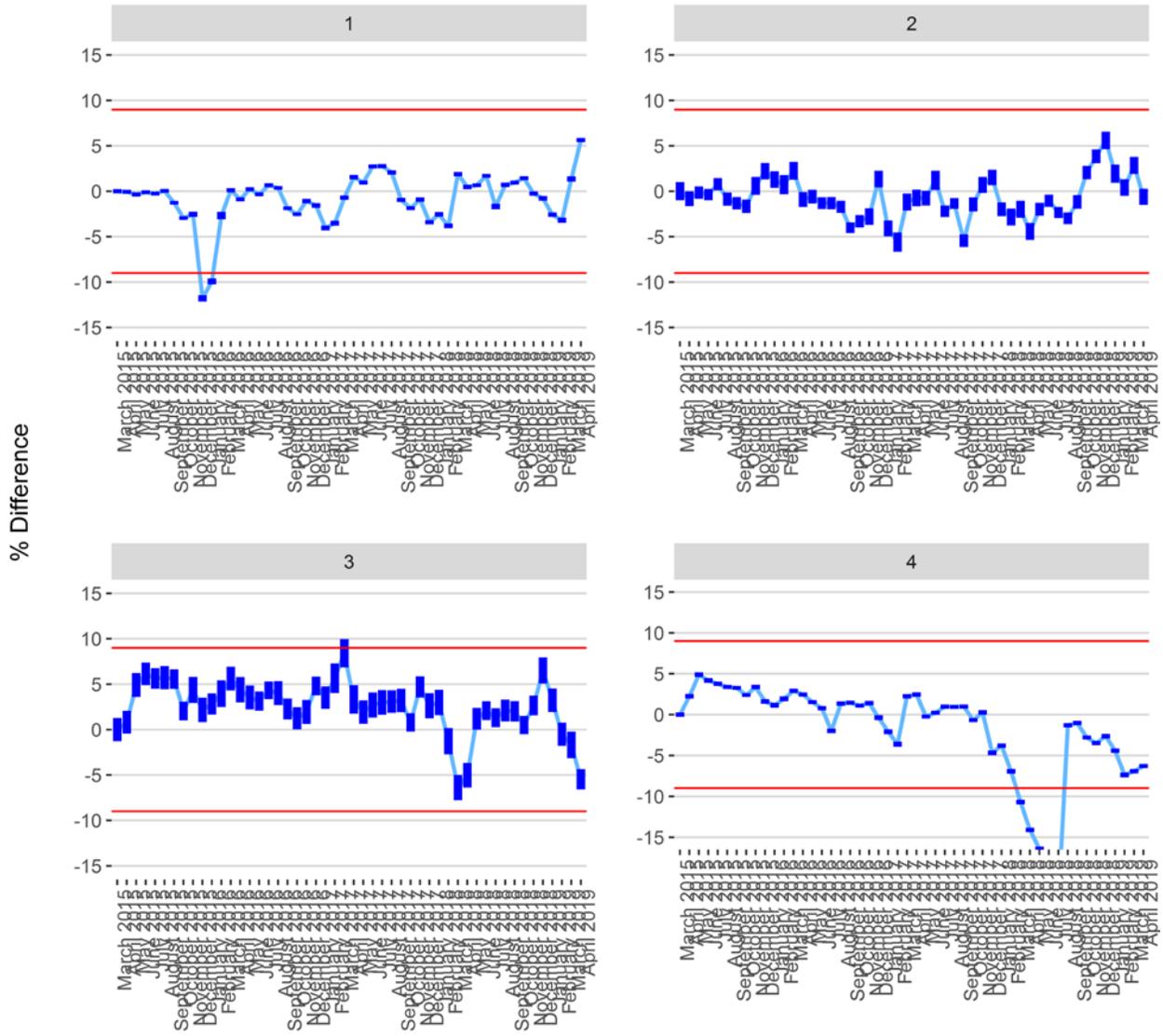
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

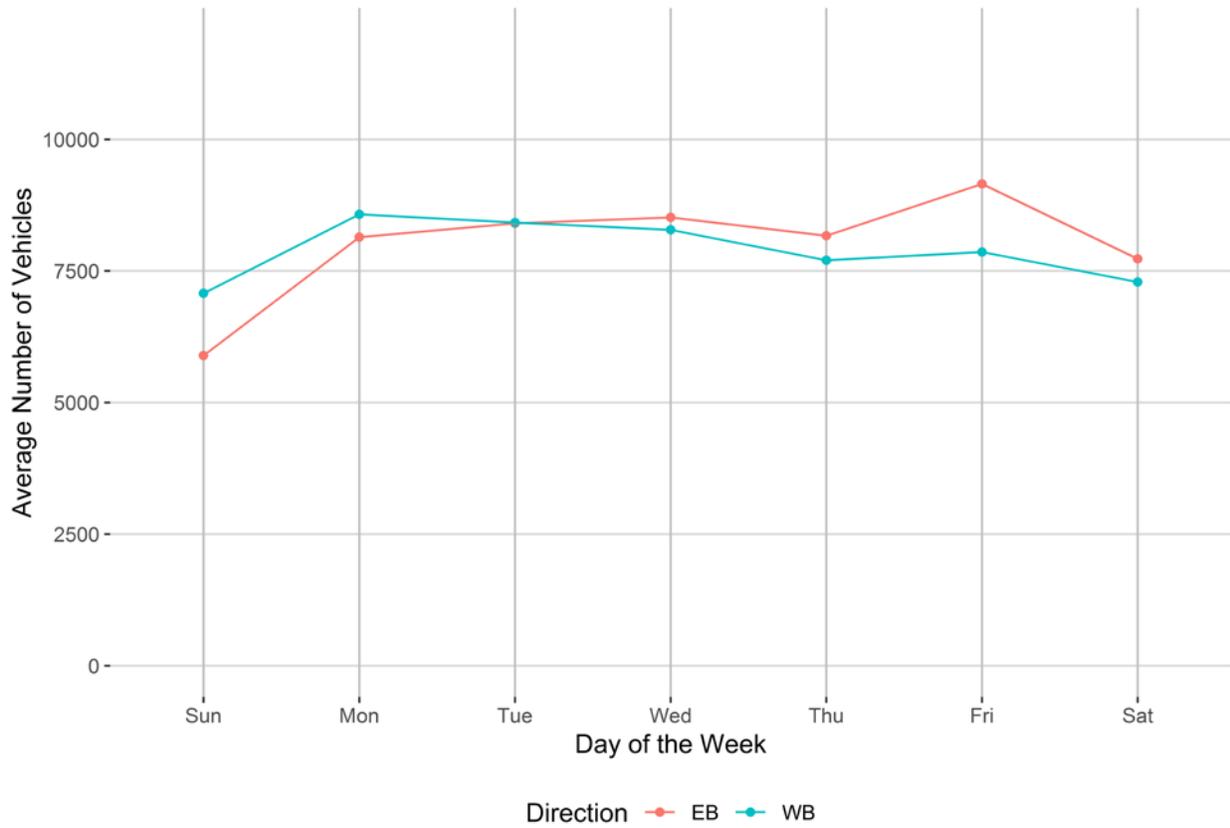


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

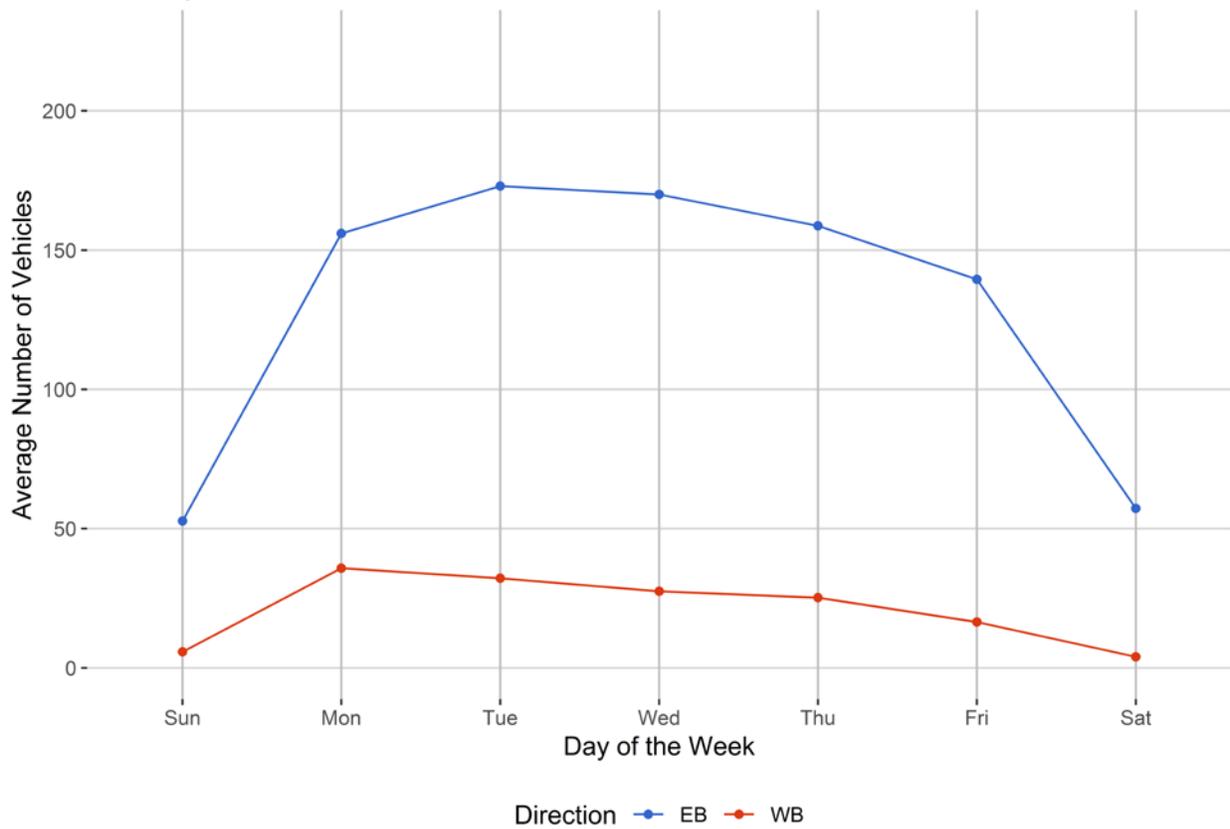


Figure 4 - Passenger Vehicles vs. Hour of the Day

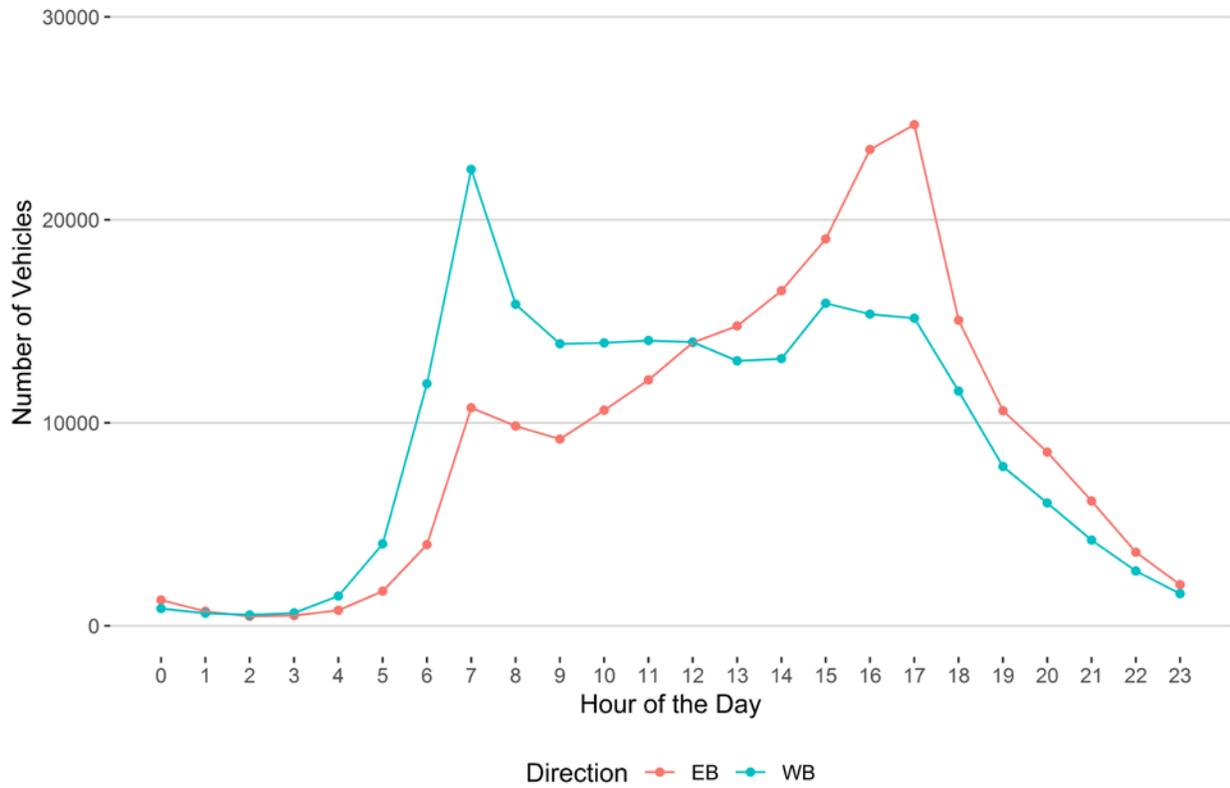


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

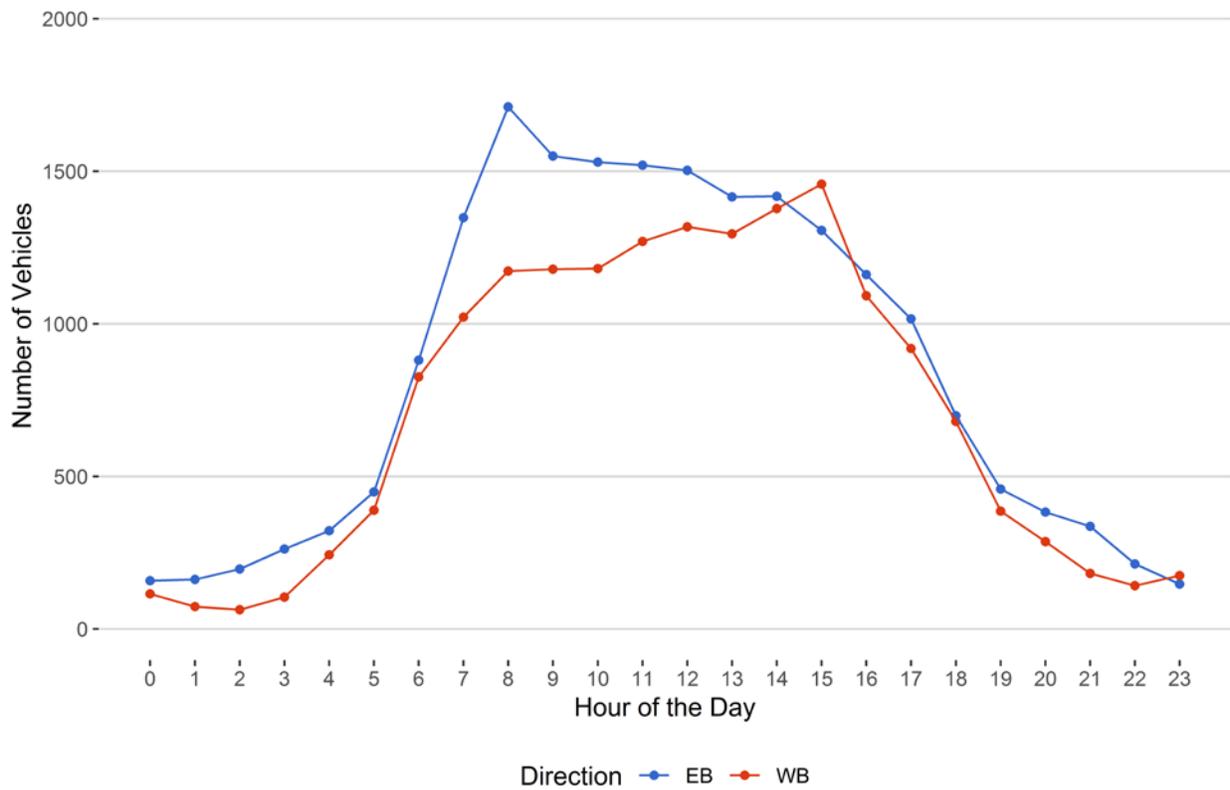


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

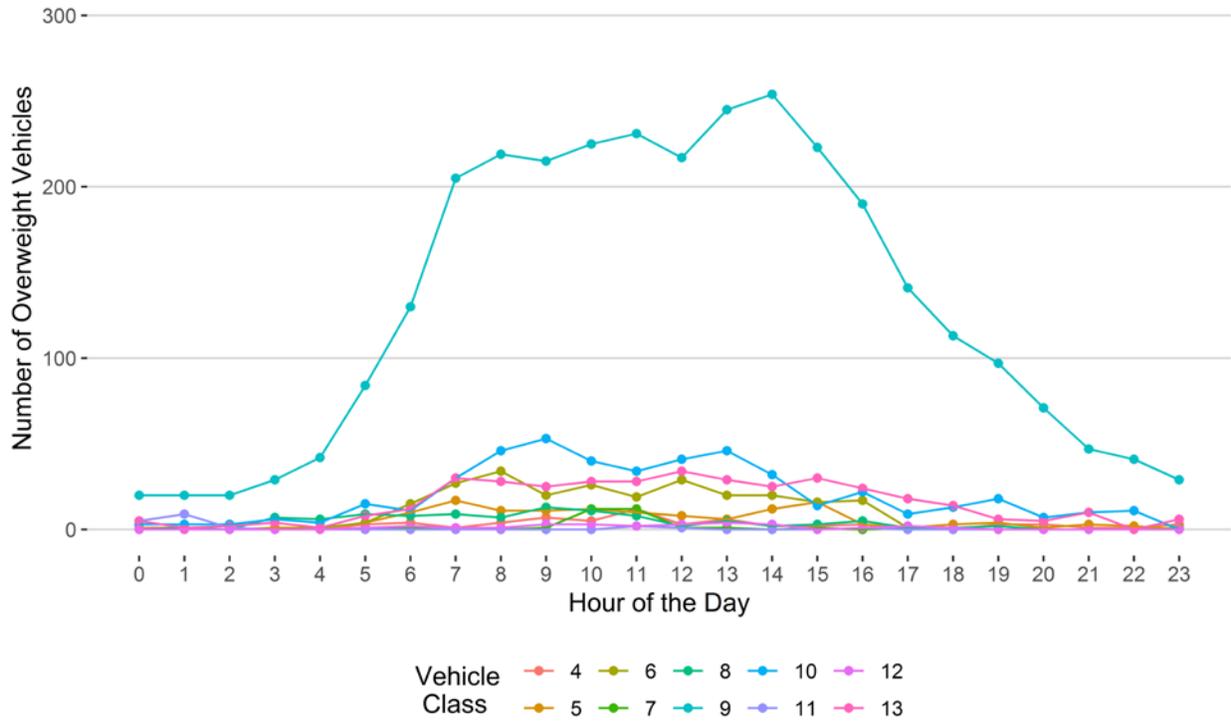


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

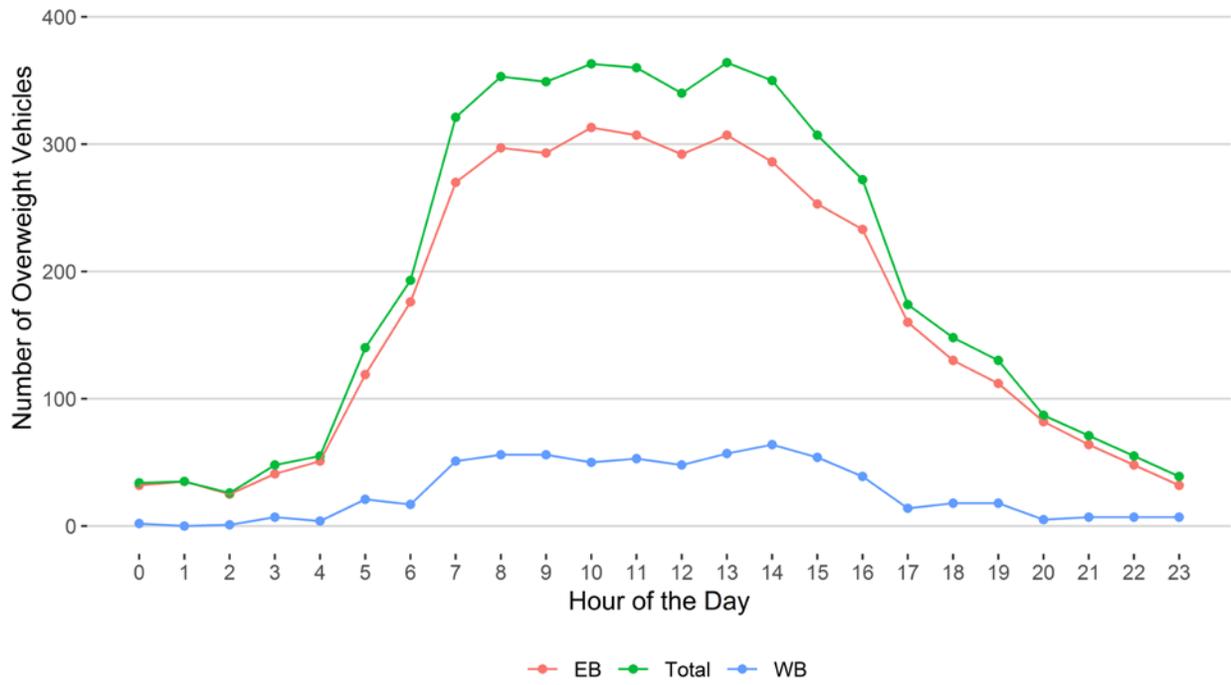
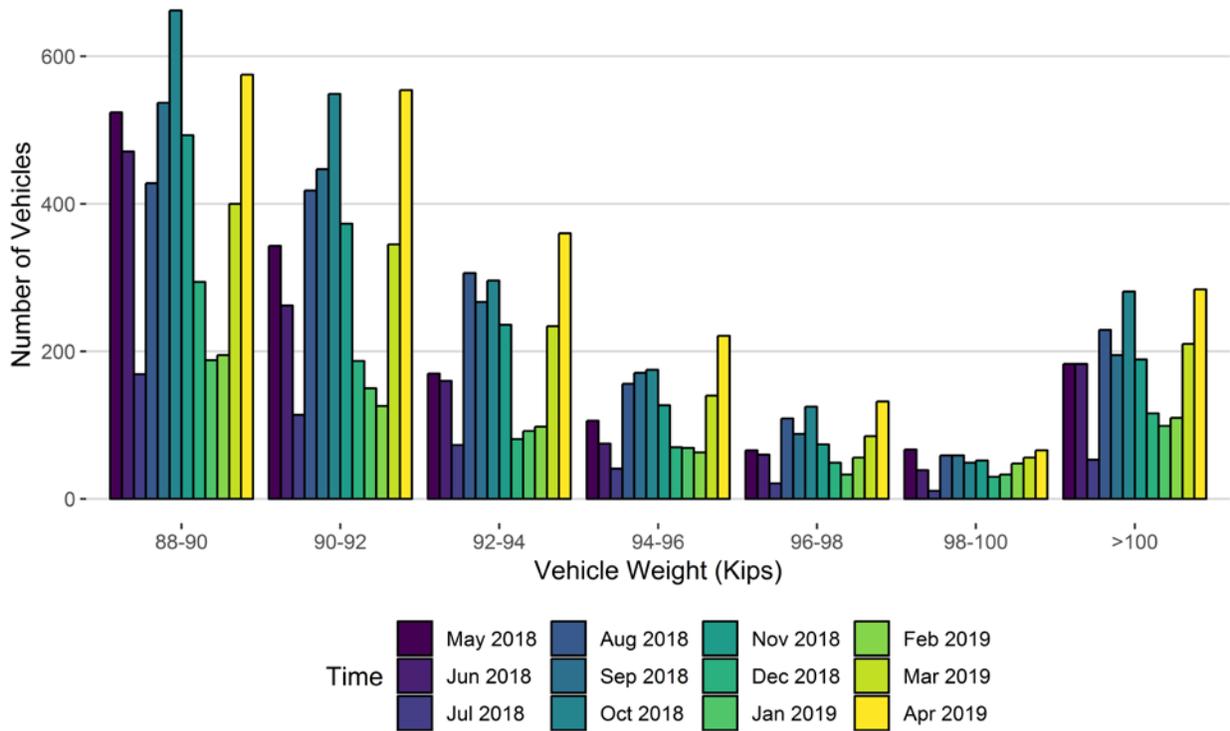
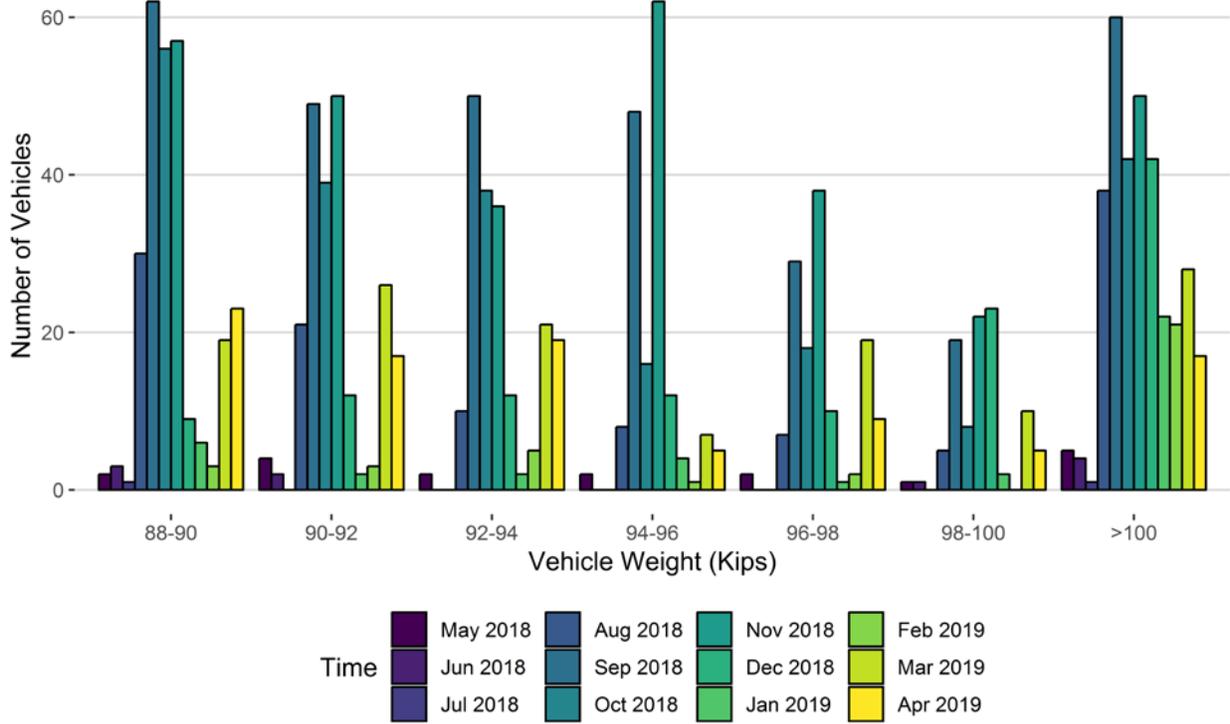


Figure 8 - Histogram of EB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019
88-90	524	471	169	428	537	662	493	294	188	195	400	575
90-92	343	262	114	418	447	549	373	187	150	126	345	554
92-94	170	160	73	306	267	296	236	81	92	98	234	360
94-96	106	75	41	156	171	175	127	70	69	63	140	221
96-98	66	60	21	109	88	125	74	49	33	56	85	132
98-100	67	39	11	59	59	49	52	30	33	48	56	66
>100	183	183	53	229	195	281	189	116	99	110	210	284
Total	1459	1250	482	1705	1764	2137	1544	827	664	696	1470	2192

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



Vehicle Weights (Kips)	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019
88-90	2	3	1	30	62	56	57	9	6	3	19	23
90-92	4	2	0	21	49	39	50	12	2	3	26	17
92-94	2	0	0	10	50	38	36	12	2	5	21	19
94-96	2	0	0	8	48	16	62	12	4	1	7	5
96-98	2	0	0	7	29	18	38	10	1	2	19	9
98-100	1	1	0	5	19	8	22	23	2	0	10	5
>100	5	4	1	38	60	42	50	42	22	21	28	17
Total	18	10	2	119	317	217	315	120	39	35	130	95

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

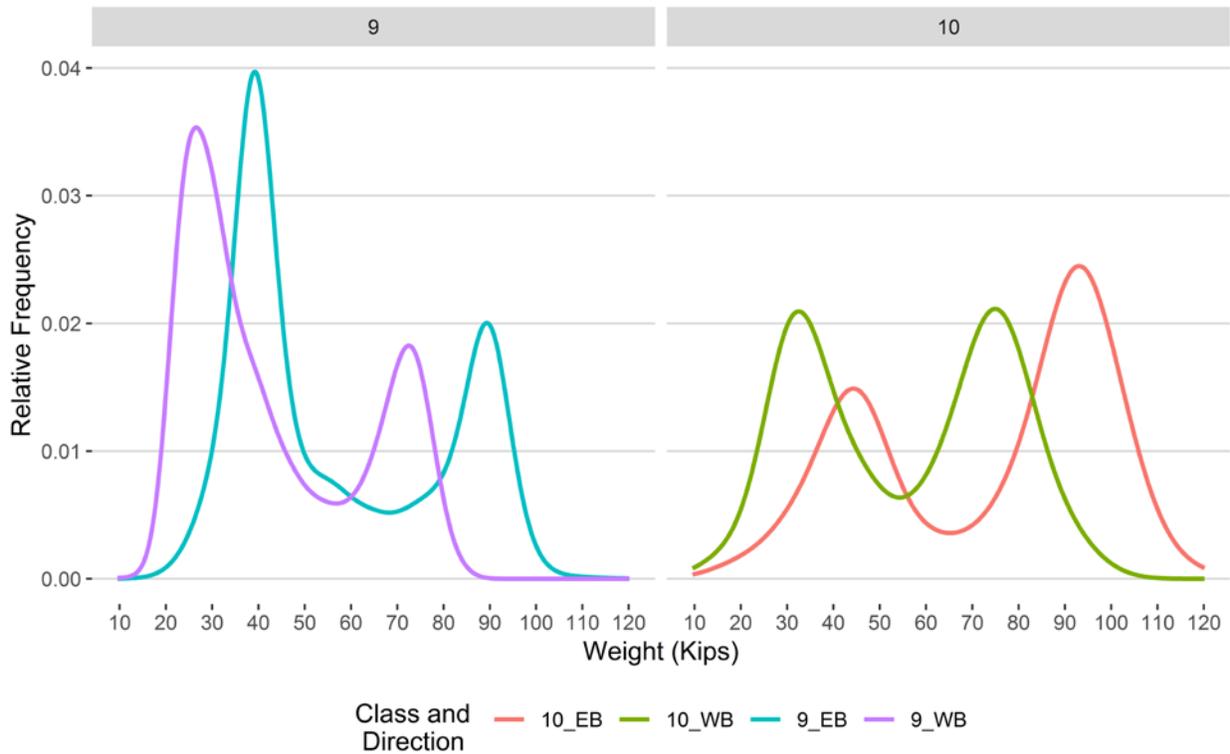


Figure 9 - Freight Percentage by Direction and Class

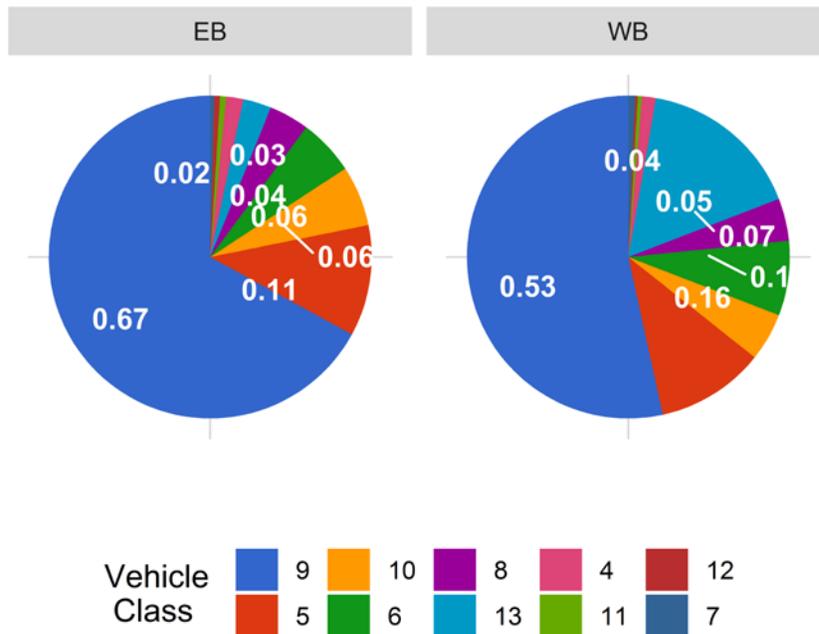


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

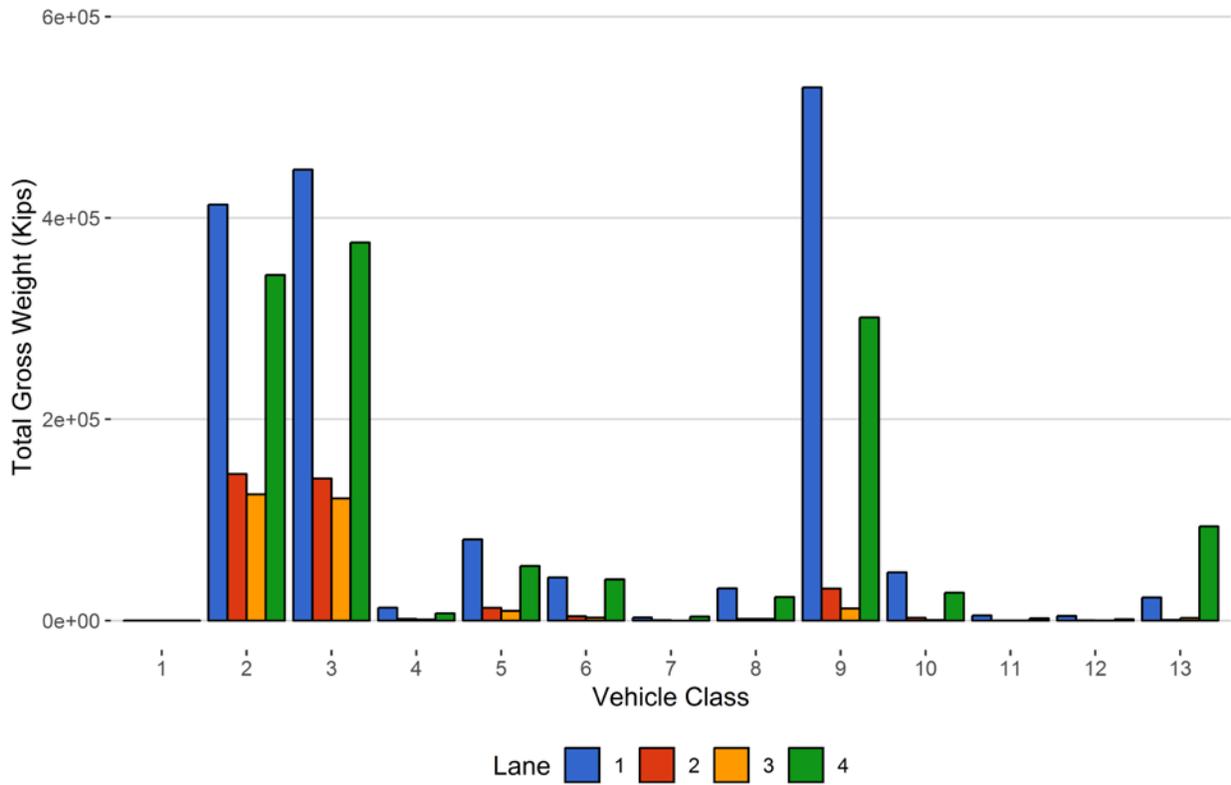


Figure 11 - Total Gross Vehicle Weight t

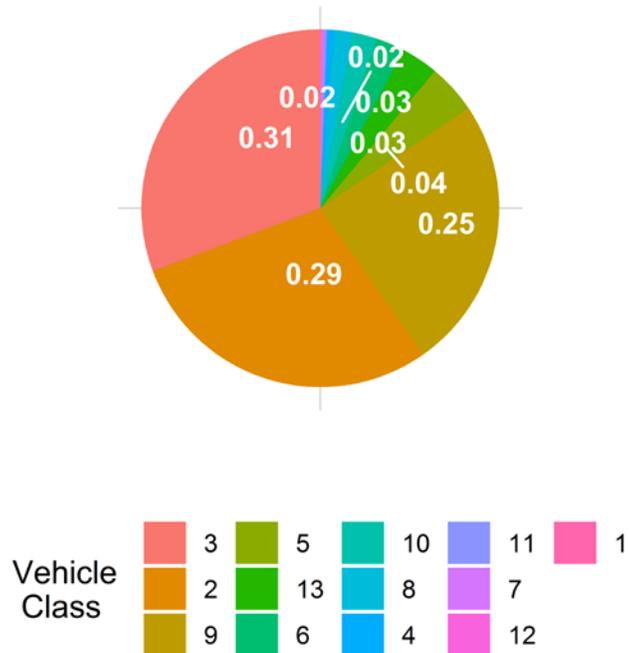


Figure 12 - Total ESALs by Class and Lane

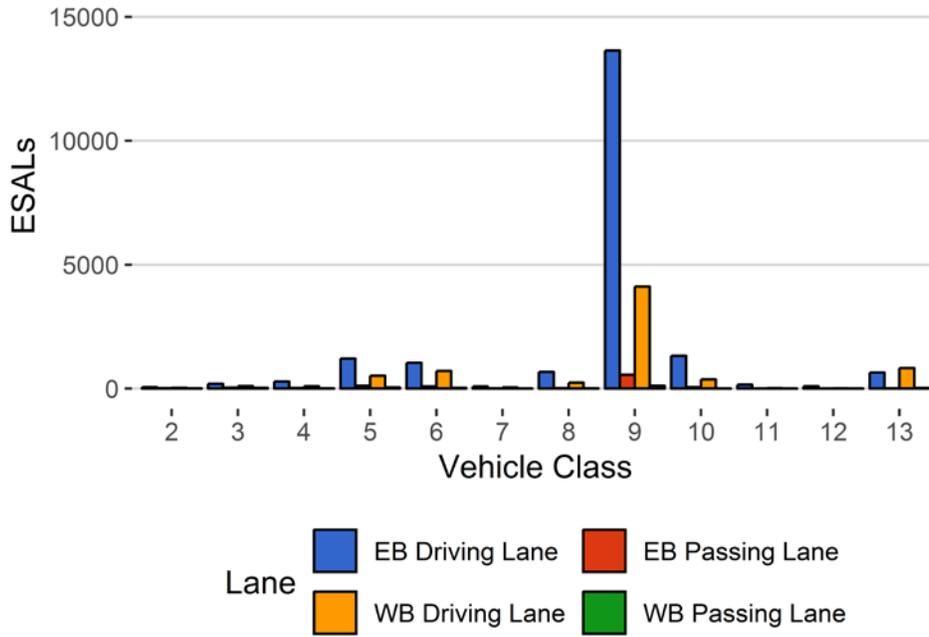


Figure 13 - ESALs by Class

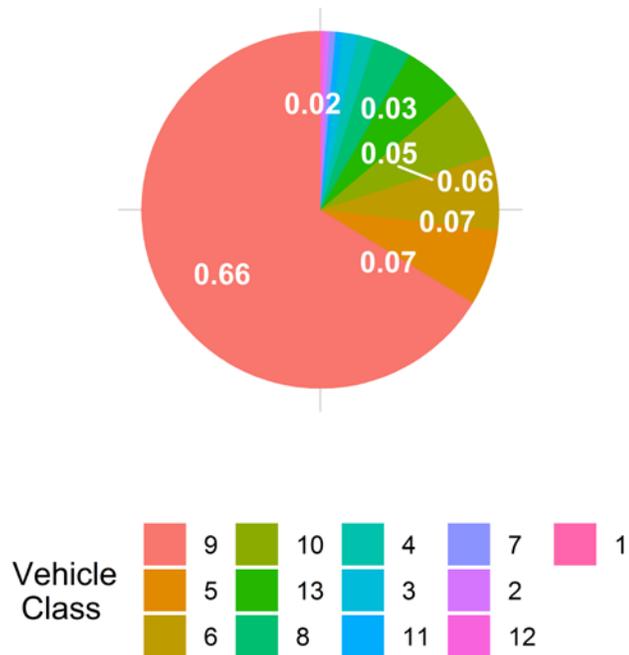


Table 1 Class 9 Front Axle Weight by Lane

<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
September 2018	12.70	0.95	11.59	-1.17	11.16	2.01	10.70	-1.03
October 2018	12.76	1.44	11.96	2.05	10.99	0.51	10.51	-2.80
November 2018	12.55	-0.25	12.17	3.85	11.23	2.65	10.44	-3.47
December 2018	12.48	-0.78	12.38	5.60	11.65	6.51	10.53	-2.64
January 2019	12.26	-2.58	11.95	1.93	11.29	3.24	10.33	-4.42
February 2019	12.18	-3.19	11.77	0.41	10.88	-0.51	10.01	-7.38
March 2019	12.75	1.35	12.06	2.86	10.75	-1.68	10.06	-6.92
April 2019	13.29	5.64	11.65	-0.62	10.34	-5.46	10.13	-6.28

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	3	98	0	0	0
2	8811	264340	54.8	0	0
3	6008	180232	37.4	0	0
4	29	866	0.2	65	1.4
5	388	11630	2.4	136	3
6	94	2811	0.6	251	5.5
7	5	140	0	30	0.7
8	60	1804	0.4	100	2.2
9	571	17134	3.6	3108	67.9
10	40	1201	0.2	471	10.3
11	5	144	0	19	0.4
12	3	98	0	27	0.6
13	51	1520	0.3	373	8.1
TOTAL	16067	482019	100	4580	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>
2019-04-11	Thursday	13:11:20	9	EB	1	120.17
2019-04-01	Monday	19:18:58	10	EB	1	119.03
2019-04-17	Wednesday	16:00:24	10	EB	1	118.82
2019-04-03	Wednesday	07:54:03	10	EB	1	116.95
2019-04-02	Tuesday	19:05:16	10	EB	1	116.55
2019-04-23	Tuesday	03:36:26	9	EB	1	116.55
2019-04-19	Friday	11:41:41	10	EB	1	114.93
2019-04-01	Monday	18:30:55	10	EB	1	113.63
2019-04-15	Monday	08:53:04	9	EB	1	113.23
2019-04-21	Sunday	16:22:16	9	EB	1	112.81

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	511	89	17.4	13204	1192	3437
5	EB	8	6375	447	7	89989	3241	21283
6	EB	19	1394	35	2.5	46570	602	10375
7	EB	11.5	59	0	0	3462	0	1392
8	EB	31	917	230	25.1	29152	4418	3928
9	EB	33	9826	675	6.9	541888	19596	119953
10	EB	33.5	685	39	5.7	49536	1059	13947
11	EB	36.5	83	4	4.8	4989	126	1053
12	EB	36.5	69	0	0	4739	0	1110
13	EB	31.5	226	0	0	23642	0	8262
TOTAL	****	****	20145	1519	****	807171	****	184738
<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	349	114	32.7	6835	1358	1655
5	WB	8	5176	1493	28.8	53418	10377	11977
6	WB	19	1398	291	20.8	38990	4830	8979
7	WB	11.5	80	1	1.2	4000	11	1546
8	WB	31	875	565	64.6	11678	13265	1034
9	WB	33	7191	3104	43.2	230556	82546	47843
10	WB	33.5	508	129	25.4	24508	3711	5906
11	WB	36.5	60	18	30	1812	587	140
12	WB	36.5	28	2	7.1	1420	60	236
13	WB	31.5	1284	1	0.1	96007	25	27796
TOTAL	****	****	16949	5718	****	469226	****	107111
GRAND TOTAL	****	****	37094	7237	323	1276397	147004	291849

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	41	16	17	35	109	0
2	413239	145641	125321	343420	1027621	29.1
3	448032	141140	121295	375702	1086169	30.7
4	12812	1584	967	7225	22588	0.6
5	80650	12580	9598	54198	157026	4.4
6	42894	4279	2872	40948	90993	2.6
7	3038	424	0	4011	7473	0.2
8	32009	1562	1618	23325	58513	1.7
9	529806	31678	11971	301132	874587	24.7
10	47858	2737	565	27653	78814	2.2
11	5030	85	85	2314	7514	0.2
12	4527	212	92	1388	6220	0.2
13	22880	762	2504	93528	119674	3.4
TOTAL	1642815	342701	276907	1274878	3537301	100
GVW/LANE	46.44	9.69	7.83	36.04	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	0.0102
2	60	17	12	31	121	0.43	9e-04
3	200	45	33	102	380	1.37	0.0043
4	291	30	14	98	433	1.56	1.01
5	1218	122	51	522	1912	6.88	0.33
6	1049	87	37	710	1883	6.77	1.35
7	92	9	0	50	151	0.54	2.12
8	673	18	13	239	943	3.39	1.05
9	13640	556	116	4121	18434	66.28	2.17
10	1320	54	6	372	1753	6.3	2.93
11	159	1	0	15	176	0.63	2.36
12	94	2	1	14	110	0.4	2.13
13	652	12	24	830	1518	5.46	2.01
TOTAL	19448	954	307	7104	27812	100	17
ESALS/LANE	69.9	3.4	1.1	25.5	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>
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
Sep 2018	547486	18250	1506	502315	91.7	45170.6	8.3	89.3	10.7
Oct 2018	529466	17080	1570	480795	90.8	48670.8	9.2	89.9	10.1
Nov 2018	430849	15388	1183	395350	91.8	35498.8	8.2	89	11
Dec 2018	433085	14436	902	405135	93.5	27950	6.5	89.7	10.3
Jan 2019	406644	13118	916	378257	93	28386.7	7	89.3	10.7
Feb 2019	369962	13213	920	344189	93	25772.6	7	88.3	11.7
Mar 2019	438978	14161	1022	407281	92.8	31697	7.2	89.5	10.5
Apr 2019	482019	16067	1245	444670	92.3	37348.8	7.7	90.3	9.7
TOTAL	6061855	-	-	5633770	-	428083	-	-	-
AVERAGE	505155	16710	1172	469481	93	35674	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>
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
Sep 2018	18309	1493	802	13104	33709	93	7	40.7
Oct 2018	21183	1561	720	13103	36568	94	6	42.3
Nov 2018	16981	1449	650	8651	27730	92	8	38.1
Dec 2018	12116	983	430	5471	19000	93	7	29.2
Jan 2019	11889	941	448	5234	18512	92	8	26.3
Feb 2019	10649	1069	422	4110	16250	91	9	32.8
Mar 2019	15090	1062	361	5540	22053	94	6	44.2
Apr 2019	19732	967	307	7119	28125	95	5	49.7
TOTAL	190388	15540	7170	81737	294835	-	-	-
AVERAGE	15866	1295	598	6811	24570	92	8	35

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>
May 18	1919649	486092	384335	1105460	3895536
Jun 18	1873989	527355	405817	977118	3784280
Jul 18	1484105	532750	442390	949621	3408866
Aug 18	1827123	516522	412675	1913186	4669506
Sep 18	1772922	435625	369201	1713661	4291408
Oct 18	1828907	443941	363248	1696927	4333023
Nov 18	1535083	394342	304696	1360820	3594942
Dec 18	1310112	327610	267904	1120597	3026224
Jan 19	1229340	286706	250586	1044234	2810866
Feb 19	1126534	266155	229583	907774	2530046
Mar 19	1408617	318406	250134	1119744	3096901
Apr 19	1646316	343358	277000	1276356	3543029
TOTAL	18962696	4878863	3957570	15185497	42984625
AVERAGE	1580225	406572	329798	1265458	3582052

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>
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
Sep 2018	6002	1.1	13.3	2081	333
Oct 2018	6412	1.2	13.2	2356	381
Nov 2018	5096	1.1	13.3	1860	313
Dec 2018	3237	0.7	11.4	947	211
Jan 2019	3050	0.8	10.8	703	156
Feb 2019	2654	0.7	10.3	733	180
Mar 2019	3701	0.8	11.7	1601	305
Apr 2019	4614	1	12.4	2287	372
TOTAL	50600	-	-	17617	3130
AVERAGE	4216.7	0.8	11.6	1468.1	260.8

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>
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
Sep 2018	177219	202462	379681	46.7	53.3
Oct 2018	205680	203542	409222	50.3	49.7
Nov 2018	168189	136273	304462	55.2	44.8
Dec 2018	123430	79692	203122	60.8	39.2
Jan 2019	122311	69881	192193	63.6	36.4
Feb 2019	110574	57944	168518	65.6	34.4
Mar 2019	147797	80463	228260	64.7	35.3
Apr 2019	184738	107111	291849	63.3	36.7
TOTAL	1906956	1321898	3228853	-	-
AVERAGE	158913	110158.1	269071.1	62.2	37.8