

APRIL 2018



**WIM #38
I-535, MP 1.1
DULUTH, MN**

**MONTHLY
REPORT**



Your Destination...Our Priority



WIM Site Location

WIM #38 is located on I-535 near Duluth in St Louis county.

System Operation

WIM #38 was operational for the entire month of April 2018. Volume was computed using all monthly data.

System Calibration

WIM #38 was most recently calibrated on 2017-01-23. 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: 934763 | Passenger Vehicles: 885913 | Heavy Commercial Vehicles: 48850

Monthly Average Daily Traffic (MADT): 31159 | Monthly Heavy Commercial Average Daily Traffic (MHCADT): 1628

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 Thursdays, 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 48850 HCVs, 2077 of them were overweight³. These overweight HCVs contributed to 0.2% of total monthly volume, and 4.4% 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 Mondays, with lowest volumes reported on Saturdays. See Figure 3 .

The top two overweight violators by class were the class 9 and class 6 vehicles . Overall, overweight vehicles tended to reach peak volume concentrations during typical business hours, with 65.2% 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 September.

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 ,26 NB vehicles exceeded 88,000 pounds (11 vehicles were Class 13's; 10 vehicles were Class 10's). Of vehicles traveling SB,

31 NB vehicles exceeded 88,000 pounds (22 vehicles were Class 13's; 7 vehicles were Class 10's). Refer to Table 3 for the Top 10 highest recorded GVWs from Classes 9 and 10 from April 2018.

Loaded vs. Unloaded HCVs. Figure 10 shows the GVW distributions of Class 9s and 10s in April 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 338541 tons of freight was recorded to have crossed the WIM. More freight was shipped NB (52.1%) than SB (47.9%). See Table 4 and Figure 11 for more freight information.

Infrastructure Considerations

Bridge. Bridge No. 9030 (Blatnik Bridge) is approximately 1.1 miles south of WIM #38, and Bridge No. 69808 is 0.45 miles south of WIM #38. A pair of bridges also exists 0.4 miles north of WIM #38 (Bridge No. 69801C on the NB side and Bridge No. 69801N on the SB side). WIM #38 recorded a total of 934763 vehicles with a combined GVW of 5418670 kips (1 kip = 1,000 pounds = 0.5 tons) in April 2018. See Table 5 and Figures 12-13 for GVW information by vehicle class and lane.

Pavement Design. A total of 28932 equivalent single axle loads (ESALs) passed over the pavement at this site. Approximately 52.1% of all ESALs were recorded NB while 47.9% was observed SB. In particular, 70% of all ESALs were generated by the Class 9's (Class 9's

were also responsible for generating 22% 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).

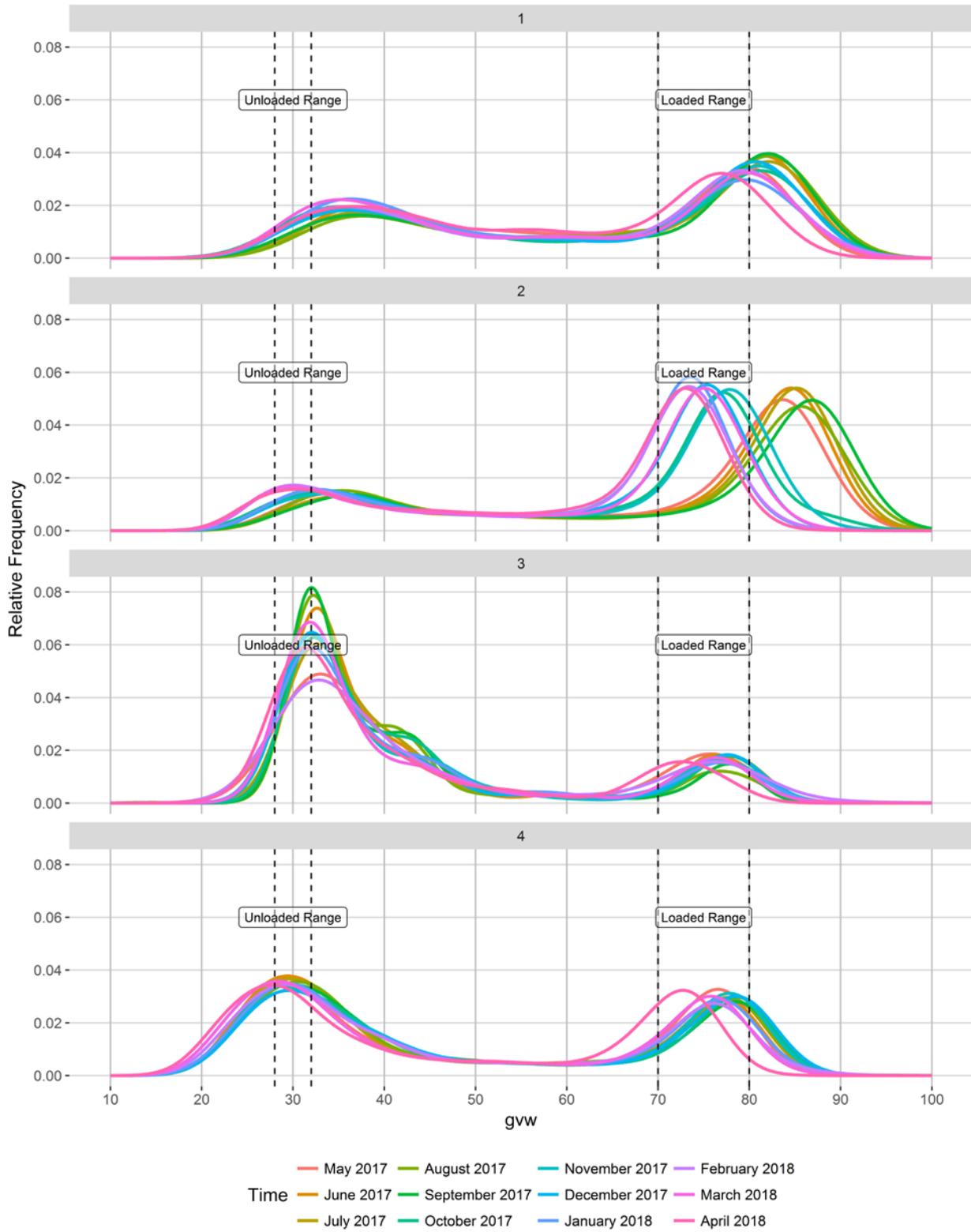
WIM monthly reports can be found at: <http://www.dot.state.mn.us/traffic/data/reports-monthly-wim.html>

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.

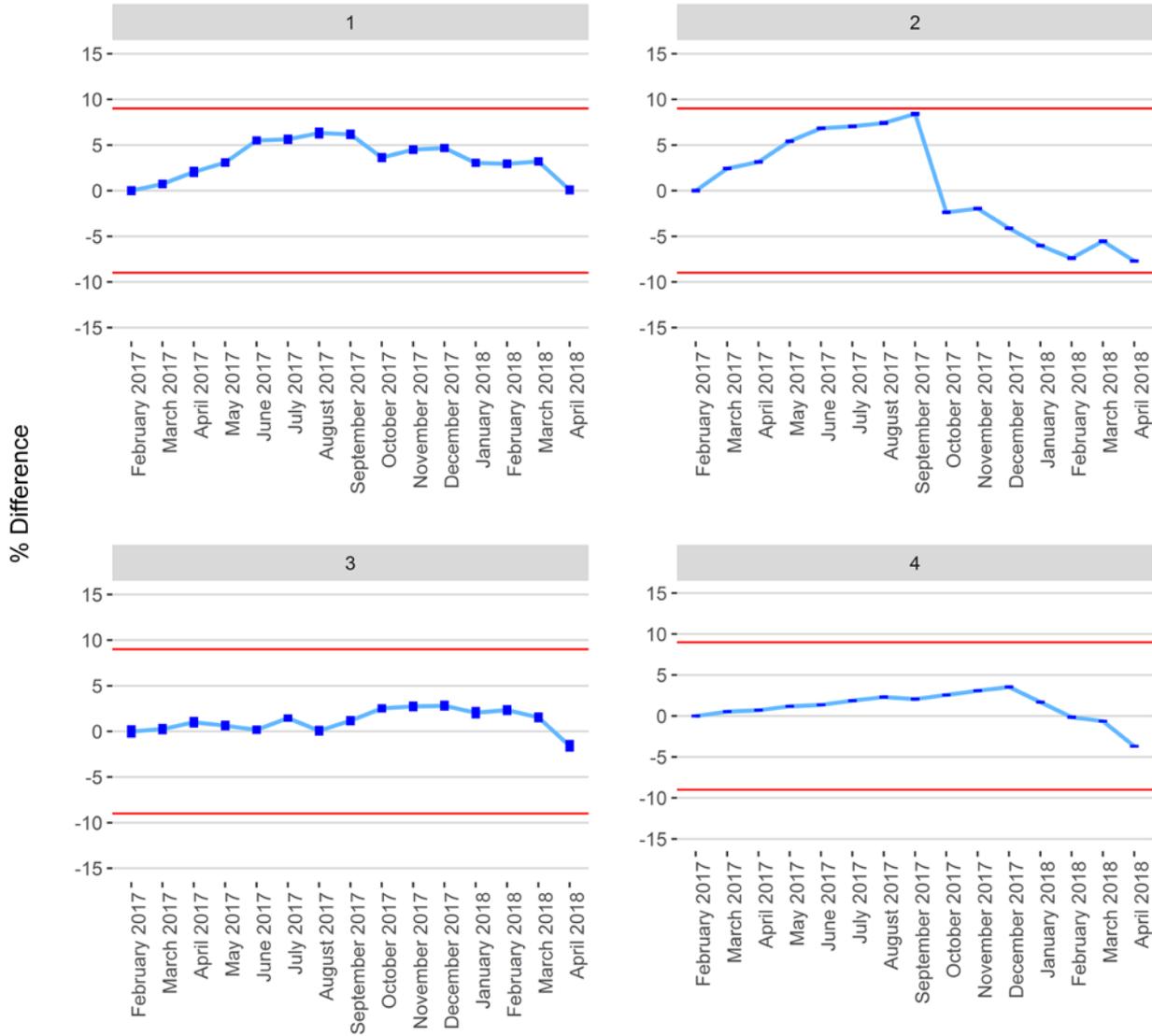
To request this document in an alternative format, please call 651-366-4718 or 1-800-657-3774, or email your request to ADArequest.dot@state.mn.us. Please request at least one week in advance.

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

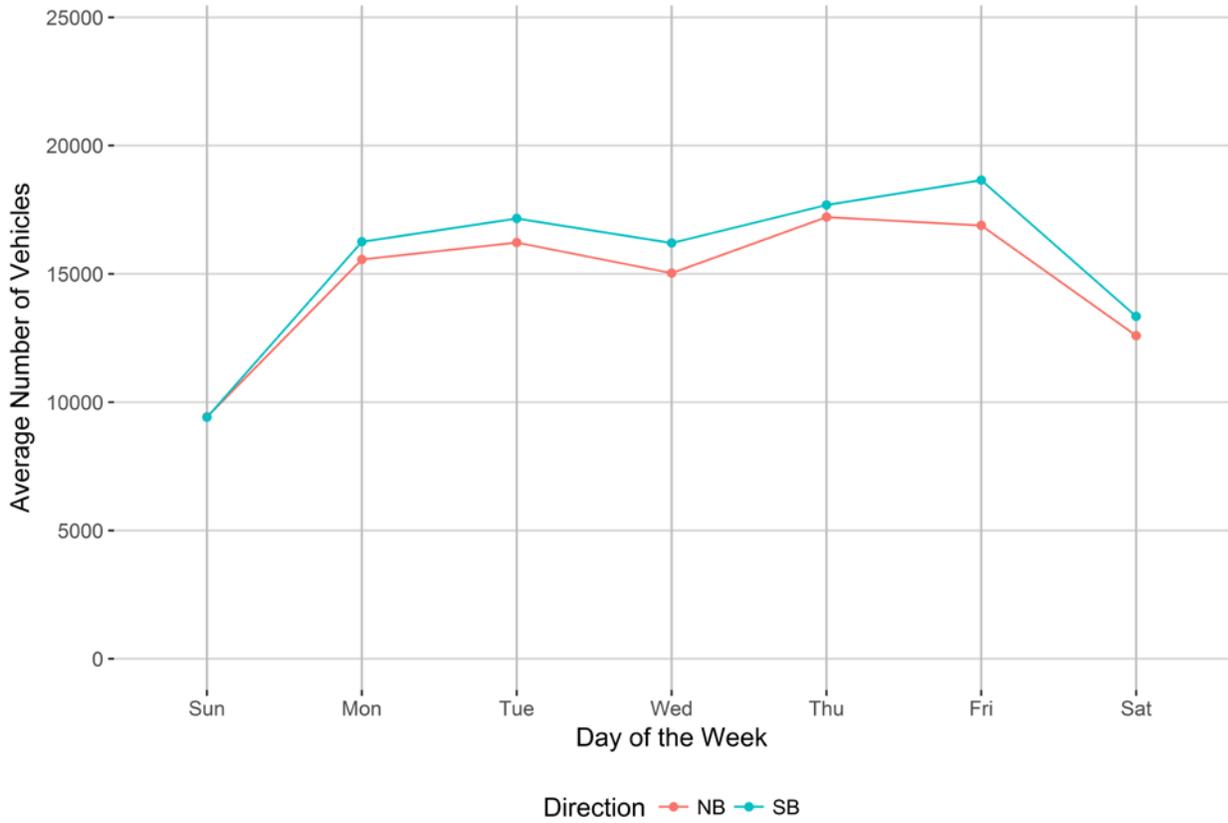


Figure 3 - Average Overweight Vehicle Volume vs. Day of the Week

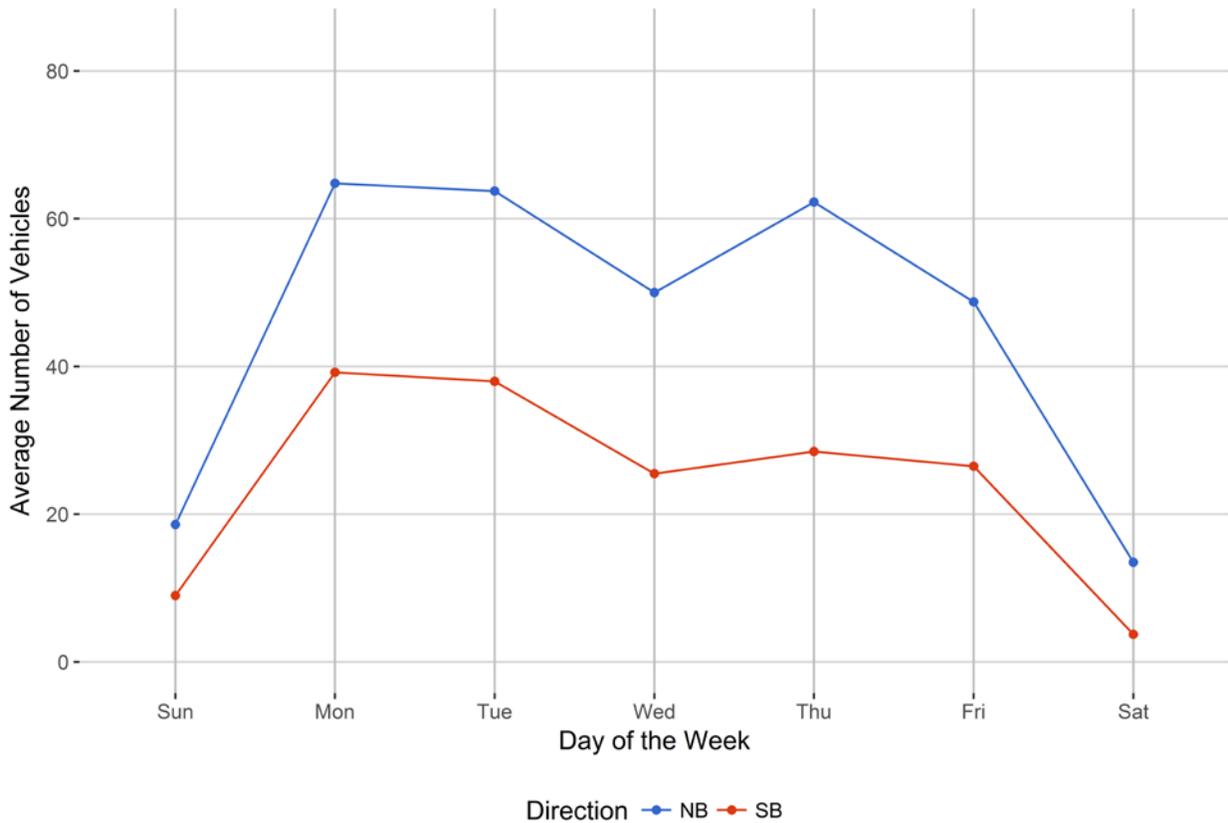


Figure 4 - Passenger Vehicles vs. Hour of the Day

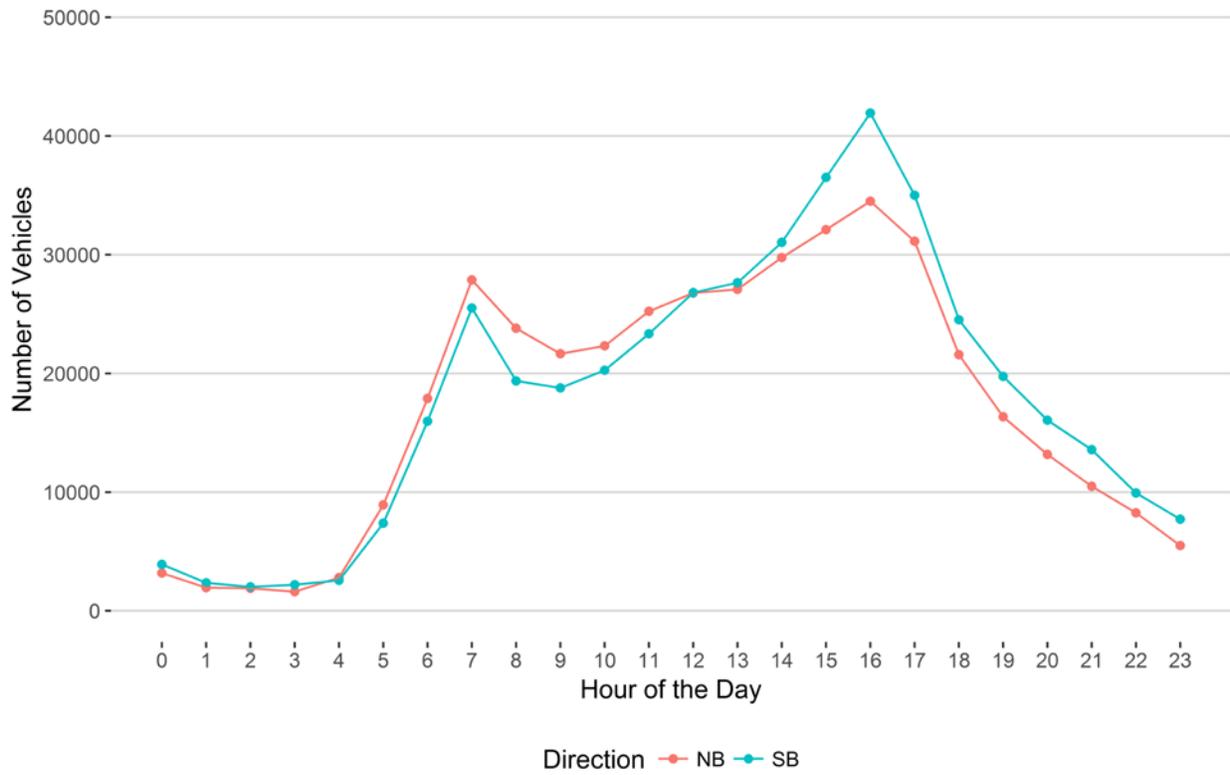


Figure 5 - Heavy Commercial Vehicles vs. Hour of the Day

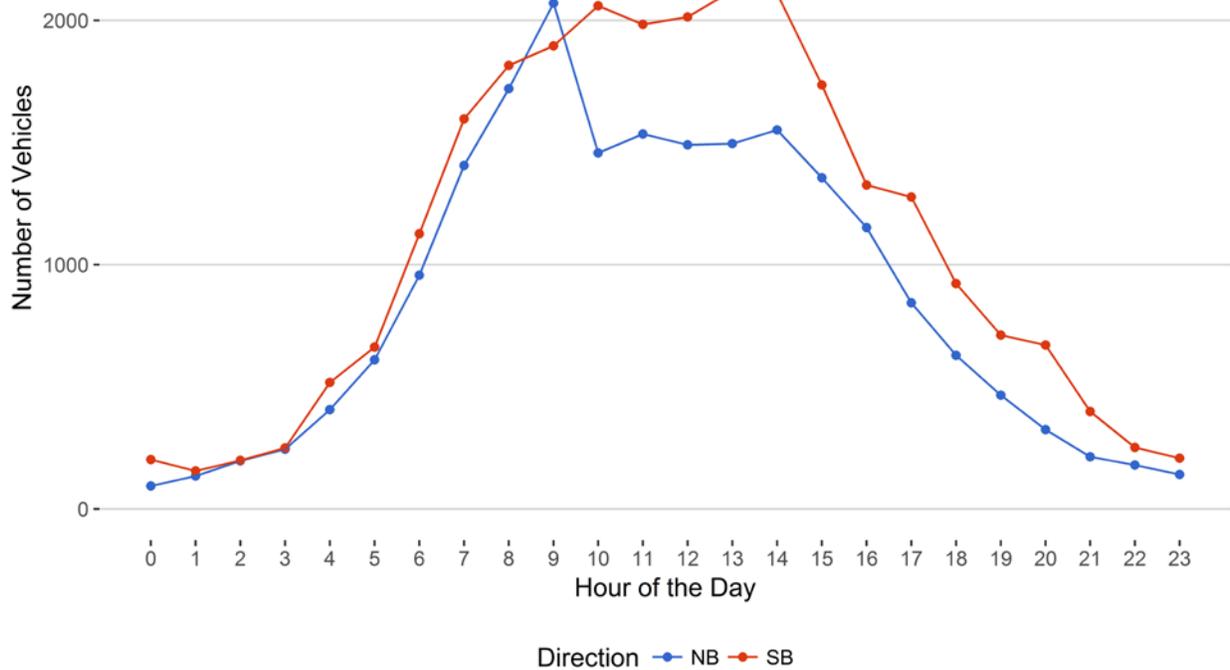


Figure 6 - Overweight Vehicles by Class vs. Hour of the Day

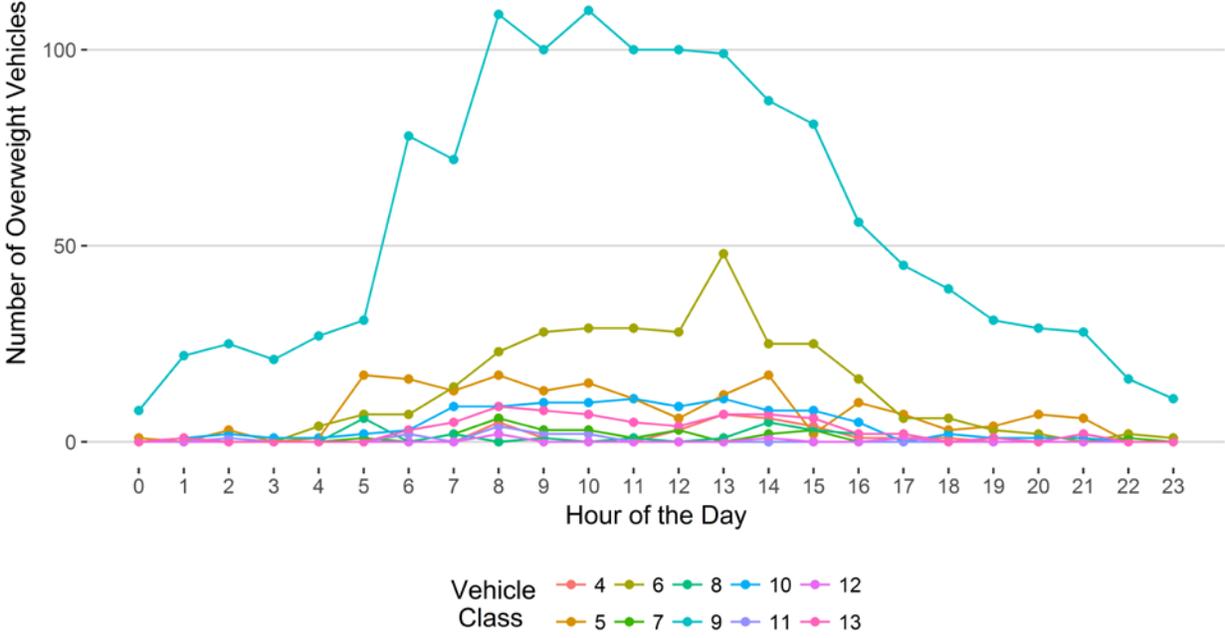


Figure 7 - Overweight Vehicles by Direction
Hour of the Day

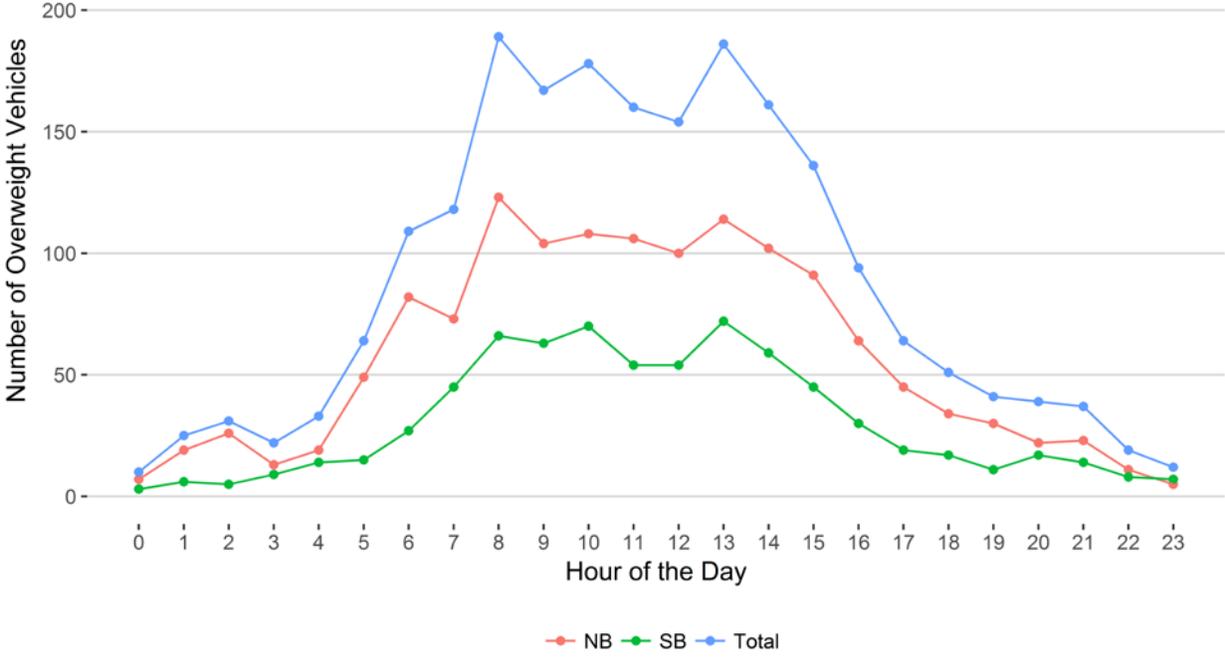
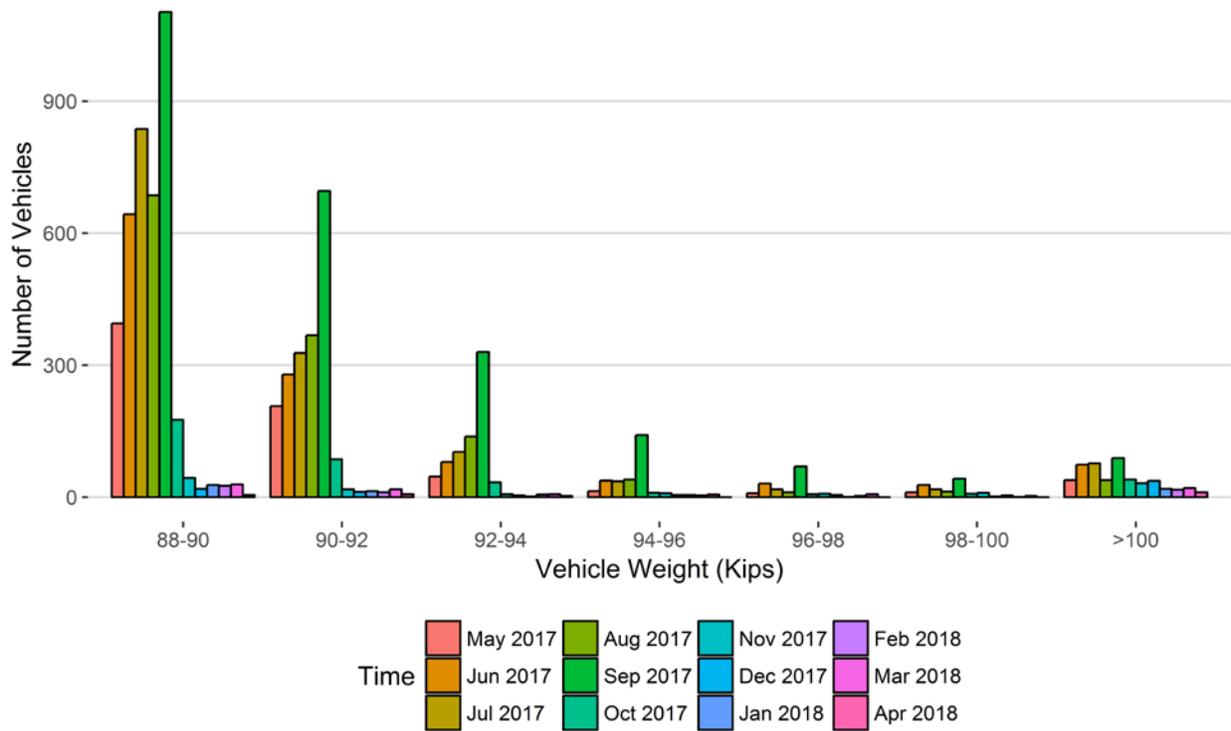
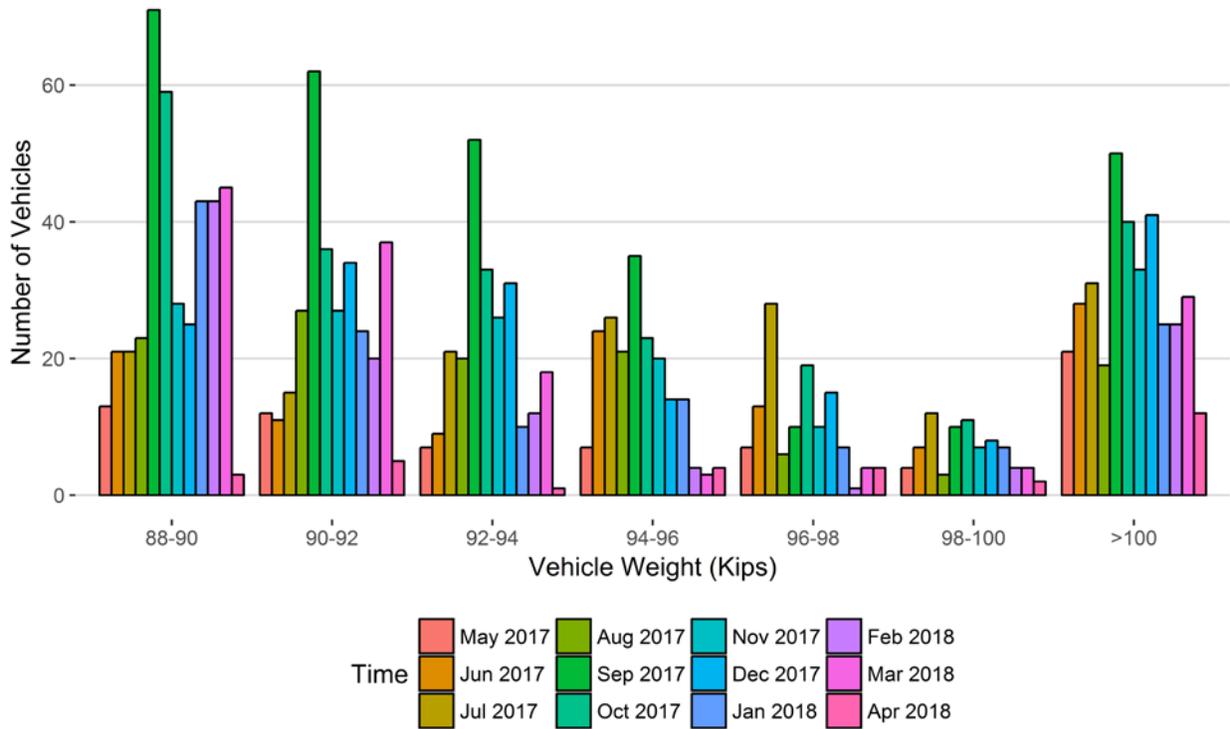


Figure 8 - Histogram of NB Vehicles Over 88,000 Pounds for Current Month



Vehicle Weights (Kips)	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
88-90	395	643	837	686	1103	176	44	19	28	26	29	5
90-92	207	279	328	368	696	86	18	12	14	11	18	7
92-94	47	80	103	138	330	34	7	4	2	6	7	3
94-96	14	38	36	40	141	10	9	5	5	4	6	0
96-98	9	31	18	11	70	7	8	5	1	3	7	0
98-100	11	28	18	13	42	8	10	2	4	1	3	0
>100	39	74	77	39	89	40	32	37	19	17	21	11
Total	722	1173	1417	1295	2471	361	128	84	73	68	91	26

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



Vehicle Weights (Kips)	May 2017	Jun 2017	Jul 2017	Aug 2017	Sep 2017	Oct 2017	Nov 2017	Dec 2017	Jan 2018	Feb 2018	Mar 2018	Apr 2018
88-90	13	21	21	23	71	59	28	25	43	43	45	3
90-92	12	11	15	27	62	36	27	34	24	20	37	5
92-94	7	9	21	20	52	33	26	31	10	12	18	1
94-96	7	24	26	21	35	23	20	14	14	4	3	4
96-98	7	13	28	6	10	19	10	15	7	1	4	4
98-100	4	7	12	3	10	11	7	8	7	4	4	2
>100	21	28	31	19	50	40	33	41	25	25	29	12
Total	71	113	154	119	290	221	151	168	130	109	140	31

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

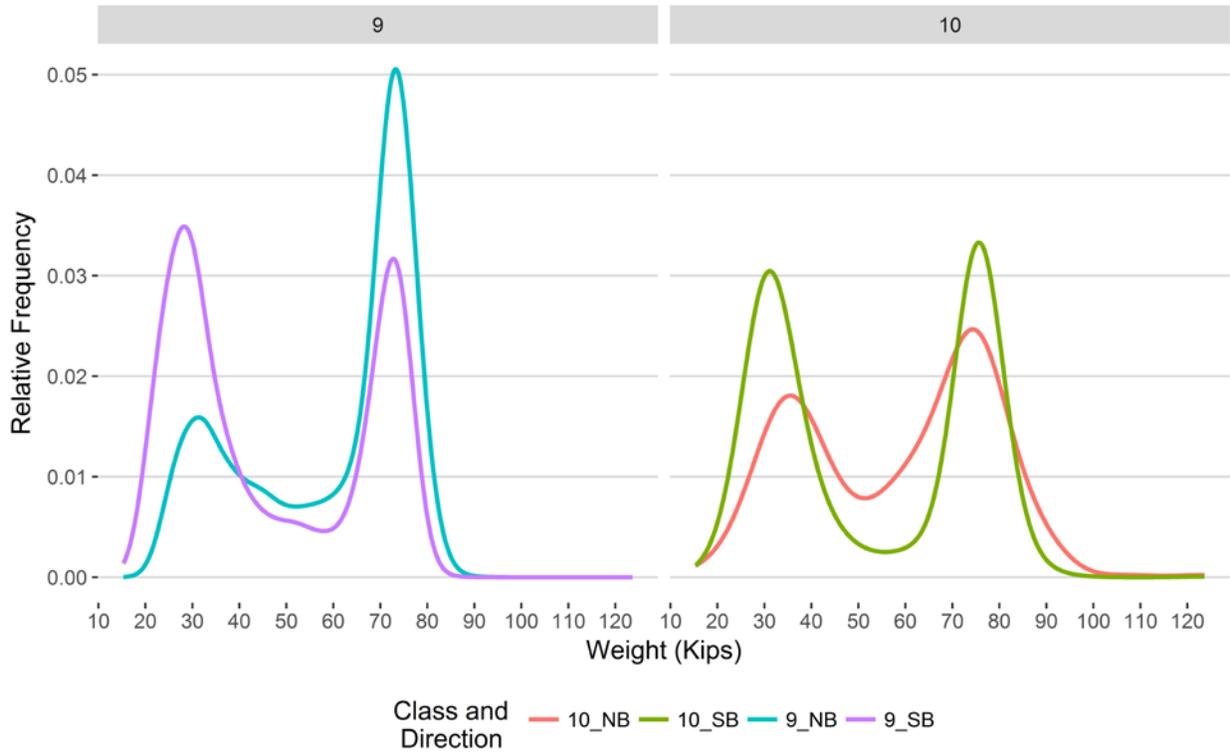


Figure 9 - Freight Percentage by Direction and Class

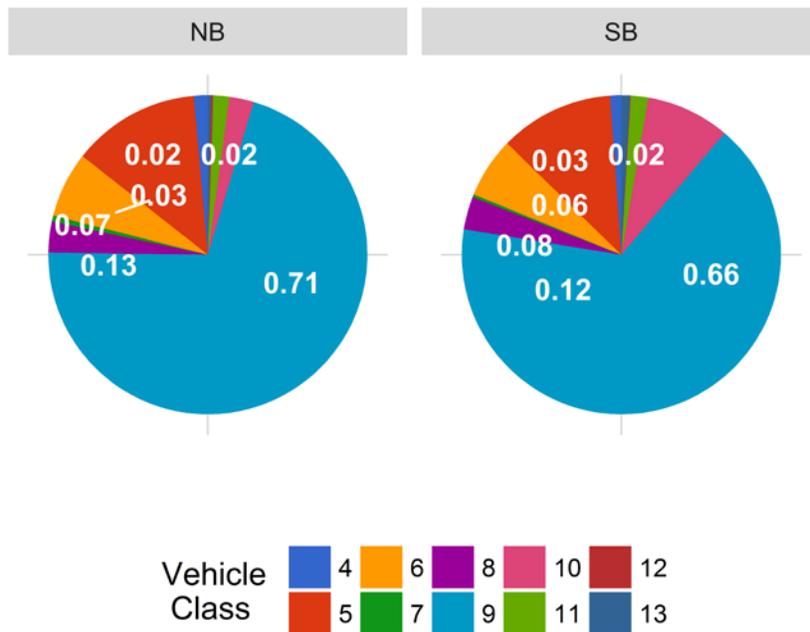


Figure 10 - Total Gross Vehicle Weight Percentage by Class and Lane

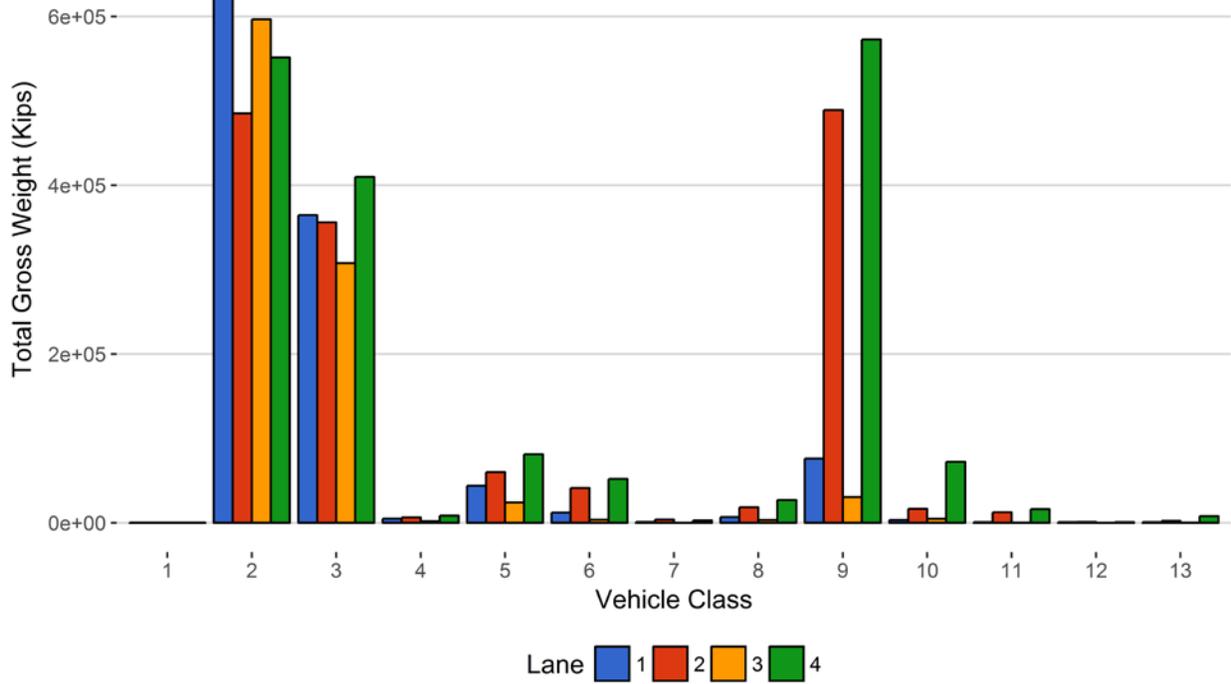


Figure 11 - Total Gross Vehicle Weight I

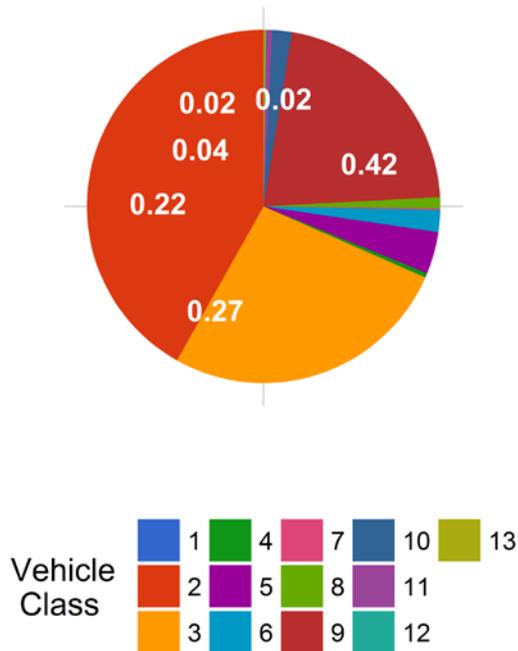


Figure 12 - Total ESALs by Class and Lane

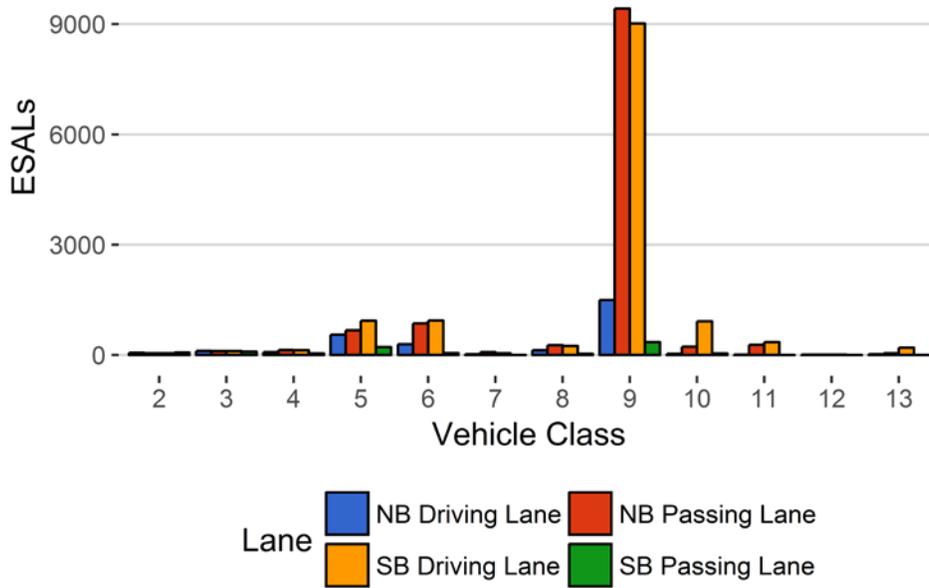


Figure 13 - ESALs by Class

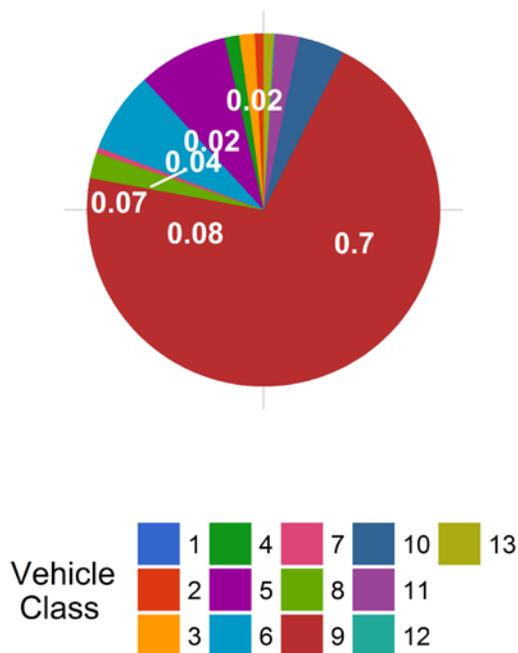


Table 1 Class 9 Front Axle Weight by Lane

<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>
February 2017	11.58	0.00	11.71	0.00	11.07	0.00	10.45	0.00
March 2017	11.67	0.74	12.00	2.43	11.10	0.26	10.50	0.53
April 2017	11.82	2.05	12.08	3.15	11.18	1.00	10.52	0.71
May 2017	11.94	3.09	12.35	5.42	11.14	0.64	10.57	1.18
June 2017	12.22	5.51	12.51	6.84	11.09	0.18	10.59	1.36
July 2017	12.23	5.63	12.54	7.05	11.23	1.46	10.64	1.87
August 2017	12.31	6.32	12.58	7.42	11.08	0.08	10.69	2.32
September 2017	12.29	6.17	12.70	8.41	11.20	1.18	10.66	2.06
October 2017	12.00	3.63	11.43	-2.37	11.35	2.52	10.72	2.56
November 2017	12.10	4.50	11.48	-1.96	11.37	2.73	10.77	3.08
December 2017	12.12	4.67	11.23	-4.12	11.38	2.82	10.82	3.54
January 2018	11.93	3.05	11.01	-6.00	11.30	2.06	10.63	1.69
February 2018	11.92	2.95	10.85	-7.39	11.33	2.33	10.43	-0.15
March 2018	11.95	3.20	11.06	-5.53	11.24	1.53	10.38	-0.63
April 2018	11.59	0.09	10.81	-7.70	10.89	-1.59	10.06	-3.69

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	9	257	0	0	0
2	20749	622464	66.6	0	0
3	8773	263192	28.2	0	0
4	26	777	0.1	29	1.4
5	546	16370	1.8	181	8.7
6	124	3729	0.4	304	14.6
7	5	156	0	25	1.2
8	64	1929	0.2	23	1.1
9	777	23300	2.5	1325	63.8
10	62	1860	0.2	105	5.1
11	18	550	0.1	12	0.6
12	1	42	0	4	0.2
13	5	137	0	69	3.3
TOTAL	31159	934763	100	2077	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>
2018-04-09	Monday	11:43:59	10	NB	2	123.68
2018-04-27	Friday	19:18:50	10	SB	4	123.17
2018-04-12	Thursday	13:10:56	10	NB	2	107.39
2018-04-02	Monday	13:17:49	10	SB	4	95.45
2018-04-05	Thursday	05:42:56	10	NB	2	95.37
2018-04-12	Thursday	02:46:28	9	NB	2	92.96
2018-04-11	Wednesday	06:28:42	10	SB	4	92.64
2018-04-03	Tuesday	06:03:42	10	NB	2	91.32
2018-04-09	Monday	14:24:44	9	SB	4	91.15
2018-04-12	Thursday	11:28:17	10	NB	2	91.06

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	388	70	18	10477	886	2854
5	NB	8	7612	1338	17.6	94248	9670	22028
6	NB	19	1674	363	21.7	47039	6238	11065
7	NB	11.5	93	0	0	4801	0	1866
8	NB	31	797	389	48.8	15932	9210	1642
9	NB	33	9485	1353	14.3	526425	38784	129034
10	NB	33.5	338	49	14.5	18330	1433	4324
11	NB	36.5	235	8	3.4	12858	278	2286
12	NB	36.5	28	3	10.7	1512	46	300
13	NB	31.5	33	0	0	2791	0	876
TOTAL	****	****	20683	3573	****	734413	****	176275
<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	358	84	23.5	9205	1041	2547
5	SB	8	8105	1839	22.7	92591	12621	21232
6	SB	19	1906	485	25.4	47990	7718	10495
7	SB	11.5	57	0	0	2682	0	1013
8	SB	31	1055	686	65	13596	16592	1079
9	SB	33	12886	5312	41.2	460544	142756	105301
10	SB	33.5	1448	508	35.1	62089	14973	15299
11	SB	36.5	293	26	8.9	15341	880	2798
12	SB	36.5	12	1	8.3	660	34	129
13	SB	31.5	99	0	0	7864	0	2373
TOTAL	****	****	26219	8941	****	712562	****	162266
GRAND TOTAL	****	****	46902	12514	379	1446975	263160	338541

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	96	80	75	68	320	0
2	631787	485010	596578	551410	2264786	41.8
3	364591	355990	307677	409775	1438033	26.6
4	4967	6396	1760	8485	21608	0.4
5	43924	59995	24040	81172	209132	3.9
6	12134	41143	3701	52007	108985	2
7	970	3831	25	2657	7483	0.1
8	6769	18373	3192	26996	55330	1
9	76060	489149	30528	572772	1168509	21.6
10	3293	16469	4802	72260	96824	1.8
11	660	12476	112	16109	29357	0.5
12	760	798	34	660	2252	0
13	697	2093	70	7794	10654	0.2
TOTAL	1146709	1491804	972595	1802166	5413273	100
GVW/LANE	21.18	27.56	17.97	33.29	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	0.004
2	66	50	68	48	232	0.8	8e-04
3	110	105	91	103	409	1.42	0.0033
4	80	134	41	131	387	1.34	1.04
5	554	673	213	932	2372	8.23	0.3
6	290	858	54	937	2140	7.43	1.2
7	20	81	0	49	150	0.52	1.96
8	132	265	35	244	676	2.35	0.73
9	1498	9421	352	9015	20286	70.42	1.82
10	32	225	42	916	1215	4.22	1.36
11	10	278	2	350	641	2.22	2.4
12	11	13	0	10	34	0.12	1.53
13	21	47	0	199	267	0.93	3.78
TOTAL	2824	12150	900	12934	28808	100	16
ESALS/LANE	9.8	42.2	3.1	44.9	100	--	--

Table 7 Site Summary: Volume and Vehicle Class

<i>Month</i>	<i>Total Volume</i>	<i>Monthly ADT</i>	<i>Monthly HCAD T</i>	<i>Passenger Vehicles</i>	<i>Passenger Vehicles %</i>	<i>Heavy Commercial Vehicles</i>	<i>Heavy Commercial Vehicles %</i>	<i>Heavy Commercial Vehicles in Driving Lane %</i>	<i>Heavy Commercial Vehicles in Passing Lane %</i>
May 2017	1054019	34001	1922	994452	94.3	59567.1	5.7	61	39
Jun 2017	1103626	36788	2259	1035865	93.9	67760.6	6.1	60.9	39.1
Jul 2017	1111119	35842	2117	1045498	94.1	65621.3	5.9	58.7	41.3
Aug 2017	1143334	36882	2251	1073561	93.9	69773.2	6.1	59.8	40.2
Sep 2017	1051344	35045	2281	982913	93.5	68430.8	6.5	60.3	39.7
Oct 2017	1057921	34126	2165	990812	93.7	67109	6.3	60	40
Nov 2017	923269	30776	1811	868925	94.1	54344.1	5.9	60.9	39.1
Dec 2017	913329	29462	1624	862996	94.5	50333.1	5.5	60.5	39.5
Jan 2018	858959	27708	1616	808848	94.2	50110.6	5.8	60.1	39.9
Feb 2018	795786	28421	1662	749260	94.2	46525.6	5.8	59.1	40.9
Mar 2018	957360	30883	1728	903798	94.4	53562.5	5.6	60.8	39.2
Apr 2018	934763	31159	1628	885913	94.8	48850.1	5.2	60.9	39.1
TOTAL	11904829	--	--	11202841	--	701988	--	--	--
AVERA GE	992069	32591	1922	933570	94	58499	6	60	40

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>
May 2017	4668	25425	1534	19116	50742	47	53	10.3
Jun 2017	6460	31181	1724	21126	60491	46	54	13.1
Jul 2017	6190	29560	2422	20719	58891	46	54	16.2
Aug 2017	4162	21573	1201	15440	42376	46	54	20.1
Sep 2017	5516	27204	1410	19085	53216	46	54	32.1
Oct 2017	5387	21860	1938	23245	52430	55	45	3.5
Nov 2017	4502	18335	1386	19614	43837	55	45	2.6
Dec 2017	5033	14652	1411	18341	39436	59	41	3.4
Jan 2018	3867	13495	1148	15629	34139	57	43	3.7
Feb 2018	4269	13000	1411	14675	33354	57	43	2.6
Mar 2018	4256	15982	1290	16709	38236	55	45	3.5
Apr 2018	2887	12198	902	12945	28932	55	45	0.4
TOTAL	57195	244466	17777	216643	536081	--	--	--
AVERAGE	4766	20372	1481	18054	44673	52	48	9

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>
May 2017	1100540	1437948	924675	1711001	5174164
Jun 2017	1096990	1404045	940384	1574511	5015929
Jul 2017	1259004	1655262	1055154	1973361	5942780
Aug 2017	1149562	1493254	972731	1803124	5418670
Sep 2017	1340633	2048682	1132022	2233901	6755238
Oct 2017	1467807	2319975	1215363	2464901	7468048
Nov 2017	1489627	2288435	1285258	2401267	7464586
Dec 2017	1025328	1641377	861048	1751501	5279254
Jan 2018	1153419	1839408	961714	1968958	5923499
Feb 2018	1397531	2035396	1222254	2396951	7052132
Mar 2018	1205042	1716301	1046717	2030046	5998106
Apr 2018	1216056	1589362	1057242	1926795	5789455
TOTAL	14901539	21469444	12674562	24236316	73281860
AVERAGE	1241795	1789120	1056213	2019693	6106822

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>
May 2017	9713	1	16.6	794	75
Jun 2017	12929	1.2	19.4	1301	138
Jul 2017	12936	1.2	20.1	1577	140
Aug 2017	9461	1.3	20.5	1418	74
Sep 2017	12595	1.5	23.5	2766	192
Oct 2017	9515	0.9	14.5	584	99
Nov 2017	7927	0.9	14.9	279	82
Dec 2017	6568	0.7	13.3	253	88
Jan 2018	4336	0.5	9.3	204	55
Feb 2018	4386	0.6	9.6	178	48
Mar 2018	4983	0.5	9.5	232	58
Apr 2018	2100	0.2	4.5	57	25
TOTAL	97449	--	--	9643	1074
AVERAGE	8120.8	0.9	14.6	803.6	89.5

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>
May 2017	276871	225364	502235	55.1	44.9
Jun 2017	337770	242770	580541	58.2	41.8
Jul 2017	322105	245232	567337	56.8	43.2
Aug 2017	234236	173821	408057	57.4	42.6
Sep 2017	297263	219100	516363	57.6	42.4
Oct 2017	293703	260883	554586	53	47
Nov 2017	235864	214931	450795	52.3	47.7
Dec 2017	206917	196474	403391	51.3	48.7
Jan 2018	193276	170391	363667	53.1	46.9
Feb 2018	190177	163838	354015	53.7	46.3
Mar 2018	219841	189443	409283	53.7	46.3
Apr 2018	176275	162266	338541	52.1	47.9
TOTAL	2984298	2464513	5448811	--	--
AVERAGE	248691.5	205376.1	454067.6	54.5	45.5