

JULY 2018



**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 2018. 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. Table 1 indicates that the class 9 front axle weights were all within +/- 9% of baseline calibration values for all lanes. 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: 1124798 | Passenger Vehicles: 1069022 | Heavy Commercial Vehicles: 55776

Monthly Average Daily Traffic (MADT): 36284 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1799

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 Saturdays, 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 55776 HCVs, 4504 of them were overweight³. These overweight HCVs contributed to 0.4% of total monthly volume, and 8.3% of total monthly HCV volume. NB overweight vehicles typically reached highest numbers on Thursdays, with lowest volumes reported on Sundays. SB 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 50.4% 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 August.

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 report⁴.

Using normal load limits ,68 NB vehicles exceeded 88,000 pounds (35 vehicles were Class 13's; 22 vehicles were Class 10's). Of vehicles traveling SB,

167 NB vehicles exceeded 88,000 pounds (97 vehicles were Class 13's; 48 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from July 2018.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in July 2018. 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 383271 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (58.4%) than SB (41.6%). 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 1124798 vehicles with a combined GVW of 6493146 kips (1 kip = 1,000 pounds = 0.5 tons) in July 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 31401 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 57.2% of all ESALs were recorded NB while 42.8% 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).

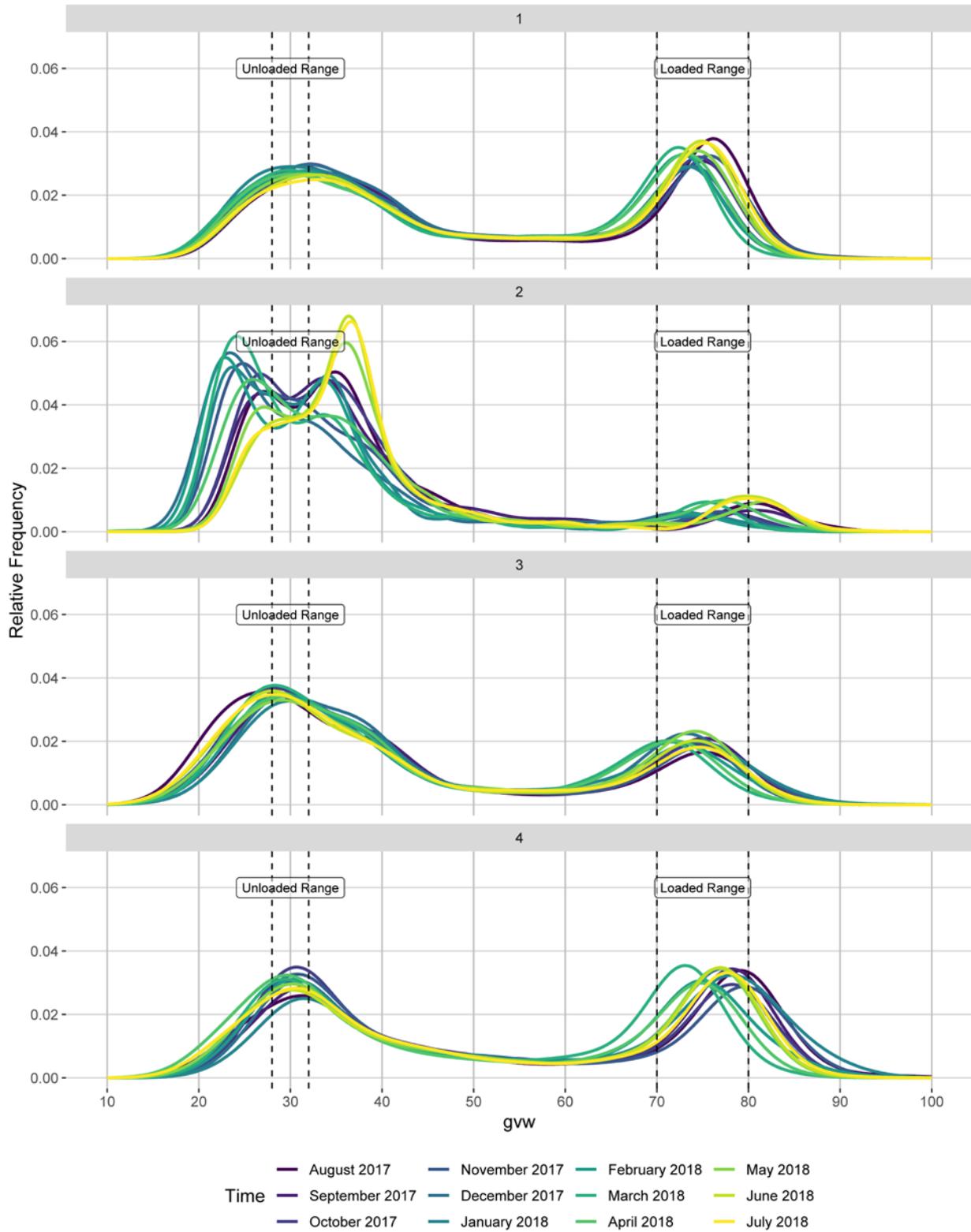
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

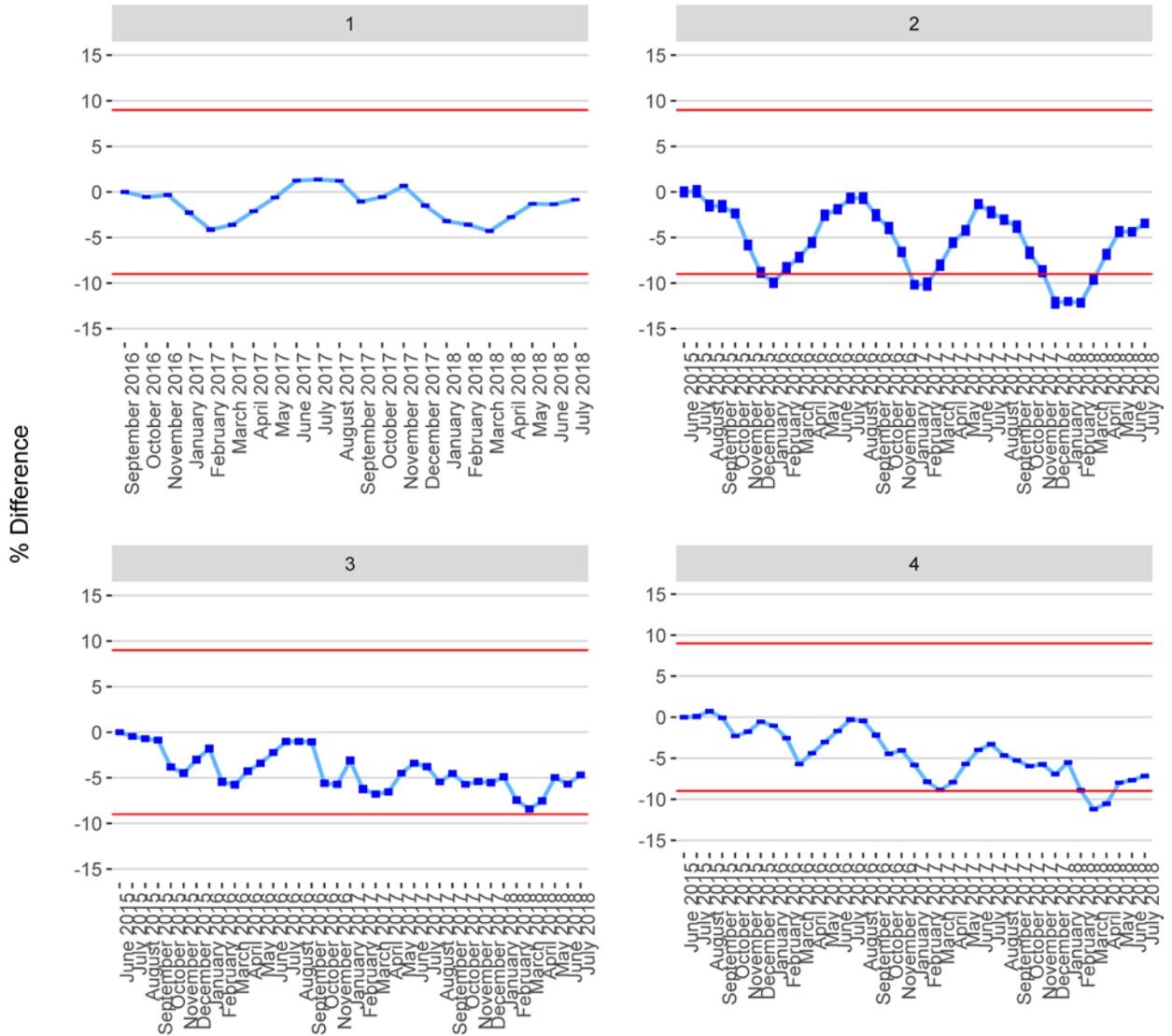
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

Figure 1 - Monthly Class 9 GWW 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

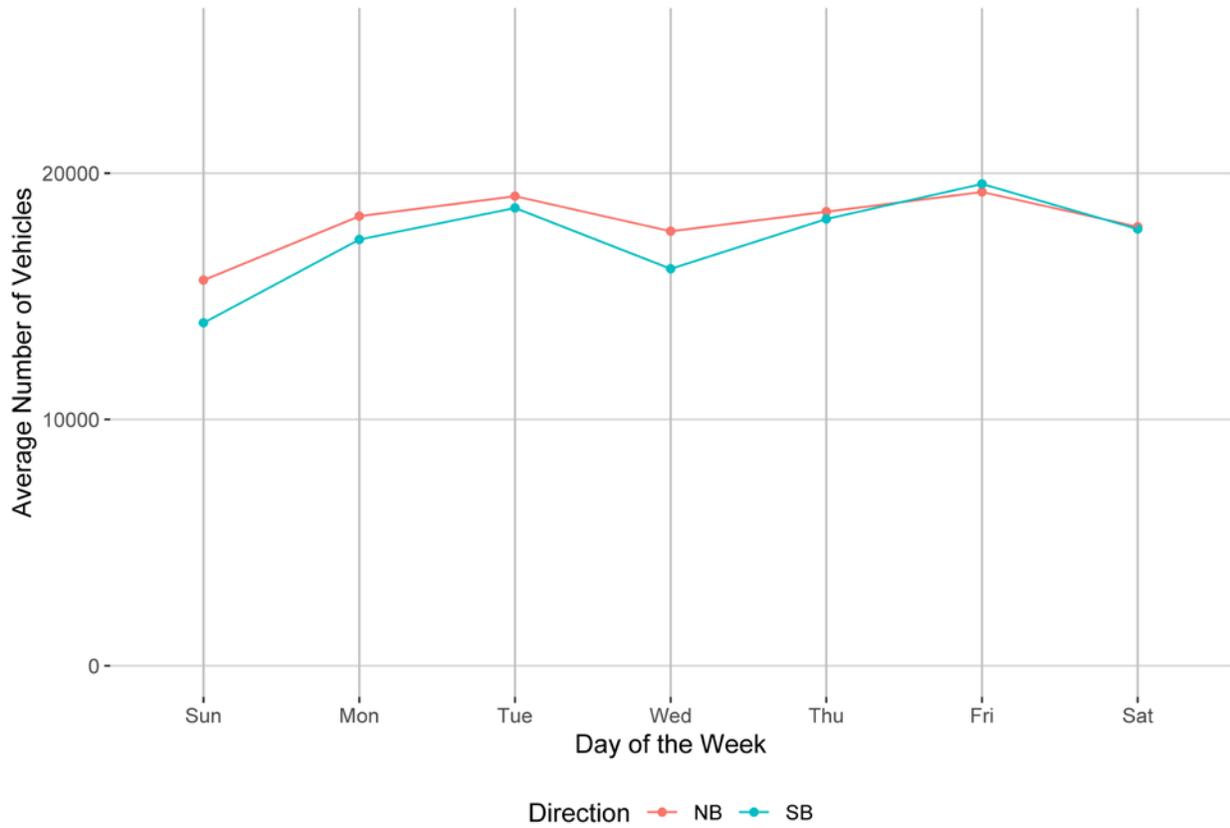


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

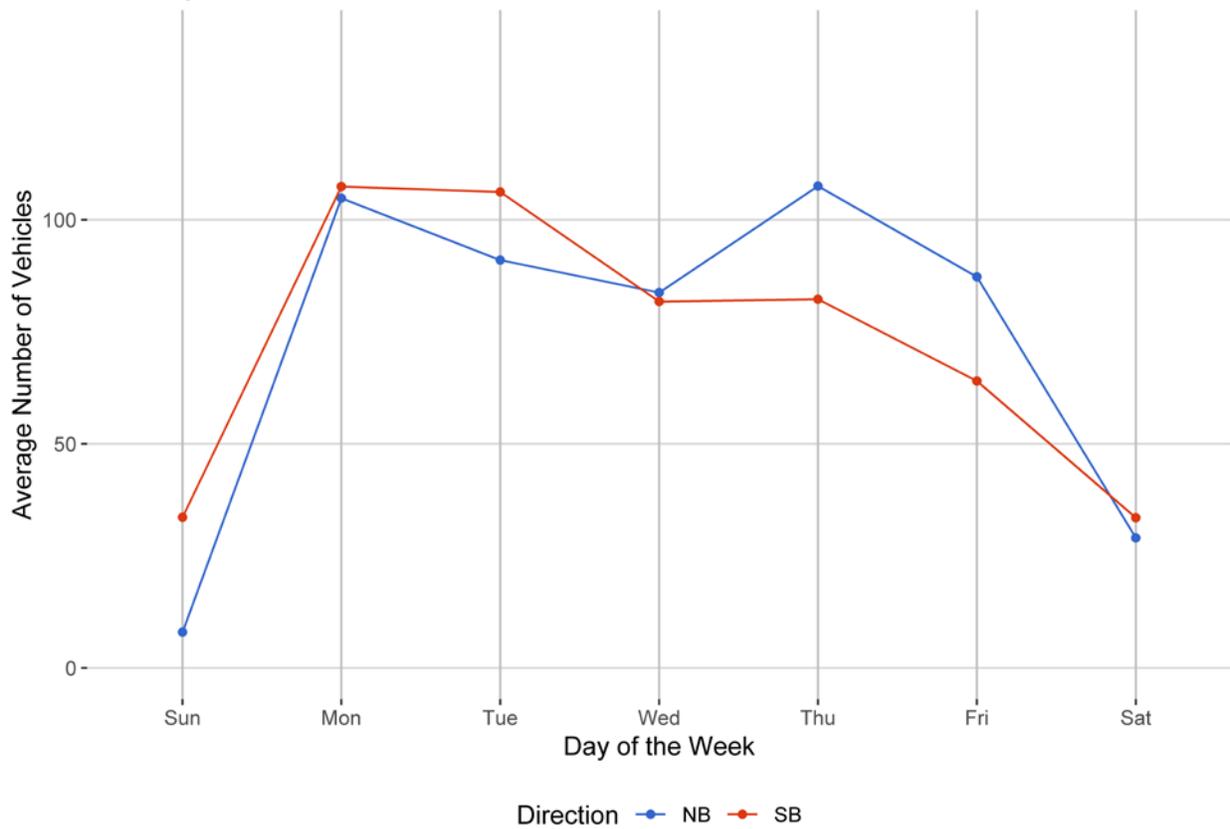


Figure 4 - Passenger Vehicles vs. Hour of the Day

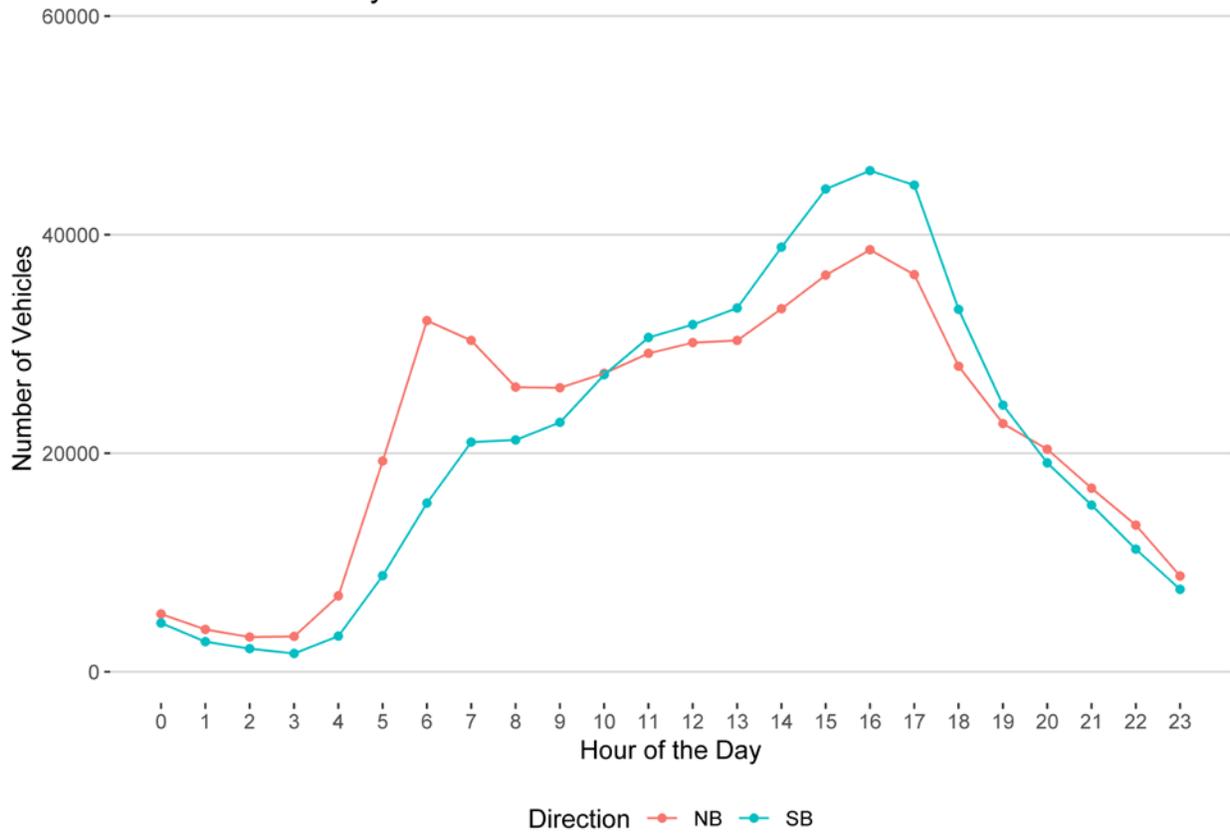


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

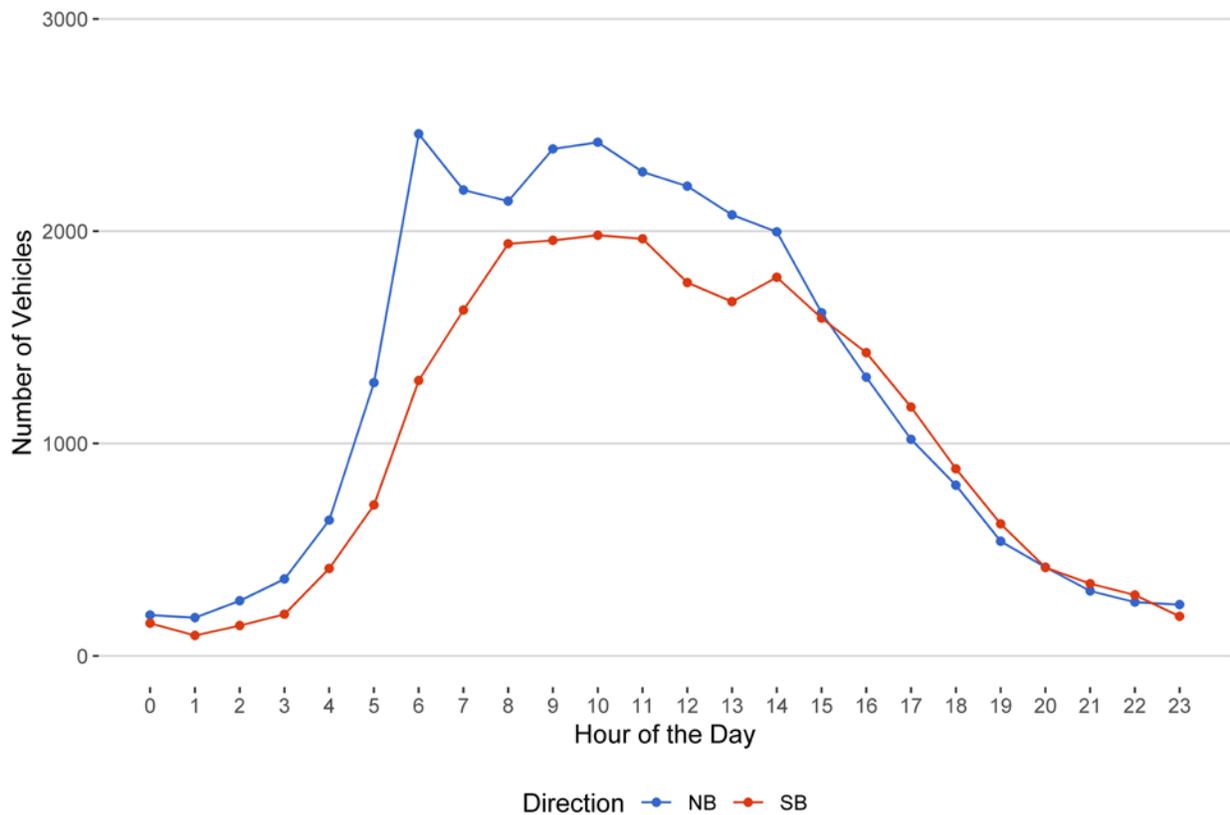


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

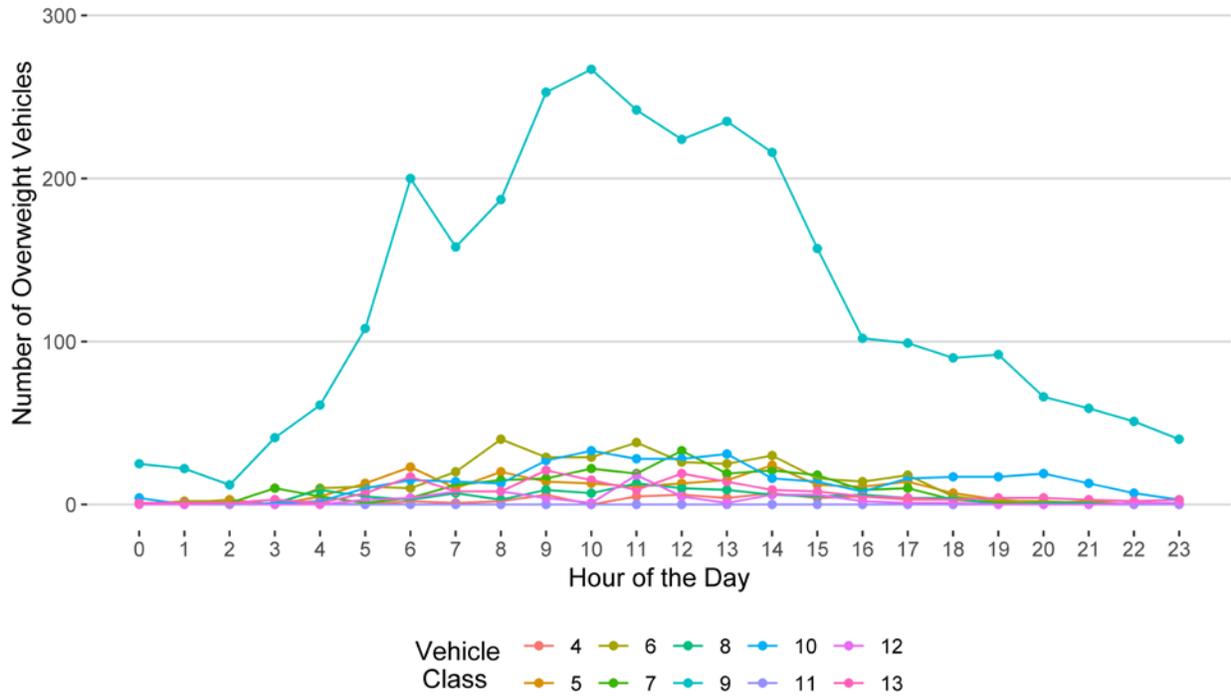


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

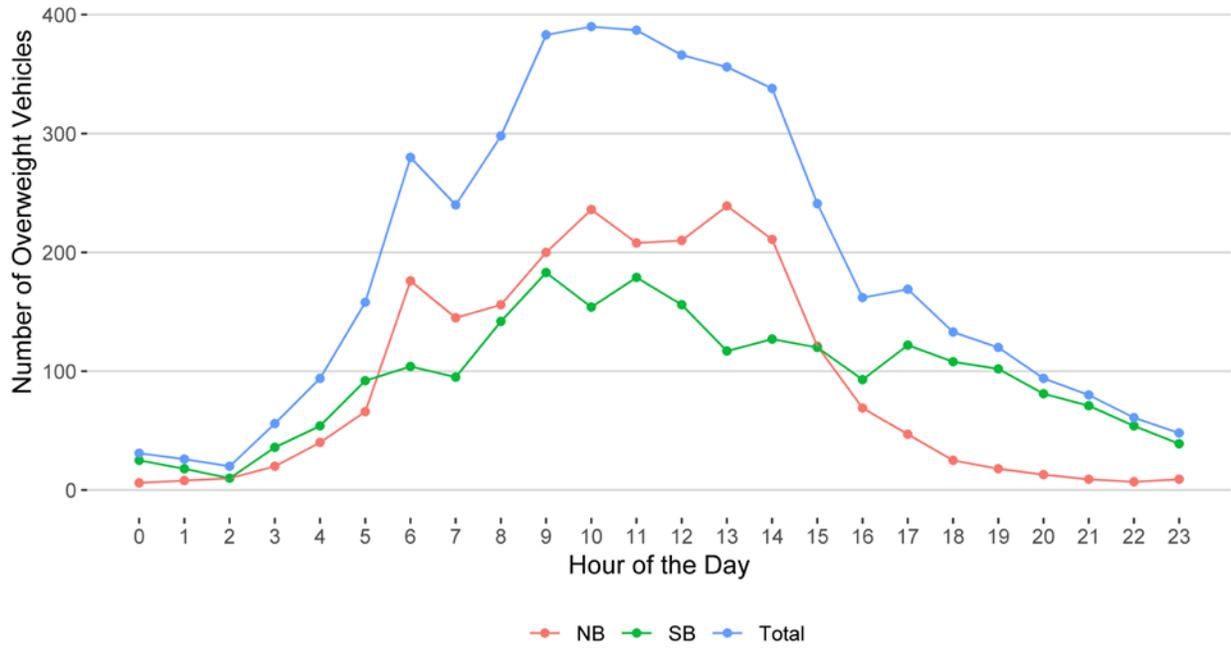
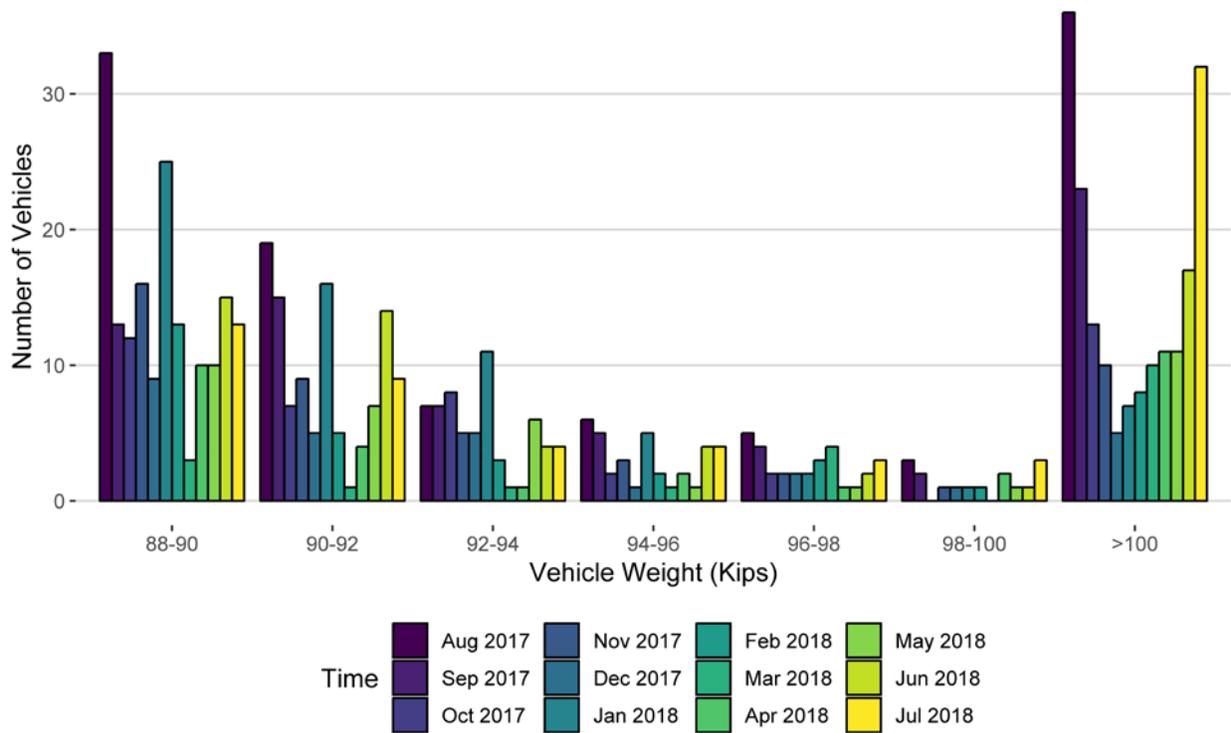
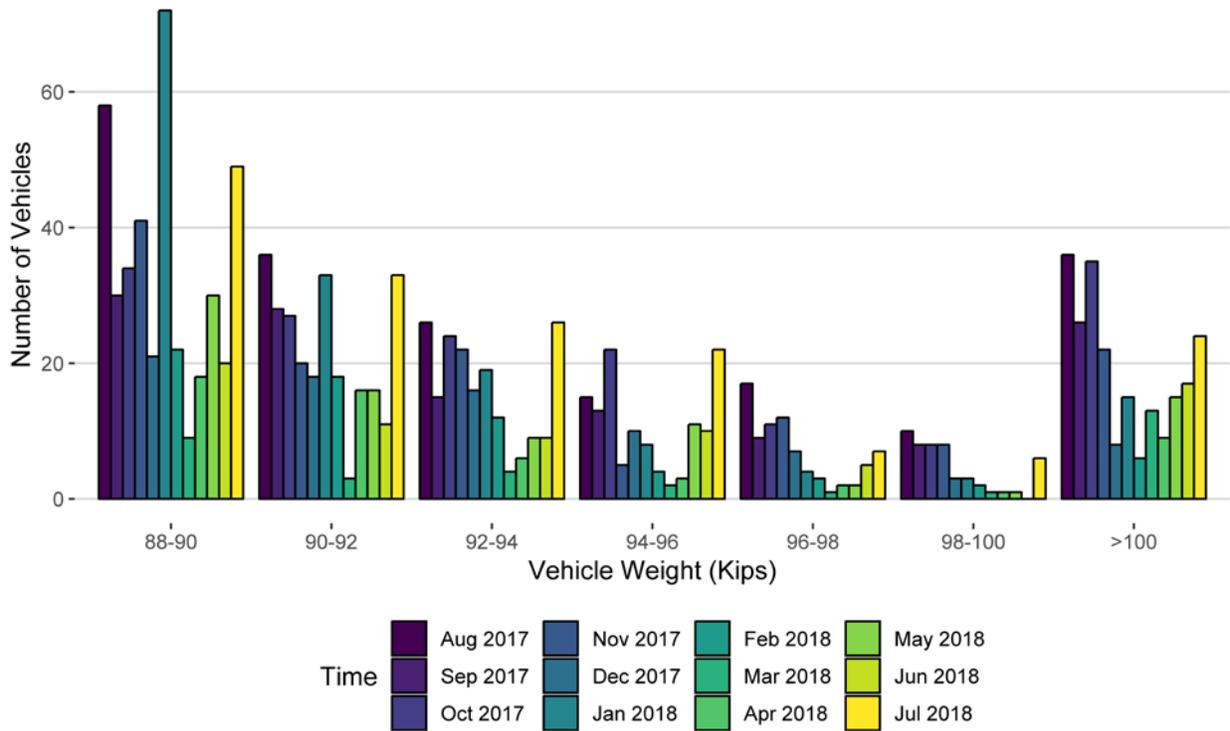


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018
88-90	33	13	12	16	9	25	13	3	10	10	15	13
90-92	19	15	7	9	5	16	5	1	4	7	14	9
92-94	7	7	8	5	5	11	3	1	1	6	4	4
94-96	6	5	2	3	1	5	2	1	2	1	4	4
96-98	5	4	2	2	2	2	3	4	1	1	2	3
98-100	3	2	0	1	1	1	1	0	2	1	1	3
>100	36	23	13	10	5	7	8	10	11	11	17	32
Total	109	69	44	46	28	67	35	20	31	37	57	68

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



Vehicle Weights (Kips)	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018
88-90	58	30	34	41	21	72	22	9	18	30	20	49
90-92	36	28	27	20	18	33	18	3	16	16	11	33
92-94	26	15	24	22	16	19	12	4	6	9	9	26
94-96	15	13	22	5	10	8	4	2	3	11	10	22
96-98	17	9	11	12	7	4	3	1	2	2	5	7
98-100	10	8	8	8	3	3	2	1	1	1	0	6
>100	36	26	35	22	8	15	6	13	9	15	17	24
Total	198	129	161	130	83	154	67	33	55	84	72	167

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

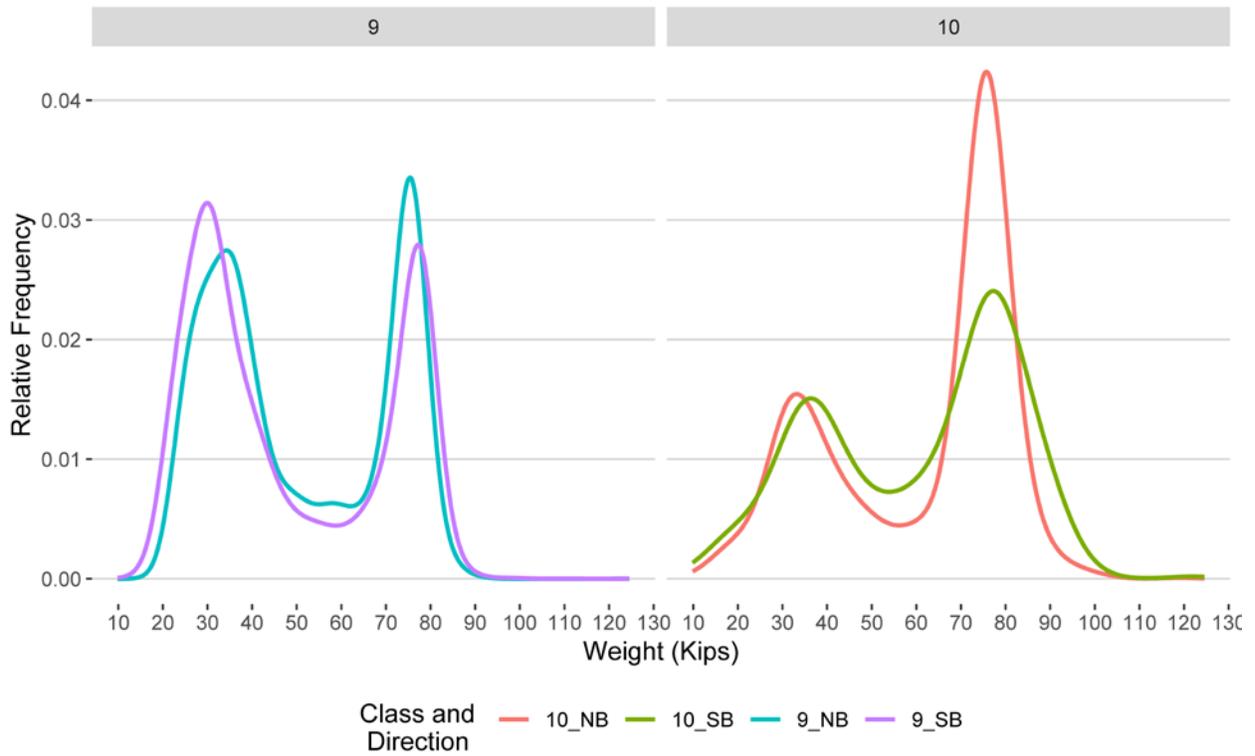


Figure 9 - Freight Percentage by Direction and Class

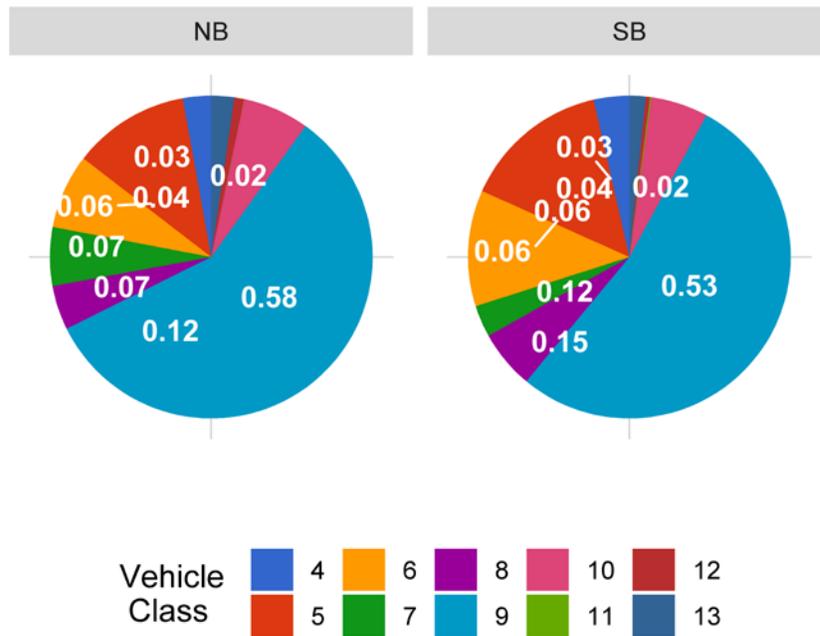


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

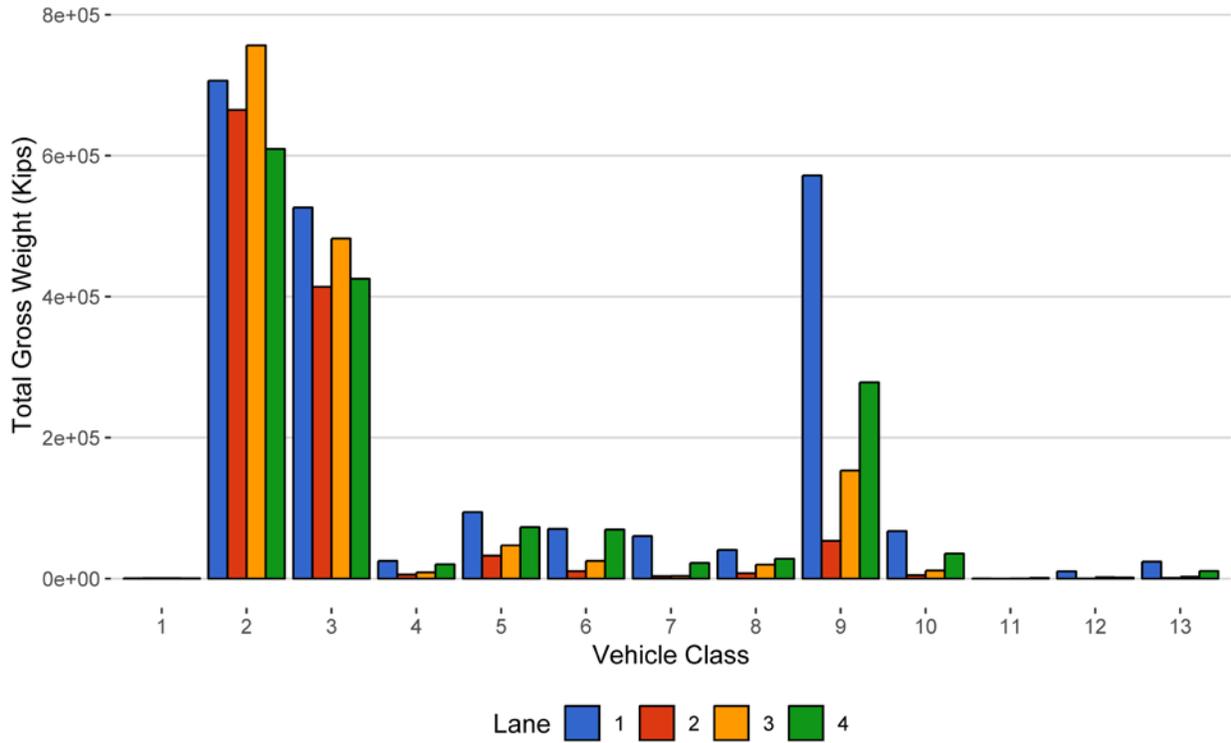


Figure 11 - Total Gross Vehicle Weight t

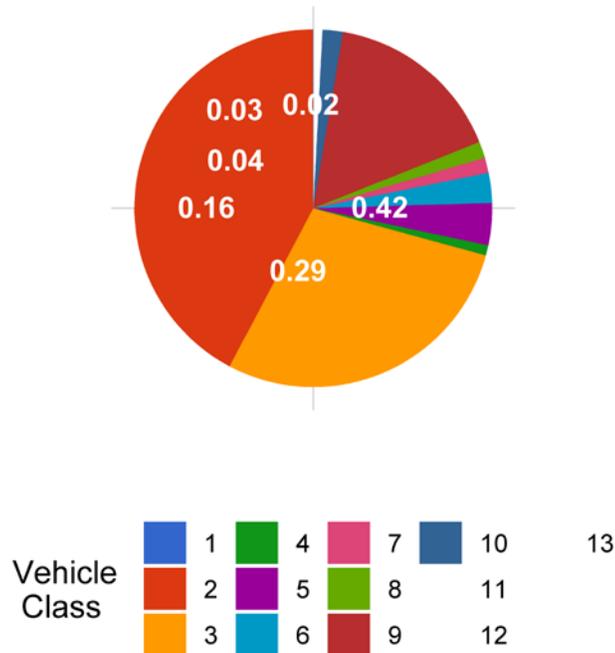


Figure 12 - Total ESALs by Class and Lane

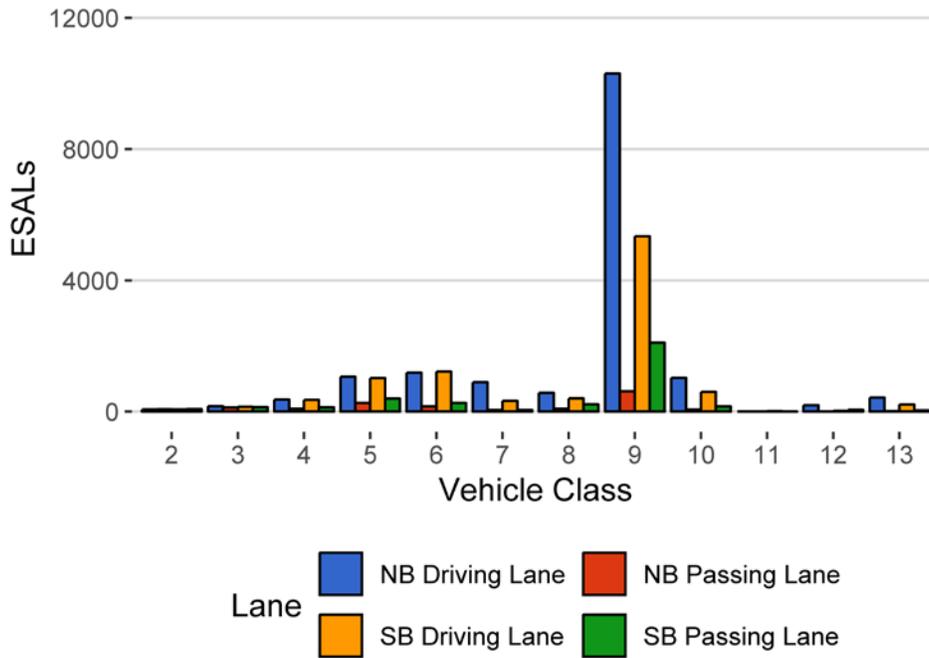


Figure 13 - ESALs by Class

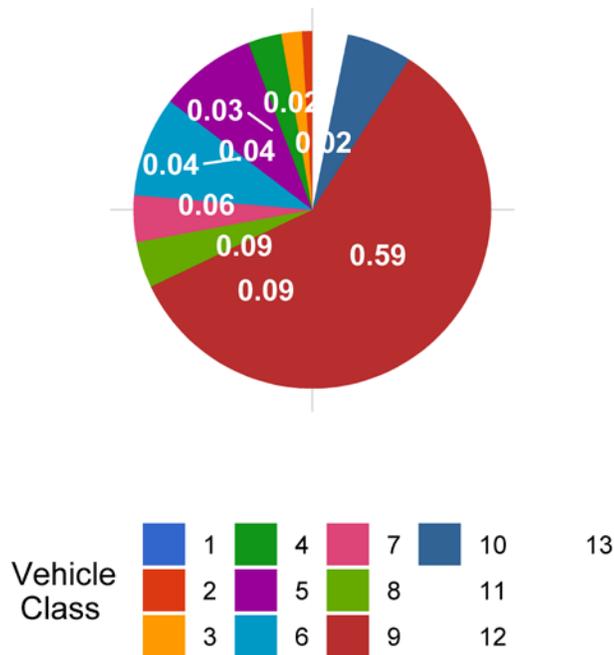


Table 1 Class 9 Front Axle Weight by Lane

<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

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	53	1651	0.1	0	0
2	24006	744178	66.2	0	0
3	10426	323192	28.7	0	0
4	70	2163	0.2	51	1.1
5	592	18348	1.6	216	4.8
6	193	5968	0.5	330	7.3
7	49	1519	0.1	220	4.9
8	108	3347	0.3	103	2.3
9	700	21696	1.9	3007	66.8
10	65	2006	0.2	336	7.5
11	1	30	0	0	0
12	7	210	0	71	1.6
13	16	490	0	170	3.8
TOTAL	36284	1124798	100	4504	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>
2018-07-18	Wednesday	00:18:50	9	NB	1	124.58
2018-07-04	Wednesday	12:40:54	10	SB	4	122.95
2018-07-05	Thursday	12:44:51	9	SB	3	121.82
2018-07-13	Friday	15:12:28	10	SB	4	120.7
2018-07-08	Sunday	12:46:17	10	NB	1	118.98
2018-07-10	Tuesday	12:14:29	9	SB	4	109.72
2018-07-16	Monday	15:07:23	9	SB	4	104.17
2018-07-14	Saturday	16:54:04	10	NB	1	101.57
2018-07-23	Monday	21:44:16	10	SB	4	101.22
2018-07-30	Monday	14:53:04	9	SB	4	99.67

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	1144	190	16.6	28330	2385	7010
5	NB	8	9232	1505	16.3	116079	10758	27131
6	NB	19	2654	304	11.5	75929	4967	15639
7	NB	11.5	1044	0	0	63612	0	25803
8	NB	31	1633	985	60.3	26091	21989	3001
9	NB	33	12222	3044	24.9	540506	84908	118816
10	NB	33.5	1175	198	16.9	66469	5549	16870
11	NB	36.5	7	7	100	0	158	0
12	NB	36.5	158	1	0.6	10459	23	2364
13	NB	31.5	328	0	0	24921	0	7294
TOTAL	****	****	29597	6234	****	952396	****	223930
<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	958	90	9.4	27795	1140	7387
5	SB	8	8601	1254	14.6	110866	8989	26045
6	SB	19	3146	240	7.6	90702	3892	17744
7	SB	11.5	432	0	0	25857	0	10444
8	SB	31	1620	913	56.4	27225	20556	2654
9	SB	33	8865	3299	37.2	341481	90191	78902
10	SB	33.5	775	116	15	43802	3020	10863
11	SB	36.5	22	4	18.2	969	91	156
12	SB	36.5	46	1	2.2	3327	24	842
13	SB	31.5	148	0	0	13267	0	4303
TOTAL	****	****	24613	5917	****	685292	****	159341
GRAND TOTAL	****	****	54210	12151	408	1637689	258639	383271

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	422	484	572	395	1873	0
2	706262	664778	756539	609603	2737183	42.2
3	526496	413926	482498	425372	1848293	28.5
4	25134	5581	8706	20229	59650	0.9
5	94283	32554	47053	72802	246692	3.8
6	70320	10575	25057	69537	175490	2.7
7	60252	3360	3708	22149	89469	1.4
8	40760	7320	19677	28104	95861	1.5
9	571947	53467	153262	278410	1057086	16.3
10	67311	4707	11454	35369	118841	1.8
11	158	0	46	1014	1218	0
12	10262	220	1918	1432	13832	0.2
13	23989	932	2649	10618	38188	0.6
TOTAL	2197597	1197904	1513140	1575034	6483676	100
GVW/LANE	33.89	18.48	23.34	24.29	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	6e-04
2	70	75	77	68	290	0.93	8e-04
3	167	124	140	150	581	1.86	0.0037
4	368	92	130	360	950	3.04	0.91
5	1066	264	398	1021	2749	8.8	0.31
6	1188	161	262	1220	2832	9.07	0.98
7	894	48	48	329	1319	4.22	1.79
8	576	92	226	405	1299	4.16	0.8
9	10305	621	2104	5344	18374	58.82	1.75
10	1027	64	157	602	1849	5.92	1.9
11	0	0	0	15	16	0.05	1.07
12	196	5	54	26	281	0.9	2.66
13	426	14	39	217	696	2.23	2.88
TOTAL	16285	1559	3634	9758	31236	100	15
ESALS/LANE	52.1	5	11.6	31.2	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>
Aug 2017	1061457	34240	1731	1007809	94.9	53647.7	5.1	72.3	27.7
Sep 2017	1024417	34147	1676	974137	95.1	50280.4	4.9	73.5	26.5
Oct 2017	1066794	34413	1775	1011755	94.8	55038.8	5.2	73.9	26.1
Nov 2017	953086	31770	1573	905896	95	47190.4	5	74	26
Dec 2017	916857	29576	1233	878647	95.8	38210.2	4.2	71.1	28.9
Jan 2018	872295	28138	1250	833551	95.6	38744	4.4	68.9	31.1
Feb 2018	821000	29321	1278	785225	95.6	35774.6	4.4	71.6	28.4
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
TOTAL	12013836	-	-	11447476	-	566360	-	-	-
AVERAGE	1001153	32894	1550	953956	95	47197	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>
Aug 2017	16521	1443	3865	10965	32795	84	16	1.7
Sep 2017	13486	1270	3745	10395	28896	83	17	1.2
Oct 2017	14796	1056	3830	10197	29879	84	16	0.7
Nov 2017	13898	810	3662	9572	27942	84	16	0.8
Dec 2017	9122	748	3027	7048	19946	81	19	1.6
Jan 2018	8928	843	3536	7448	20755	79	21	2.9
Feb 2018	9225	701	2769	5385	18081	81	19	1.9
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
TOTAL	154880	13039	41702	99599	309220	-	-	-
AVERAGE	12907	1087	3475	8300	25768	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>
Aug 2017	1535621	819939	1217052	1168290	4740903
Sep 2017	1484466	720163	1090816	1068086	4363532
Oct 2017	1730276	868402	1235504	1263310	5097491
Nov 2017	1713918	884564	1241636	1225668	5065786
Dec 2017	2161183	1175039	1581054	1449968	6367245
Jan 2018	2164093	1193202	1560431	1483902	6401628
Feb 2018	2204255	1198396	1514059	1576436	6493146
Mar 2018	2166374	1116411	1494313	1517190	6294287
Apr 2018	1995793	1061893	1411603	1508519	5977808
May 2018	2111653	1089943	1502804	1588535	6292934
Jun 2018	1895059	933642	1366755	1465744	5661201
Jul 2018	1643079	793869	1249765	1255341	4942054
TOTAL	22805770	11855465	16465790	16570991	67698016
AVERAGE	1900481	987955	1372149	1380916	5641501

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 2017	5377	0.5	10.1	308	85
Sep 2017	4168	0.4	8.3	199	60
Oct 2017	3836	0.4	7	206	56
Nov 2017	4271	0.5	9.1	177	42
Dec 2017	2385	0.3	6.3	111	17
Jan 2018	2776	0.3	7.1	224	28
Feb 2018	1765	0.2	4.9	102	17
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
TOTAL	39553	-	-	1951	480
AVERAGE	3296.1	0.3	6.9	162.6	40

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 2017	217682	162484	380166	57.3	42.7
Sep 2017	189502	157281	346783	54.6	45.4
Oct 2017	213041	158477	371518	57.3	42.7
Nov 2017	183851	144619	328470	56	44
Dec 2017	126740	115689	242429	52.3	47.7
Jan 2018	122668	121856	244524	50.2	49.8
Feb 2018	125964	95803	221767	56.8	43.2
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
TOTAL	2121525	1630463	3751987	-	-
AVERAGE	176793.7	135871.9	312665.6	56.3	43.7