

MARCH 2018



11/18/2010

**WIM #29
US 53,
MP 42.1
Cotton, MN**

**MONTHLY
REPORT**



11/18/2010

Your Destination...Our Priority



WIM Site Location

WIM #29 is located on US 53 near Cotton in St Louis county.

System Operation

WIM #29 was operational for the entire month of March 2018. Volume was computed using all monthly data.

System Calibration

WIM #29 was most recently calibrated on 2016-12-28. 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: 211100 | Passenger Vehicles: 198536 | Heavy Commercial Vehicles: 12564

Monthly Average Daily Traffic (MADT): 6810 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 405

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 Mondays (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 12 PM 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 12 PM and 04 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 12564 HCVs, 2966 of them were overweight³. These overweight HCVs contributed to 1.4% of total monthly volume, and 23.7% 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 Wednesdays, with lowest volumes reported on Sundays. See Figure 3 . The top two overweight violators by class were the class 9 and class 10 vehicles . Overall, overweight vehicles tended to reach peak volume concentrations during typical business hours, with 89.5% 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 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 report⁴.

Using normal load limits ,831 NB vehicles exceeded 88,000 pounds (411 vehicles were Class 9's; 359 vehicles were Class 10's). Of vehicles traveling SB,

157 NB vehicles exceeded 88,000 pounds (107 vehicles were Class 10's; 41 vehicles were Class 9's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from March 2018.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in March 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 136619 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (89.4%) than SB (10.6%). See Table 4 and Figure 11 for more freight information.

Infrastructure Considerations

Bridge. Bridge No. 69021 is approximately 5.8 miles north of WIM #29. Bridges No. 69019 and No. 6603, which are respectively on the NB and SB side of MN 53, are 0.2 miles south of WIM #29. WIM #29 recorded a total of 211100 vehicles with a combined GVW of 1375165 kips (1 kip = 1,000 pounds = 0.5 tons) in March 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 53988 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 90.4% of all ESALs were recorded NB while 9.6% was observed SB. In particular, 74% of all ESALs were generated by the Class 14's (Class 14's were also responsible for generating % 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).

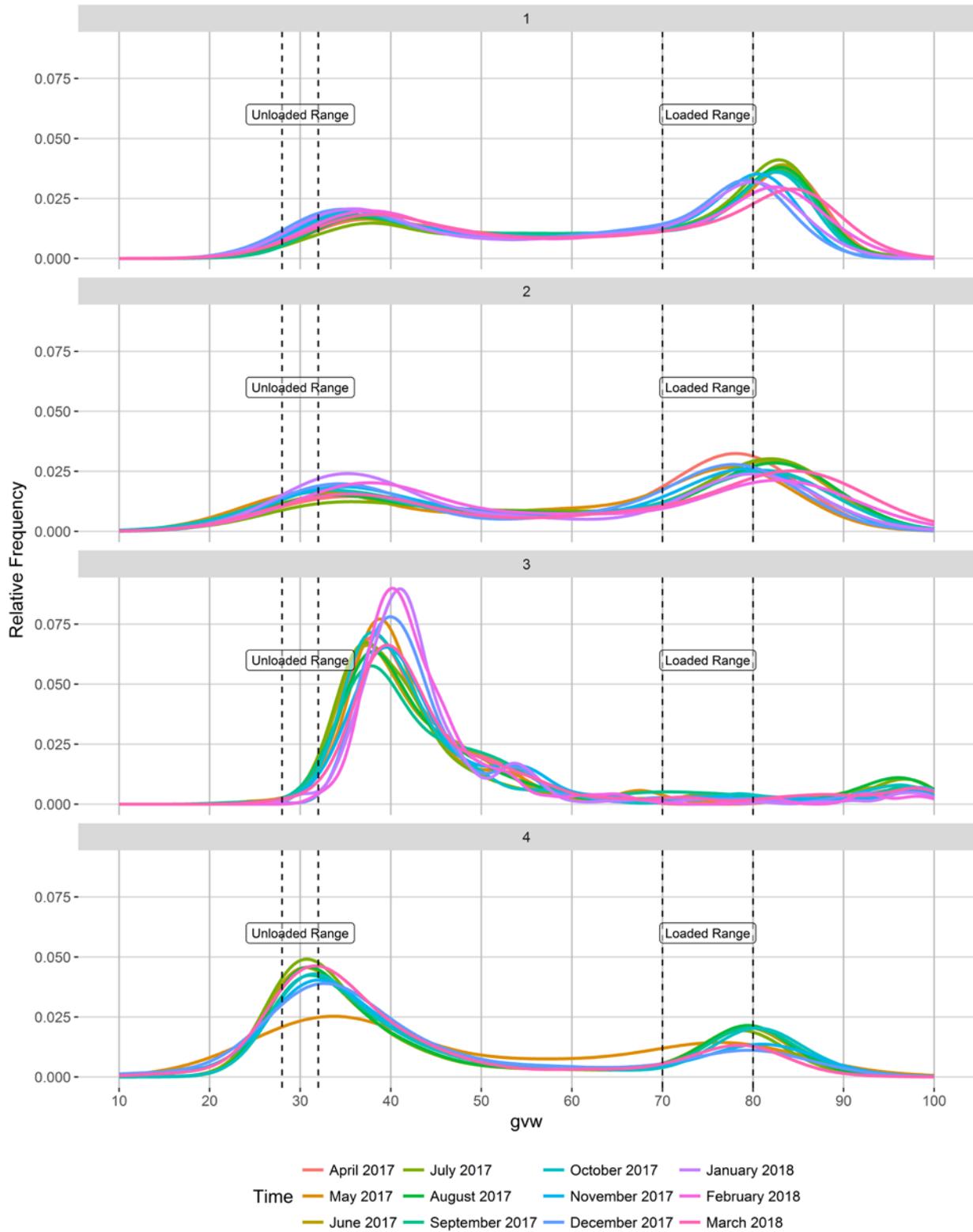
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

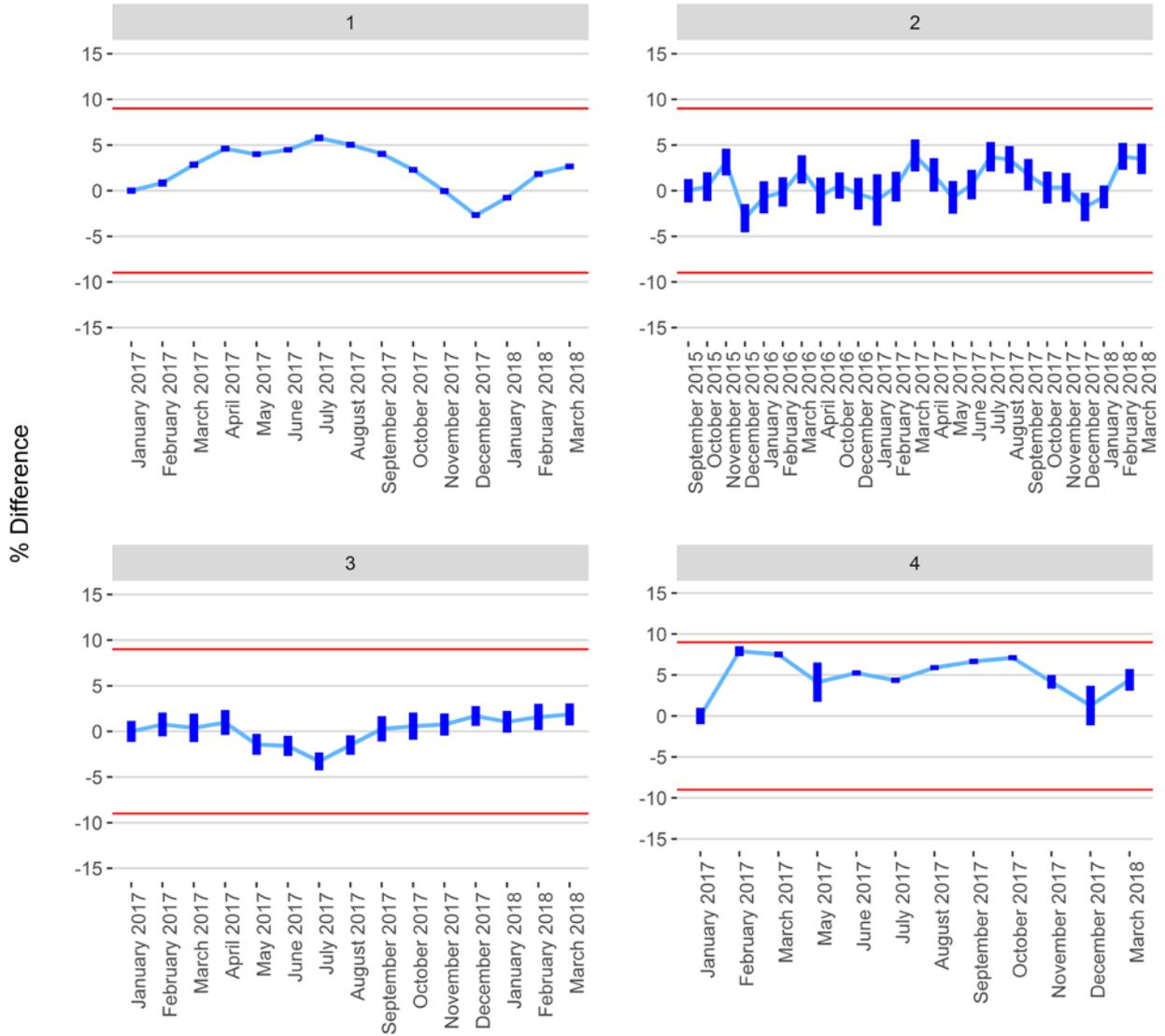
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

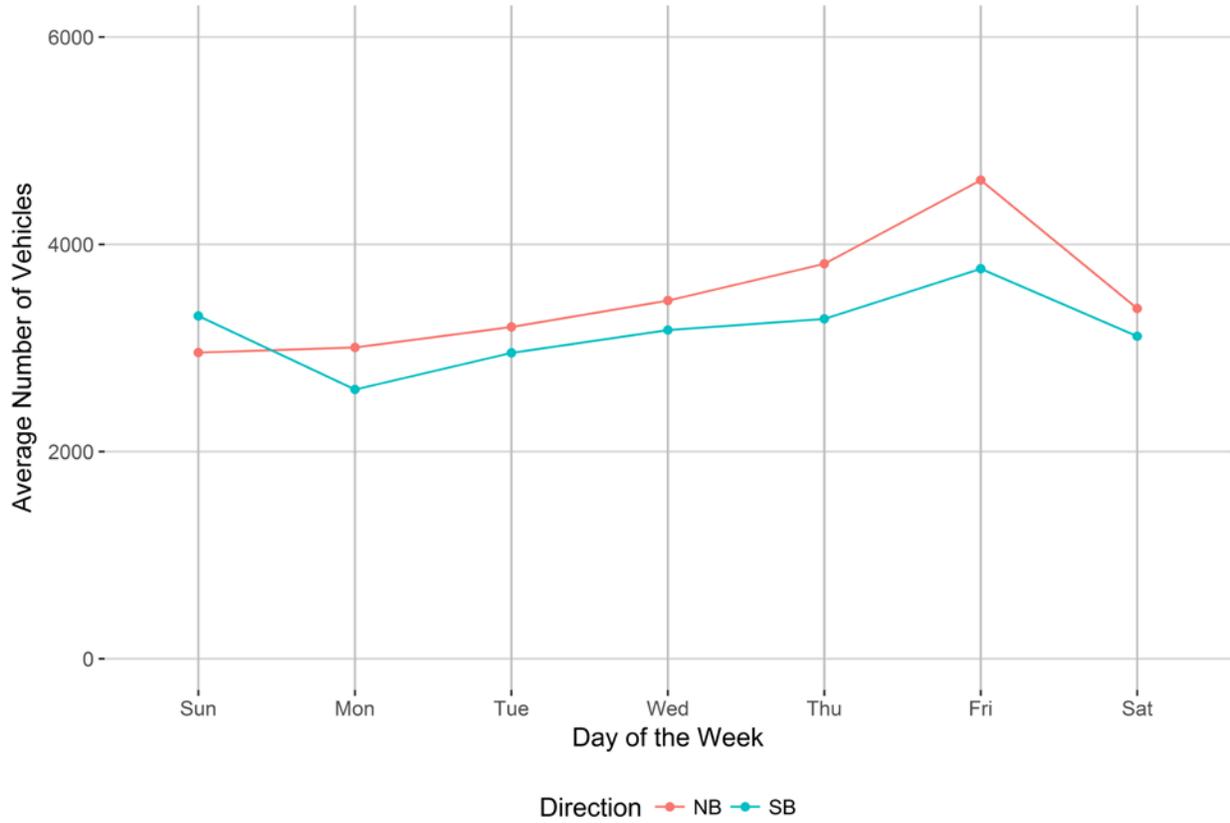


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

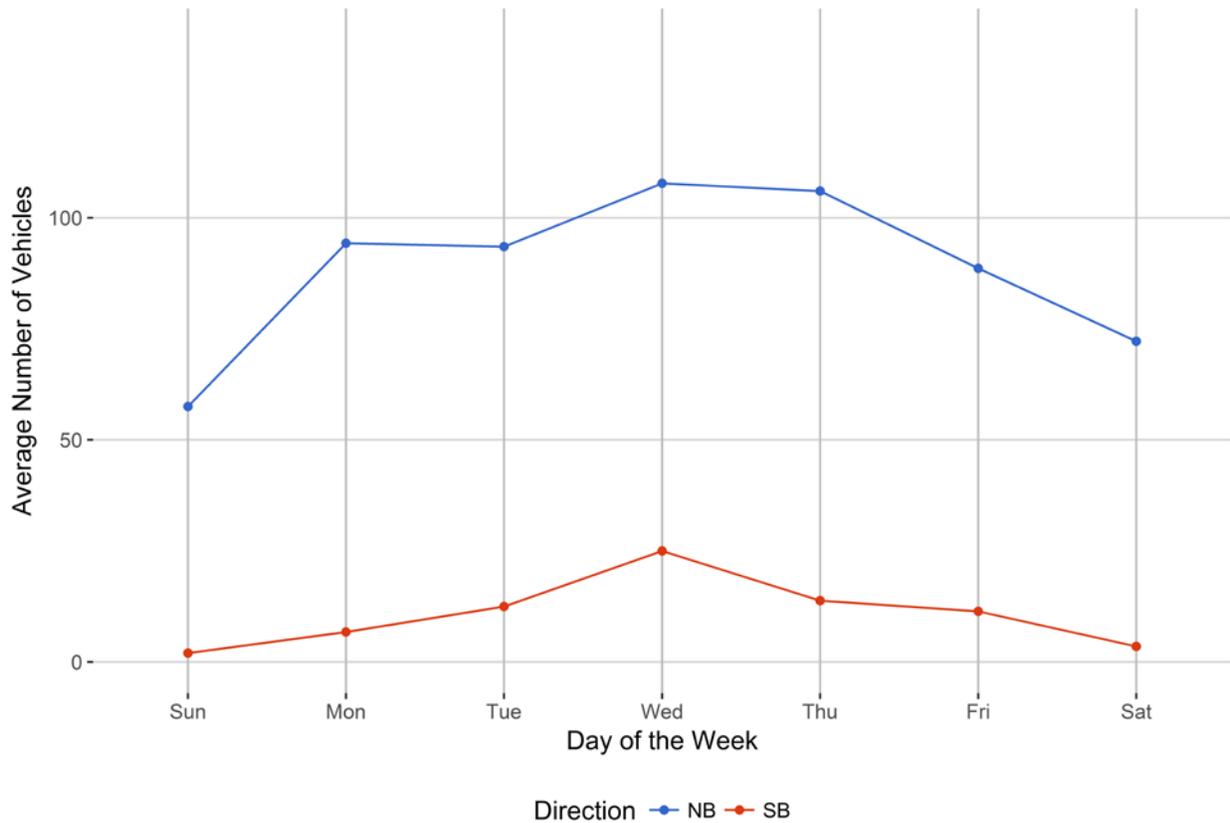


Figure 4 - Passenger Vehicles vs. Hour of the Day

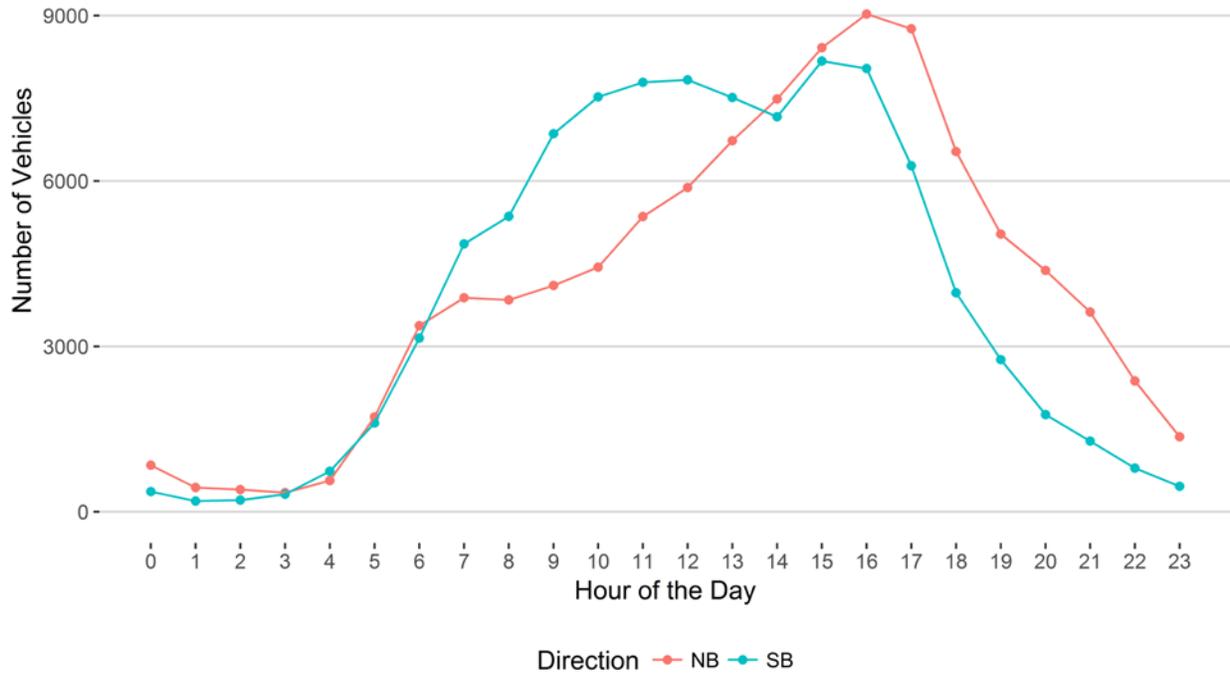


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

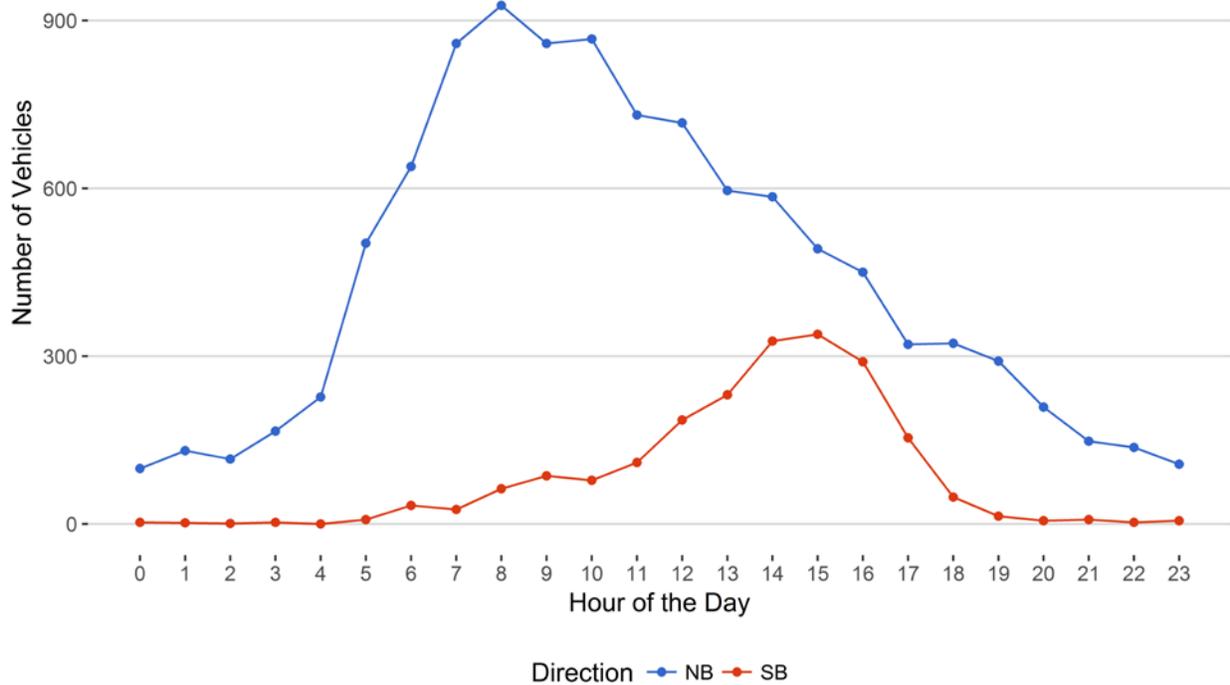


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

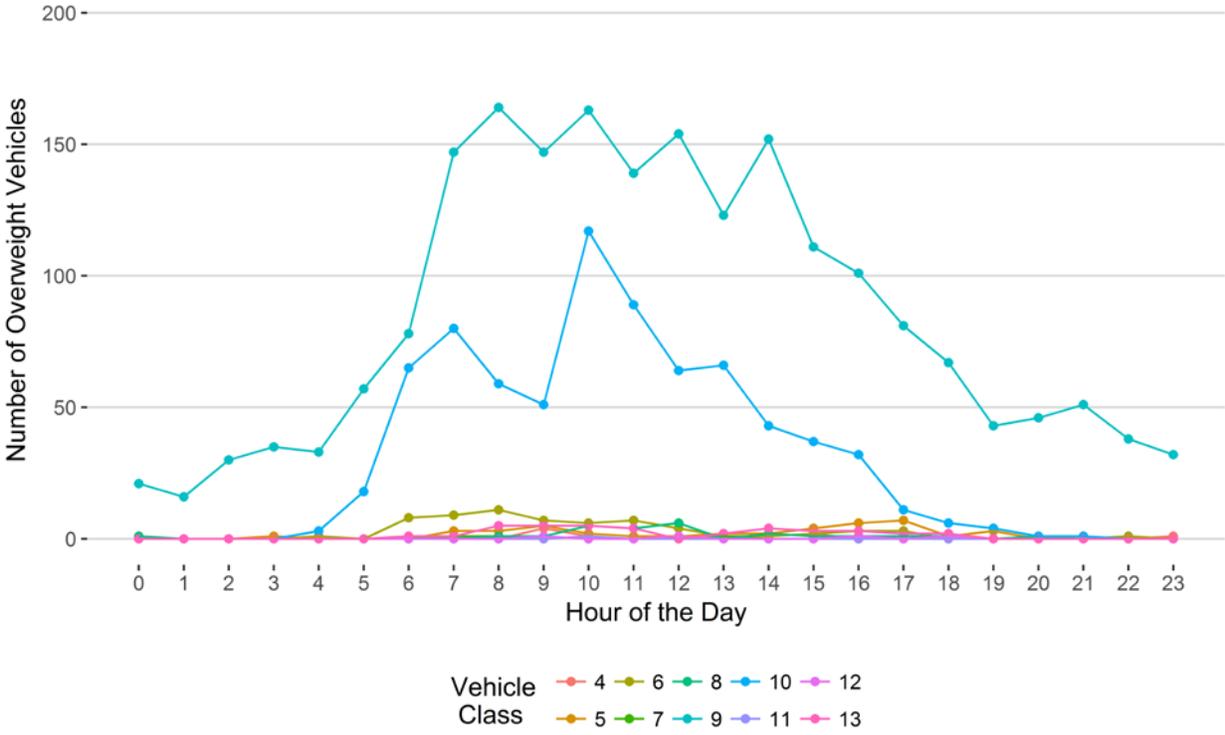


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

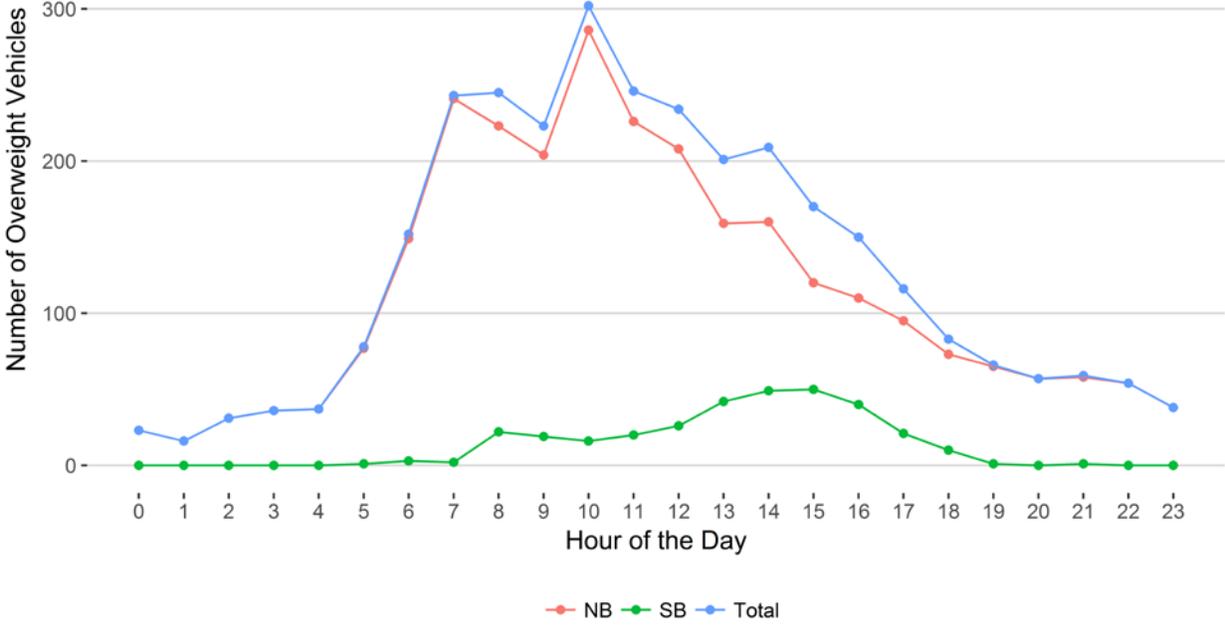
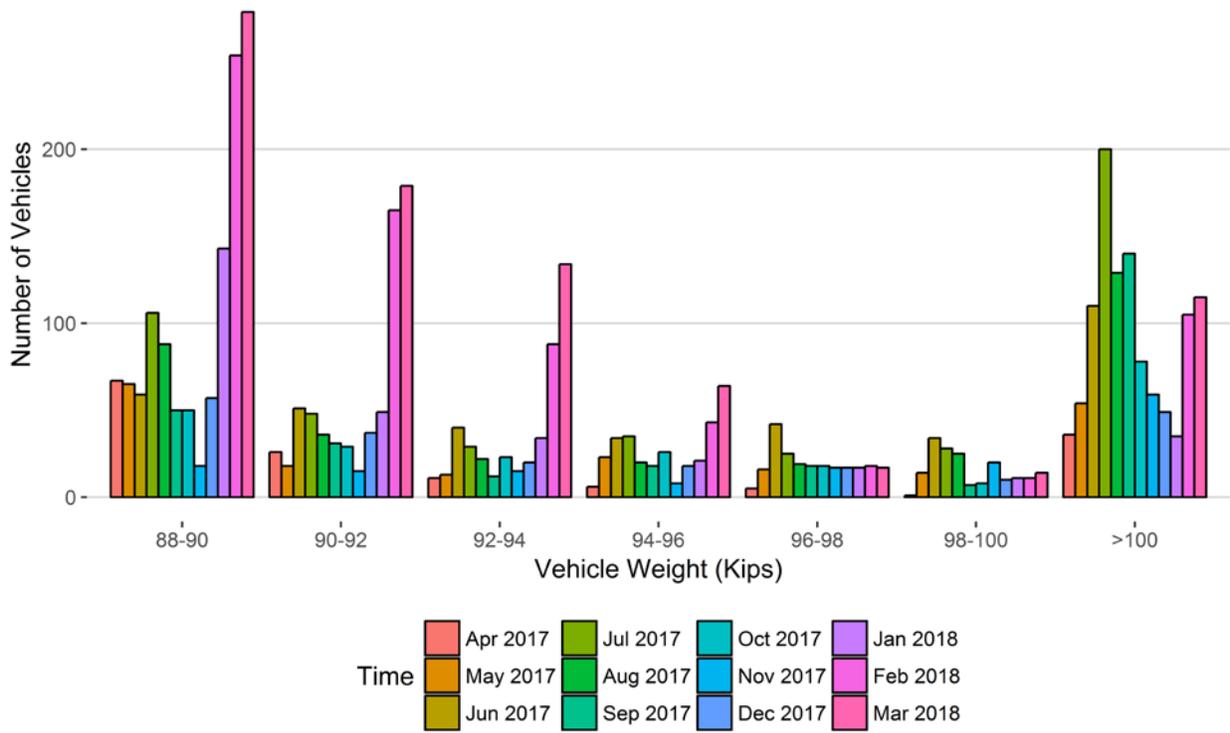
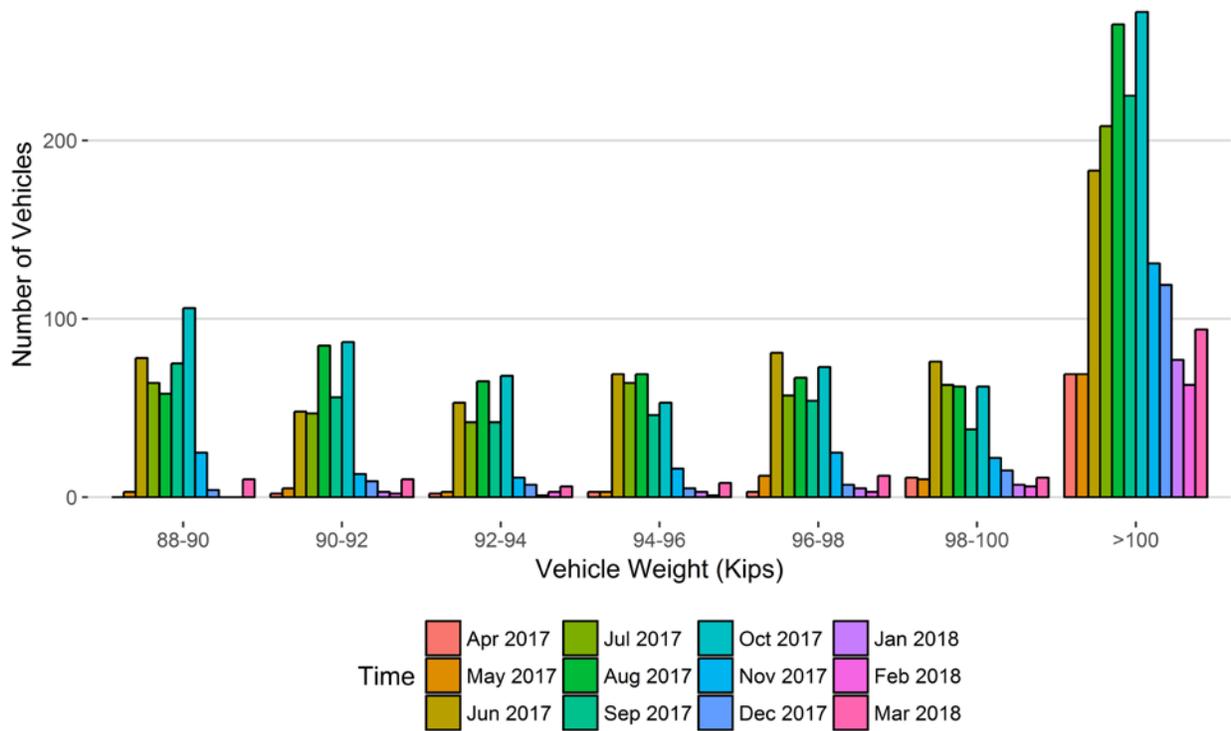


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018
88-90	67	65	59	106	88	50	50	18	57	143	254	279
90-92	26	18	51	48	36	31	29	15	37	49	165	179
92-94	11	13	40	29	22	12	23	15	20	34	88	134
94-96	6	23	34	35	20	18	26	8	18	21	43	64
96-98	5	16	42	25	19	18	18	17	17	17	18	17
98-100	1	14	34	28	25	7	8	20	10	11	11	14
>100	36	54	110	200	129	140	78	59	49	35	105	115
Total	152	203	370	471	339	276	232	152	208	310	684	802

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



Vehicle Weights (Kips)	Apr 2017	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018
88-90	0	3	78	64	58	75	106	25	4	0	0	10
90-92	2	5	48	47	85	56	87	13	9	3	2	10
92-94	2	3	53	42	65	42	68	11	7	1	3	6
94-96	3	3	69	64	69	46	53	16	5	3	1	8
96-98	3	12	81	57	67	54	73	25	7	5	3	12
98-100	11	10	76	63	62	38	62	22	15	7	6	11
>100	69	69	183	208	265	225	272	131	119	77	63	94
Total	90	105	588	545	671	536	721	243	166	96	78	151

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

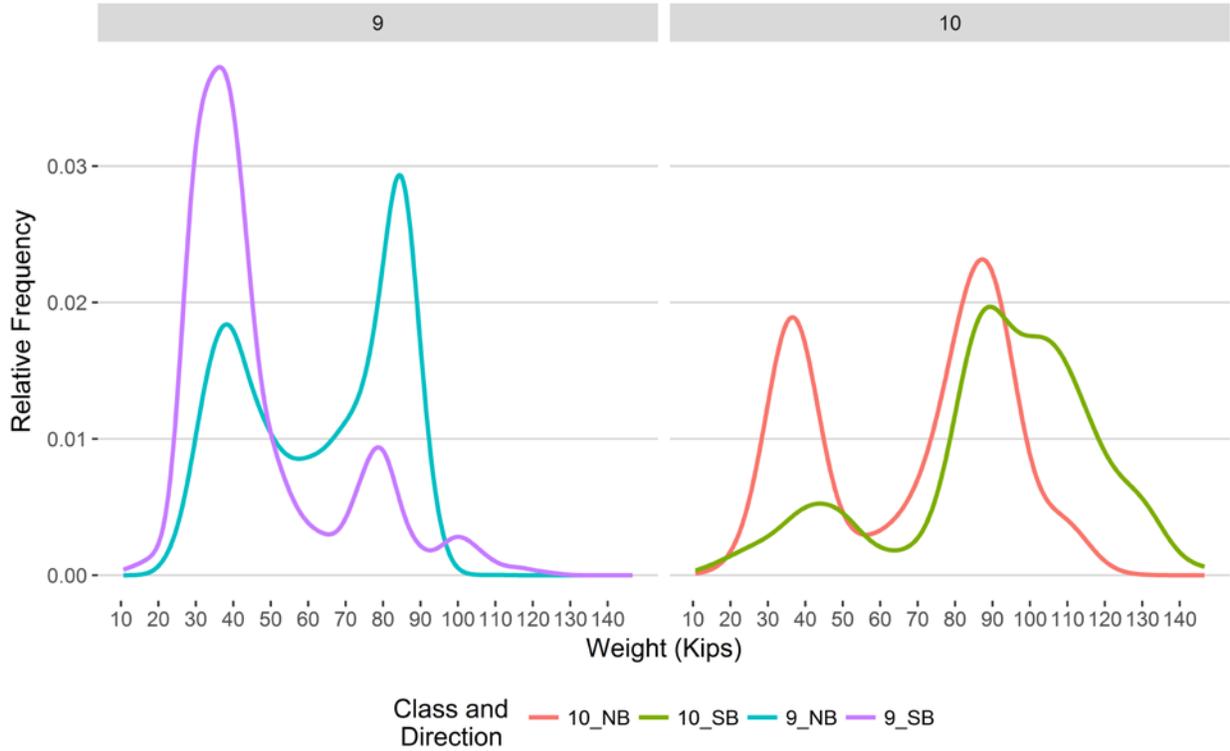


Figure 9 - Freight Percentage by Direction and Class

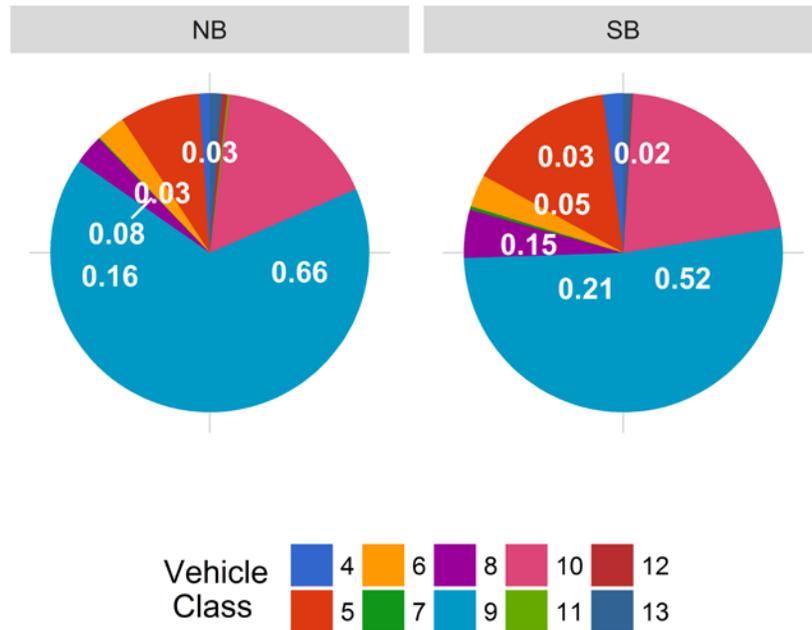


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

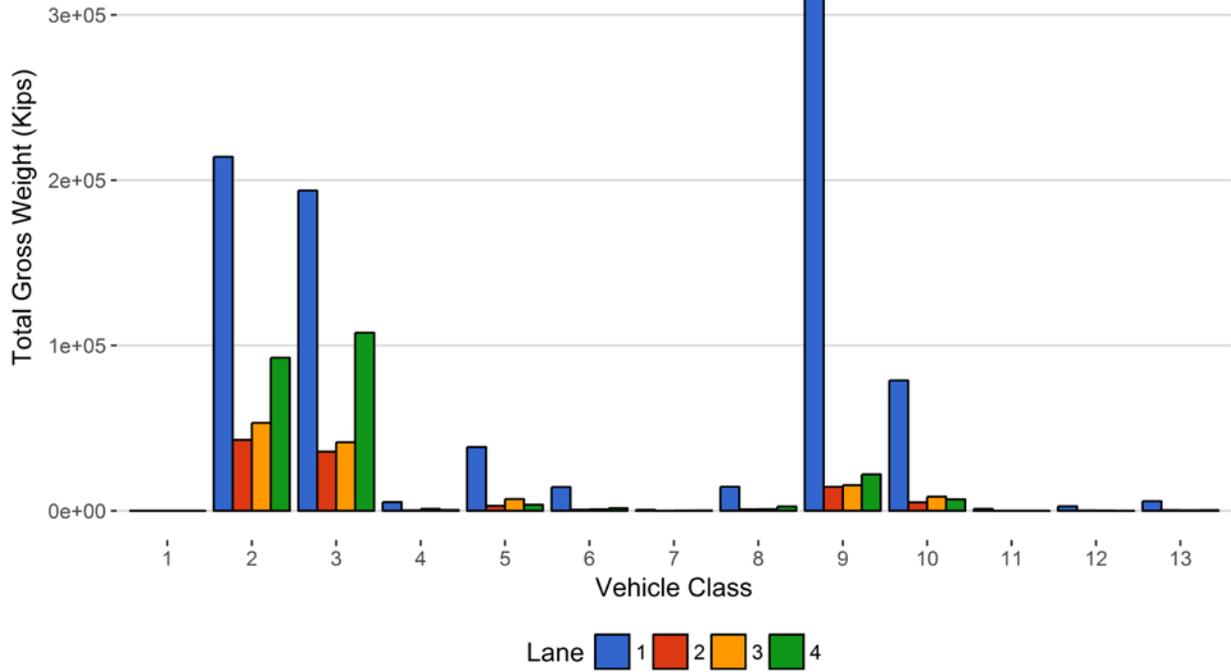


Figure 11 - Total Gross Vehicle Weight I

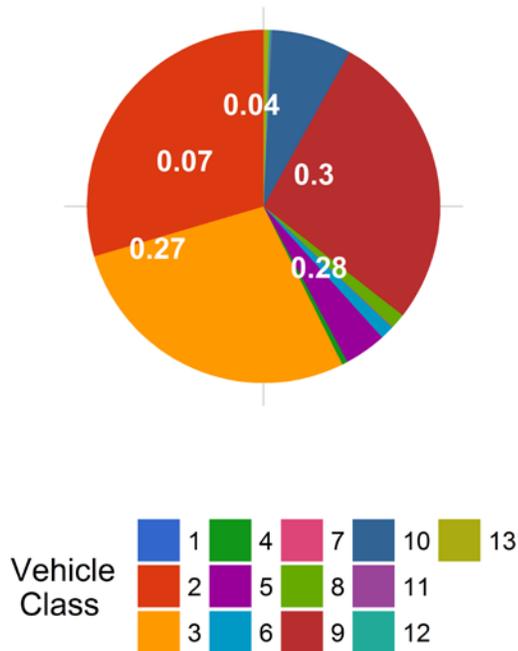


Figure 12 - Total ESALs by Class and Lane

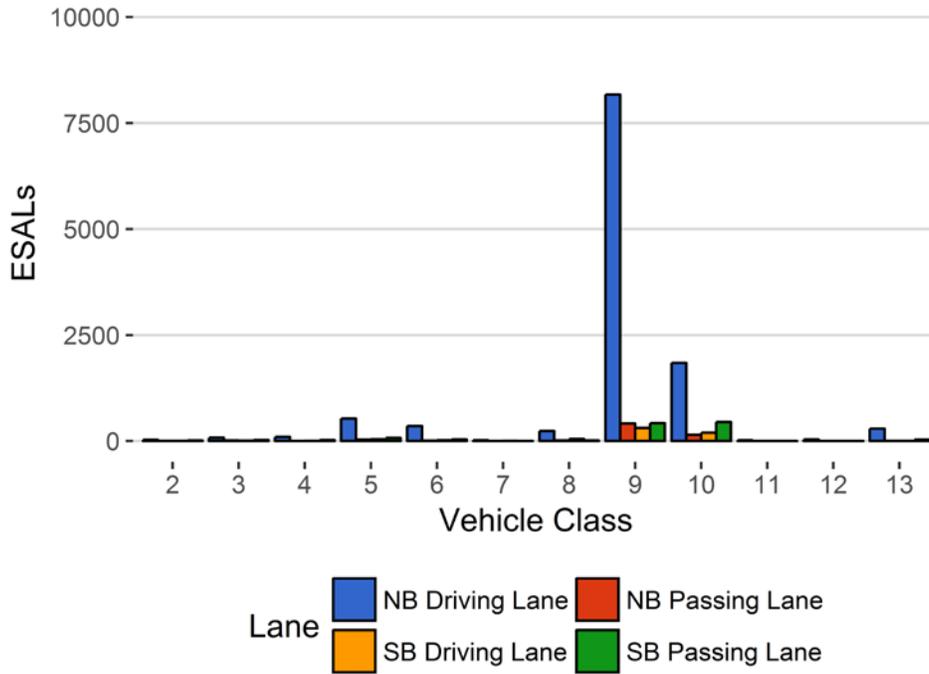


Figure 13 - ESALs by Class

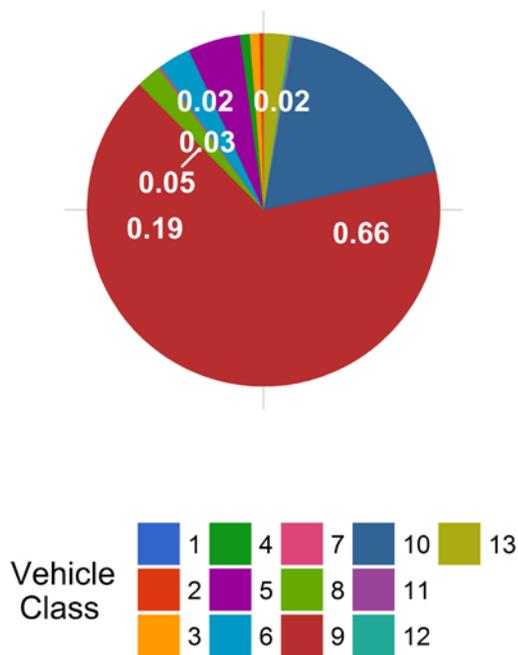


Table 1 Class 9 Front Axle Weight by Lane

<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>
September 2015	NA	NA	11.27	0.00	NA	NA	NA	NA
October 2015	NA	NA	11.32	0.45	NA	NA	NA	NA
November 2015	NA	NA	11.62	3.14	NA	NA	NA	NA
December 2015	NA	NA	10.93	-3.01	NA	NA	NA	NA
January 2016	NA	NA	11.19	-0.73	NA	NA	NA	NA
February 2016	NA	NA	11.25	-0.14	NA	NA	NA	NA
March 2016	NA	NA	11.53	2.33	NA	NA	NA	NA
April 2016	NA	NA	11.21	-0.53	NA	NA	NA	NA
October 2016	NA	NA	11.33	0.56	NA	NA	NA	NA
December 2016	NA	NA	11.23	-0.34	NA	NA	NA	NA
January 2017	12.25	0.00	11.15	-1.01	13.55	0.00	9.66	0.00
February 2017	12.36	0.85	11.32	0.45	13.65	0.76	10.42	7.91
March 2017	12.60	2.86	11.70	3.86	13.60	0.40	10.38	7.51
April 2017	12.82	4.61	11.46	1.73	13.68	0.97	NA	NA
May 2017	12.74	3.99	11.19	-0.74	13.36	-1.41	10.05	4.12
June 2017	12.80	4.47	11.34	0.66	13.33	-1.59	10.16	5.25
July 2017	12.96	5.78	11.69	3.71	13.10	-3.28	10.08	4.36
August 2017	12.87	5.03	11.65	3.40	13.35	-1.49	10.23	5.90
September 2017	12.75	4.04	11.47	1.75	13.59	0.29	10.30	6.65
October 2017	12.53	2.29	11.31	0.34	13.63	0.57	10.34	7.12
November 2017	12.25	-0.04	11.31	0.36	13.65	0.76	10.06	4.16
December 2017	11.93	-2.67	11.07	-1.79	13.78	1.69	9.78	1.27
January 2018	12.16	-0.76	11.19	-0.68	13.69	1.05	NA	NA
February	12.48	1.83	11.69	3.76	13.76	1.58	NA	NA

2018								
March	12.58	2.64	11.66	3.49	13.80	1.86	10.08	4.41
2018								

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	1	44	0	0	0
2	3701	114720	54.3	0	0
3	2702	83772	39.7	0	0
4	8	261	0.1	12	0.4
5	114	3526	1.7	42	1.4
6	17	512	0.2	64	2.2
7	1	20	0	5	0.2
8	18	572	0.3	25	0.8
9	198	6149	2.9	2029	68.4
10	45	1393	0.7	747	25.2
11	1	20	0	1	0
12	2	49	0	4	0.1
13	2	62	0	37	1.2
TOTAL	6810	211100	100	2966	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>
2018-03-02	Friday	15:23:49	10	SB	3	146.67
2018-03-10	Saturday	03:19:52	10	SB	3	141.42
2018-03-07	Wednesday	02:25:10	10	SB	3	138.27
2018-03-14	Wednesday	11:10:54	10	SB	3	137.27
2018-03-01	Thursday	10:00:28	10	SB	3	133.81
2018-03-14	Wednesday	05:26:25	10	SB	3	132
2018-03-01	Thursday	08:08:43	10	SB	3	131.16
2018-03-05	Monday	12:21:03	10	SB	3	131.07
2018-03-13	Tuesday	09:05:01	10	SB	3	130.33
2018-03-23	Friday	15:31:16	10	NB	1	130.2

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	195	48	24.6	4883	621	1339
5	NB	8	2741	247	9	39726	1761	9887
6	NB	19	438	31	7.1	14353	542	3310
7	NB	11.5	12	0	0	577	0	220
8	NB	31	446	132	29.6	12619	2713	1443
9	NB	33	5326	399	7.5	325106	11864	81257
10	NB	33.5	1219	108	8.9	80569	3245	21675
11	NB	36.5	20	1	5	1036	31	171
12	NB	36.5	47	2	4.3	2791	48	574
13	NB	31.5	55	0	0	6209	0	2238
TOTAL	****	****	10499	968	****	487870	****	122115
<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	65	16	24.6	1309	190	287
5	SB	8	774	45	5.8	10444	322	2306
6	SB	19	72	8	11.1	2262	126	523
7	SB	11.5	8	2	25	240	17	85
8	SB	31	124	69	55.6	2091	1444	193
9	SB	33	803	203	25.3	31686	5876	5943
10	SB	33.5	170	6	3.5	15367	150	4936
12	SB	36.5	2	1	50	55	27	9
13	SB	31.5	7	1	14.3	630	8	221
TOTAL	****	****	2025	351	****	64084	****	14504
GRAND TOTAL	****	****	12524	1319	311	551954	28985	136619

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	22	23	0
2	214112	42899	53205	92603	402818	29.6
3	193792	35718	41438	107721	378670	27.8
4	5238	266	1078	422	7004	0.5
5	38527	2960	7142	3623	52253	3.8
6	14304	591	819	1570	17283	1.3
7	577	0	66	191	834	0.1
8	14519	813	954	2580	18867	1.4
9	322568	14402	15510	22052	374532	27.5
10	78792	5021	8544	6972	99330	7.3
11	1068	0	0	0	1068	0.1
12	2676	163	81	0	2921	0.2
13	5836	373	276	362	6847	0.5
TOTAL	892012	103207	129113	238118	1362450	100
GVW/LANE	65.47	7.58	9.48	17.48	100	0.01

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	0.0222
2	28	6	13	5	53	0.37	0.001
3	76	13	26	11	126	0.89	0.0031
4	96	3	22	5	126	0.89	0.97
5	530	32	74	42	678	4.81	0.39
6	352	12	38	20	421	2.99	1.65
7	20	0	2	6	28	0.2	2.36
8	238	17	16	49	319	2.26	1.12
9	8171	411	422	310	9313	66.08	3.05
10	1844	147	450	193	2634	18.69	3.79
11	21	0	0	0	21	0.15	1.74
12	36	3	0	0	39	0.28	1.49
13	289	8	31	7	335	2.38	9.13
TOTAL	11701	650	1094	649	14093	100	26
ESALS/LANE	83	4.6	7.8	4.6	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>
Apr 2017	215331	7178	444	202022	93.8	13309.4	6.2	89	11
May 2017	271582	8761	575	253750	93.4	17831.8	6.6	88	12
Jun 2017	319238	10641	930	291338	91.3	27899.8	8.7	91.1	8.9
Jul 2017	341612	11020	954	312053	91.3	29559.5	8.7	91.4	8.6
Aug 2017	323990	10451	906	295913	91.3	28077.5	8.7	91.7	8.3
Sep 2017	286867	9562	835	261811	91.3	25055.9	8.7	91.8	8.2
Oct 2017	260529	8404	843	234384	90	26144.9	10	92.4	7.6
Nov 2017	215323	7177	500	200318	93	15005	7	88.1	11.9
Dec 2017	205518	6630	393	193348	94.1	12170.2	5.9	85.6	14.4
Jan 2018	181841	5866	375	170202	93.6	11639.2	6.4	85.6	14.4
Feb 2018	175341	6262	392	164375	93.7	10966.1	6.3	87	13
Mar 2018	211100	6810	405	198536	94	12563.9	6	87.5	12.5
TOTAL	3008272	--	--	2778050	--	230223	--	--	--
AVERAGE	250689	8230	629	231504	93	19185	7	89	11

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>
Apr 2017	9922	460	773	436	11591	89	11	4.4
May 2017	12532	589	941	752	14814	90	10	5.2
Jun 2017	13372	929	1116	9528	24945	92	8	9.3
Jul 2017	15823	887	1206	8865	26780	92	8	23.7
Aug 2017	16638	861	1147	10280	28927	93	7	13
Sep 2017	13397	688	893	8999	23977	93	7	9.7
Oct 2017	12228	695	965	10730	24619	93	7	6.3
Nov 2017	16855	610	1089	22664	41217	96	4	34.2
Dec 2017	22666	582	1523	13599	38370	95	5	7.9
Jan 2018	20391	683	1163	7	22244	92	8	10.7
Feb 2018	26091	646	943	7	27687	94	6	27.8
Mar 2018	48174	658	1125	4031	53988	97	3	29.2
TOTAL	228088	8288	12883	89898	339158	--	--	--
AVERAGE	19007	691	1074	7492	28263	93	7	15

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>
Apr 2017	825230	86740	100718	162052	1174740
May 2017	818040	85005	93348	153344	1149736
Jun 2017	897695	103424	129546	244500	1375165
Jul 2017	849503	98129	100461	375945	1424039
Aug 2017	1093082	151887	154874	445317	1845160
Sep 2017	1226497	207142	212959	1067914	2714512
Oct 2017	1285190	212694	240911	1100208	2839003
Nov 2017	1208868	202501	206603	1102509	2720481
Dec 2017	1055974	165403	173645	982897	2377919
Jan 2018	1034880	137948	160634	994865	2328327
Feb 2018	864848	109802	135880	388739	1499269
Mar 2018	847068	95361	130293	218569	1291292
TOTAL	12006874	1656036	1839873	7236861	22739644
AVERAGE	1000573	138003	153323	603072	1894970

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>
Apr 2017	2531	1.2	20	243	117
May 2017	3145	1.2	18.8	308	147
Jun 2017	5558	1.8	20	960	404
Jul 2017	5908	1.8	20.1	1025	508
Aug 2017	5699	1.8	20.4	1016	485
Sep 2017	4749	1.7	19.1	817	414
Oct 2017	5511	2.1	21.2	955	421
Nov 2017	2799	1.3	16.4	429	260
Dec 2017	2265	1.1	16	412	224
Jan 2018	2500	1.4	19.5	415	137
Feb 2018	2757	1.6	22.7	778	197
Mar 2018	3069	1.5	21.2	988	264
TOTAL	46491	--	--	8346	3578
AVERAGE	3874.2	1.5	19.6	695.5	298.2

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>
Apr 2017	110430	12575	123005	89.8	10.2
May 2017	137051	18215	155266	88.3	11.7
Jun 2017	146355	105381	251736	58.1	41.9
Jul 2017	165781	98437	264218	62.7	37.3
Aug 2017	149028	108771	257798	57.8	42.2
Sep 2017	127781	96029	223811	57.1	42.9
Oct 2017	135565	112336	247902	54.7	45.3
Nov 2017	115079	32265	147344	78.1	21.9
Dec 2017	111685	13609	125293	89.1	10.9
Jan 2018	116628	7851	124479	93.7	6.3
Feb 2018	116036	6240	122276	94.9	5.1
Mar 2018	122115	14504	136619	89.4	10.6
TOTAL	1553534	626212	2179746	--	--
AVERAGE	129461.2	52184.4	181645.5	76.1	23.9