

JULY 2019



**WIM #42
US 61,
MP 119.6
COTTAGE
GROVE,
MINNESOTA**

**MONTHLY
REPORT**



Your Destination...Our Priority



WIM Site Location

WIM #42 is located on US 61 near Cottage Grove in Washington county.

System Operation

WIM #42 was operational for the entire month of July 2019. Volume was computed using all monthly data.

System Calibration

WIM #42 was most recently calibrated on 2016-08-04. 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: 1100654 | Passenger Vehicles: 1045333 | Heavy Commercial Vehicles: 55321

Monthly Average Daily Traffic (MADT): 35362 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1785

See Table 2 for vehicle class breakdown

Passenger Vehicles (PVs) and Heavy Commercial Vehicles (HCVs)

Volume trends. NB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Sundays. SB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Sundays (see Figure 3 and 4).

Passenger Vehicles (PVs)

Volume trends. On an average 24-hour day (see Figure 5), NB PVs generally reached peak volume levels between 03 PM and 05 PM. Similarly, SB PVs peaked in volume between 03 PM and 05 PM

Heavy Commercial Vehicles (HCVs)

Volume trends. On an average 24-hour day, HCVs traveling NB typically reached peak volume levels between 03 PM and 05 PM, while volume going SB 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 55321 HCVs, 8446 of them were overweight ³. These overweight HCVs contributed to 0.8% of total monthly volume, and 15.7% of total monthly

HCV volume. NB overweight vehicles typically reached highest numbers on Fridays, with lowest volumes reported on Sundays. SB 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 56.2% of all overweight vehicles traveling SB this month (see Figure 7 & 8). Figure 9 shows the number of vehicles exceeding 88,000 pounds that crossed the WIM over the last 12 months. The highest number of 88,000+ vehicles within the last 12 months occurred in June.

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

Using normal load limits ,155 NB vehicles exceeded 88,000 pounds (92 vehicles were Class 9's; 30 vehicles were Class 10's). Of vehicles traveling SB,

1229 NB vehicles exceeded 88,000 pounds (1006 vehicles were Class 9's; 125 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from July 2019.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in July 2019. Data suggests that there were greater numbers of fully_loaded Class 9's than empty Class 9's traveling NB, while there were more empty Class 9's than fully_loaded traveling SB. Data also suggests that there were more fully_loaded Class 10's than empty traveling in the NB direction. In the SB direction, there were more empty class 10 vehicles.

Freight Totals. A total of 426719 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (51%) than SB (49%). See Table 4 and Figure 11 for more freight information.

####**Infrastructure Considerations Bridge.** Bridge No. 5895 (Hastings Bridge) is approximately 1.9 miles south of WIM #42, and Bridge No. 82J16 is 1.0 miles north of WIM #42. WIM #42 recorded a total of 1100654 vehicles with a combined GVW of 6857117 kips (1 kip = 1,000 pounds = 0.5 tons) in July 2019. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 41459 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 53.6% of all ESALs were recorded SB while 46.4% was observed NB. In particular, 61% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 17% 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:

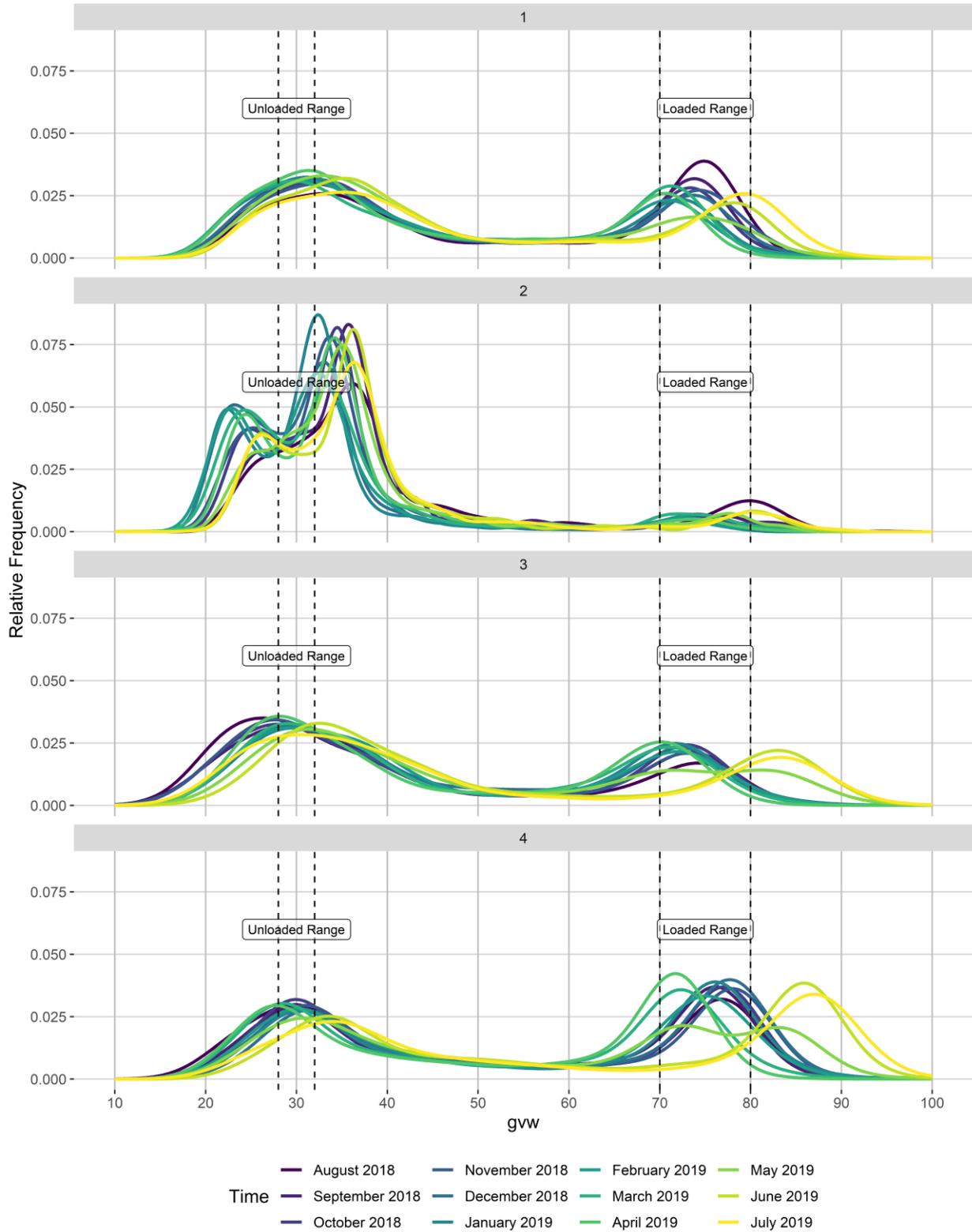
<http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html> MnDOT's vehicle

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.

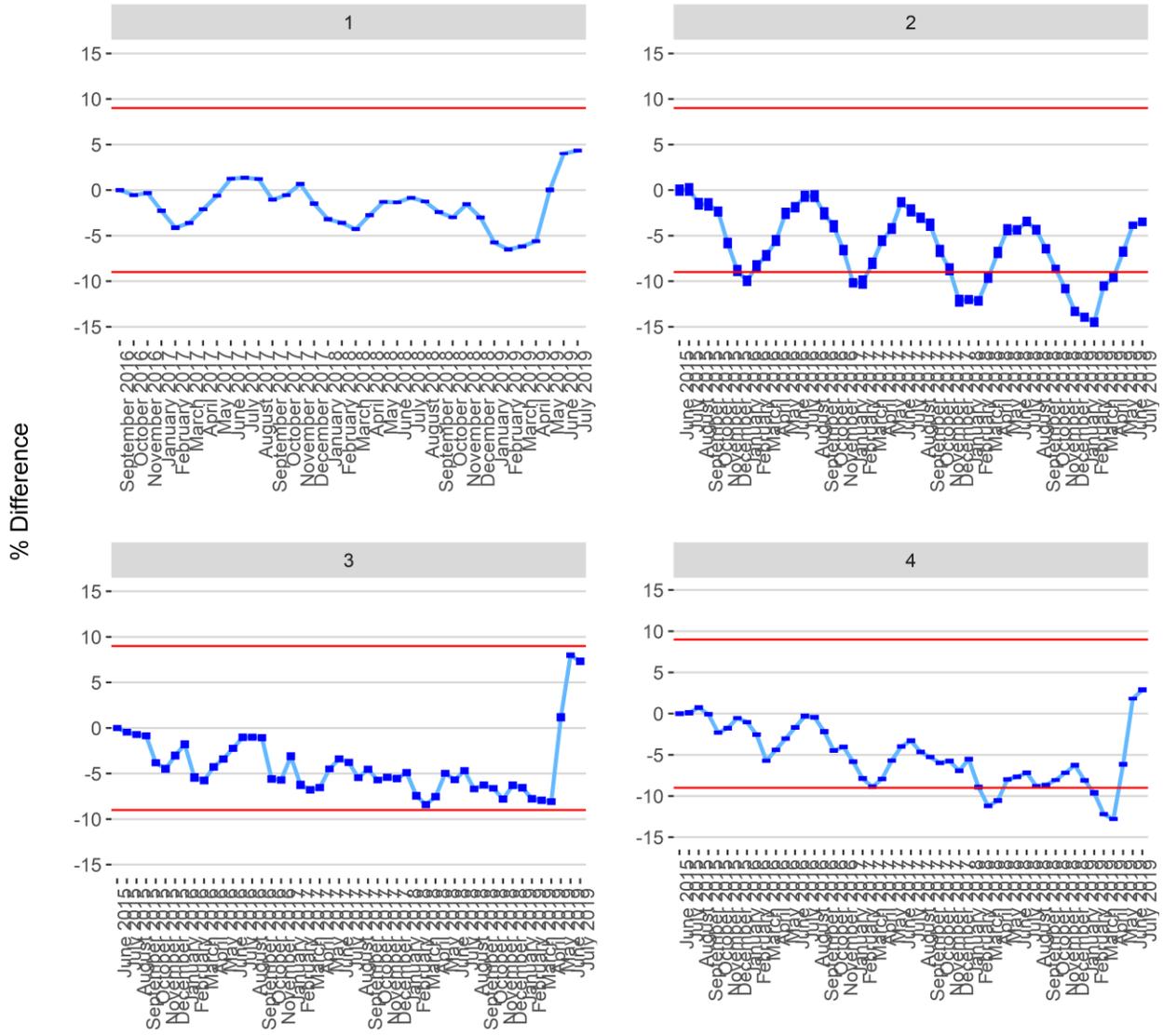
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

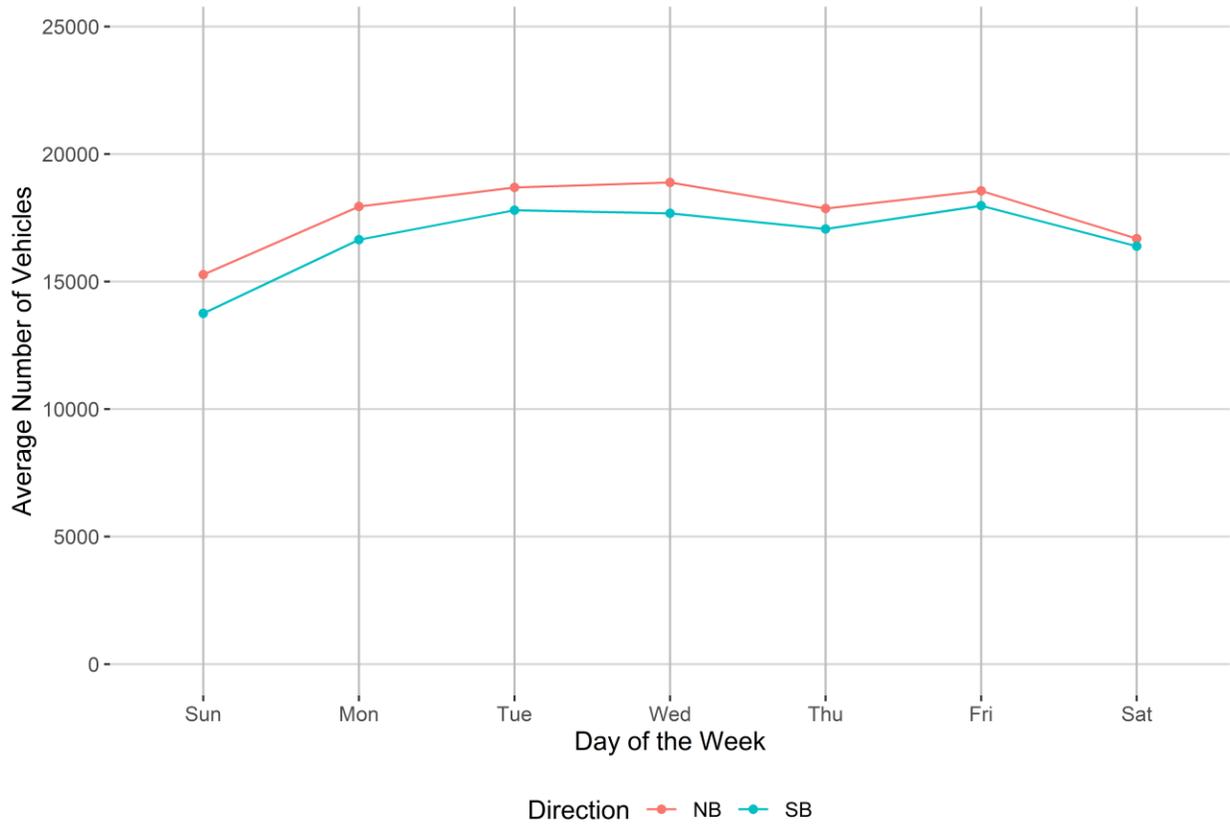


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

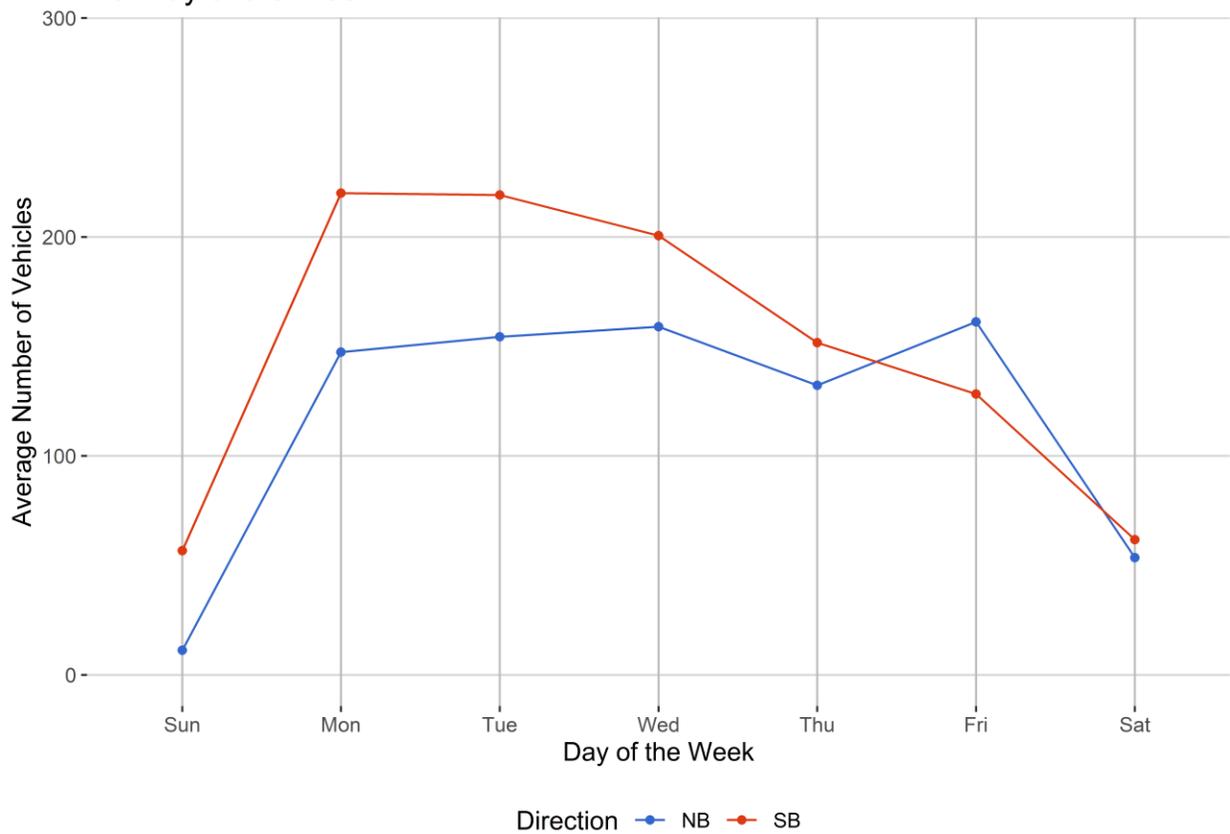


Figure 4 - Passenger Vehicles vs. Hour of the Day

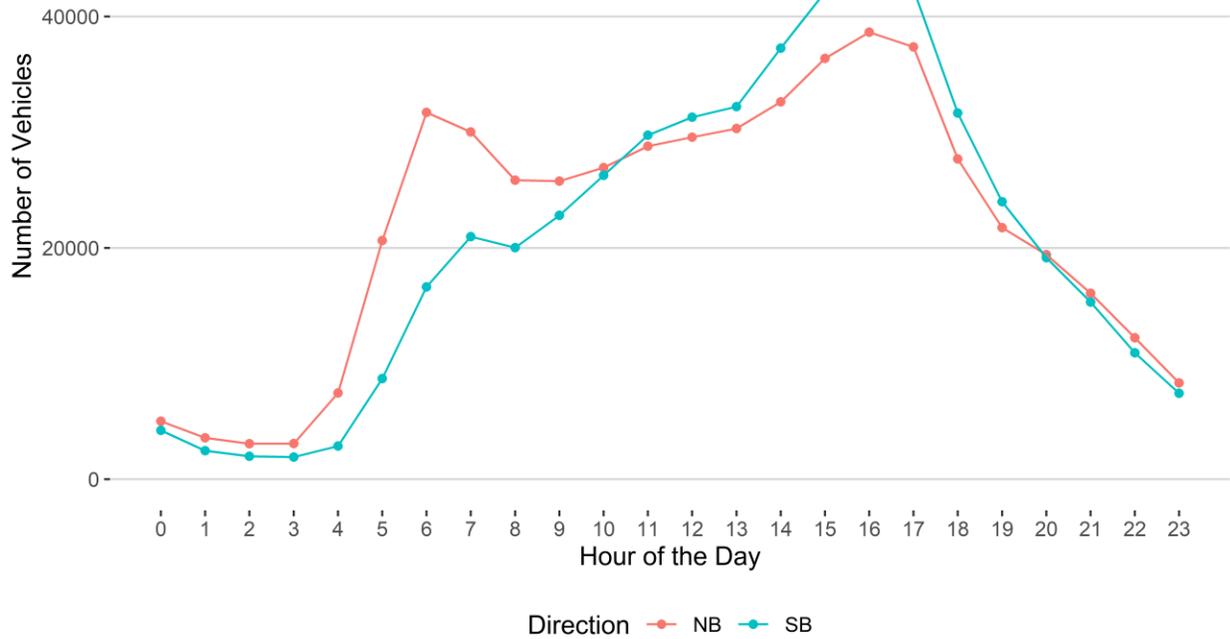


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

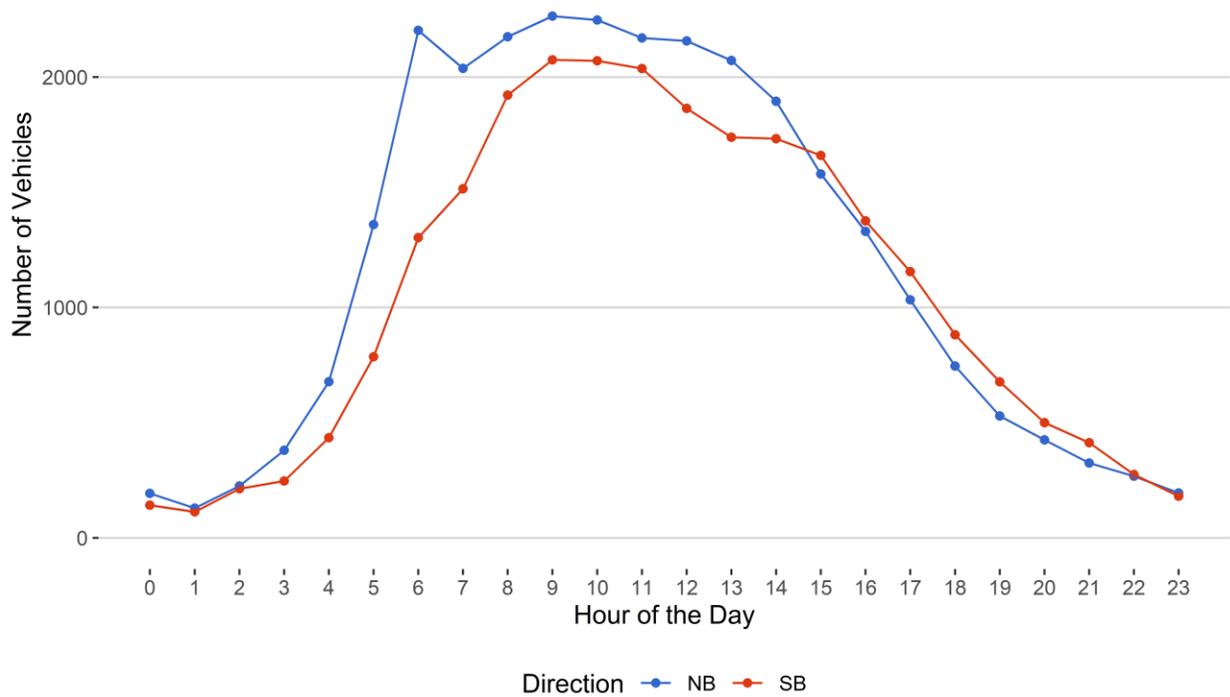


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

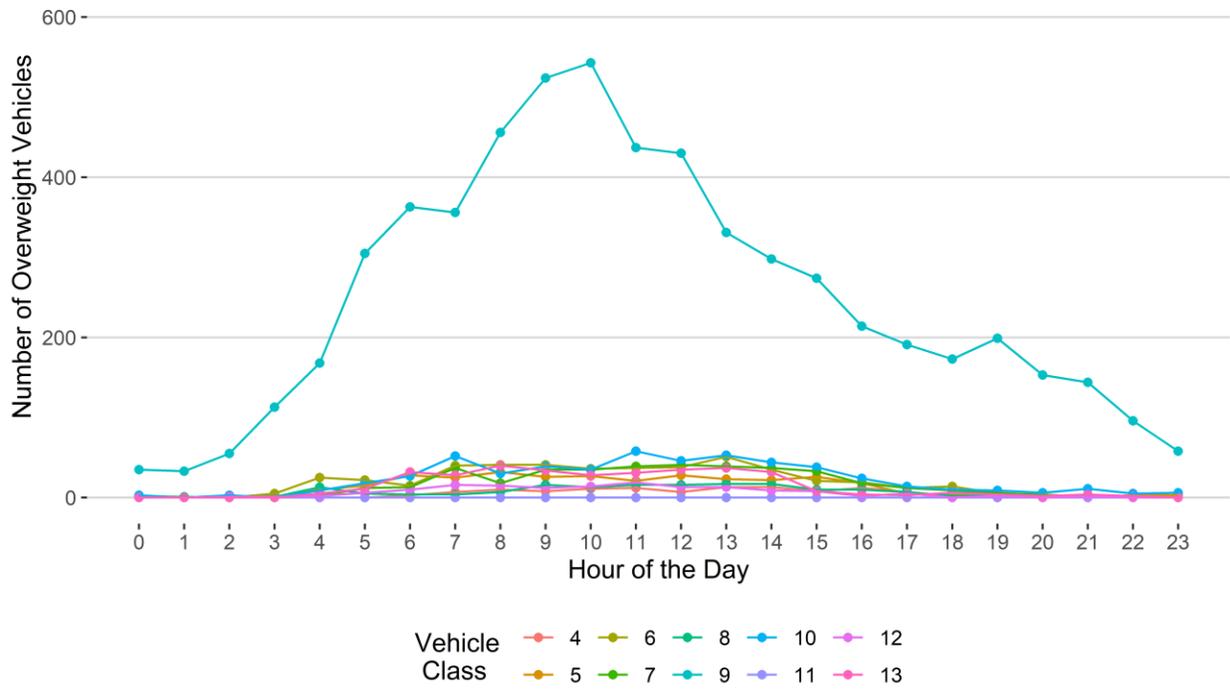


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

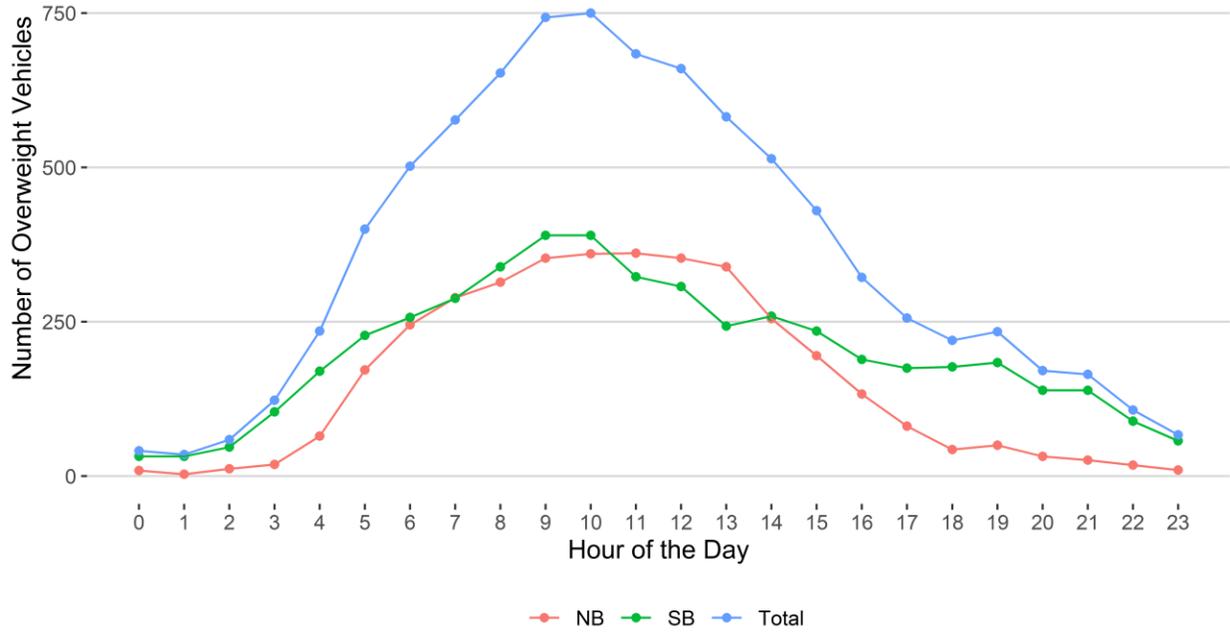
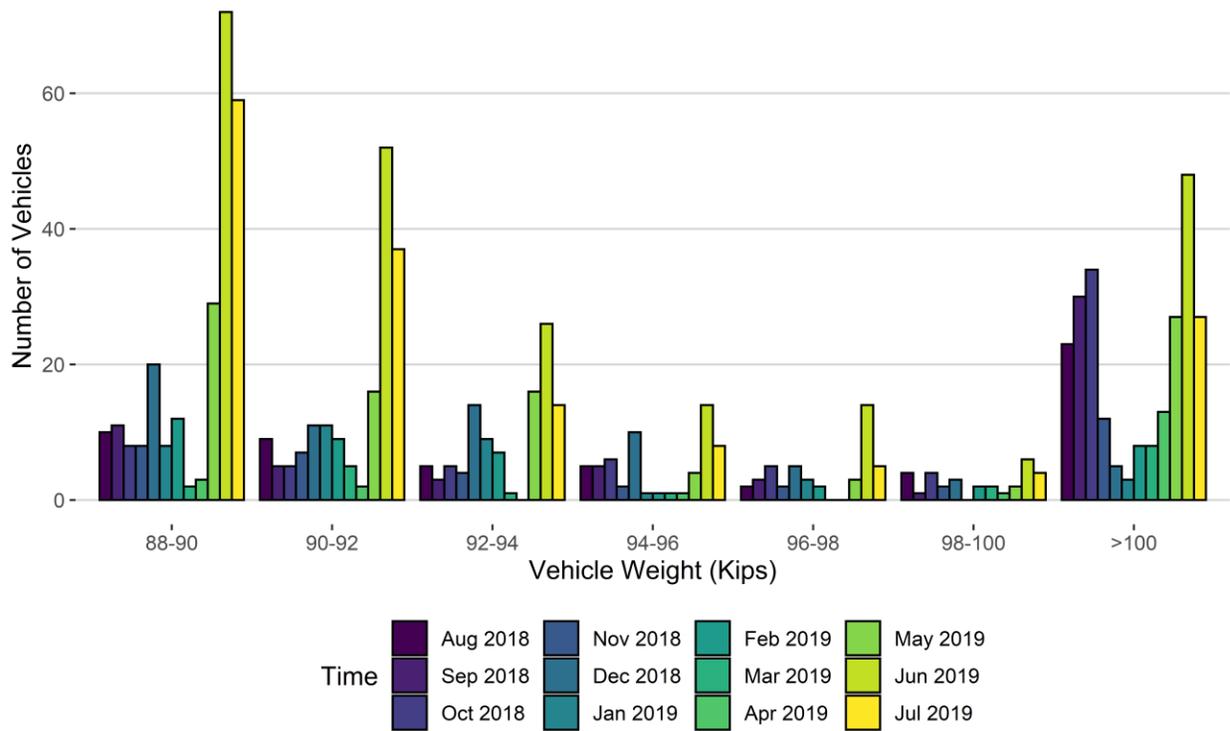
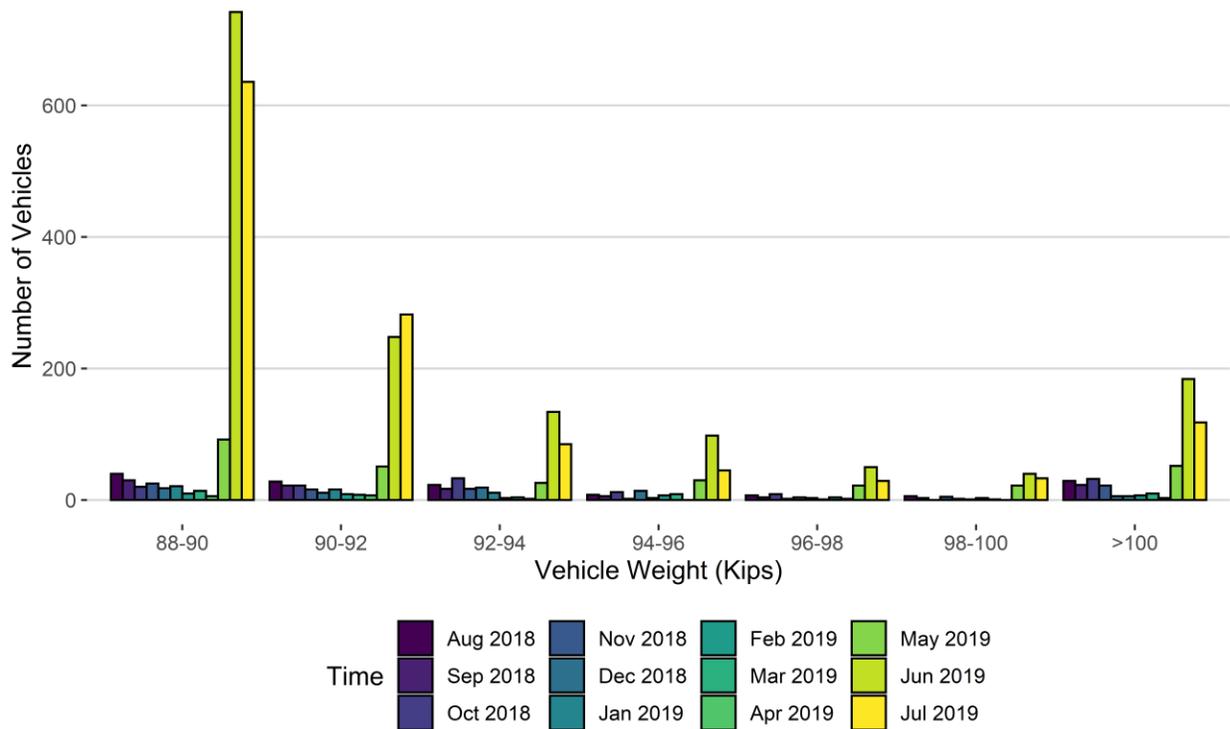


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019
88-90	10	11	8	8	20	8	12	2	3	29	72	59
90-92	9	5	5	7	11	11	9	5	2	16	52	37
92-94	5	3	5	4	14	9	7	1	0	16	26	14
94-96	5	5	6	2	10	1	1	1	1	4	14	8
96-98	2	3	5	2	5	3	2	0	0	3	14	5
98-100	4	1	4	2	3	0	2	2	1	2	6	4
>100	23	30	34	12	5	3	8	8	13	27	48	27
Total	58	58	67	37	68	35	41	19	20	97	232	154

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



Vehicle Weights (Kips)	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	Jun 2019	Jul 2019
88-90	40	30	20	25	18	21	10	14	6	92	742	636
90-92	28	22	22	16	11	16	9	8	7	51	248	282
92-94	23	17	33	17	19	11	3	4	2	26	134	85
94-96	8	6	12	2	14	3	7	9	0	30	98	45
96-98	7	4	9	2	4	3	1	4	2	22	50	29
98-100	6	3	0	5	2	1	3	1	0	22	40	33
>100	29	23	32	22	6	6	7	10	3	52	184	118
Total	141	105	128	89	74	61	40	50	20	295	1496	1228

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

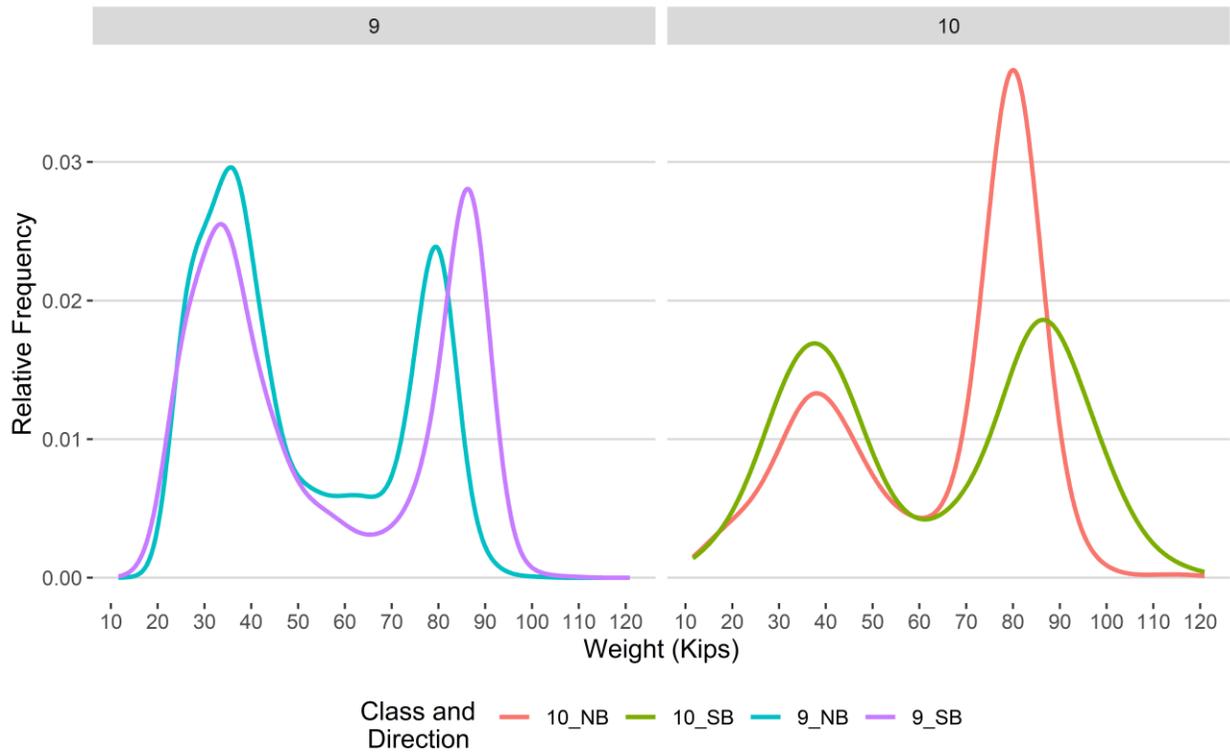


Figure 9 - Freight Percentage by Direction and Class

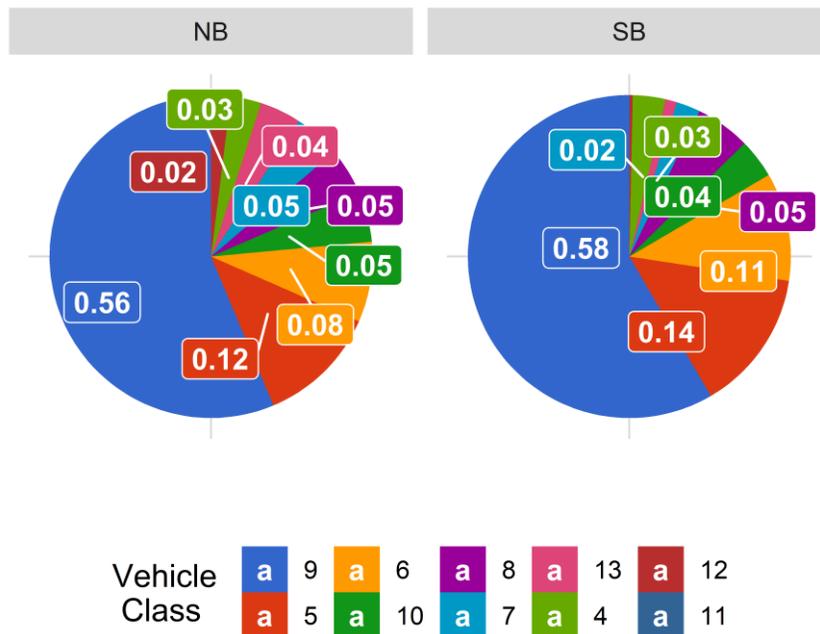


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

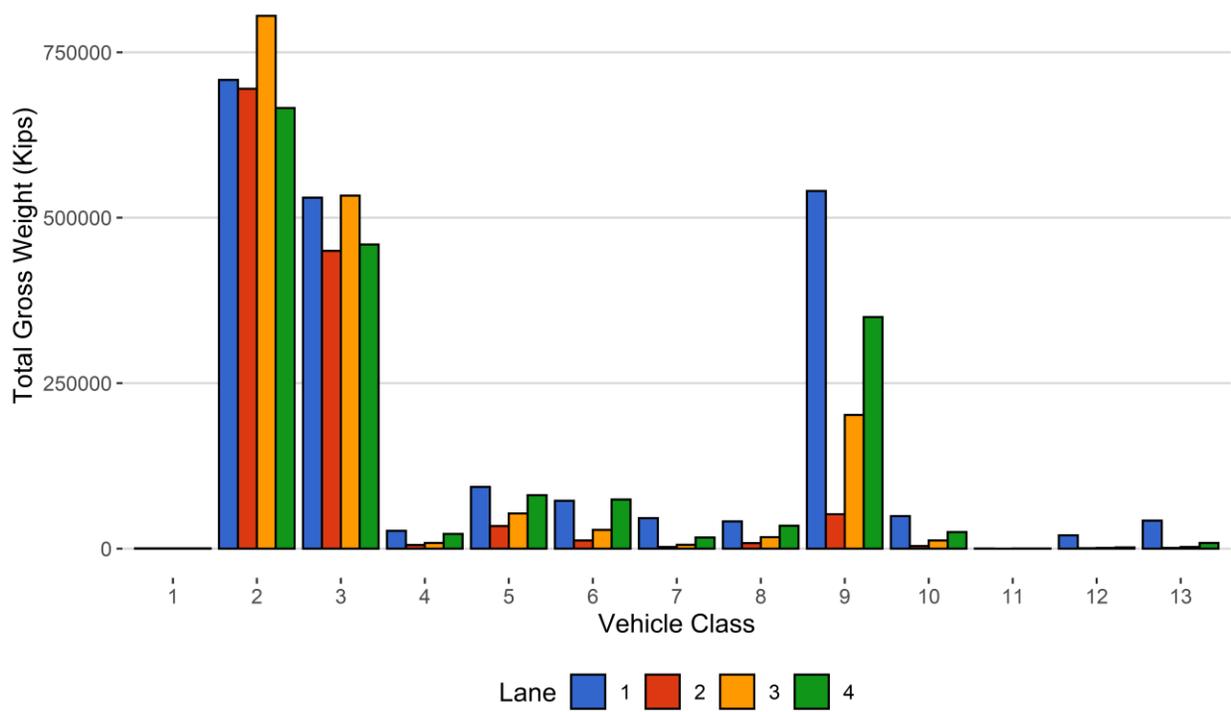


Figure 11 - Total Gross Vehicle Weight t

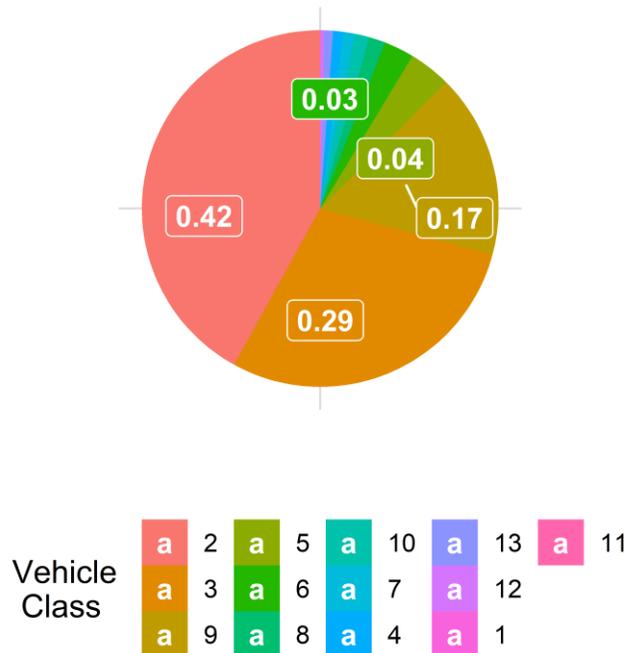


Figure 12 - Total ESALs by Class and Lane

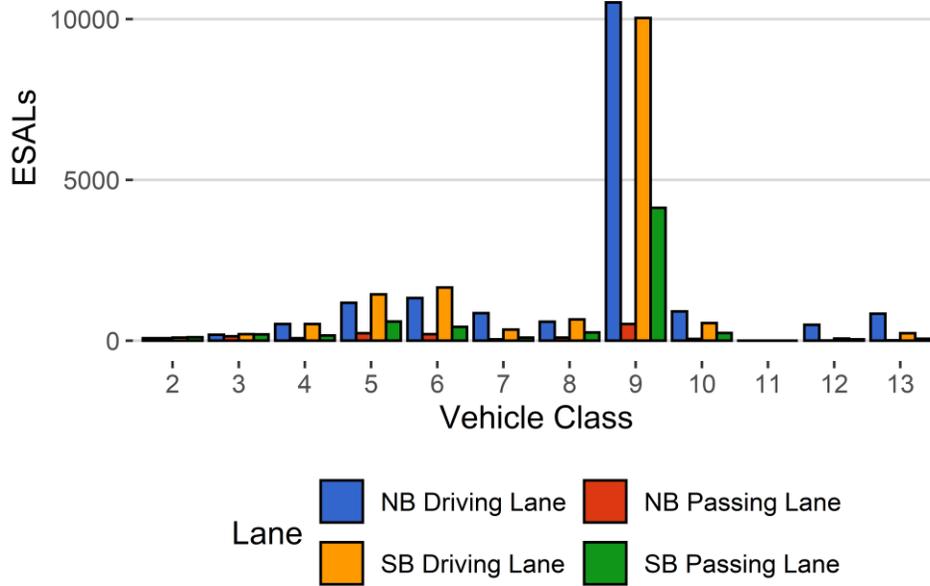


Figure 13 - ESALs by Class

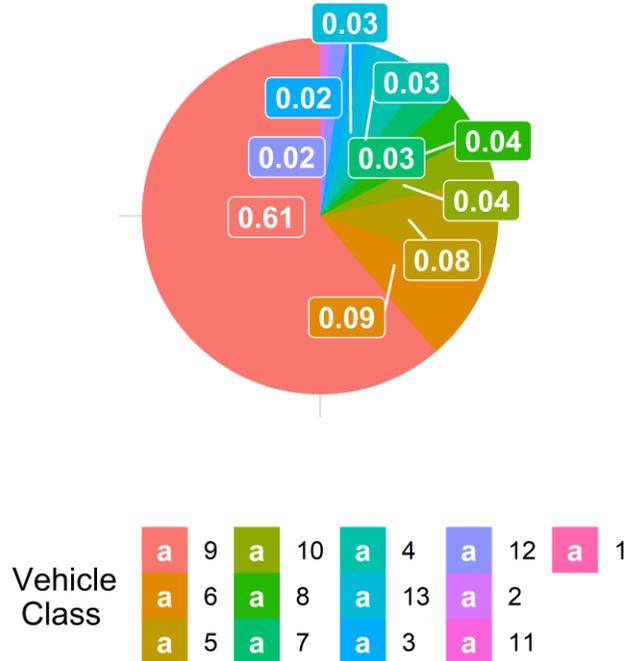


Table 1 Class 9 Front Axle Weight by Lane

<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>
June 2015	NA	NA	10.99	0.00	10.36	0.00	11.58	0.00
July 2015	NA	NA	11.00	0.07	10.31	-0.46	11.59	0.10
August 2015	NA	NA	10.83	-1.50	10.29	-0.71	11.66	0.73
September 2015	NA	NA	10.82	-1.58	10.27	-0.86	11.57	-0.07
October 2015	NA	NA	10.73	-2.36	9.96	-3.82	11.31	-2.30
November 2015	NA	NA	10.35	-5.82	9.90	-4.48	11.38	-1.76
December 2015	NA	NA	10.02	-8.82	10.05	-3.02	11.52	-0.54
January 2016	NA	NA	9.90	-9.96	10.18	-1.79	11.46	-1.04
February 2016	NA	NA	10.08	-8.33	9.80	-5.44	11.28	-2.55
March 2016	NA	NA	10.20	-7.17	9.76	-5.76	10.92	-5.71
April 2016	NA	NA	10.38	-5.54	9.92	-4.27	11.07	-4.40
May 2016	NA	NA	10.71	-2.55	10.01	-3.40	11.23	-3.03
June 2016	NA	NA	10.79	-1.89	10.13	-2.23	11.38	-1.68
July 2016	NA	NA	10.92	-0.67	10.25	-1.02	11.54	-0.30
August 2016	NA	NA	10.92	-0.66	10.26	-1.01	11.53	-0.45
September 2016	10.31	0.00	10.71	-2.56	10.25	-1.07	11.33	-2.18
October 2016	10.25	-0.56	10.56	-3.97	9.78	-5.60	11.06	-4.48
November 2016	10.27	-0.33	10.27	-6.58	9.77	-5.71	11.11	-4.04
January 2017	10.07	-2.27	9.87	-10.18	10.04	-3.10	10.90	-5.84
February 2017	9.88	-4.13	9.88	-10.10	9.71	-6.24	10.67	-7.87
March 2017	9.94	-3.61	10.11	-8.04	9.66	-6.79	10.55	-8.88
April 2017	10.09	-2.11	10.38	-5.55	9.68	-6.54	10.66	-7.92
May 2017	10.25	-0.61	10.53	-4.22	9.90	-4.48	10.92	-5.70
June 2017	10.44	1.25	10.85	-1.33	10.01	-3.39	11.12	-3.99
July 2017	10.45	1.36	10.75	-2.23	9.97	-3.77	11.20	-3.28
August 2017	10.43	1.22	10.66	-3.04	9.79	-5.46	11.04	-4.65

September 2017	10.20	-1.06	10.57	-3.80	9.89	-4.52	10.97	-5.27
October 2017	10.25	-0.56	10.26	-6.68	9.77	-5.71	10.89	-5.98
November 2017	10.38	0.67	10.04	-8.70	9.80	-5.41	10.91	-5.75
December 2017	10.15	-1.49	9.66	-12.14	9.79	-5.54	10.78	-6.93
January 2018	9.98	-3.20	9.67	-12.02	9.85	-4.90	10.94	-5.52
February 2018	9.94	-3.60	9.66	-12.16	9.59	-7.44	10.55	-8.91
March 2018	9.87	-4.29	9.93	-9.63	9.49	-8.42	10.28	-11.21
April 2018	10.02	-2.76	10.24	-6.84	9.58	-7.54	10.36	-10.54
May 2018	10.17	-1.30	10.52	-4.34	9.85	-4.97	10.65	-7.99
June 2018	10.17	-1.35	10.51	-4.37	9.77	-5.69	10.69	-7.67
July 2018	10.22	-0.84	10.61	-3.45	9.88	-4.68	10.75	-7.17
August 2018	10.18	-1.25	10.51	-4.36	9.67	-6.69	10.56	-8.80
September 2018	10.06	-2.42	10.29	-6.44	9.71	-6.26	10.58	-8.65
October 2018	10.00	-2.99	10.04	-8.66	9.67	-6.62	10.65	-8.05
November 2018	10.15	-1.55	9.80	-10.82	9.55	-7.80	10.75	-7.18
December 2018	10.00	-3.01	9.53	-13.32	9.71	-6.29	10.85	-6.26
January 2019	9.72	-5.74	9.46	-13.96	9.68	-6.56	10.64	-8.10
February 2019	9.64	-6.52	9.40	-14.50	9.56	-7.77	10.47	-9.61
March 2019	9.67	-6.19	9.84	-10.53	9.54	-7.94	10.17	-12.20
April 2019	9.73	-5.61	9.94	-9.59	9.52	-8.08	10.10	-12.79
May 2019	10.31	0.02	10.25	-6.76	10.48	1.18	10.87	-6.15
June 2019	10.72	4.01	10.57	-3.85	11.19	7.99	11.79	1.82
July 2019	10.75	4.33	10.61	-3.49	11.12	7.32	11.91	2.88

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	38	1187	0.1	0	0
2	23281	721710	65.6	0	0
3	10401	322436	29.3	0	0
4	67	2075	0.2	115	1.4
5	591	18314	1.7	327	3.9
6	193	5986	0.5	464	5.5
7	36	1124	0.1	391	4.6
8	105	3263	0.3	165	2
9	713	22103	2	5949	70.4
10	47	1449	0.1	540	6.4
11	0	12	0	0	0
12	11	327	0	149	1.8
13	22	668	0.1	346	4.1
TOTAL	35505	1100654	100	8446	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>
2019-07-09	Tuesday	23:49:45	10	SB	4	120.92
2019-07-22	Monday	21:26:22	10	NB	1	118.47
2019-07-08	Monday	08:27:36	9	SB	4	116.96
2019-07-02	Tuesday	15:14:58	10	SB	4	114.49
2019-07-11	Thursday	21:05:05	10	NB	1	114.16
2019-07-30	Tuesday	16:03:00	10	SB	4	112.98
2019-07-10	Wednesday	11:20:49	10	SB	4	112.48
2019-07-15	Monday	13:15:11	10	NB	1	111.15
2019-07-02	Tuesday	16:44:08	10	SB	4	110.99
2019-07-31	Wednesday	18:54:43	10	SB	4	110.94

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	NB	15	1101	156	14.2	30320	2028	8073
5	NB	8	9043	1057	11.7	119646	7661	27879
6	NB	19	2729	296	10.8	79705	4932	16739
7	NB	11.5	752	0	0	48681	0	20016
8	NB	31	1660	996	60	26568	22986	2992
9	NB	33	11672	2874	24.6	511560	80796	110613
10	NB	33.5	827	92	11.1	50576	2300	12977
11	NB	36.5	6	6	100	0	140	0
12	NB	36.5	282	0	0	20483	0	5095
13	NB	31.5	546	0	0	43396	0	13099
TOTAL	****	****	28618	5477	****	930935	****	217482
<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	SB	15	922	53	5.7	30207	727	8586
5	SB	8	8811	479	5.4	130241	3517	31792
6	SB	19	3107	194	6.2	99046	3324	21849
7	SB	11.5	344	0	0	22646	0	9345
8	SB	31	1521	556	36.6	39317	12523	4701
9	SB	33	9876	2385	24.1	485892	65920	119345
10	SB	33.5	586	90	15.4	34683	2459	9033
11	SB	36.5	6	3	50	195	78	43
12	SB	36.5	37	2	5.4	2841	50	782
13	SB	31.5	105	0	0	10830	0	3761
TOTAL	****	****	25315	3762	****	855897	****	209237
GRAND TOTAL	****	****	53933	9239	381	1786832	209442	426719

Table 5 Gross Vehicle Weight by Class and Lane

<i>Vehicle Class</i>	<i>NB Driving Lane</i>	<i>NB Passing Lane</i>	<i>SB Passing Lane</i>	<i>SB Driving Lane</i>	<i>Total</i>	<i>Percentage</i>
1	310	398	465	245	1418	0
2	708269	694799	805018	665857	2873943	42
3	530361	449954	533442	459633	1973390	28.8
4	26774	5574	8665	22268	63282	0.9
5	93145	34162	53067	80690	261064	3.8
6	72241	12396	28289	74082	187007	2.7
7	46127	2553	5790	16856	71327	1
8	41229	8326	17174	34666	101395	1.5
9	540389	51967	202018	349795	1144168	16.7
10	49084	3791	12199	24943	90017	1.3
11	140	0	90	183	413	0
12	19970	513	1066	1825	23374	0.3
13	42325	1071	2355	8475	54226	0.8
TOTAL	2170365	1265505	1669638	1739517	6845025	100
GVW/LANE	31.71	18.49	24.39	25.41	100	0

Table 6 ESALs by Class and Lane and Flexible ESAL Factors

<i>Vehicle Class</i>	<i>NB Driving Lane</i>	<i>NB Passing Lane</i>	<i>SB Passing Lane</i>	<i>SB Driving Lane</i>	<i>Total</i>	<i>Percentage</i>	<i>Flexible ESAL Factor</i>
1	0	0	0	0	0	0	9e-04
2	78	80	107	95	361	0.88	0.001
3	185	138	201	202	726	1.76	0.0046
4	521	77	162	522	1281	3.11	1.27
5	1182	234	596	1442	3454	8.4	0.39
6	1329	204	431	1656	3620	8.8	1.24
7	860	42	100	346	1349	3.28	2.46
8	590	97	261	661	1609	3.91	1.01
9	10517	518	4132	10035	25202	61.25	2.34
10	911	58	243	548	1760	4.28	2.48
11	0	0	2	4	5	0.01	0.95
12	496	9	44	69	619	1.5	3.78
13	844	16	63	234	1158	2.81	3.51
TOTAL	17514	1475	6341	15815	41144	100	19
ESALS/LANE	42.6	3.6	15.4	38.4	100	-	-

Table 7 Site Summary: Volume and Vehicle Class

Month	Total Volume	Monthly ADT	Monthly HCAD T	Passenger Vehicles	Passenger Vehicles %	Heavy Commercial Vehicles	Heavy Commercial Vehicles %	Heavy Commercial Vehicles in Driving Lane %	Heavy Commercial Vehicles in Passing Lane %
Aug 2018	1137438	36692	1873	1079387	94.9	58051	5.1	72.5	27.5
Sep 2018	1068437	35615	1806	1014244	94.9	54192.6	5.1	73.1	26.9
Oct 2018	1143679	36893	1932	1083787	94.8	59891.9	5.2	73.6	26.4
Nov 2018	980508	32684	1594	932691	95.1	47816.9	4.9	71.4	28.6
Dec 2018	921951	30732	1217	884226	95.9	37725.4	4.1	70.5	29.5
Jan 2019	912085	29422	1247	873418	95.8	38667.4	4.2	72	28
Feb 2019	795365	28406	1230	760938	95.7	34426.8	4.3	67	33
Mar 2019	973223	31394	1336	931796	95.7	41427.3	4.3	71.7	28.3
Apr 2019	1019560	33985	1544	973238	95.5	46322.3	4.5	72.1	27.9
May 2019	1118314	36375	1686	1066053	95.3	52260.7	4.7	71.6	28.4
Jun 2019	1096822	36561	1744	1044498	95.2	52323.8	4.8	70.1	29.9
Jul 2019	1100654	35362	1785	1045333	95	55321.1	5	71.7	28.3
TOTAL	12268036	-	-	11689609	-	578427	-	-	-
AVERAGE	1022336	33677	1583	974134	95	48202	5	71	29

###ESALS

Month	ESALS NB Passing Lane	ESALS NB Driving Lane	ESALS SB Driving Lane	ESALS SB Passing Lane	Total ESALS	Driving Lane ESALS %	Passing Lane ESALS %	Pavement Life Decrease Months
Aug 2018	16699	1569	3852	9882	32003	83	17	0.8
Sep 2018	13504	1314	3680	9789	28287	82	18	0.9
Oct 2018	14864	1239	4123	11960	32186	83	17	0.9
Nov 2018	11820	925	3283	9678	25705	84	16	0.7
Dec 2018	9672	743	2777	6999	20190	83	17	2.8

Jan 2019	8504	642	2895	6695	18736	81	19	1.3
Feb 2019	7396	843	2850	4522	15611	76	24	1.9
Mar 2019	8913	920	2731	6292	18856	81	19	0.5
Apr 2019	8652	896	2921	6854	19322	80	20	0.1
May 2019	10529	1103	5184	12002	28819	78	22	6.2
Jun 2019	28564	2771	13156	27126	71617	78	22	2.9
Jul 2019	17750	1504	6355	15850	41459	81	19	3.6
TOTAL	156868	14467	53807	127650	352791	-	-	-
AVERAGE	13072	1206	4484	10638	29399	81	19	2

###Gross Vehicle Weight

<i>Month</i>	<i>GVW NB Passing Lane</i>	<i>GVW NB Driving Lane</i>	<i>GVW SB Passing Lane</i>	<i>GVW SB Driving Lane</i>	<i>Total GVW Kips</i>
Aug 18	2205186	1193867	1552543	1615359	6566955
Sep 18	1969077	1086805	1443718	1567916	6067516
Oct 18	2278157	1216871	1631350	1776223	6902601
Nov 18	1807476	940472	1377348	1453973	5579269
Dec 18	1696068	847600	1282320	1192264	5018252
Jan 19	1596048	784003	1204798	1160173	4745021
Feb 19	1387374	715290	1084749	864793	4052206
Mar 19	1654804	918271	1249463	1251819	5074356
Apr 19	1746072	946867	1329617	1290655	5313211
May 19	1895521	1089661	1663992	1664481	6313656
Jun 19	4148155	2426300	3405678	3123961	13104094
Jul 19	2179409	1266094	1670241	1741373	6857117
TOTAL	24563346	13432101	18895817	18702989	75594253
AVERAGE	2046946	1119342	1574651	1558582	6299521

###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>
Aug 2018	4223	0.4	7.4	199	62
Sep 2018	3238	0.3	6	163	57
Oct 2018	3922	0.3	6.4	195	70
Nov 2018	3672	0.4	7.8	127	42
Dec 2018	2606	0.3	6.9	144	17
Jan 2019	1949	0.2	5.1	96	10
Feb 2019	1628	0.2	4.7	81	20
Mar 2019	1385	0.1	3.4	70	22
Apr 2019	1064	0.1	2.3	40	17

May 2019	4468	0.4	8.8	393	103
Jun 2019	14060	0.7	13.9	1736	282
Jul 2019	8530	0.8	15.7	1384	182
TOTAL	50745	-	-	4628	884
AVERAGE	4228.8	0.4	7.4	385.7	73.7

###Freight

<i>Month</i>	<i>NB Freight Tons</i>	<i>SB Freight Tons</i>	<i>Total Freight</i>	<i>NB Freight %</i>	<i>SB Freight %</i>
Aug 2018	227868	162122	389990	58.4	41.6
Sep 2018	203714	164103	367817	55.4	44.6
Oct 2018	212665	187441	400106	53.2	46.8
Nov 2018	157880	147600	305480	51.7	48.3
Dec 2018	125562	112167	237729	52.8	47.2
Jan 2019	114896	109750	224646	51.1	48.9
Feb 2019	102376	83792	186168	55	45
Mar 2019	125458	111529	236987	52.9	47.1
Apr 2019	129728	127691	257419	50.4	49.6
May 2019	145149	190653	335802	43.2	56.8
Jun 2019	376690	385390	762081	49.4	50.6
Jul 2019	217482	209237	426719	51	49
TOTAL	2139469	1991474	4130944	-	-
AVERAGE	178289.1	165956.2	344245.3	52	48