

SEPTEMBER 2018



**WIM #32
US 52, MP 66.0
ORONOCO, MN**

**MONTHLY
REPORT**



Your Destination...Our Priority



WIM Site Location

WIM #32 is located on US 52 near Oronoco in Olmsted county.

System Operation

WIM #32 was operational for the entire month of September 2018. Volume was computed using all monthly data.

System Calibration

WIM #32 was most recently calibrated on 2017-05-05. 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 except lane 3. 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: 975288 | Passenger Vehicles: 899811 | Heavy Commercial Vehicles: 75477

Monthly Average Daily Traffic (MADT): 32510 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 2516

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 Mondays. SB vehicles typically reached highest volume levels on Fridays, with lowest volumes reported on Tuesdays (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 75477 HCVs, 1771 of them were overweight³. These overweight HCVs contributed to 0.2% of total monthly volume, and 2.4% 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 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 70.1% of all overweight vehicles traveling NB 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 report⁴.

Using normal load limits ,87 NB vehicles exceeded 88,000 pounds (48 vehicles were Class 13's; 22 vehicles were Class 10's). Of vehicles traveling SB,

51 NB vehicles exceeded 88,000 pounds (32 vehicles were Class 13's; 11 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from September 2018.

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

Freight Totals. A total of 540246 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (53.7%) than SB (46.3%). See Table 4 and Figure 11 for more freight information.

Infrastructure Considerations

Bridge. Bridge No. 55X13 (a box culvert) is approximately 1/3 of a mile north of WIM #32, and Bridge No. 8960 (a box culvert) is approximately 1 ¾ miles south of WIM #32. WIM #32 recorded a total of 975288 vehicles with a combined GVW of 6641740 kips (1 kip = 1,000 pounds = 0.5 tons) in September 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 40523 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 55.3% of all ESALs were recorded NB while 44.7% was observed SB. In particular, 75% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 34% 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).

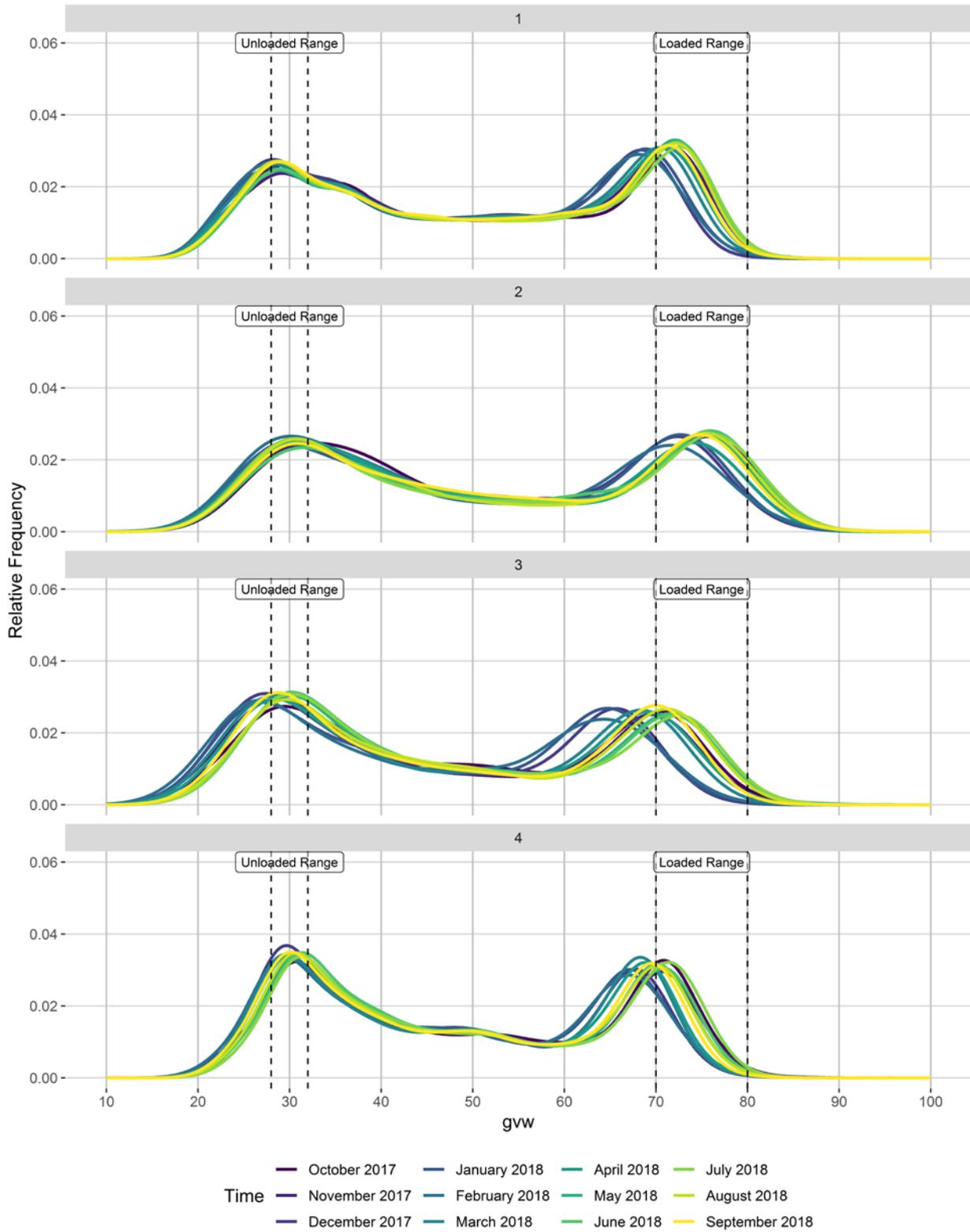
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

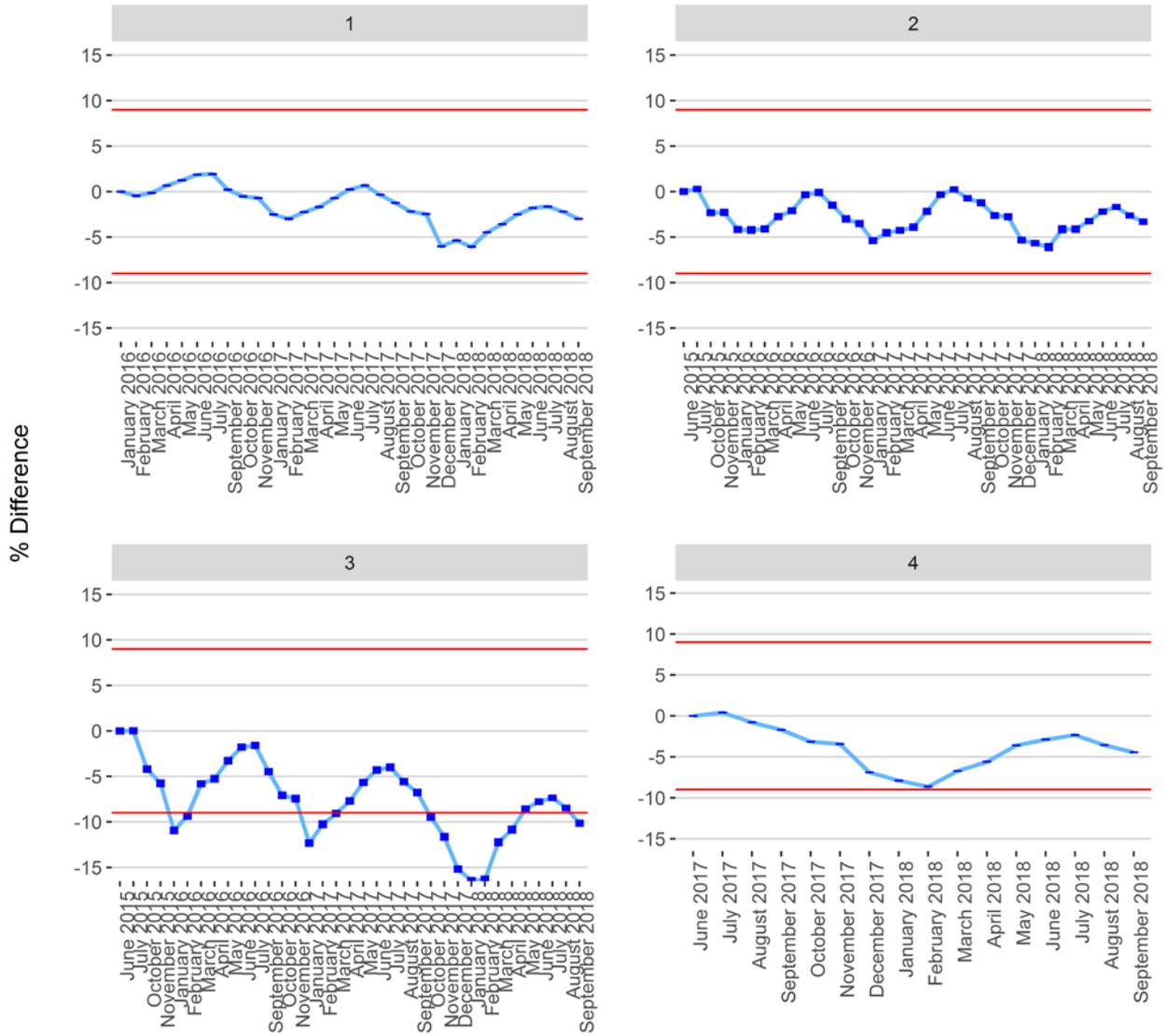
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

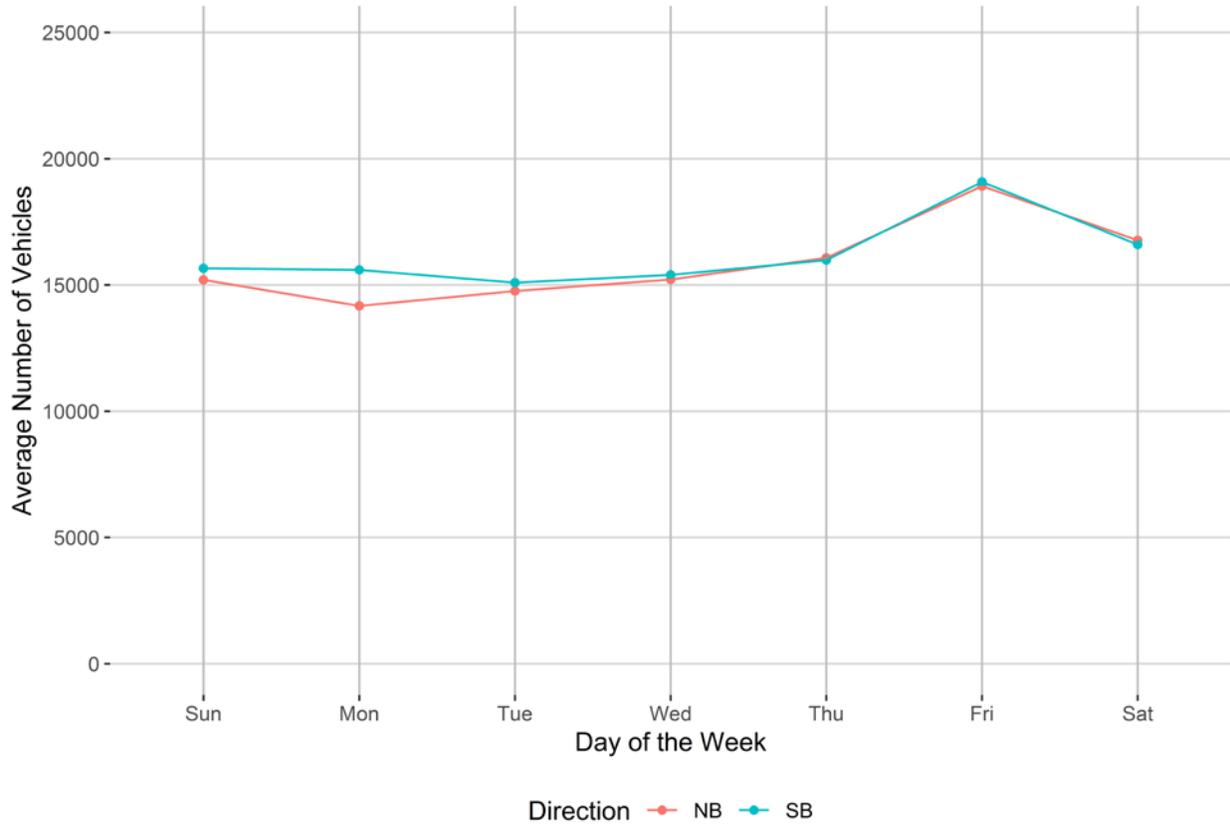


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

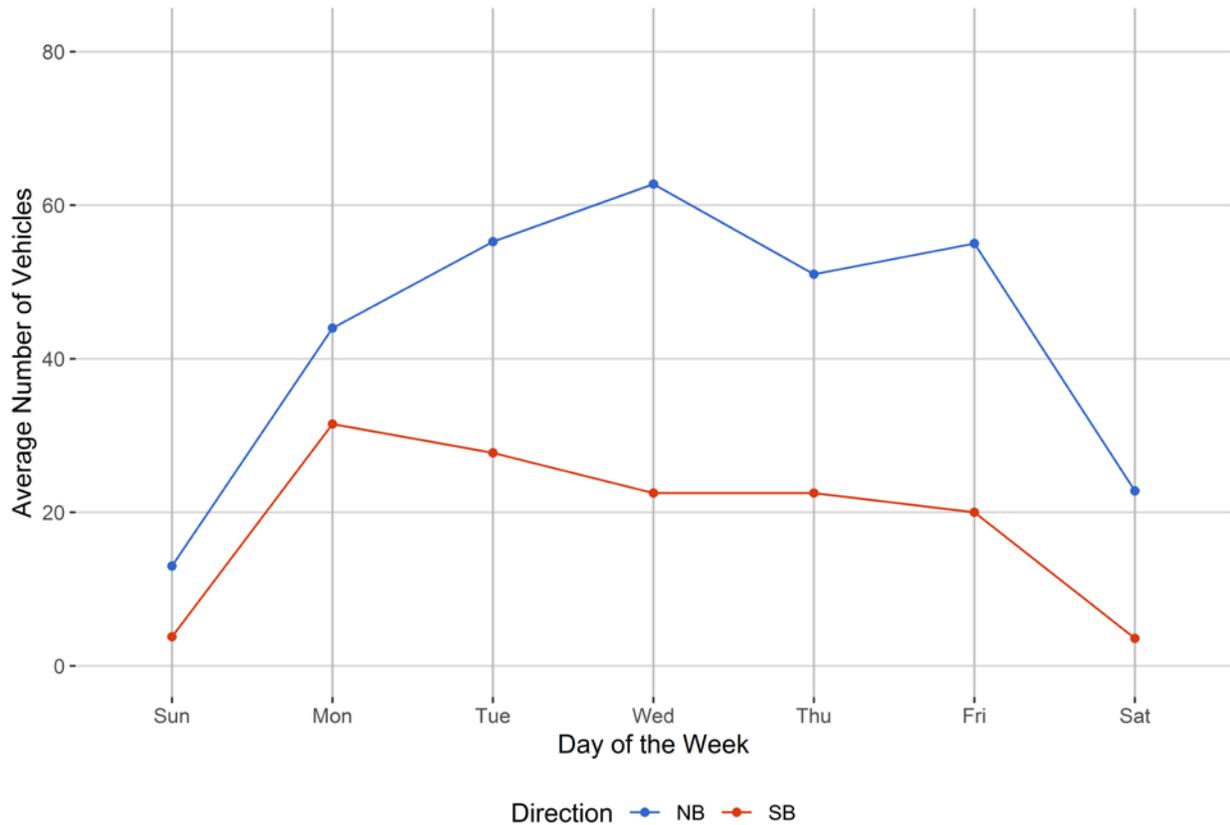


Figure 4 - Passenger Vehicles vs. Hour of the Day

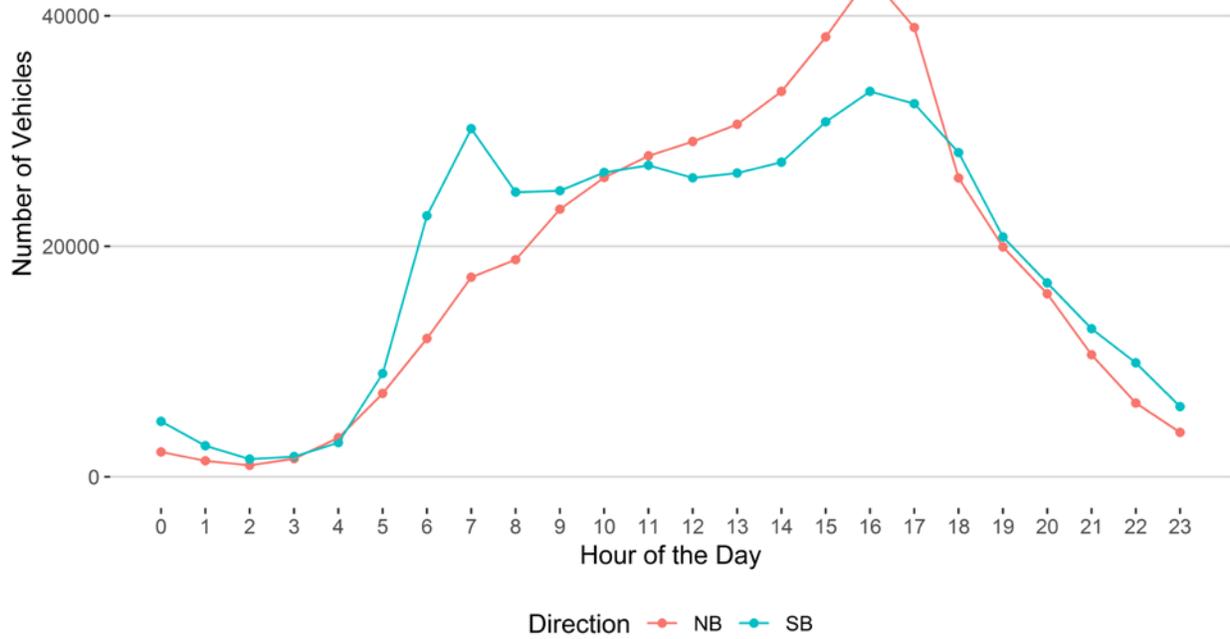


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

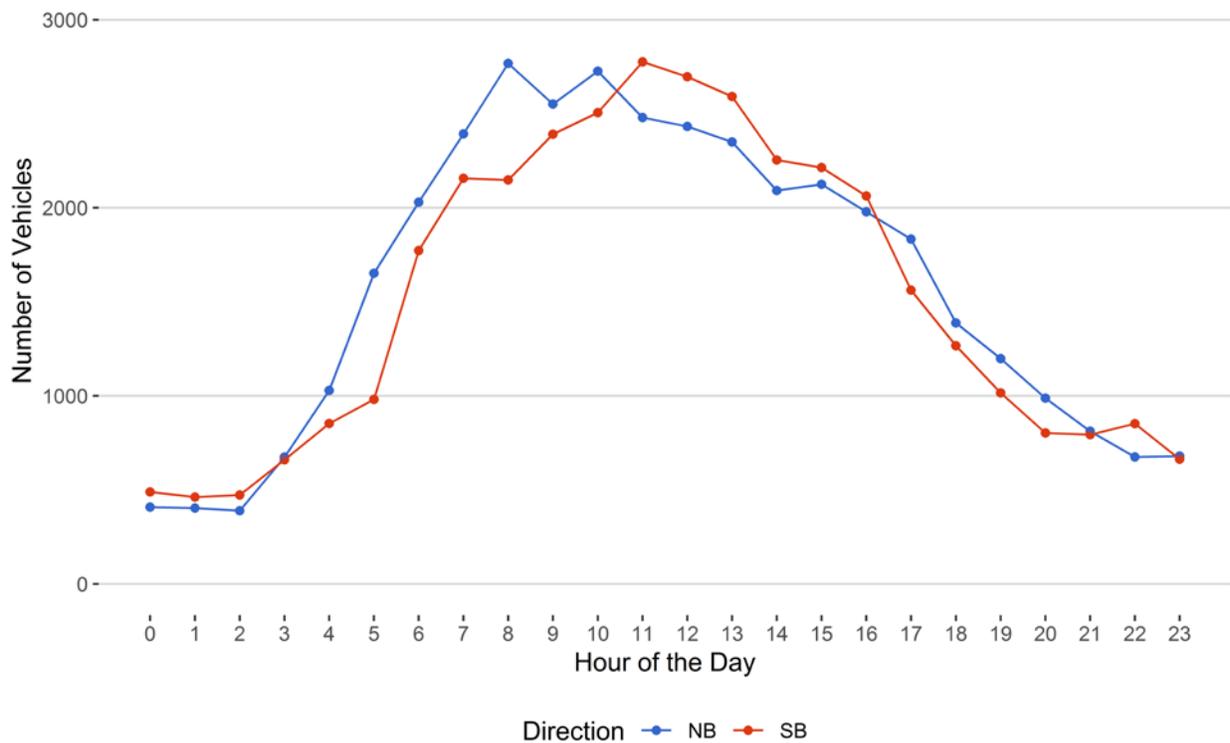


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

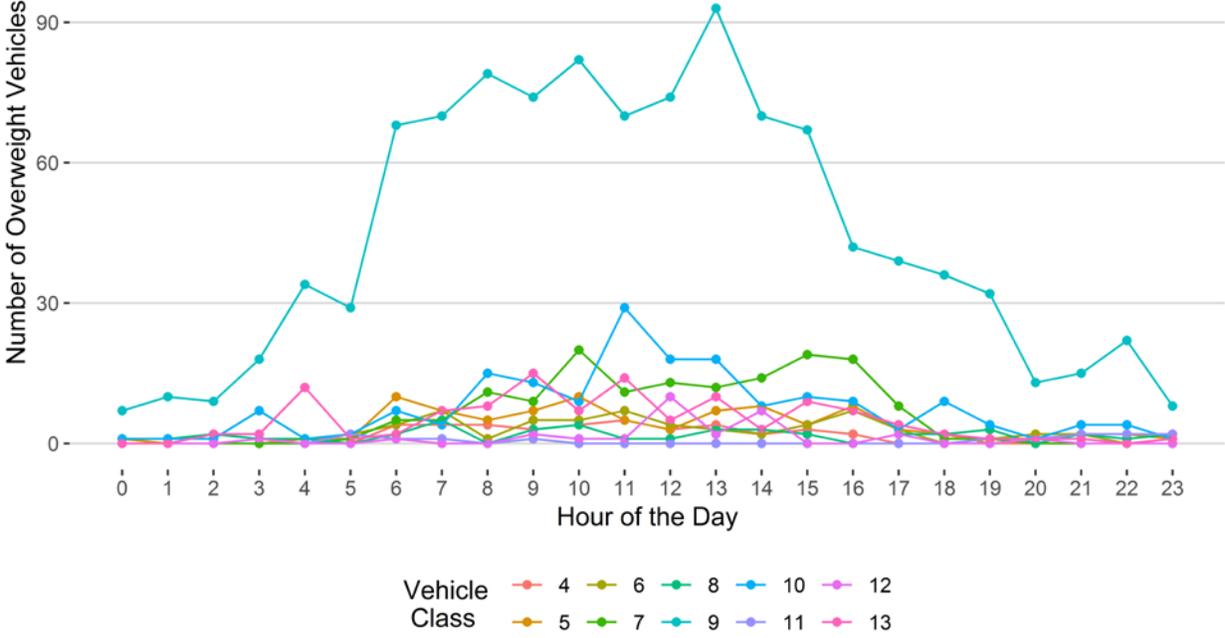


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

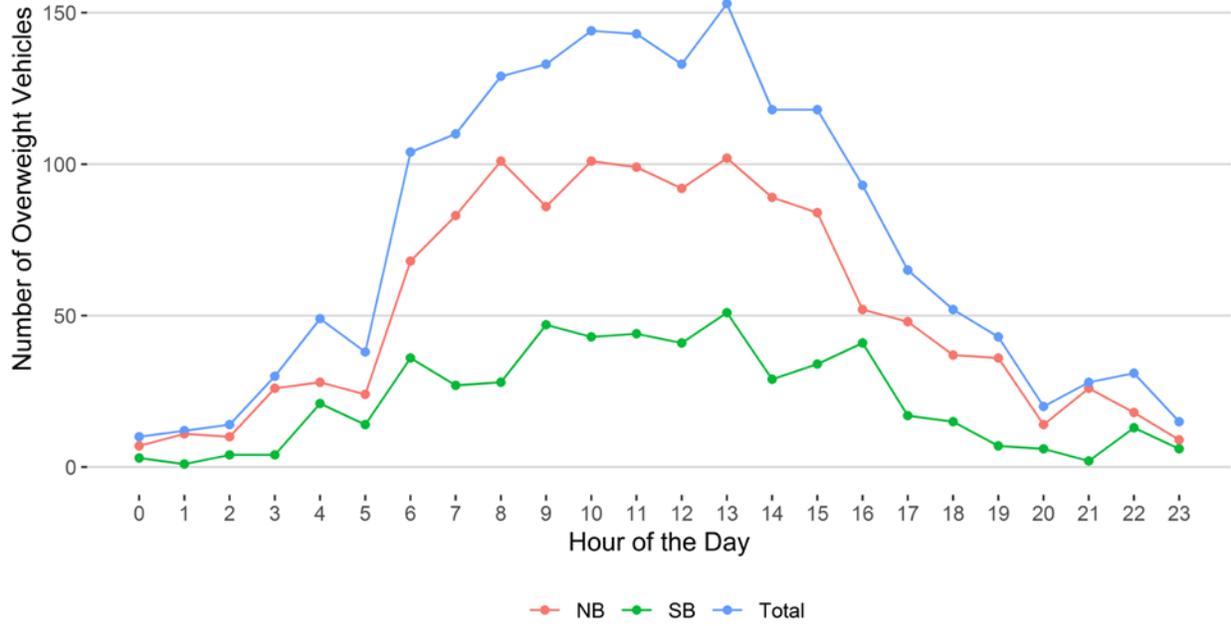
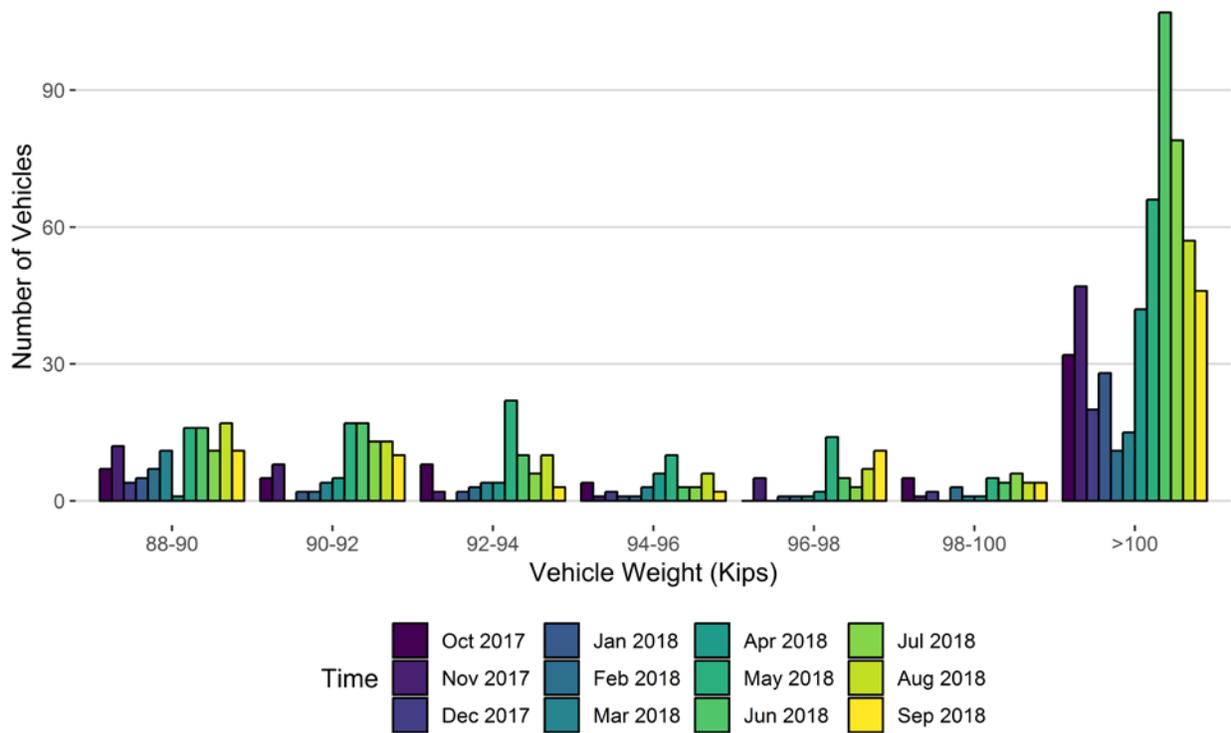
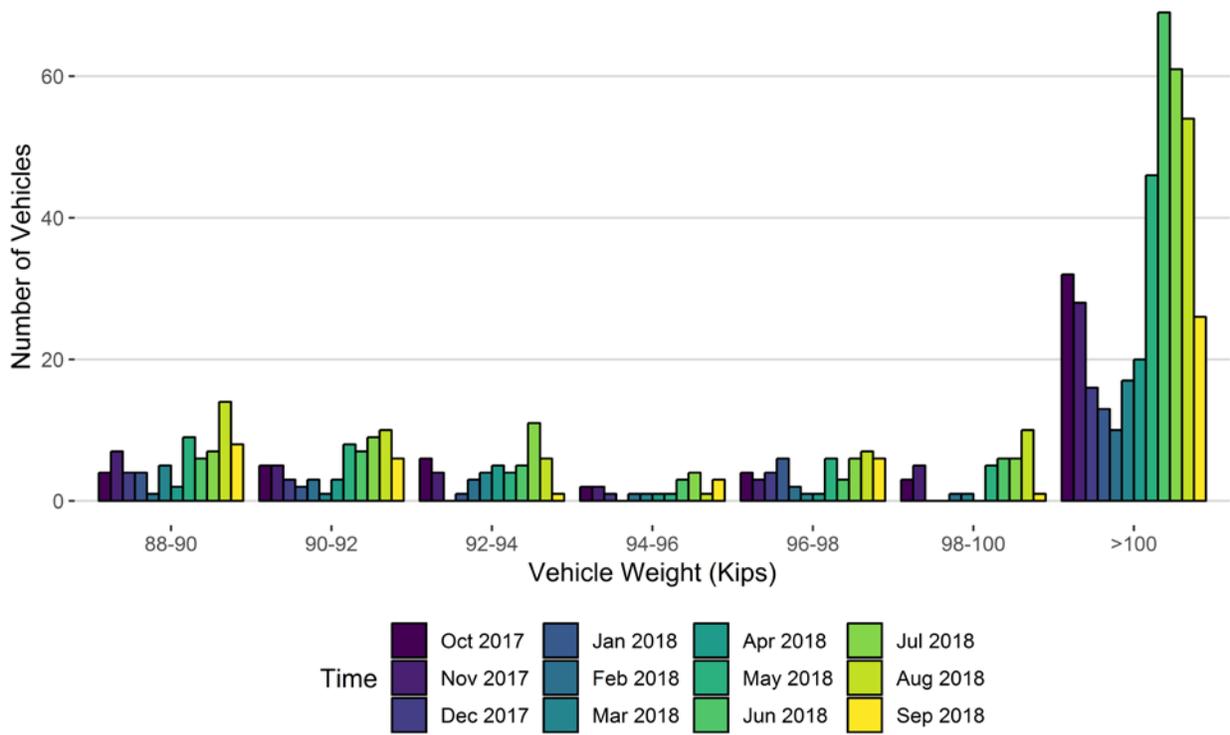


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018
88-90	7	12	4	5	7	11	1	16	16	11	17	11
90-92	5	8	0	2	2	4	5	17	17	13	13	10
92-94	8	2	0	2	3	4	4	22	10	6	10	3
94-96	4	1	2	1	1	3	6	10	3	3	6	2
96-98	0	5	0	1	1	1	2	14	5	3	7	11
98-100	5	1	2	0	3	1	1	5	4	6	4	4
>100	32	47	20	28	11	15	42	66	107	79	57	46
Total	61	76	28	39	28	39	61	150	162	121	114	87

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



Vehicle Weights (Kips)	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	Jun 2018	Jul 2018	Aug 2018	Sep 2018
88-90	4	7	4	4	1	5	2	9	6	7	14	8
90-92	5	5	3	2	3	1	3	8	7	9	10	6
92-94	6	4	0	1	3	4	5	4	5	11	6	1
94-96	2	2	1	0	1	1	1	1	3	4	1	3
96-98	4	3	4	6	2	1	1	6	3	6	7	6
98-100	3	5	0	0	1	1	0	5	6	6	10	1
>100	32	28	16	13	10	17	20	46	69	61	54	26
Total	56	54	28	26	21	30	32	79	99	104	102	51

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

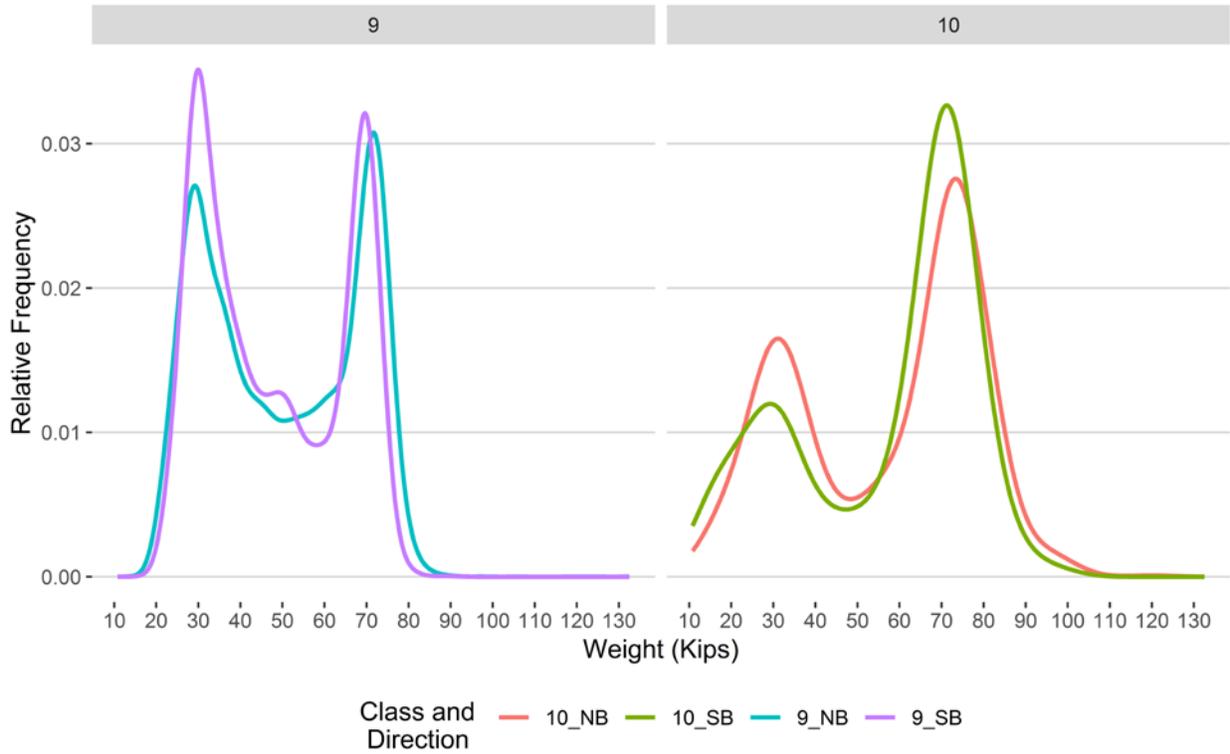


Figure 9 - Freight Percentage by Direction and Class

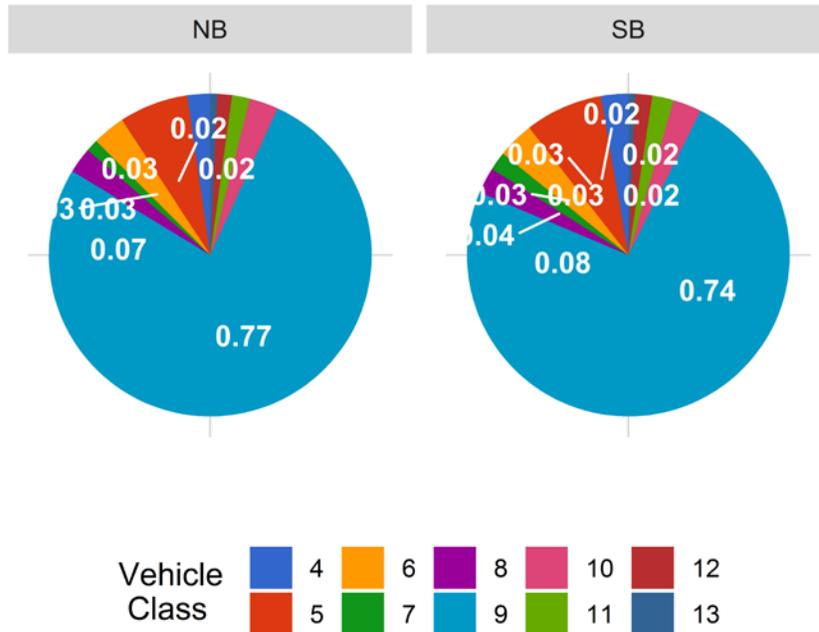


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

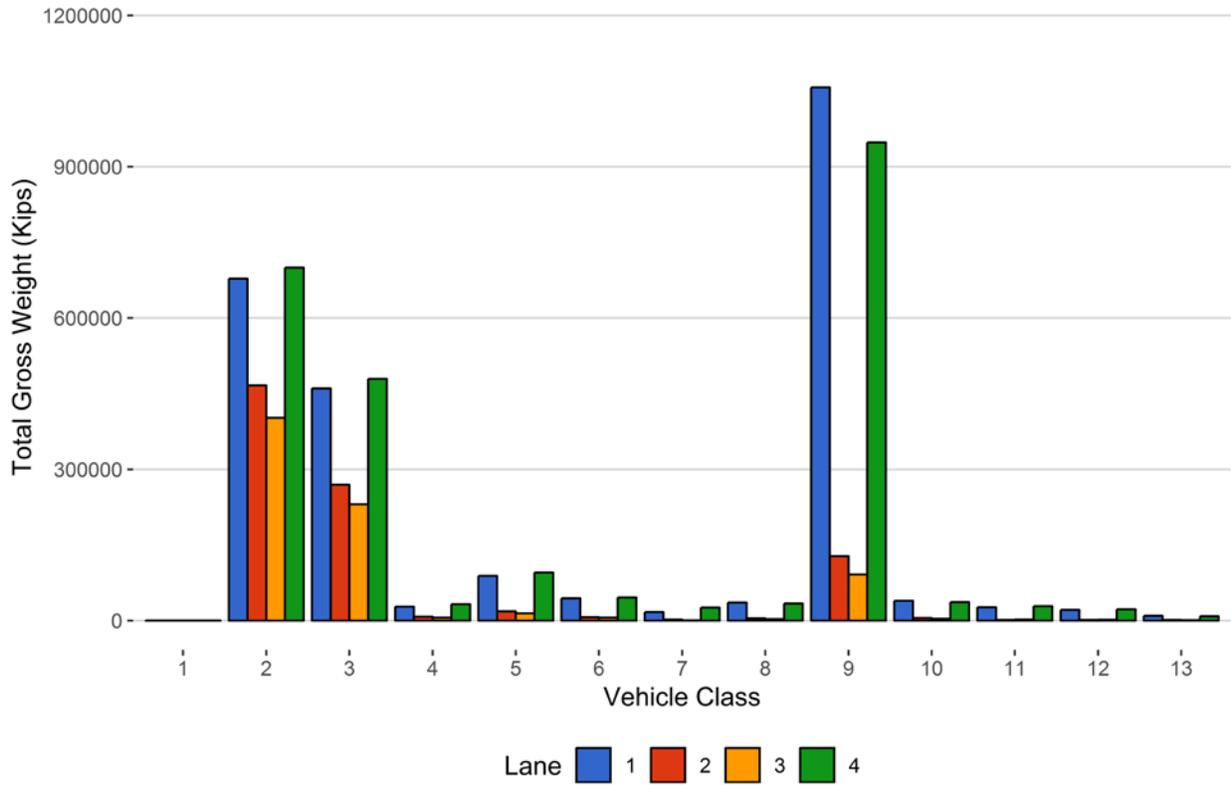


Figure 11 - Total Gross Vehicle Weight t

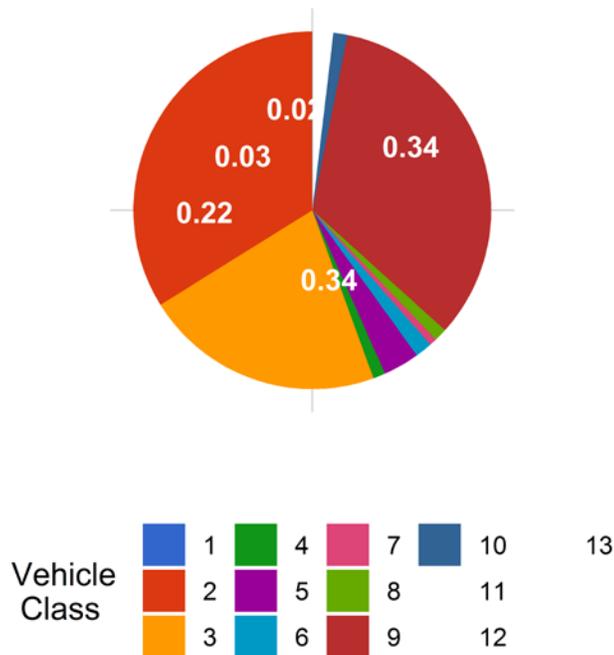


Figure 12 - Total ESALs by Class and Lane

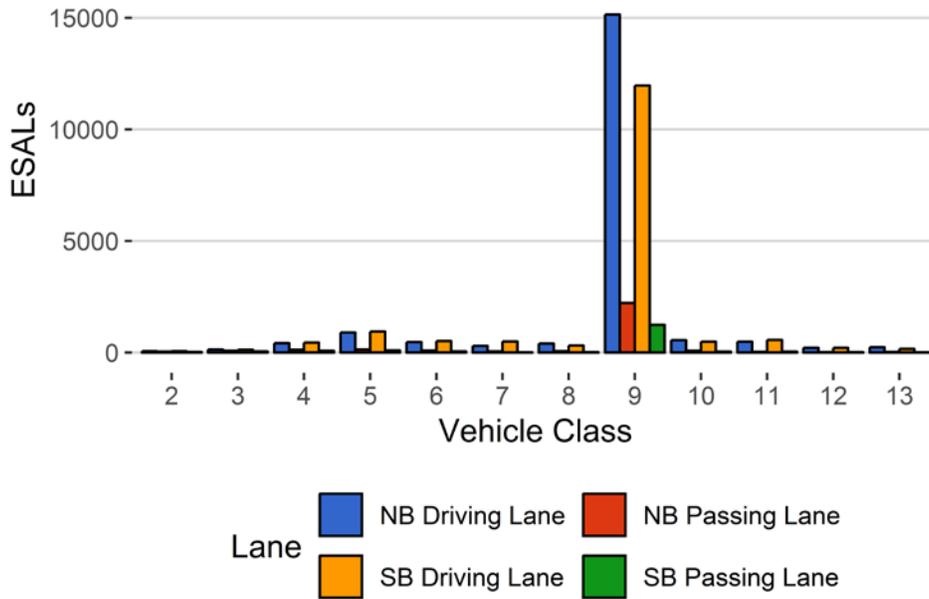


Figure 13 - ESALs by Class

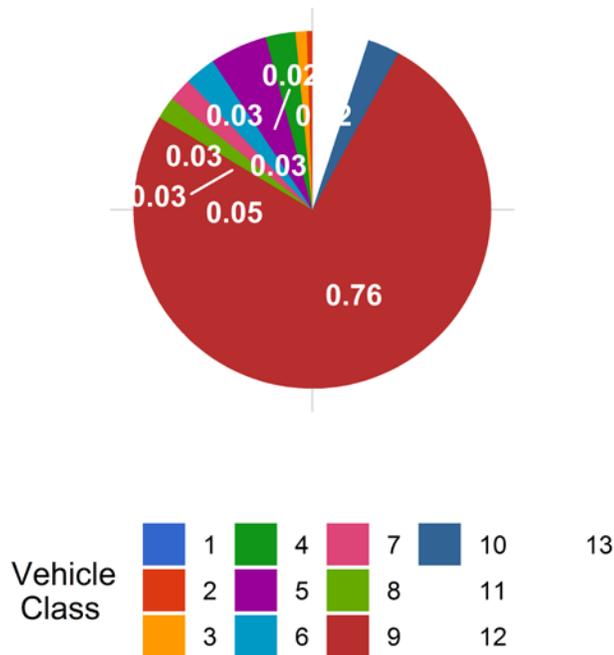


Table 1 Class 9 Front Axle Weight by Lane

<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	11.20	0.00	11.34	0.00	NA	NA
July 2015	NA	NA	11.23	0.30	11.35	0.02	NA	NA
October 2015	NA	NA	10.93	-2.33	10.87	-4.19	NA	NA
November 2015	NA	NA	10.94	-2.29	10.69	-5.77	NA	NA
January 2016	10.55	0.00	10.73	-4.17	10.10	-10.94	NA	NA
February 2016	10.50	-0.47	10.72	-4.22	10.29	-9.33	NA	NA
March 2016	10.53	-0.14	10.74	-4.11	10.68	-5.82	NA	NA
April 2016	10.62	0.67	10.89	-2.75	10.75	-5.26	NA	NA
May 2016	10.68	1.24	10.96	-2.10	10.97	-3.27	NA	NA
June 2016	10.74	1.86	11.16	-0.34	11.14	-1.78	NA	NA
July 2016	10.75	1.92	11.18	-0.10	11.16	-1.59	NA	NA
September 2016	10.57	0.21	11.03	-1.49	10.84	-4.47	NA	NA
October 2016	10.49	-0.52	10.86	-3.01	10.54	-7.07	NA	NA
November 2016	10.47	-0.71	10.80	-3.51	10.50	-7.44	NA	NA
January 2017	10.28	-2.51	10.59	-5.39	9.94	-12.34	NA	NA
February 2017	10.23	-2.99	10.69	-4.53	10.18	-10.26	NA	NA
March 2017	10.31	-2.25	10.72	-4.26	10.32	-9.07	NA	NA
April 2017	10.37	-1.68	10.76	-3.92	10.47	-7.71	NA	NA
May 2017	10.47	-0.72	10.95	-2.16	10.70	-5.67	NA	NA
June 2017	10.57	0.24	11.16	-0.34	10.86	-4.30	10.78	0.00
July 2017	10.62	0.68	11.22	0.24	10.89	-4.00	10.82	0.42
August 2017	10.51	-0.35	11.11	-0.73	10.71	-5.58	10.69	-0.78
September 2017	10.41	-1.25	11.06	-1.23	10.58	-6.78	10.60	-1.70
October 2017	10.31	-2.19	10.90	-2.63	10.27	-9.46	10.44	-3.15
November 2017	10.29	-2.46	10.89	-2.77	10.02	-11.64	10.41	-3.43
December 2017	9.91	-6.02	10.60	-5.33	9.62	-15.19	10.04	-6.89

January 2018	9.98	-5.37	10.56	-5.67	9.48	-16.42	9.93	-7.89
February 2018	9.91	-6.06	10.51	-6.11	9.49	-16.37	9.85	-8.63
March 2018	10.07	-4.48	10.73	-4.14	9.96	-12.23	10.05	-6.73
April 2018	10.17	-3.58	10.73	-4.13	10.11	-10.86	10.18	-5.59
May 2018	10.28	-2.51	10.83	-3.25	10.37	-8.56	10.39	-3.60
June 2018	10.36	-1.80	10.95	-2.19	10.46	-7.78	10.47	-2.88
July 2018	10.37	-1.65	11.01	-1.69	10.51	-7.36	10.53	-2.34
August 2018	10.31	-2.21	10.90	-2.63	10.38	-8.46	10.39	-3.56
September 2018	10.23	-3.00	10.82	-3.32	10.19	-10.15	10.30	-4.43

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	10	298	0	0	0
2	21270	638094	65.4	0	0
3	8714	261419	26.8	0	0
4	87	2615	0.3	38	2.1
5	530	15895	1.6	88	5
6	132	3947	0.4	59	3.3
7	26	778	0.1	148	8.4
8	92	2758	0.3	42	2.4
9	1526	45775	4.7	1061	59.9
10	50	1499	0.2	179	10.1
11	37	1118	0.1	14	0.8
12	29	862	0.1	28	1.6
13	8	229	0	114	6.4
TOTAL	32510	975288	100	1771	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>
2018-09-14	Friday	04:23:51	9	NB	2	132.52
2018-09-11	Tuesday	04:09:49	9	NB	1	124.34
2018-09-14	Friday	18:58:34	10	NB	1	120.12
2018-09-25	Tuesday	04:08:13	9	NB	1	118.85
2018-09-25	Tuesday	20:28:07	9	NB	1	105.95
2018-09-21	Friday	15:32:59	10	NB	1	103.26
2018-09-20	Thursday	18:19:47	10	SB	4	100.33
2018-09-13	Thursday	17:38:26	10	NB	1	99.7
2018-09-10	Monday	08:06:01	10	NB	1	99.08
2018-09-29	Saturday	10:29:47	10	NB	1	98.53

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	1180	142	12	33378	1774	8904
5	NB	8	7776	1262	16.2	97741	9037	22814
6	NB	19	1977	478	24.2	43262	7634	7390
7	NB	11.5	310	1	0.3	18764	10	7605
8	NB	31	1393	884	63.5	19780	20091	2000
9	NB	33	23574	6082	25.8	1016472	168859	219618
10	NB	33.5	779	185	23.7	39668	4911	9884
11	NB	36.5	535	55	10.3	26162	1703	4321
12	NB	36.5	419	55	13.1	20921	1855	3817
13	NB	31.5	116	0	0	10654	0	3500
TOTAL	****	****	38059	9144	****	1326802	****	289856
<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	1401	221	15.8	35729	2723	9014
5	SB	8	7915	1532	19.4	98755	10809	23846
6	SB	19	1919	463	24.1	43843	7495	8089
7	SB	11.5	458	1	0.2	26148	11	10446
8	SB	31	1330	931	70	15064	21674	1348
9	SB	33	21613	6144	28.4	863259	176136	176391
10	SB	33.5	701	168	24	36033	4116	9089
11	SB	36.5	569	62	10.9	28544	1890	5019
12	SB	36.5	432	13	3	23750	433	4228
13	SB	31.5	110	1	0.9	9274	25	2920
TOTAL	****	****	36448	9536	****	1180399	****	250391
GRAND TOTAL	****	****	74507	18680	386	2507201	441186	540246

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	118	60	65	100	343	0
2	678094	466336	402017	700001	2246447	33.9
3	460359	269422	230672	479334	1439787	21.7
4	27635	7518	5845	32606	73604	1.1
5	88439	18338	14264	95301	216342	3.3
6	44126	6770	5650	45688	102233	1.5
7	16762	2011	454	25704	44932	0.7
8	35454	4417	2927	33811	76609	1.2
9	1057521	127810	91376	948019	2224727	33.5
10	39391	5188	3493	36657	84728	1.3
11	26468	1398	1897	28538	58299	0.9
12	21265	1511	1816	22367	46959	0.7
13	9293	1362	683	8616	19954	0.3
TOTAL	2504925	912140	761158	2456741	6634964	100
GVW/LANE	37.75	13.75	11.47	37.03	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	0.0034
2	62	48	33	60	203	0.5	6e-04
3	144	78	54	133	409	1.01	0.0032
4	422	132	82	453	1089	2.69	0.85
5	905	141	102	948	2097	5.19	0.27
6	475	90	56	515	1137	2.81	0.58
7	300	51	8	502	861	2.13	2.23
8	406	66	19	322	814	2.01	0.6
9	15146	2225	1244	11969	30584	75.65	1.36
10	557	80	44	494	1176	2.91	1.59
11	488	34	44	565	1132	2.8	2.04
12	216	20	24	220	480	1.19	1.13
13	242	27	9	168	446	1.1	3.79
TOTAL	19364	2993	1720	16351	40427	100	14
ESALS/LANE	47.9	7.4	4.3	40.4	100	-	-

Table 7 Site Summary: Volume and Vehicle Class

<i>Month</i>	<i>Total Volume</i>	<i>Monthly ADT</i>	<i>Monthly HCAD T</i>	<i>Passenger Vehicles</i>	<i>Passenger Vehicles %</i>	<i>Heavy Commercial Vehicles</i>	<i>Heavy Commercial Vehicles %</i>	<i>Heavy Commercial Vehicles in Driving Lane %</i>	<i>Heavy Commercial Vehicles in Passing Lane %</i>
Oct 2017	953108	30745	2606	872337	91.5	80770.9	8.5	89.1	10.9
Nov 2017	900902	30030	2391	829176	92	71725.8	8	89.1	10.9
Dec 2017	869439	28046	2065	805426	92.6	64013	7.4	88.2	11.8
Jan 2018	777133	25069	2126	711218	91.5	65915.4	8.5	87.3	12.7
Feb 2018	732422	26158	2134	672666	91.8	59756.2	8.2	89.1	10.9
Mar 2018	899645	29021	2200	831445	92.4	68199.7	7.6	90.2	9.8
Apr 2018	850664	28356	2215	784220	92.2	66444	7.8	89.5	10.5
May 2018	1039431	33530	2662	956910	92.1	82521.5	7.9	87.5	12.5
Jun 2018	1097500	36583	2770	1014403	92.4	83097.5	7.6	87.6	12.4
Jul 2018	1120144	36134	2761	1034542	92.4	85602.1	7.6	87.3	12.7
Aug 2018	1096236	35362	2766	1010488	92.2	85748.4	7.8	87.8	12.2
Sep 2018	975288	32510	2516	899811	92.3	75477.3	7.7	88.6	11.4
TOTAL	11311912	-	-	10422642	-	889272	-	-	-
AVERAGE	942659	30962	2434	868554	92	74106	8	88	12

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>
Oct 2017	22079	3110	1788	19884	46861	90	10	1.6
Nov 2017	19599	2736	1498	16531	40364	90	10	1.1
Dec 2017	14090	2504	1185	12527	30306	88	12	0.7
Jan 2018	15526	2839	1441	13237	33043	87	13	1.2
Feb 2018	14312	2062	1192	12404	29970	89	11	0.5
Mar 2018	17718	2055	1307	14249	35330	90	10	1.1
Apr 2018	17911	2401	1428	13971	35711	89	11	1.5
May 2018	22396	3529	2349	18747	47020	88	12	2
Jun 2018	23012	3694	2374	19307	48387	87	13	2.4
Jul 2018	22415	3858	2407	21343	50024	87	13	1.7
Aug 2018	22748	3715	2300	19232	47995	87	13	1.7
Sep 2018	19416	3002	1725	16380	40523	88	12	1.2
TOTAL	231223	35504	20995	197811	485533	-	-	-
AVERAGE	19269	2959	1750	16484	40461	88	12	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>
Oct 2017	2084390	711458	548906	2059562	5404317
Nov 2017	1947717	627968	484577	1890136	4950397
Dec 2017	2337771	771441	616757	2244953	5970921
Jan 2018	2259387	759393	600722	2164611	5784113
Feb 2018	2707830	1023785	857182	2663473	7252270
Mar 2018	2805374	1107547	932861	2734606	7580388
Apr 2018	2846033	1123846	955181	2884472	7809531
May 2018	2838230	1095512	906826	2780943	7621510
Jun 2018	2508245	912624	761584	2459287	6641740
Jul 2018	2637284	907307	731619	2602728	6878938
Aug 2018	2414147	828796	668537	2357091	6268571
Sep 2018	2153551	784938	597727	2126715	5662931
TOTAL	29539958	10654616	8662478	28968576	77825628
AVERAGE	2461663	887885	721873	2414048	6485469

Overweight Vehicles

<i>Month</i>	<i>Total Number of Overweight Vehicles</i>	<i>Overweight / Total Volume</i>	<i>Overweight / Heavy Commercial Volume</i>	<i>Number Over 88,000 lbs</i>	<i>Number Over 98,000 lbs</i>
Oct 2017	2480	0.3	3.1	117	72
Nov 2017	1977	0.2	2.8	133	81
Dec 2017	868	0.1	1.4	61	38
Jan 2018	1147	0.1	1.8	65	41
Feb 2018	1037	0.1	1.7	50	26
Mar 2018	1066	0.1	1.6	70	34
Apr 2018	1338	0.2	2	93	63
May 2018	2314	0.2	2.8	232	122
Jun 2018	2666	0.2	3.2	261	186
Jul 2018	2866	0.3	3.4	226	152
Aug 2018	2383	0.2	2.8	216	125
Sep 2018	1785	0.2	2.4	138	77
TOTAL	21927	-	-	1662	1017
AVERAGE	1827.2	0.2	2.4	138.5	84.8

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>
Oct 2017	327015	290927	617942	52.9	47.1
Nov 2017	288577	242461	531038	54.3	45.7
Dec 2017	226392	195594	421986	53.6	46.4
Jan 2018	243904	210402	454307	53.7	46.3
Feb 2018	217781	187177	404958	53.8	46.2
Mar 2018	259219	219426	478646	54.2	45.8
Apr 2018	262841	213385	476226	55.2	44.8
May 2018	329620	285332	614952	53.6	46.4
Jun 2018	339294	288144	627438	54.1	45.9
Jul 2018	337328	317763	655090	51.5	48.5
Aug 2018	338350	290850	629200	53.8	46.2
Sep 2018	289856	250391	540246	53.7	46.3
TOTAL	3460177	2991852	6452029	-	-
AVERAGE	288348.1	249321	537669.1	53.7	46.3