

FEBRUARY 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 February 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: 795365 | Passenger Vehicles: 760938 | Heavy Commercial Vehicles: 34427

Monthly Average Daily Traffic (MADT): 28406 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1230

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 06 AM and 04 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 06 AM and 04 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 34427 HCVs, 1611 of them were overweight ³. These overweight HCVs contributed to 0.2% of total monthly volume, and 5% of total monthly

HCV volume. NB overweight vehicles typically reached highest numbers on Wednesdays, with lowest volumes reported on Sundays. SB overweight vehicles tended to reach highest volumes on Tuesdays, with lowest volumes reported on Saturdays. See Figure 3 .

The top two overweight violators by class were the class 9 and class 5 vehicles . Overall, overweight vehicles tended to reach peak volume concentrations during typical business hours, with 53.6% 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 July.

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 ,41 NB vehicles exceeded 88,000 pounds (20 vehicles were Class 10's; 9 vehicles were Class 9's). Of vehicles traveling SB,

40 NB vehicles exceeded 88,000 pounds (14 vehicles were Class 9's; 13 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from February 2019.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in February 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 fully_loaded Class 9's than empty 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 fully_loaded class 10 vehicles.

Freight Totals. A total of 186168 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (55%) than SB (45%). 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 795365 vehicles with a combined GVW of 4052206 kips (1 kip = 1,000 pounds = 0.5 tons) in February 2019. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 15611 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 52.8% of all ESALs were recorded NB while 47.2% was observed SB. In particular, 59% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 16% 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).

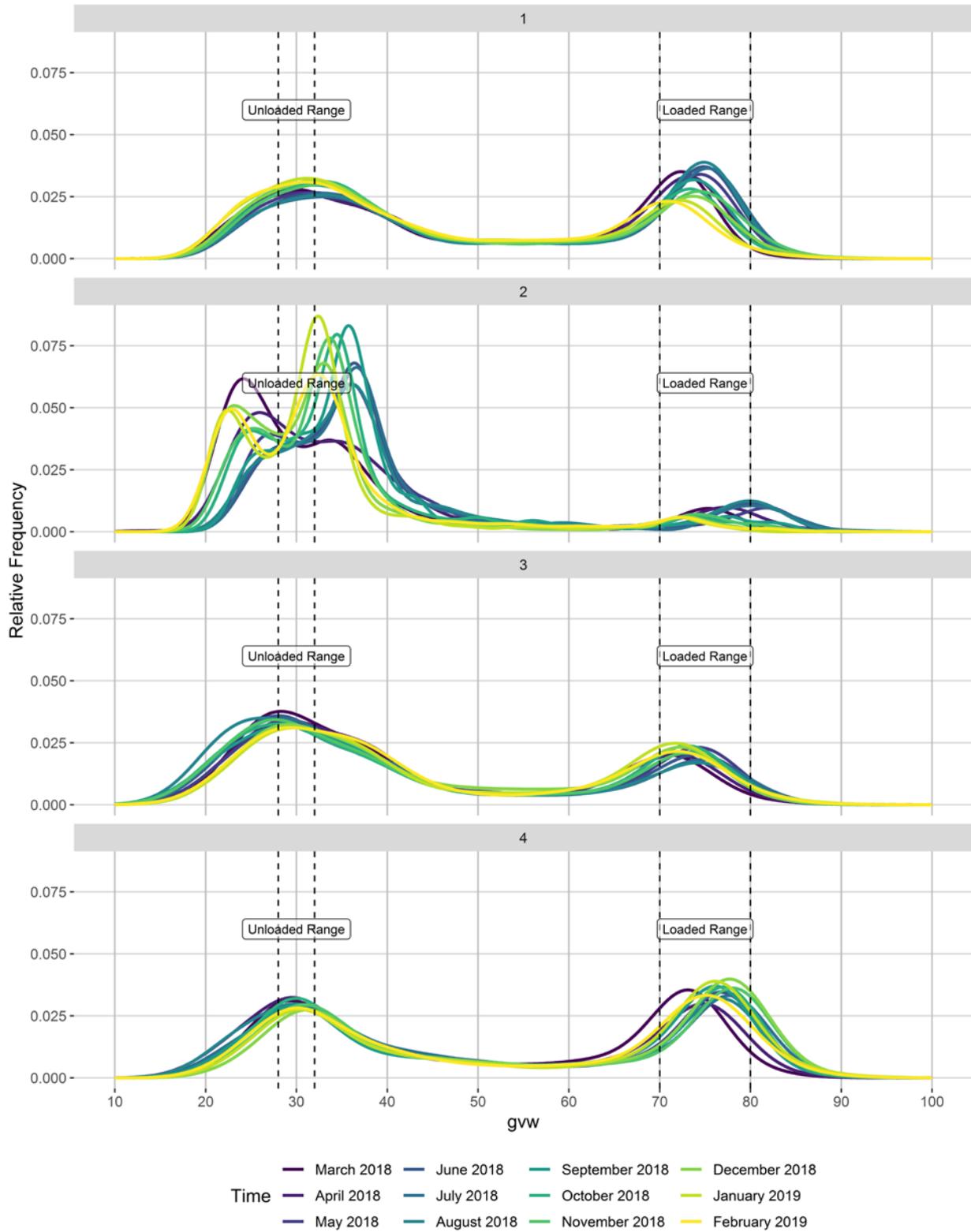
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

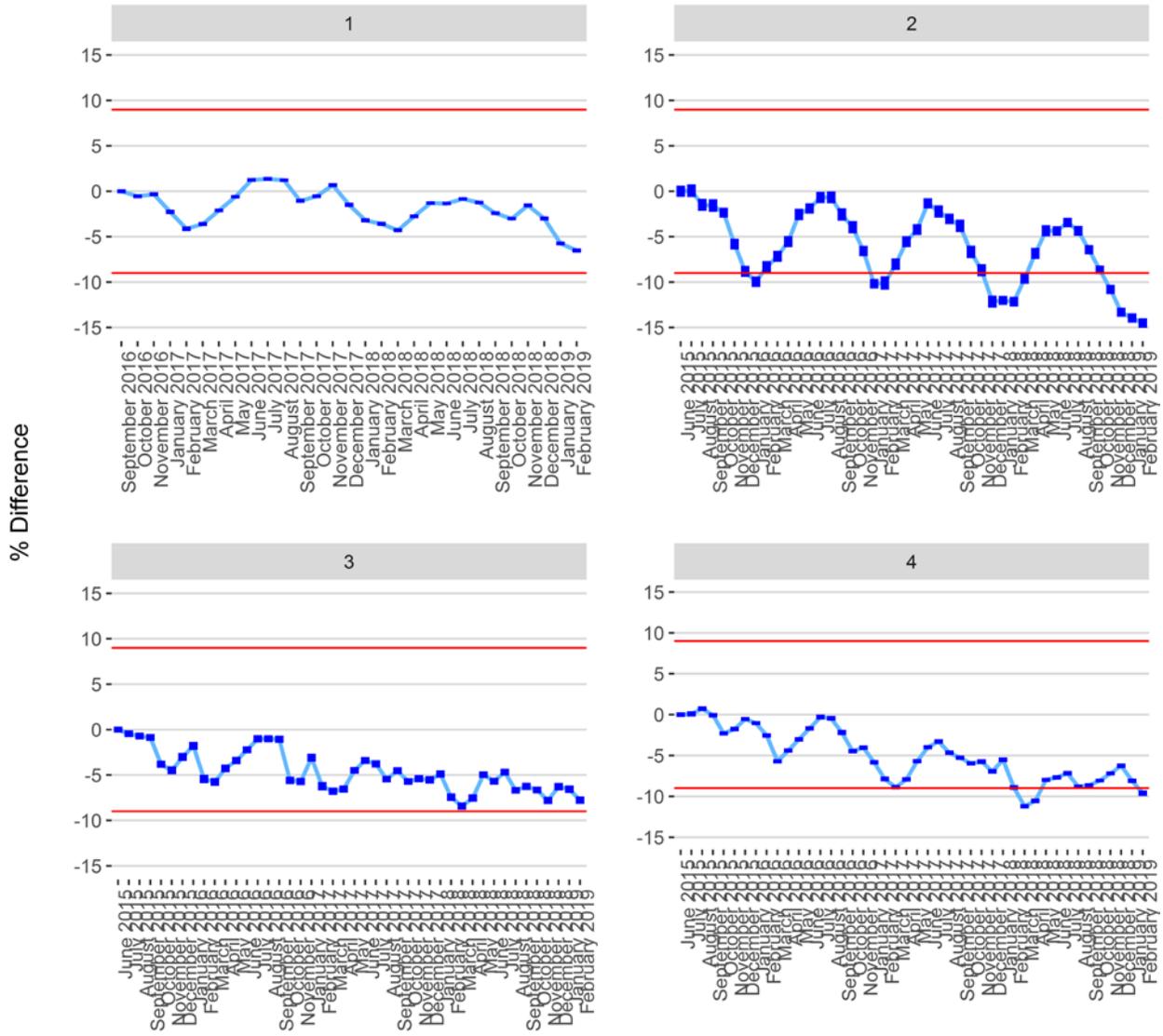
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

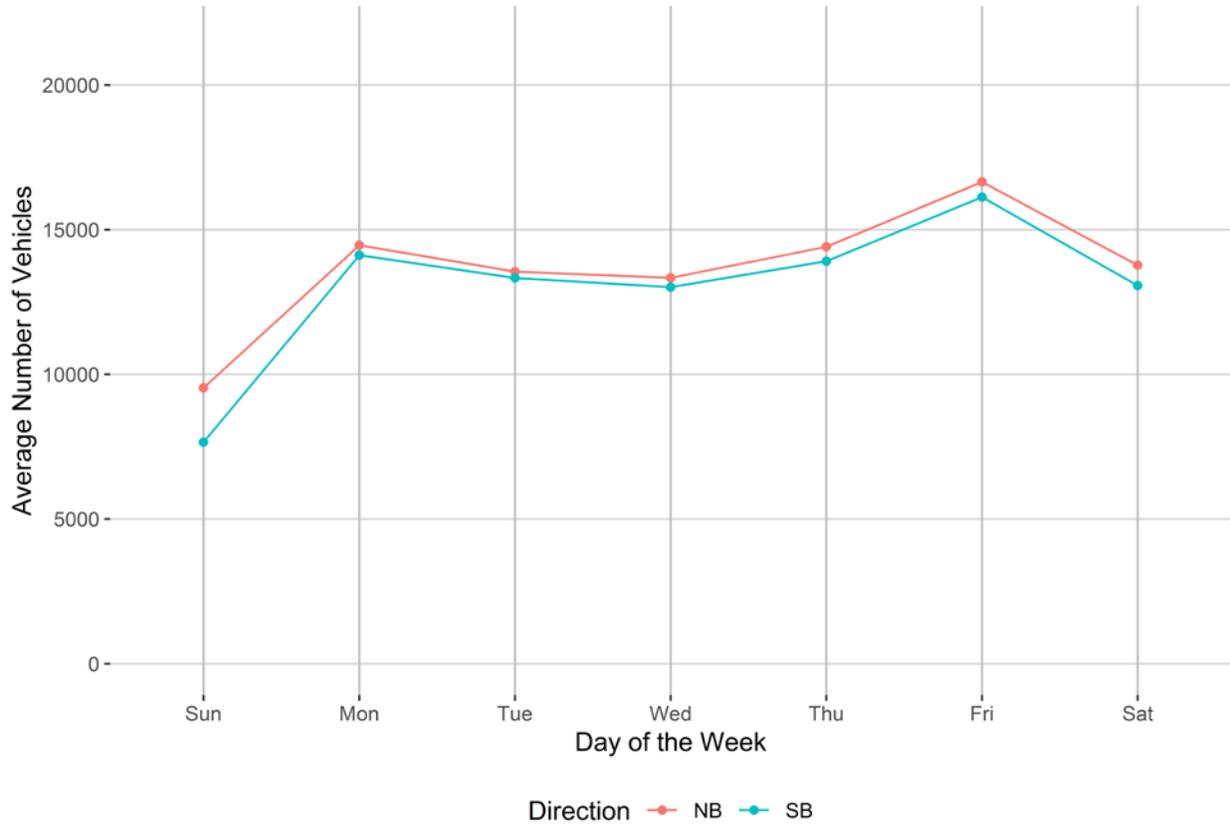


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

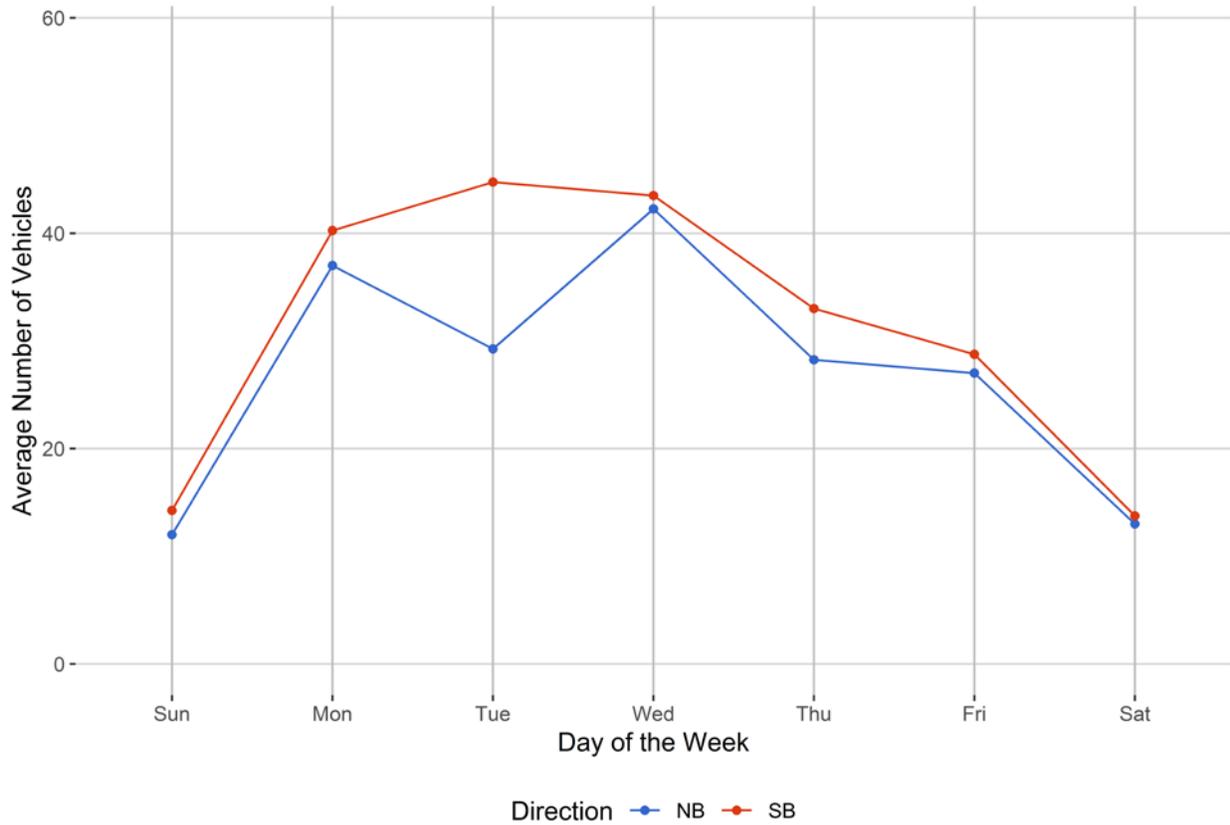


Figure 4 - Passenger Vehicles vs. Hour of the Day

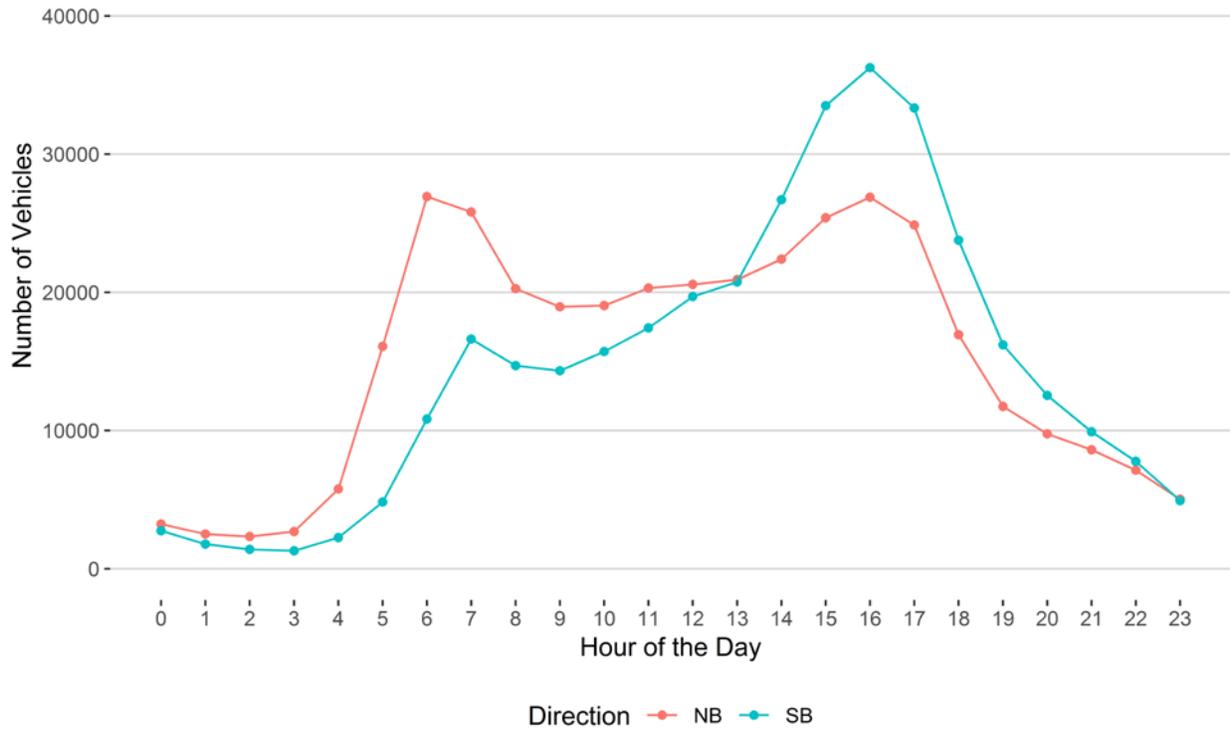


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

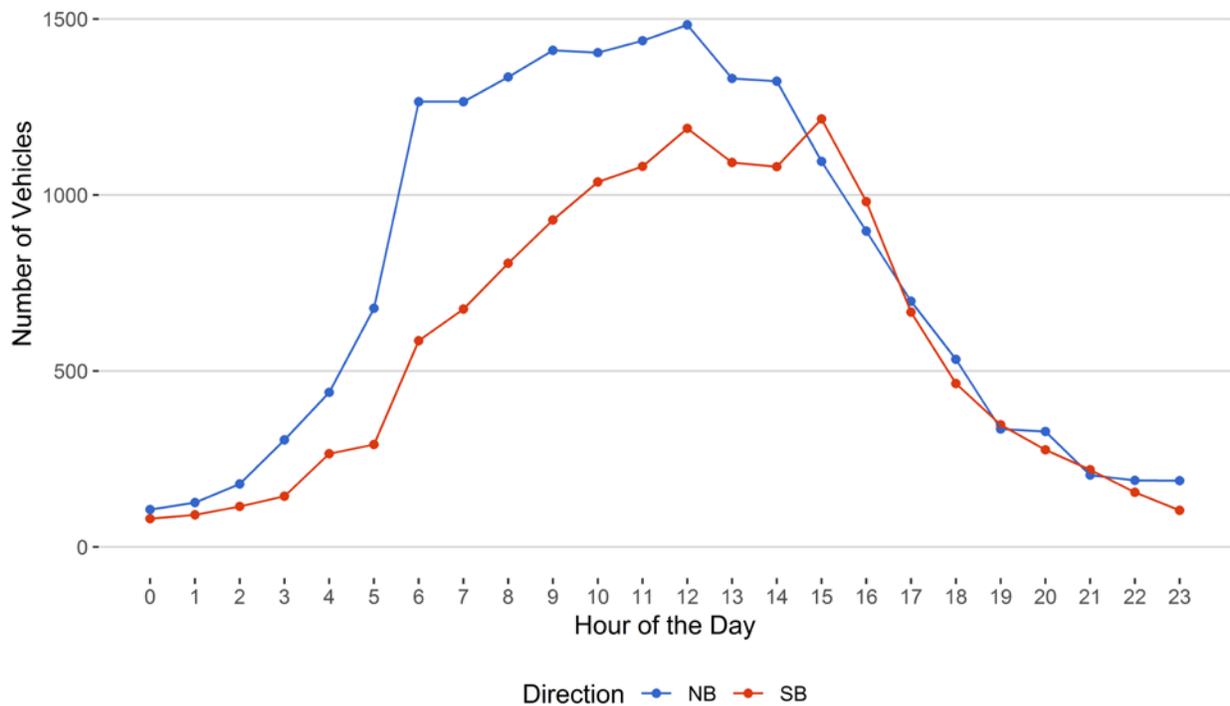


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

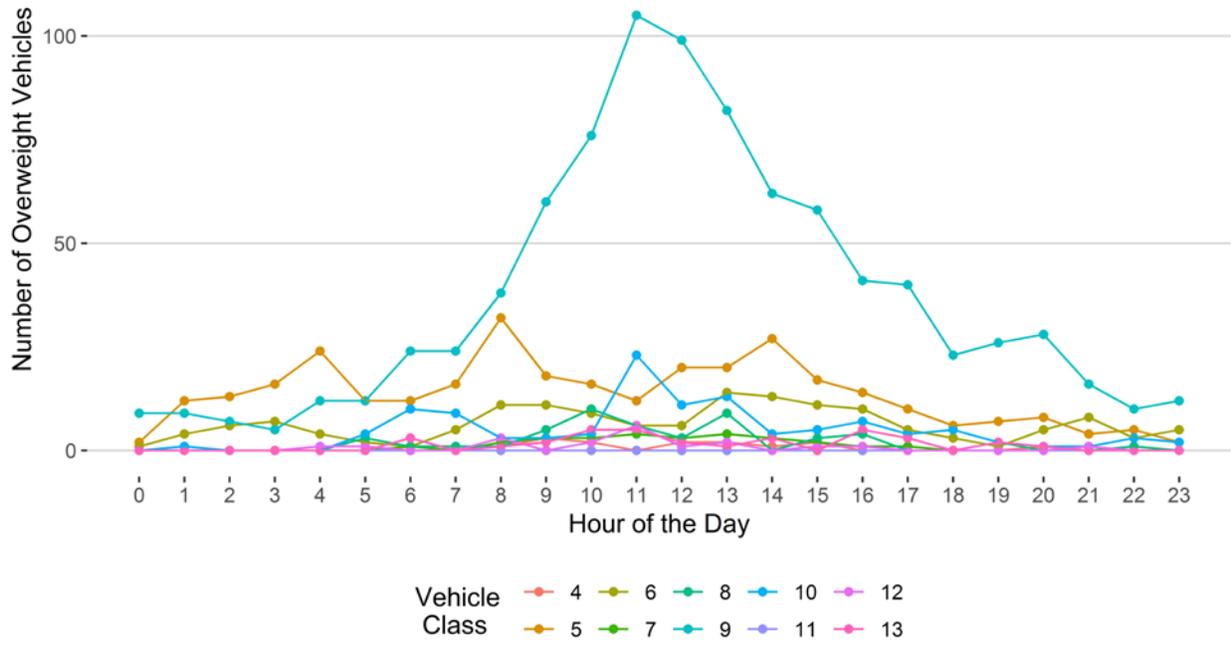


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

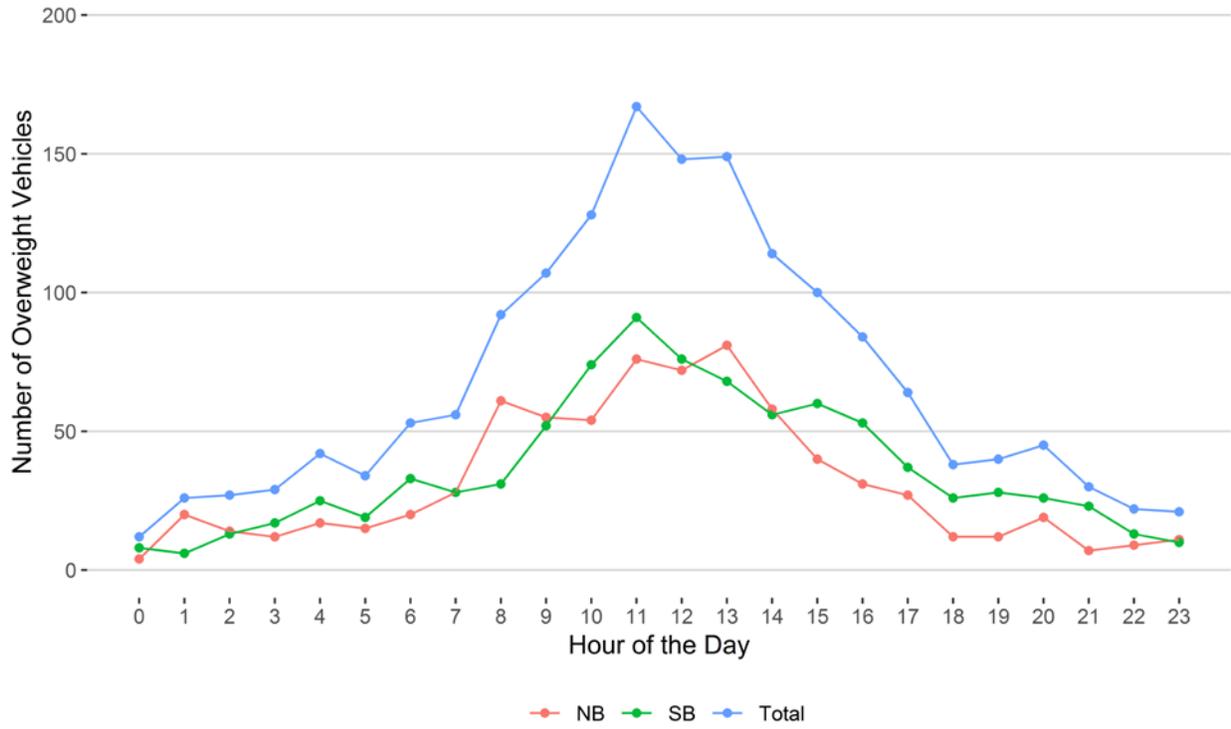
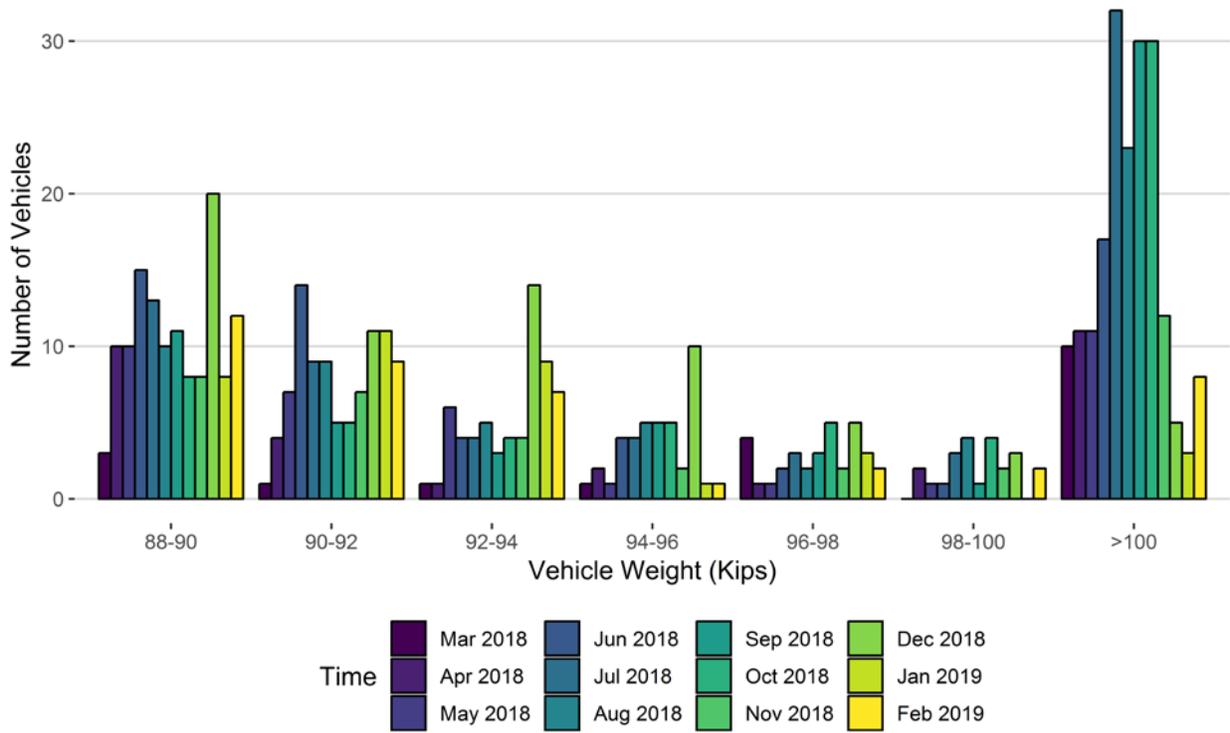
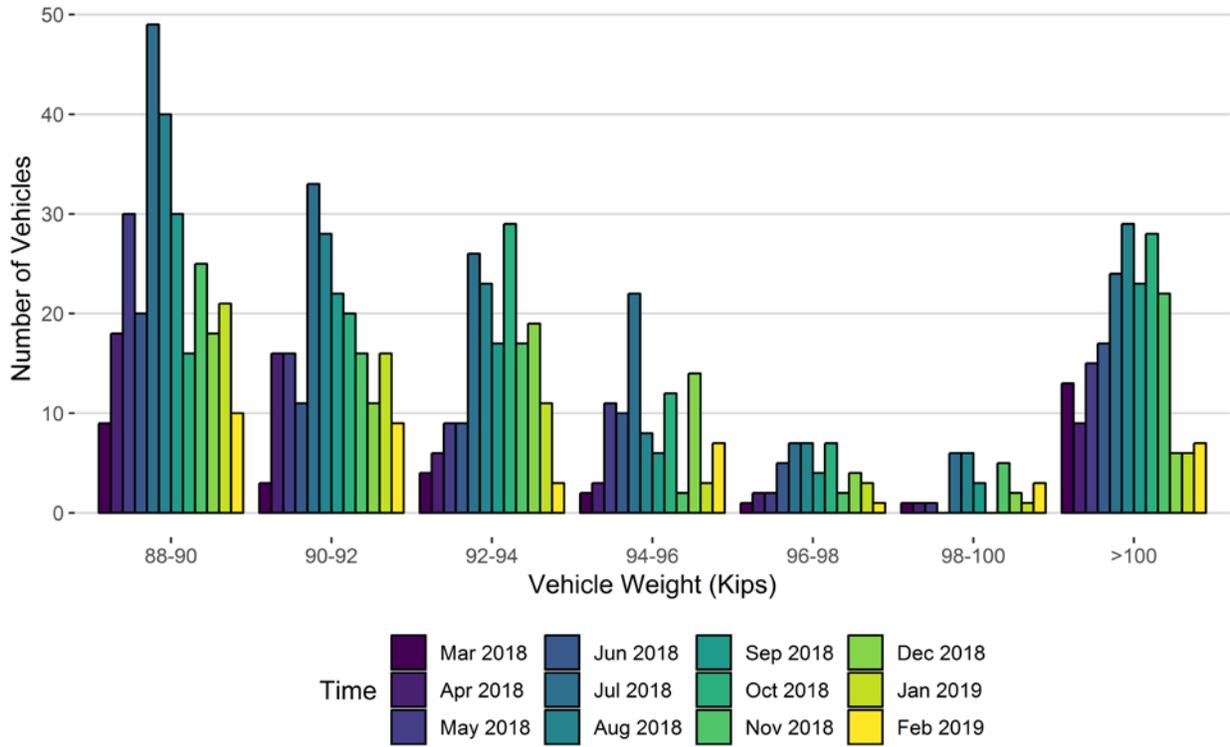


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
88-90	3	10	10	15	13	10	11	8	8	20	8	12
90-92	1	4	7	14	9	9	5	5	7	11	11	9
92-94	1	1	6	4	4	5	3	4	4	14	9	7
94-96	1	2	1	4	4	5	5	5	2	10	1	1
96-98	4	1	1	2	3	2	3	5	2	5	3	2
98-100	0	2	1	1	3	4	1	4	2	3	0	2
>100	10	11	11	17	32	23	30	30	12	5	3	8
Total	20	31	37	57	68	58	58	61	37	68	35	41

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



Vehicle Weights (Kips)	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018	Oct 2018	Nov 2018	Dec 2018	Jan 2019	Feb 2019
88-90	9	18	30	20	49	40	30	16	25	18	21	10
90-92	3	16	16	11	33	28	22	20	16	11	16	9
92-94	4	6	9	9	26	23	17	29	17	19	11	3
94-96	2	3	11	10	22	8	6	12	2	14	3	7
96-98	1	2	2	5	7	7	4	7	2	4	3	1
98-100	1	1	1	0	6	6	3	0	5	2	1	3
>100	13	9	15	17	24	29	23	28	22	6	6	7
Total	33	55	84	72	167	141	105	112	89	74	61	40

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

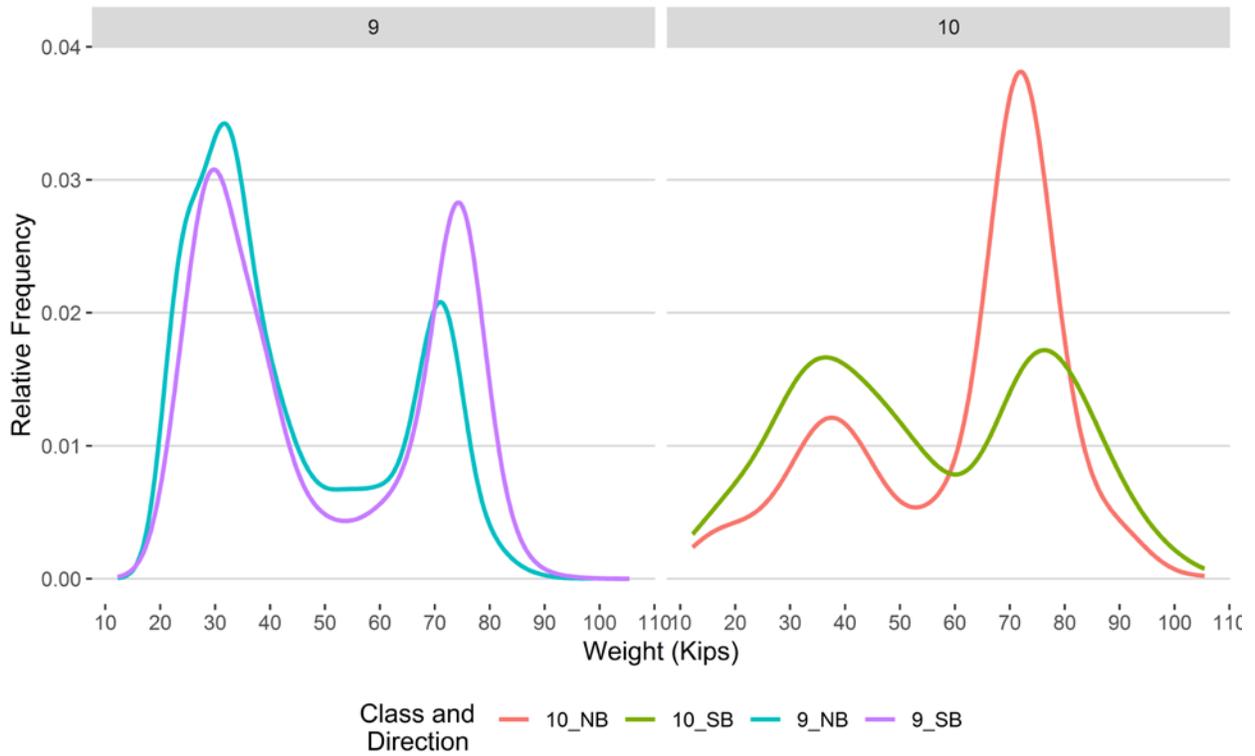


Figure 9 - Freight Percentage by Direction and Class

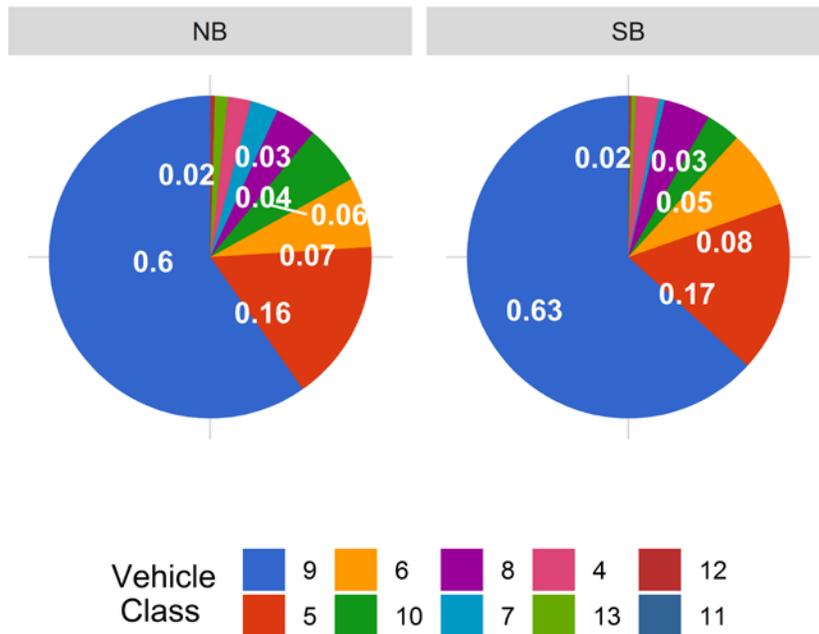


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

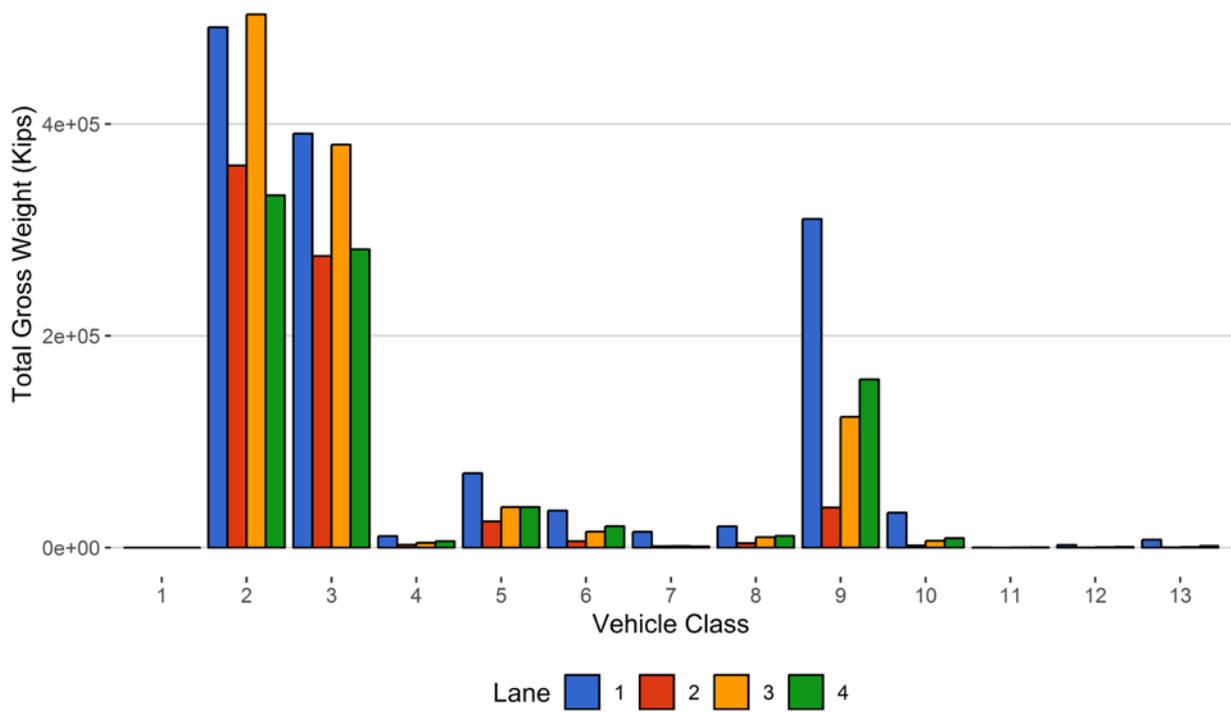


Figure 11 - Total Gross Vehicle Weight t

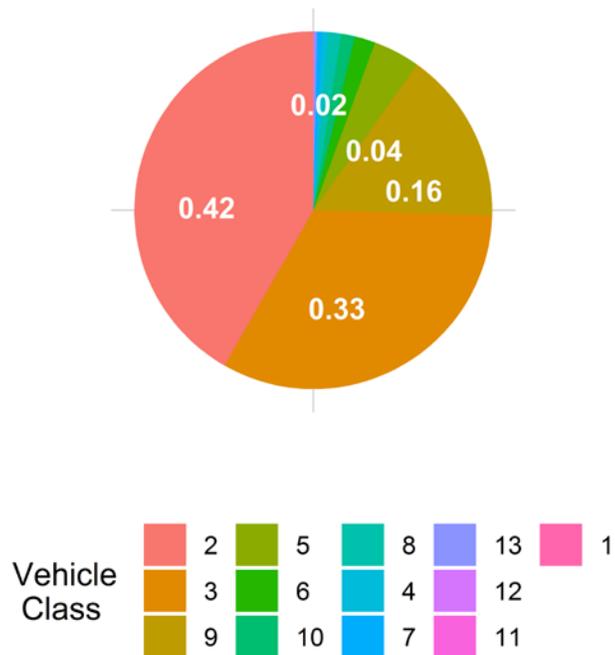


Figure 12 - Total ESALs by Class and Lane

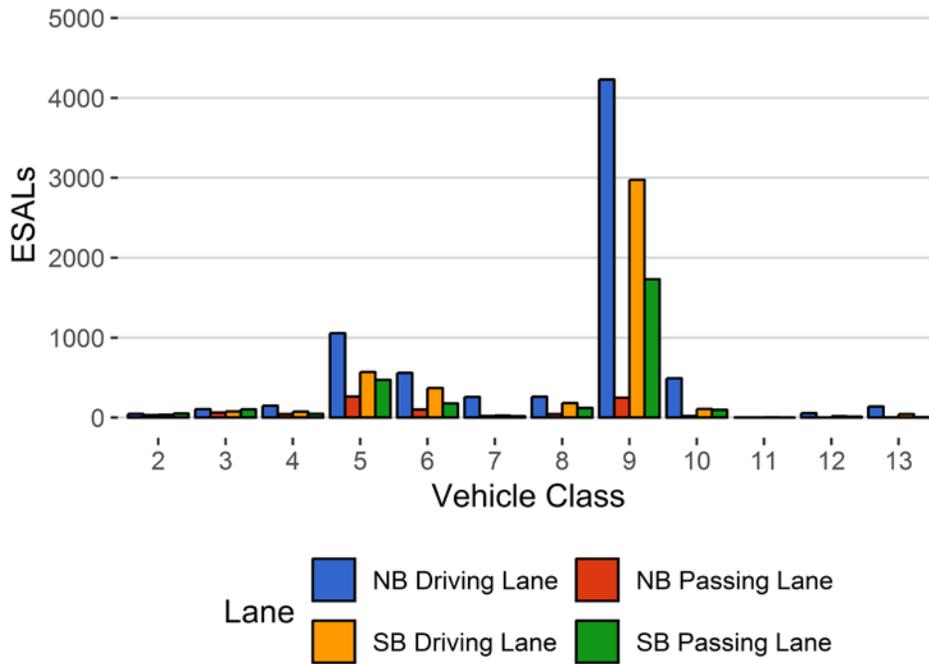


Figure 13 - ESALs by Class

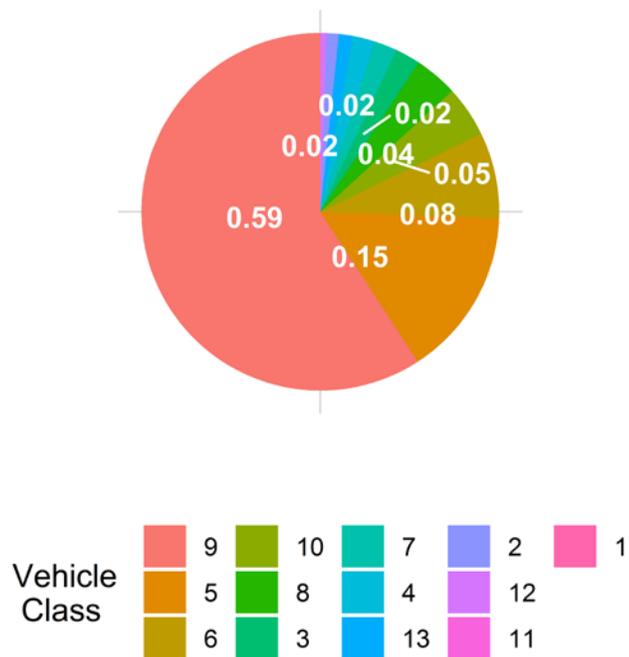


Table 1 Class 9 Front Axle Weight by Lane

<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	-3.01	10.04	-8.65	9.67	-6.65	10.64	-8.07
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

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	4	0	0	0
2	17559	491662	61.8	0	0
3	9617	269272	33.9	0	0
4	33	933	0.1	14	0.9
5	475	13289	1.7	325	20.2
6	99	2765	0.3	151	9.4
7	12	327	0	27	1.7
8	59	1653	0.2	49	3
9	513	14360	1.8	878	54.5
10	32	903	0.1	115	7.1
11	0	10	0	0	0
12	2	53	0	19	1.2
13	5	135	0	33	2
TOTAL	28406	795365	100	1611	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>
2019-02-08	Friday	08:06:56	10	SB	4	115.37
2019-02-08	Friday	06:02:15	9	SB	4	113.22
2019-02-06	Wednesday	04:36:57	9	SB	4	105.93
2019-02-22	Friday	11:58:36	10	NB	1	105.45
2019-02-07	Thursday	06:03:04	9	NB	1	101.2
2019-02-08	Friday	05:05:25	9	SB	4	101.13
2019-02-08	Friday	08:36:51	9	SB	4	101.02
2019-02-08	Friday	09:07:07	10	SB	4	99.28
2019-02-17	Sunday	17:53:45	10	SB	3	99.15
2019-02-04	Monday	07:32:03	9	NB	1	98.48

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	499	99	19.8	12212	1226	3106
5	NB	8	6974	1421	20.4	84792	10016	20184
6	NB	19	1392	236	17	37139	3775	7587
7	NB	11.5	261	0	0	16195	0	6597
8	NB	31	835	544	65.1	11490	12604	1235
9	NB	33	7876	3020	38.3	265719	82215	52736
10	NB	33.5	572	67	11.7	33212	1639	8147
11	NB	36.5	3	2	66.7	55	70	9
12	NB	36.5	36	0	0	2558	0	622
13	NB	31.5	106	2	1.9	7582	42	2153
TOTAL	****	****	18554	5391	****	470954	****	102376
<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	380	57	15	9635	692	2395
5	SB	8	5550	893	16.1	69999	6419	16372
6	SB	19	1214	175	14.4	32325	2822	6292
7	SB	11.5	47	0	0	2568	0	1014
8	SB	31	723	449	62.1	10424	10303	965
9	SB	33	5657	1846	32.6	230771	51421	52504
10	SB	33.5	279	59	21.1	13862	1528	3246
11	SB	36.5	6	1	16.7	267	33	42
12	SB	36.5	14	0	0	1060	0	274
13	SB	31.5	21	0	0	2037	0	688
TOTAL	****	****	13891	3480	****	372948	****	83792
GRAND TOTAL	****	****	32445	8871	419	843902	184804	186168

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	3	0	0	3	6	0
2	491314	360737	503459	332574	1688084	41.7
3	390872	275305	380403	281627	1328207	32.8
4	10845	2593	4416	5911	23766	0.6
5	70140	24667	38221	38198	171226	4.2
6	34907	6006	15032	20115	76061	1.9
7	14947	1248	1475	1093	18763	0.5
8	20064	4029	9740	10988	44821	1.1
9	310133	37802	123466	158727	630127	15.6
10	32858	1993	6442	8948	50241	1.2
11	124	0	106	193	424	0
12	2504	54	410	650	3617	0.1
13	7361	263	476	1561	9661	0.2
TOTAL	1386075	714696	1083645	860587	4045003	100
GVW/LANE	34.27	17.67	26.79	21.28	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	0.2
2	47	32	52	37	167	1.08	7e-04
3	107	64	104	76	351	2.26	0.0028
4	149	43	46	75	313	2.02	0.72
5	1056	263	474	571	2364	15.23	0.38
6	559	101	177	369	1206	7.77	0.93
7	259	20	17	25	321	2.07	2.07
8	261	45	120	183	608	3.92	0.78
9	4229	249	1732	2975	9186	59.18	1.36
10	492	20	96	109	718	4.62	1.68
11	1	0	1	2	5	0.03	1.02
12	55	0	13	18	86	0.55	2.98
13	140	3	7	45	195	1.26	2.89
TOTAL	7355	842	2838	4485	15520	100	15
ESALS/LANE	47.4	5.4	18.3	28.9	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>
Mar 2018	973481	31403	1334	932126	95.8	41355	4.2	73.2	26.8
Apr 2018	951927	31731	1397	910012	95.6	41915.4	4.4	72.3	27.7
May 2018	1132671	36538	1759	1078136	95.2	54534.7	4.8	72.4	27.6
Jun 2018	1115053	37168	1796	1061160	95.2	53892.6	4.8	72	28
Jul 2018	1124798	36284	1799	1069022	95	55776	5	73.1	26.9
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	1913	1084361	94.8	59317.7	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
TOTAL	12257393	-	-	11679721	-	577672	-	-	-
AVERA GE	1021449	33630	1580	973310	95	48139	5	72	28

ESALS

<i>Month</i>	<i>ESALS NB Passing Lane</i>	<i>ESALS NB Driving Lane</i>	<i>ESALS SB Driving Lane</i>	<i>ESALS SB Passing Lane</i>	<i>Total ESALS</i>	<i>Driving Lane ESALS %</i>	<i>Passing Lane ESALS %</i>	<i>Pavement Life Decrease Months</i>
Mar 2018	10255	816	2598	5993	19663	83	17	0.2
Apr 2018	10719	1003	2961	5887	20570	81	19	0.5
May 2018	15293	1316	4108	8413	29131	81	19	0.4
Jun 2018	16225	1468	3956	8512	30161	82	18	1
Jul 2018	16409	1565	3643	9784	31401	83	17	1.3
Aug 2018	16699	1569	3852	9882	32003	83	17	0.8
Sep 2018	13504	1314	3680	9789	28287	82	18	0.9
Oct 2018	14258	1193	3930	11360	30741	83	17	1
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
TOTAL	150755	13397	40533	97514	302200	-	-	-
AVERAGE	12563	1116	3378	8126	25183	82	18	1

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>
Mar 18	1730276	868402	1235504	1263310	5097491
Apr 18	1713918	884564	1241636	1225668	5065786
May 18	2161183	1175039	1581054	1449968	6367245
Jun 18	2164093	1193202	1560431	1483902	6401628
Jul 18	2204255	1198396	1514059	1576436	6493146
Aug 18	2205186	1193867	1552543	1615359	6566955
Sep 18	1969077	1086805	1443718	1567916	6067516
Oct 18	2199555	1175217	1576712	1711159	6662643
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
TOTAL	22834508	12062858	16654871	16564921	68117158
AVERAGE	1902876	1005238	1387906	1380410	5676430

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>
Mar 2018	1311	0.1	3.2	53	24
Apr 2018	1746	0.2	4.1	86	23
May 2018	3351	0.3	6.3	121	28
Jun 2018	4036	0.4	7.6	129	35
Jul 2018	4531	0.4	8.3	235	65
Aug 2018	4223	0.4	7.4	199	62
Sep 2018	3238	0.3	6	163	57
Oct 2018	3746	0.3	6.4	173	62
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
TOTAL	36037	-	-	1607	445
AVERAGE	3003.1	0.3	6.2	133.9	37.1

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>
Mar 2018	143515	109156	252670	56.8	43.2
Apr 2018	150002	107961	257962	58.1	41.9
May 2018	208896	150269	359165	58.2	41.8
Jun 2018	215733	147528	363262	59.4	40.6
Jul 2018	223930	159341	383271	58.4	41.6
Aug 2018	227868	162122	389990	58.4	41.6
Sep 2018	203714	164103	367817	55.4	44.6
Oct 2018	204388	178193	382582	53.4	46.6
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
TOTAL	2078760	1631981	3710741	-	-
AVERAGE	173230	135998.4	309228.4	55.7	44.3