

FEBRUARY 2019



**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 February 2019. Volume was computed using all monthly data.

System Calibration

WIM #32 was most recently calibrated on 2019-01-04. 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: 682508 | Passenger Vehicles: 624790 | Heavy Commercial Vehicles: 57718

Monthly Average Daily Traffic (MADT): 24375 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 2061

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 Mondays, 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 07 AM and 04 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 07 AM and 04 PM. See Figure 6. Out of all HCVs, the two highest traffic volumes were generated by Class 9's and Class 14's.

Overweight HCVs

Volume trends. Of a total of 57718 HCVs, 819 of them were overweight ³. These overweight HCVs contributed to 0.1% of total monthly volume, and 1.4% of total monthly

HCV volume. NB overweight vehicles typically reached highest numbers on Mondays, with lowest volumes reported on Saturdays. SB overweight vehicles tended to reach highest volumes on Thursdays, 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 61.7% 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 report ⁴.

Using normal load limits ,31 NB vehicles exceeded 88,000 pounds (20 vehicles were Class 13's; 7 vehicles were Class 10's). Of vehicles traveling SB,

29 NB vehicles exceeded 88,000 pounds (22 vehicles were Class 13's; 4 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 empty Class 9's than fully_loaded 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 355156 tons of freight was recorded to have crossed the WIM. More freight was shipped SB (52.6%) than NB (47.4%). 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 682508 vehicles with a combined GVW of 4531686 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 24782 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 51.6% of all ESALs were recorded SB while 48.4% was observed NB. In particular, 76% of all ESALs were generated by the Class 9's (Class 9's were also responsible for generating 37% 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).

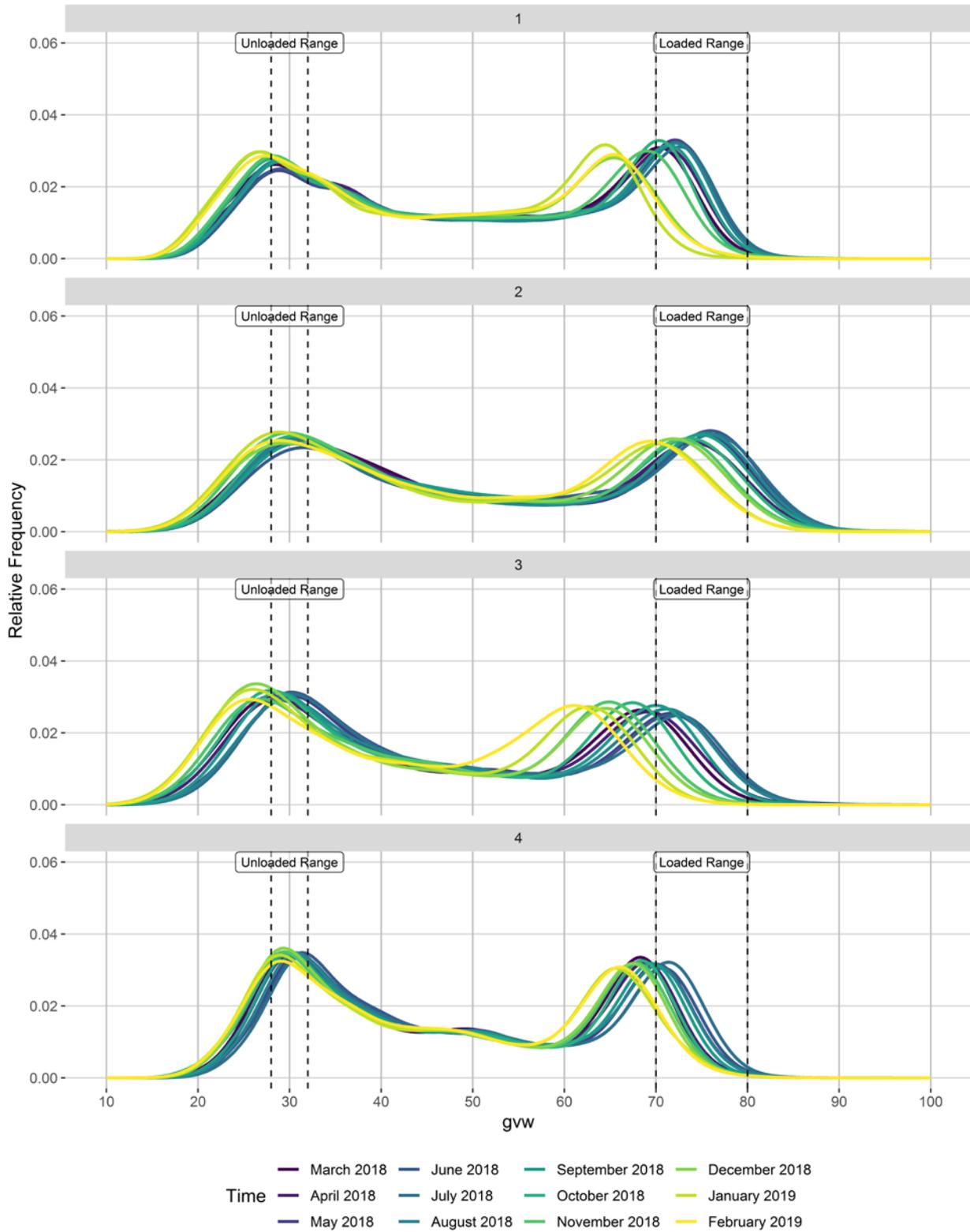
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

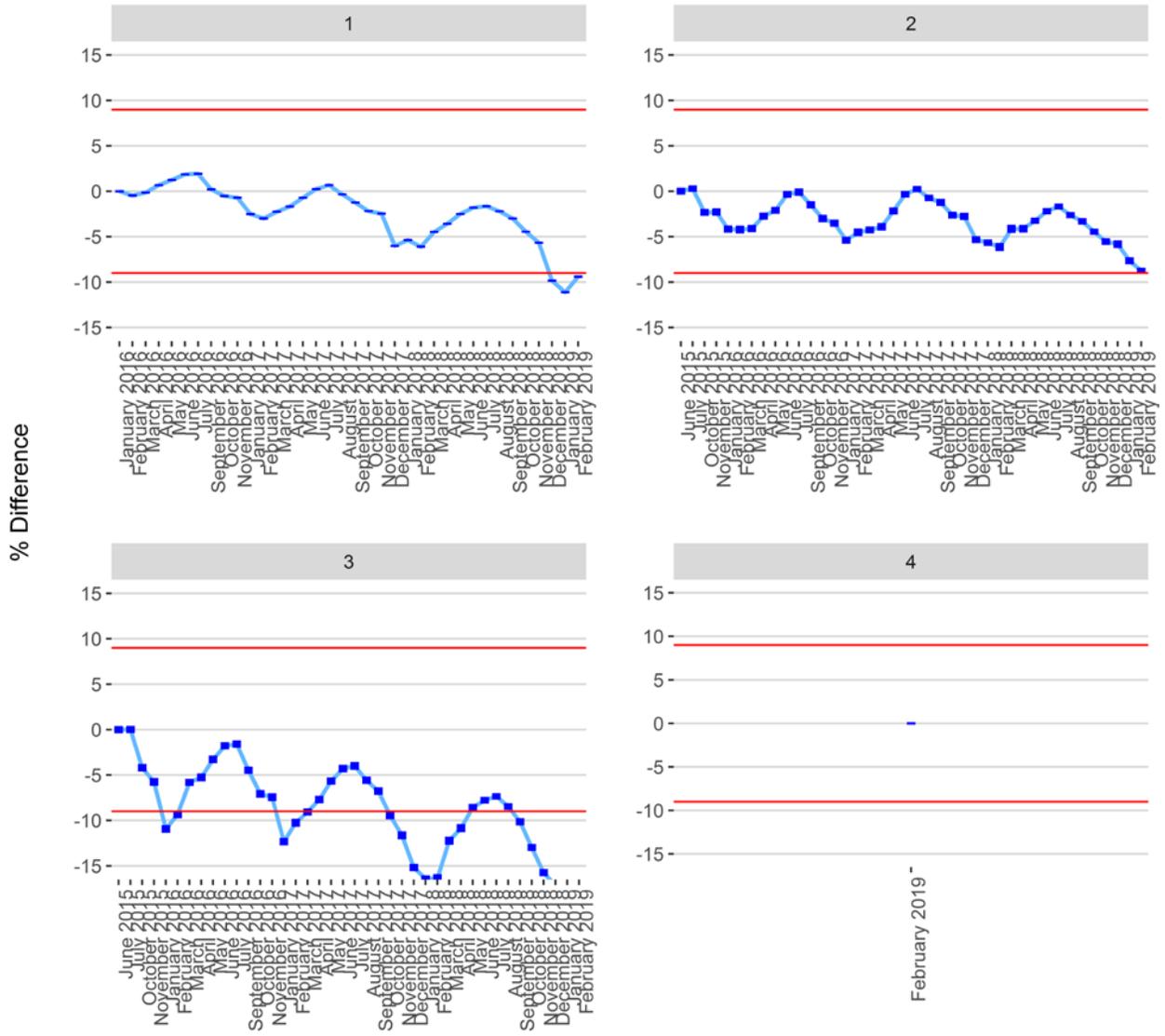
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

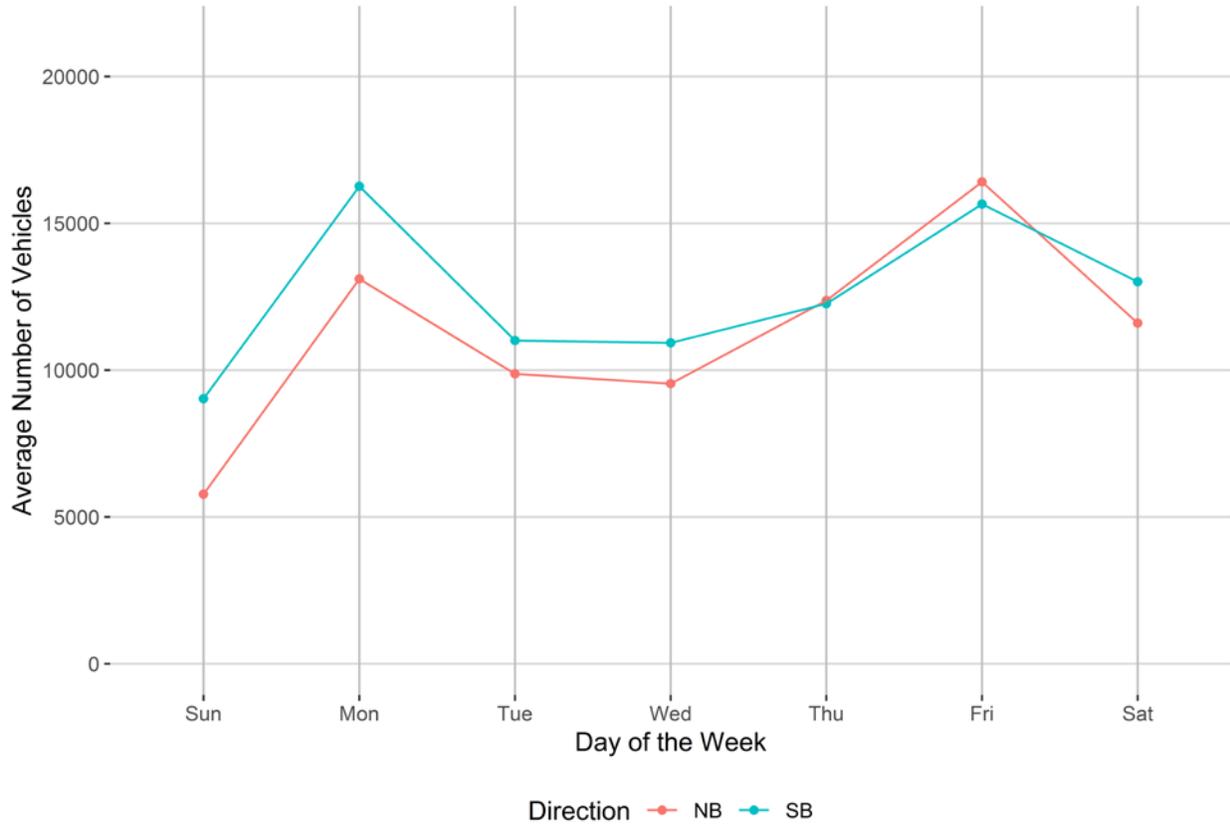


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

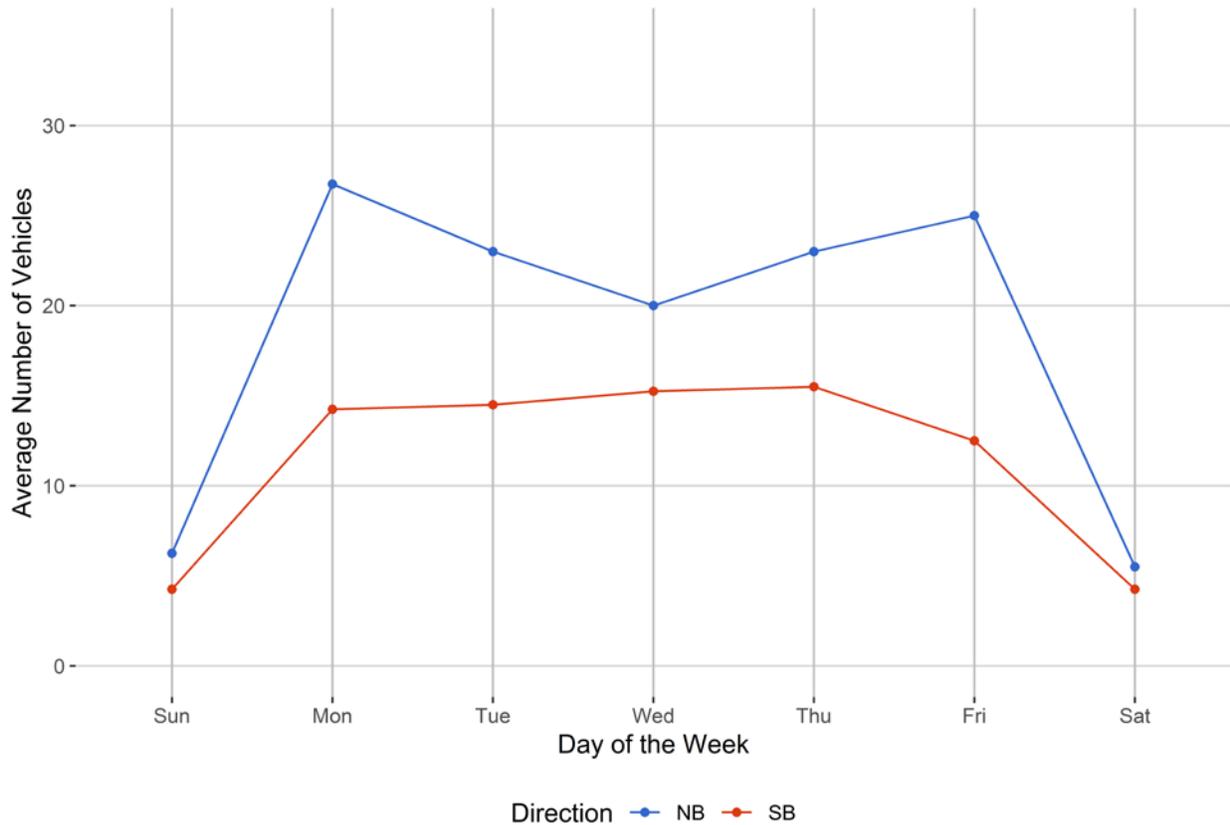


Figure 4 - Passenger Vehicles vs. Hour of the Day

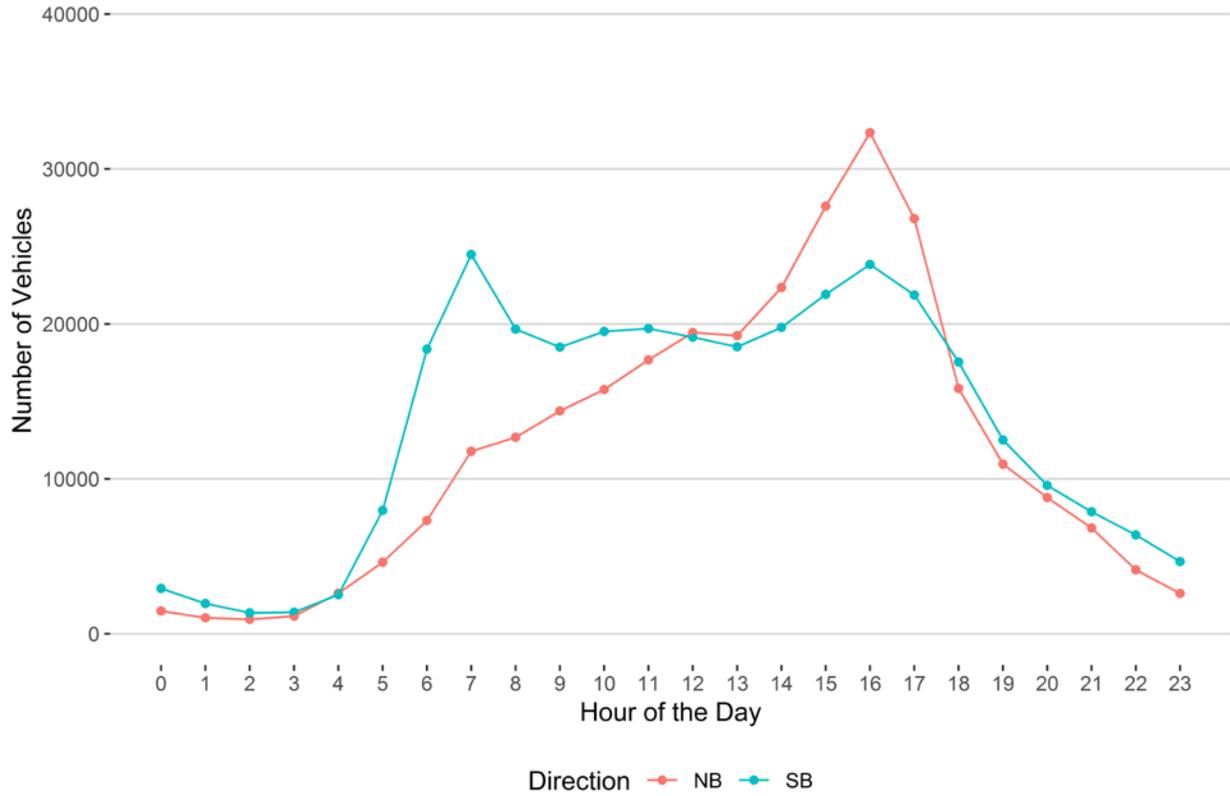


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

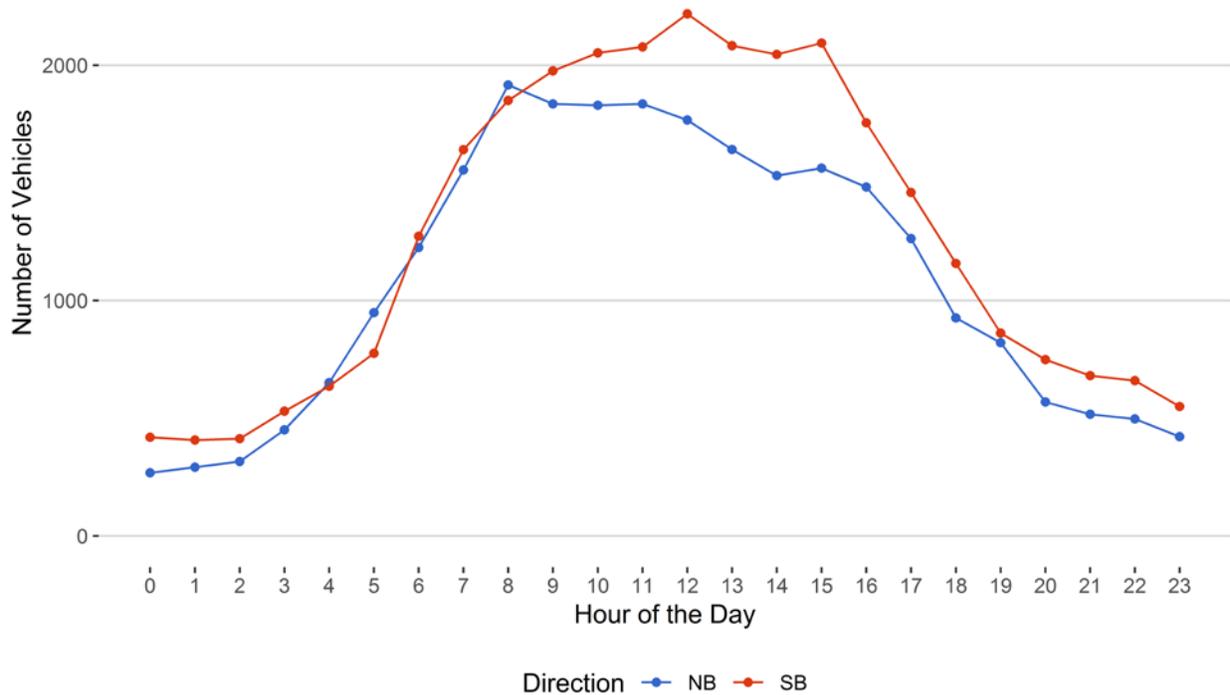


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

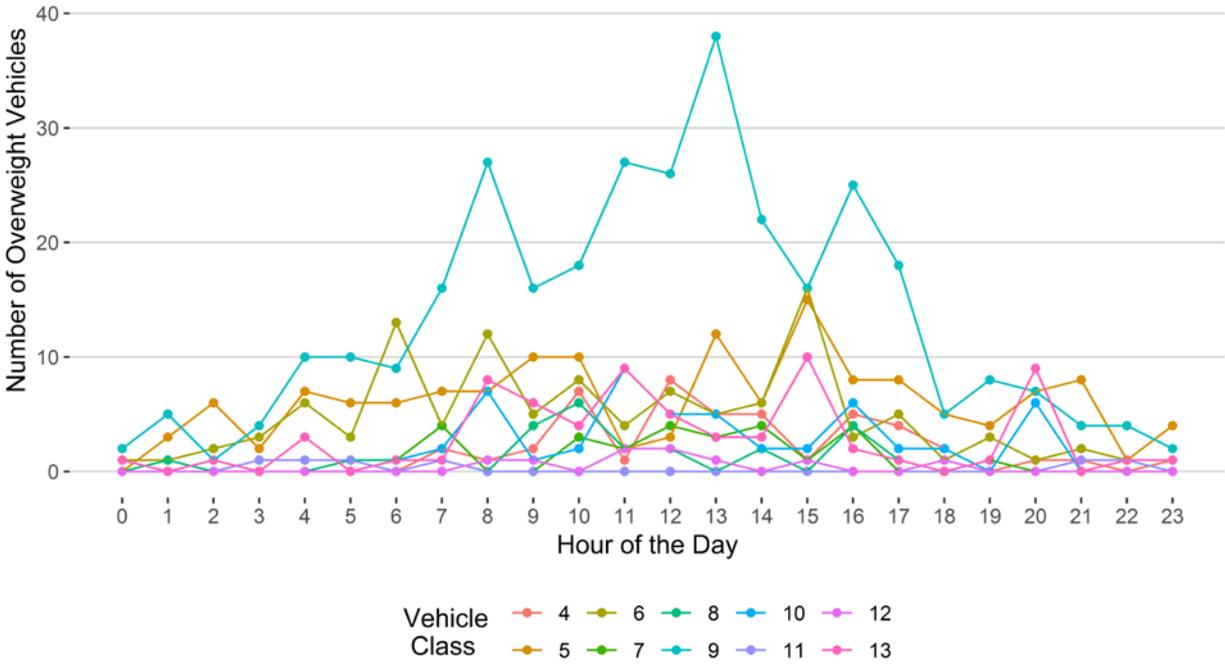


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

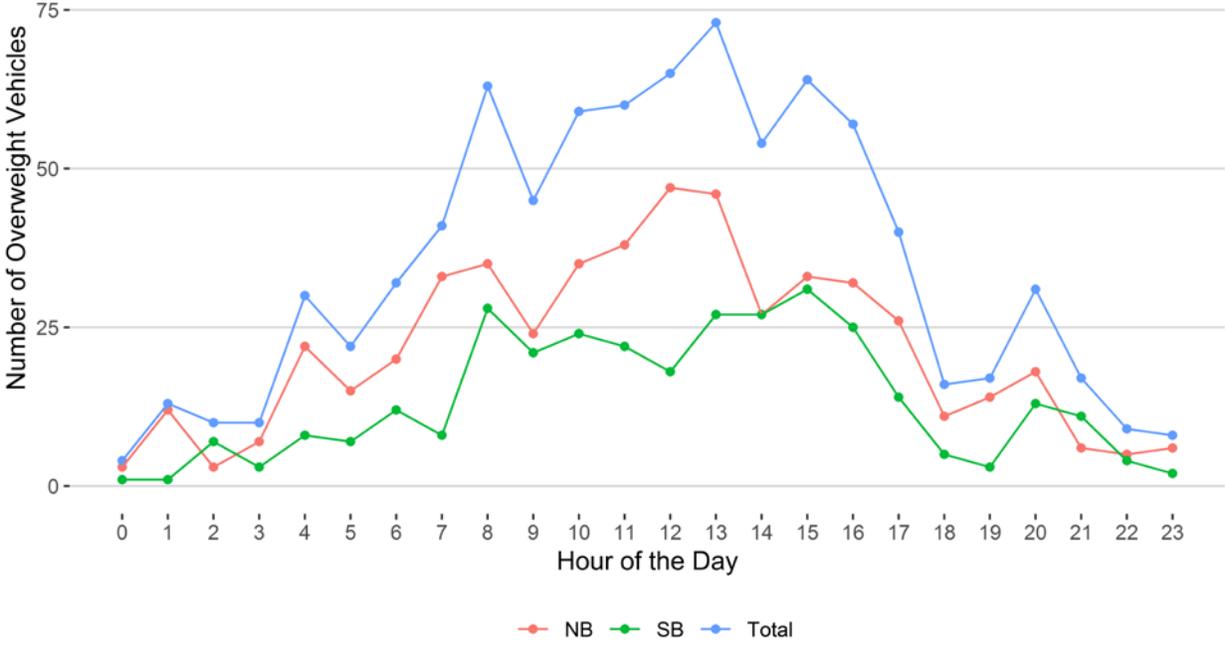
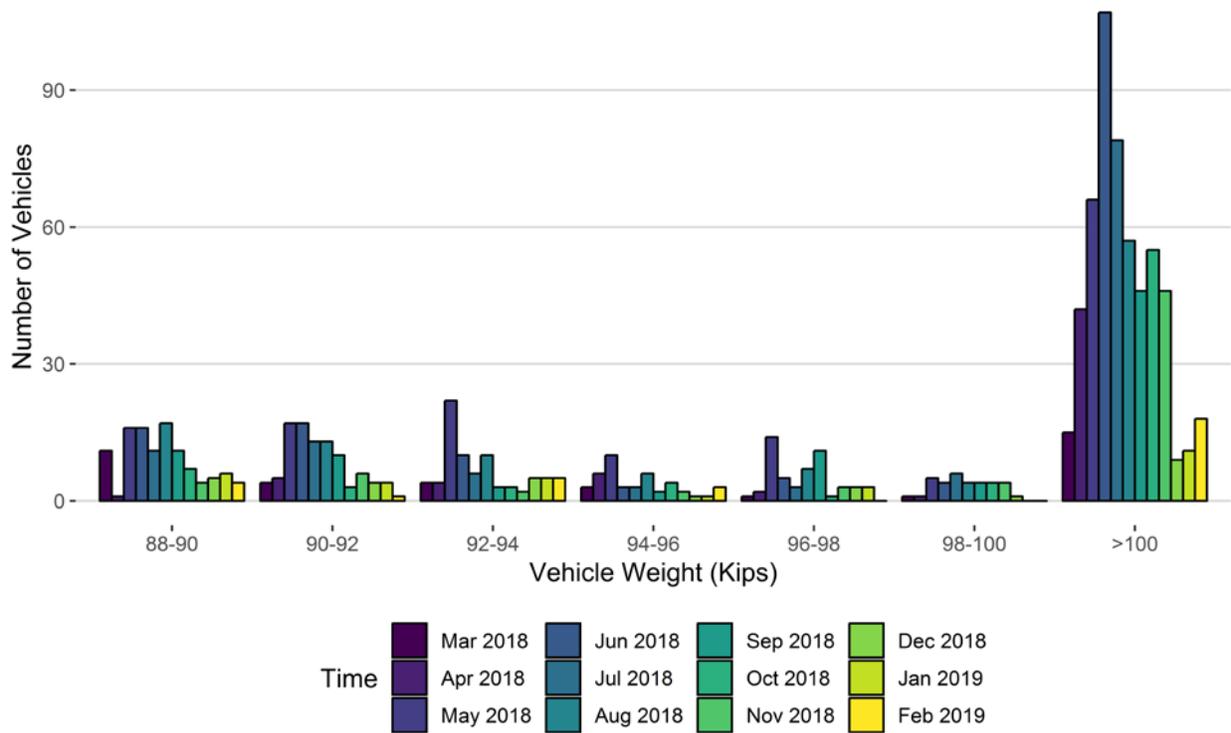
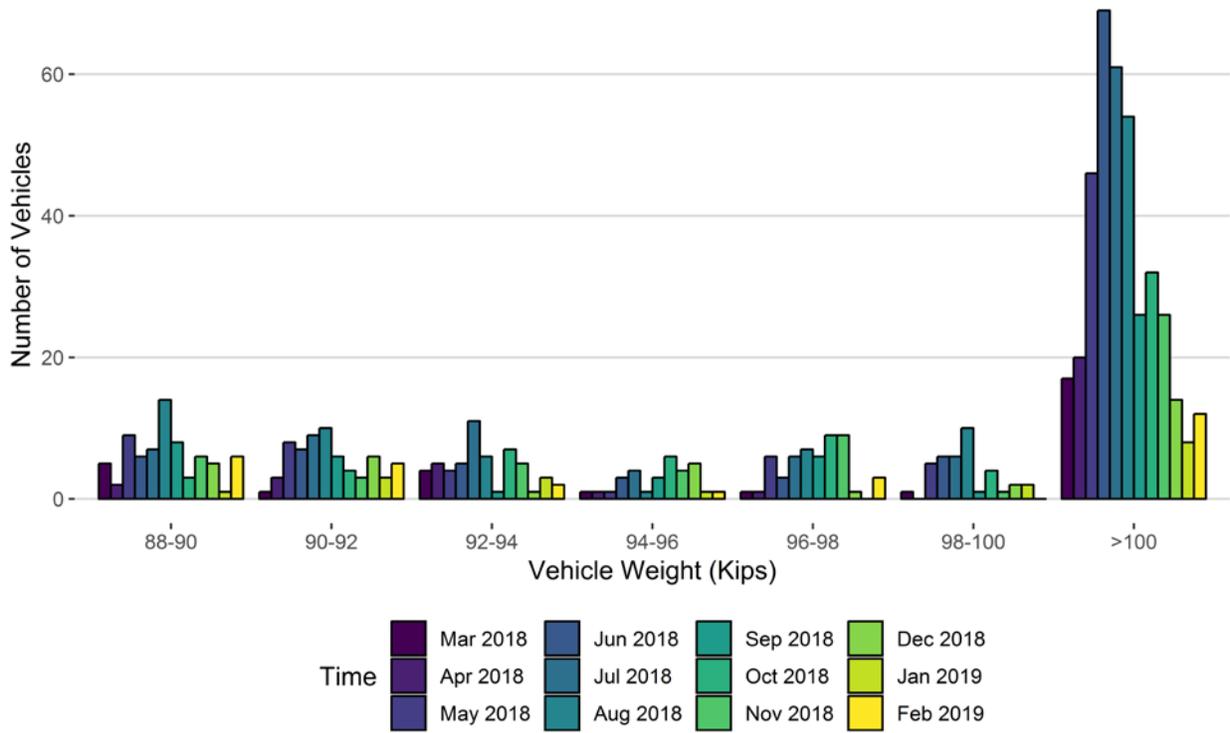


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



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	11	1	16	16	11	17	11	7	4	5	6	4
90-92	4	5	17	17	13	13	10	3	6	4	4	1
92-94	4	4	22	10	6	10	3	3	2	5	5	5
94-96	3	6	10	3	3	6	2	4	2	1	1	3
96-98	1	2	14	5	3	7	11	1	3	3	3	0
98-100	1	1	5	4	6	4	4	4	4	1	0	0
>100	15	42	66	107	79	57	46	55	46	9	11	18
Total	39	61	150	162	121	114	87	77	67	28	30	31

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	5	2	9	6	7	14	8	3	6	5	1	6
90-92	1	3	8	7	9	10	6	4	3	6	3	5
92-94	4	5	4	5	11	6	1	7	5	1	3	2
94-96	1	1	1	3	4	1	3	6	4	5	1	1
96-98	1	1	6	3	6	7	6	9	9	1	0	3
98-100	1	0	5	6	6	10	1	4	1	2	2	0
>100	17	20	46	69	61	54	26	32	26	14	8	12
Total	30	32	79	99	104	102	51	65	54	34	18	29

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

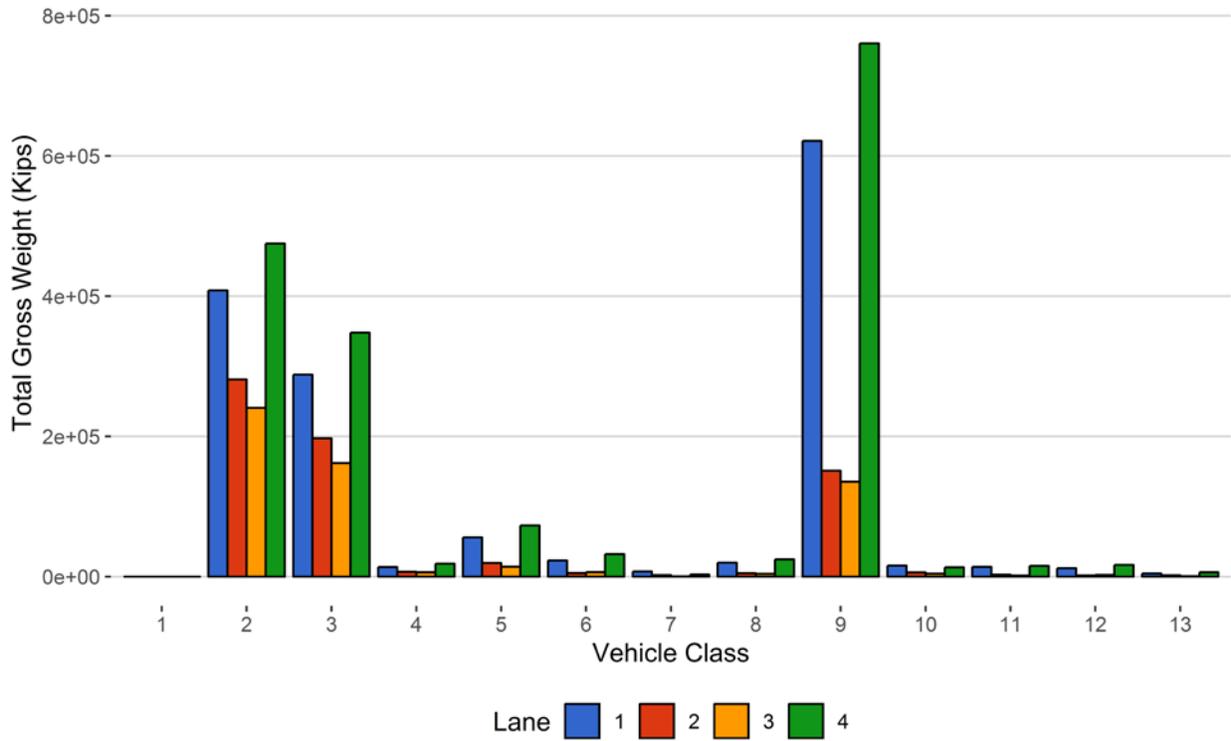


Figure 11 - Total Gross Vehicle Weight t

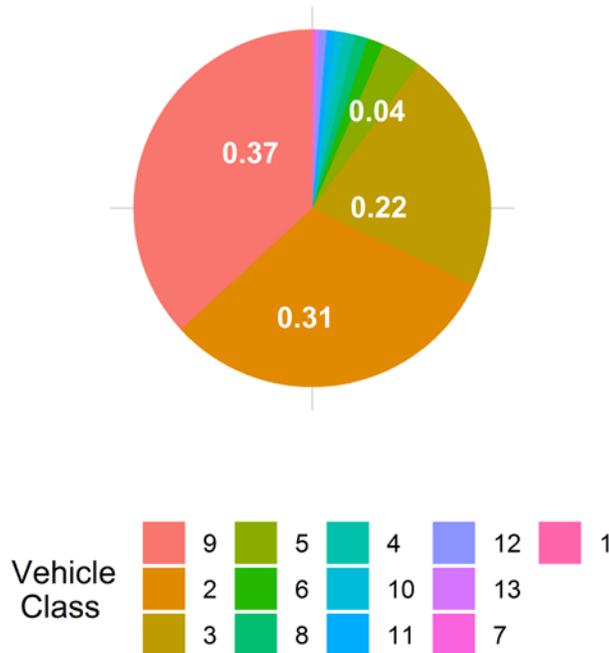


Figure 12 - Total ESALs by Class and Lane

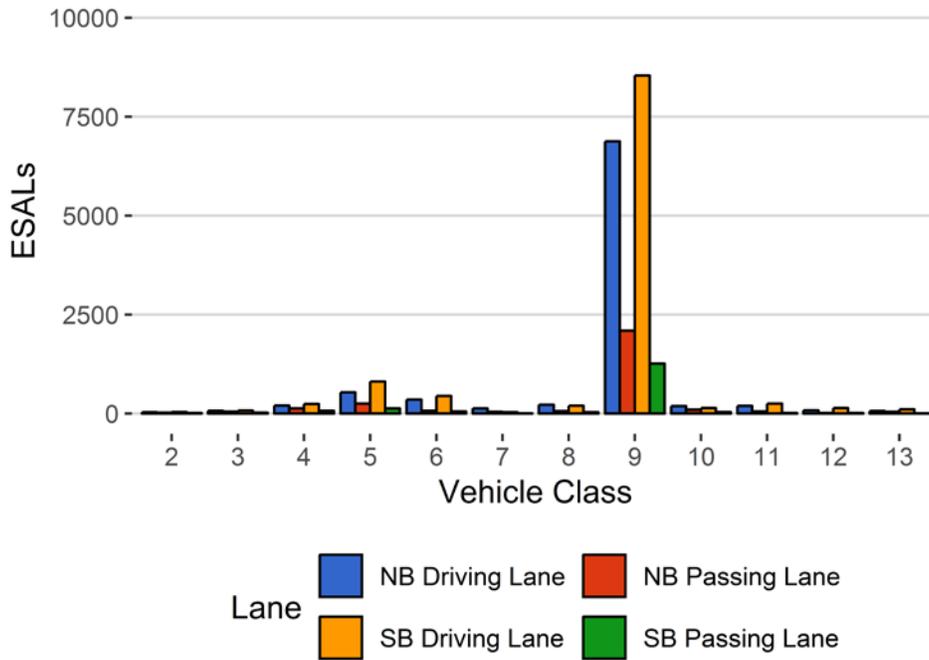


Figure 13 - ESALs by Class

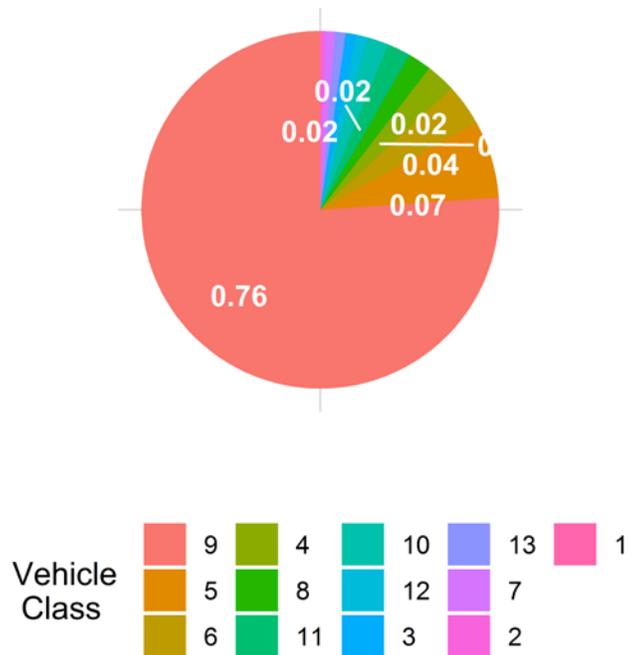


Table 1 Class 9 Front Axle Weight by Lane

<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	NA	NA
July 2017	10.62	0.68	11.22	0.24	10.89	-4.00	NA	NA
August 2017	10.51	-0.35	11.11	-0.73	10.71	-5.58	NA	NA
September 2017	10.41	-1.25	11.06	-1.23	10.58	-6.78	NA	NA
October 2017	10.31	-2.19	10.90	-2.63	10.27	-9.46	NA	NA
November 2017	10.29	-2.46	10.89	-2.77	10.02	-11.64	NA	NA
December 2017	9.91	-6.02	10.60	-5.33	9.62	-15.19	NA	NA

January 2018	9.98	-5.37	10.56	-5.67	9.48	-16.42	NA	NA
February 2018	9.90	-6.10	10.51	-6.15	9.48	-16.39	NA	NA
March 2018	10.07	-4.48	10.73	-4.14	9.96	-12.23	NA	NA
April 2018	10.17	-3.58	10.73	-4.13	10.11	-10.86	NA	NA
May 2018	10.28	-2.51	10.83	-3.25	10.37	-8.56	NA	NA
June 2018	10.36	-1.80	10.95	-2.19	10.46	-7.78	NA	NA
July 2018	10.37	-1.65	11.01	-1.69	10.51	-7.36	NA	NA
August 2018	10.31	-2.21	10.90	-2.63	10.38	-8.46	NA	NA
September 2018	10.23	-3.00	10.82	-3.32	10.19	-10.15	NA	NA
October 2018	10.08	-4.46	10.70	-4.45	9.87	-12.98	NA	NA
November 2018	9.95	-5.67	10.57	-5.55	9.56	-15.75	NA	NA
December 2018	9.51	-9.84	10.54	-5.83	9.40	-17.17	NA	NA
January 2019	9.37	-11.12	10.34	-7.66	9.18	-19.12	NA	NA
February 2019	9.55	-9.40	10.21	-8.76	8.95	-21.10	9.76	0

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	2	0	0	0
2	15193	425398	62.3	0	0
3	7121	199389	29.2	0	0
4	54	1505	0.2	46	5.6
5	439	12303	1.8	147	17.9
6	89	2501	0.4	112	13.7
7	8	231	0	27	3.3
8	69	1926	0.3	27	3.3
9	1321	36986	5.4	320	39.1
10	28	772	0.1	55	6.7
11	24	682	0.1	6	0.7
12	23	653	0.1	9	1.1
13	6	158	0	70	8.5
TOTAL	24375	682508	100	819	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>
2019-02-12	Tuesday	06:28:39	9	NB	2	140.39
2019-02-06	Wednesday	20:06:50	9	NB	1	120.32
2019-02-19	Tuesday	01:32:06	9	NB	1	113.06
2019-02-21	Thursday	11:52:46	9	NB	1	112.41
2019-02-08	Friday	05:04:18	9	NB	1	106.28
2019-02-12	Tuesday	12:37:59	9	NB	1	105.63
2019-02-17	Sunday	12:46:42	9	NB	1	105.61
2019-02-05	Tuesday	04:59:04	9	NB	1	102.93
2019-02-06	Wednesday	09:48:43	9	NB	1	101.04
2019-02-06	Wednesday	10:53:34	9	NB	1	100.22

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	630	43	6.8	19843	531	5519
5	NB	8	5626	1033	18.4	68137	7269	15697
6	NB	19	1033	292	28.3	23529	4525	4725
7	NB	11.5	152	0	0	9404	0	3828
8	NB	31	865	578	66.8	10752	13833	928
9	NB	33	16725	5381	32.2	628496	144044	127072
10	NB	33.5	399	119	29.8	18491	2897	4555
11	NB	36.5	340	41	12.1	15290	1369	2188
12	NB	36.5	283	59	20.8	11729	1932	1776
13	NB	31.5	73	0	0	6194	0	1947
TOTAL	****	****	26126	7546	****	811865	****	168236
<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	843	112	13.3	22972	1365	6003
5	SB	8	6416	1400	21.8	77254	9510	18563
6	SB	19	1415	339	24	33004	5268	6280
7	SB	11.5	74	0	0	3298	0	1223
8	SB	31	1020	712	69.8	11178	17170	815
9	SB	33	19476	6069	31.2	728860	167026	143215
10	SB	33.5	357	131	36.7	14291	2936	3360
11	SB	36.5	328	34	10.4	15458	1067	2363
12	SB	36.5	356	27	7.6	17999	883	2995
13	SB	31.5	82	0	0	6787	0	2102
TOTAL	****	****	30367	8824	****	931101	****	186920
GRAND TOTAL	****	****	56493	16370	430	1742966	381624	355156

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	1	0	0	1	2	0
2	408121	281213	240677	475103	1405115	31.1
3	288028	197235	161805	347883	994952	22
4	13669	6705	6037	18299	44711	1
5	56023	19383	14056	72708	162170	3.6
6	22983	5070	6243	32029	66325	1.5
7	7227	2177	396	2902	12702	0.3
8	19833	4752	3828	24520	52934	1.2
9	621470	151069	135286	760601	1668427	36.9
10	15534	5854	4120	13106	38615	0.9
11	13813	2846	1365	15160	33184	0.7
12	11970	1691	2404	16478	32543	0.7
13	4362	1832	637	6150	12981	0.3
TOTAL	1483036	679826	576857	1784940	4524659	100
GVW/LANE	32.78	15.02	12.75	39.45	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	0.3333
2	35	26	17	39	116	0.47	6e-04
3	73	50	28	81	233	0.94	0.0024
4	205	133	75	244	657	2.66	0.89
5	539	254	133	810	1735	7.03	0.29
6	356	74	53	448	930	3.77	0.76
7	132	44	5	36	218	0.88	1.9
8	224	65	36	200	525	2.13	0.56
9	6877	2098	1264	8541	18780	76.1	1.04
10	191	100	42	144	477	1.93	1.26
11	197	54	18	252	521	2.11	1.55
12	82	16	18	140	256	1.04	0.81
13	70	44	7	107	229	0.93	2.81
TOTAL	8981	2959	1697	11042	24679	100	12
ESALS/LANE	36.4	12	6.9	44.7	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	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
Oct 2018	1005115	32423	2741	920135	91.5	84980	8.5	89	11
Nov 2018	807078	31042	2150	742577	92	64501	8	88.3	11.7
Dec 2018	864651	28822	2035	801570	92.7	63081.4	7.3	89.2	10.8
Jan 2019	786295	25364	2059	722455	91.9	63839.9	8.1	88.7	11.3
Feb 2019	682508	24375	2061	624790	91.5	57718.5	8.5	81.3	18.7
TOTAL	1122455	-	-	10343346	-	881211	-	-	-
AVERAGE	935380	31127	2411	861946	92	73434	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>
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
Oct 2018	20621	3073	1569	17666	42930	89	11	1.1
Nov 2018	16547	2620	1352	14453	34973	89	11	1.2
Dec 2018	12208	2206	1054	12749	28217	88	12	0.2
Jan 2019	10858	2006	1055	11960	25880	88	12	0.3
Feb 2019	9025	2979	1709	11069	24782	81	19	0.3
TOTAL	214876	35137	20630	191127	461770	-	-	-
AVERAGE	17906	2928	1719	15927	38481	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>
Mar 18	2337771	771441	616757	2244953	5970921
Apr 18	2259387	759393	600722	2164611	5784113
May 18	2707830	1023785	857182	2663473	7252270
Jun 18	2805374	1107547	932861	2734606	7580388
Jul 18	2846033	1123846	955181	2884472	7809531
Aug 18	2838230	1095512	906826	2780943	7621510
Sep 18	2508245	912624	761584	2459287	6641740
Oct 18	2663414	939774	748845	2610840	6962873
Nov 18	2335826	846388	669420	2308649	6160283
Dec 18	2086264	770010	604432	2166104	5626811
Jan 19	1876590	646522	520347	1994371	5037829
Feb 19	1485892	680827	578112	1786855	4531686
TOTAL	28750855	10677669	8752268	28799164	76979956
AVERAGE	2395905	889806	729356	2399930	6414996

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	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
Oct 2018	1564	0.2	1.9	142	95
Nov 2018	1176	0.1	1.6	125	77
Dec 2018	728	0.1	1.1	66	27
Jan 2019	575	0.1	0.9	48	21
Feb 2019	840	0.1	1.5	60	30
TOTAL	19301	-	-	1677	1009
AVERAGE	1608.4	0.2	2.1	139.8	84.1

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	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
Oct 2018	321475	280646	602121	53.4	46.6
Nov 2018	261150	229123	490273	53.3	46.7
Dec 2018	207108	197689	404797	51.2	48.8
Jan 2019	191437	189886	381323	50.2	49.8
Feb 2019	168236	186920	355156	47.4	52.6
TOTAL	3305913	2949556	6255469	-	-
AVERAGE	275492.8	245796.3	521289.1	52.6	47.4