



AUTOMATIC TRAFFIC RECORDERS

2008 - 2018

Prepared by

OFFICE OF SYSTEMS PLANNING

In Cooperation With

**UNITED STATES DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION**

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JANUARY 2019

TABLE OF CONTENTS

Introduction.....	3
Summary.....	4
Percent of Change in Traffic from 1980	5
Graphs Showing Monthly Comparison	
All Systems.....	6
Rural.....	8
Municipal.....	10
Graphs Showing Daily Comparison	
All Systems.....	7
Rural.....	9
Municipal.....	11
Graphs Showing Hourly Comparison	
Rural Interstate.....	12
Rural Primary	13
Rural Secondary.....	14
Municipal Interstate	15
Municipal Primary	16
Municipal Streets	17
Summary of Analysis of Thirtieth Highest Hour.....	18
Annual Average Daily Traffic by Stations for the Years 2008 to 2018.....	19 - 25
Map of Automatic Traffic Recorder Locations	26

INTRODUCTION

This report contains graphic comparisons of daily and monthly traffic collected on Iowa's highway system at 176 Permanent Continuous Automatic Traffic Recorder locations. Eighteen (18) stations are located on the Rural Interstate system, thirteen (13) are on the Municipal Interstate system, eighty (80) are on the Rural Primary system, twenty-five (25) are on the Municipal Primary system, twenty-six (26) are on the Rural Secondary system and fourteen (14) are on the Municipal Street system. The map on page 26 shows the general location of count sites. Specific descriptions of locations, along with AADT's for the previous eleven years for each station, start on page 19. Sites without an AADT for 2018 were not used not in the calculations or graphs.

The report compares travel trends from 1980 to present. Traffic is shown for rural, municipal and statewide travel.

Factors for estimating Design Hour Volumes from Annual Average Daily Traffic are shown by highway system. The values are developed from the straight-line relationships between Design Hour Volume and Annual Average Daily Traffic for the period of 2009 - 2018.

Information from the permanent traffic recorders indicates a 0.7% decrease in statewide travel from 2017 to 2018. The estimated vehicle miles of travel for 2018 is 33.52 billion. Final 2018 traffic figures will be published near June 2019, when all traffic data collected during 2018 has been processed.

More travel occurs on Friday than any other day of the week on all road systems. Sunday is the lowest travel day on all systems except Rural Interstate. This is typical of other years.

TRAFFIC VOLUME VARIATIONS

ON

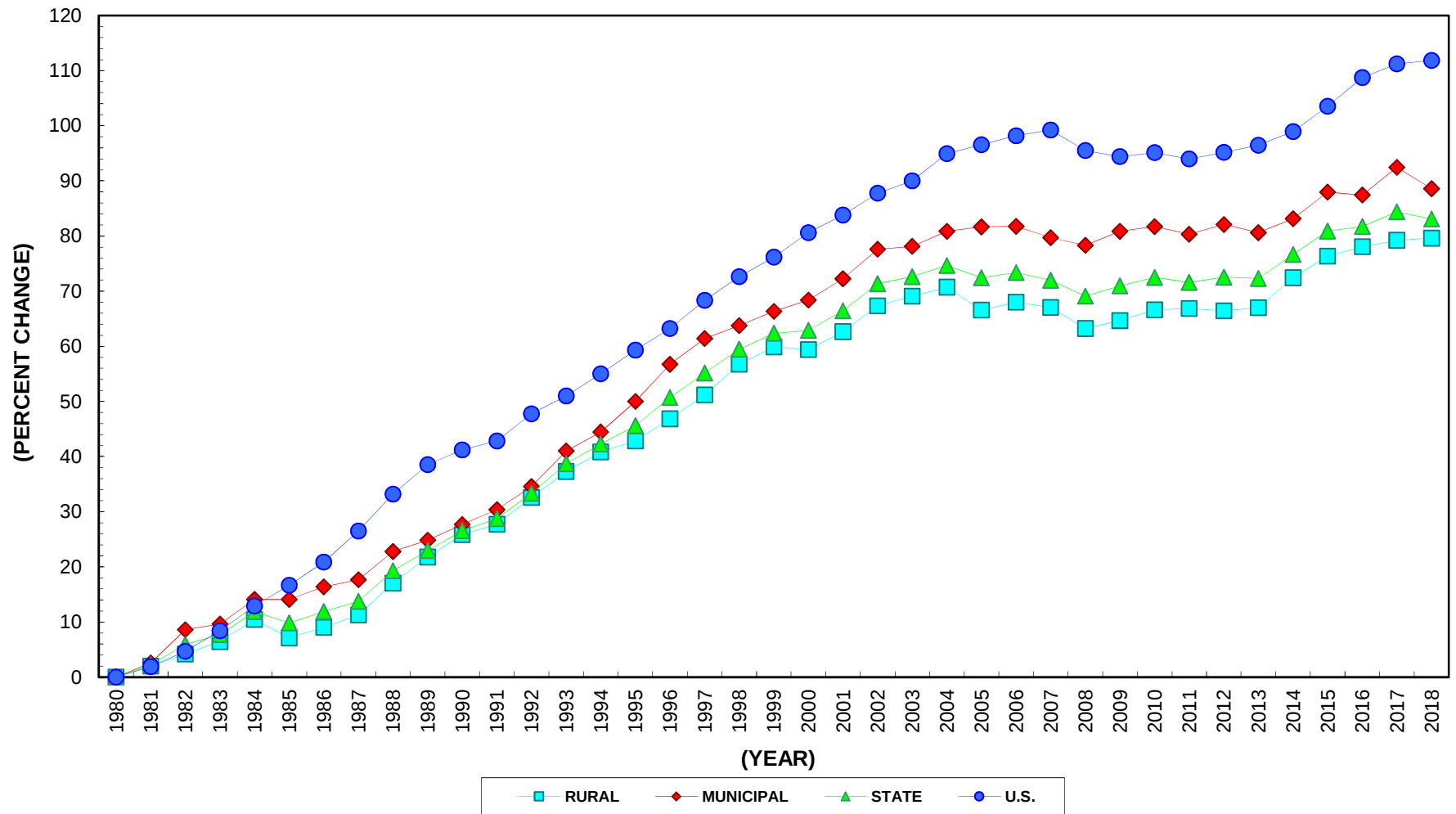
IOWA ROAD SYSTEMS

	2018 COMPARED TO 2017
RURAL INTERSTATE	+ 0.1 %
RURAL PRIMARY	- 0.2 %
RURAL SECONDARY	- 2.0 %
RURAL TOTAL	- 0.6 %
MUNICIPAL INTERSTATE	+ 0.9 %
MUNICIPAL PRIMARY	+ 0.2 %
MUNICIPAL STREETS	- 2.0 %
MUNICIPAL TOTAL	- 0.8 %
STATE TOTAL	-0.7 %

Data collected at continuous automatic traffic recorder locations (see pages 19 – 25) were utilized to compute the above percentages. The rural, municipal and state totals were weighted based on estimated vehicle miles of travel.

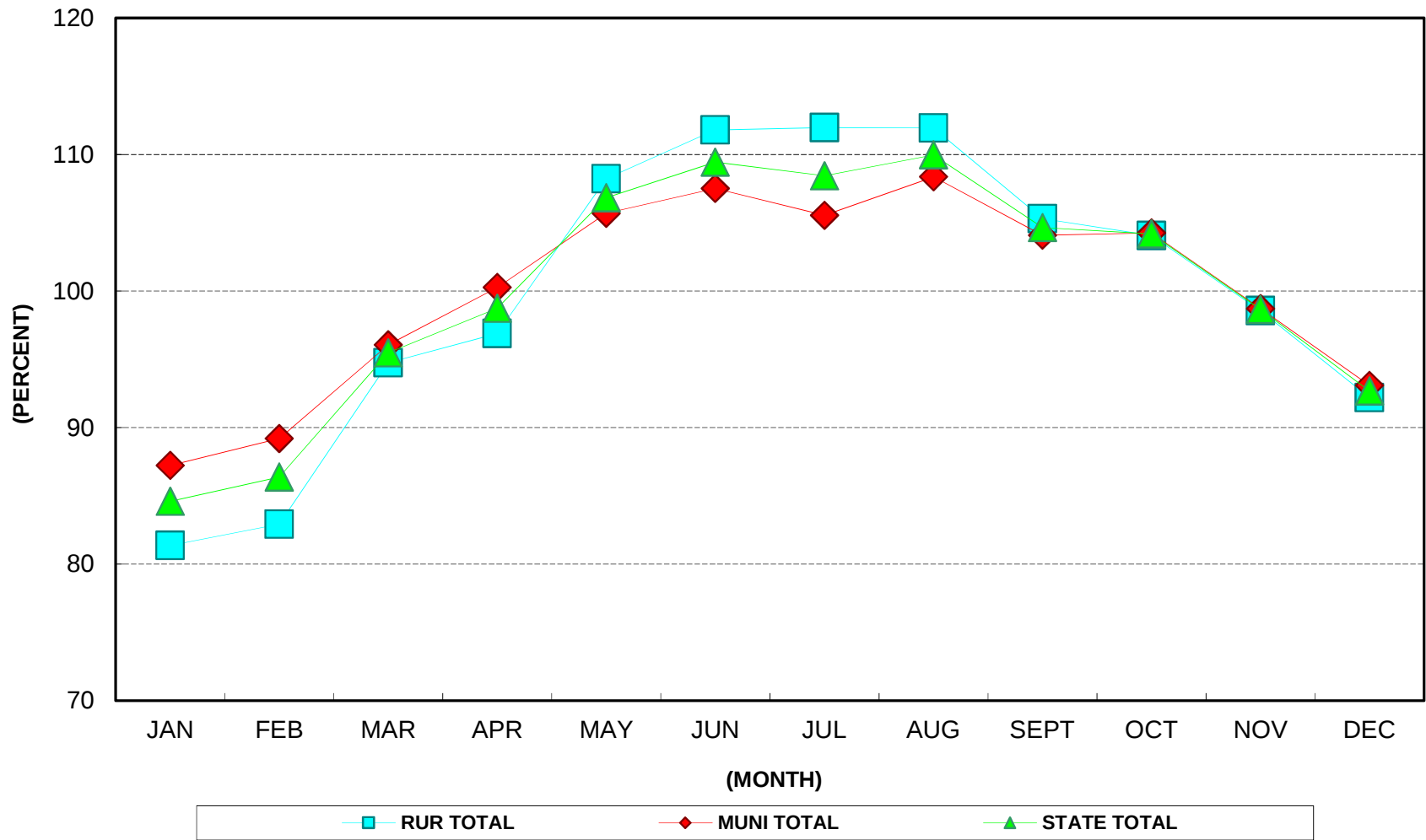
PERCENT CHANGE IN TRAFFIC

BASE YEAR 1980



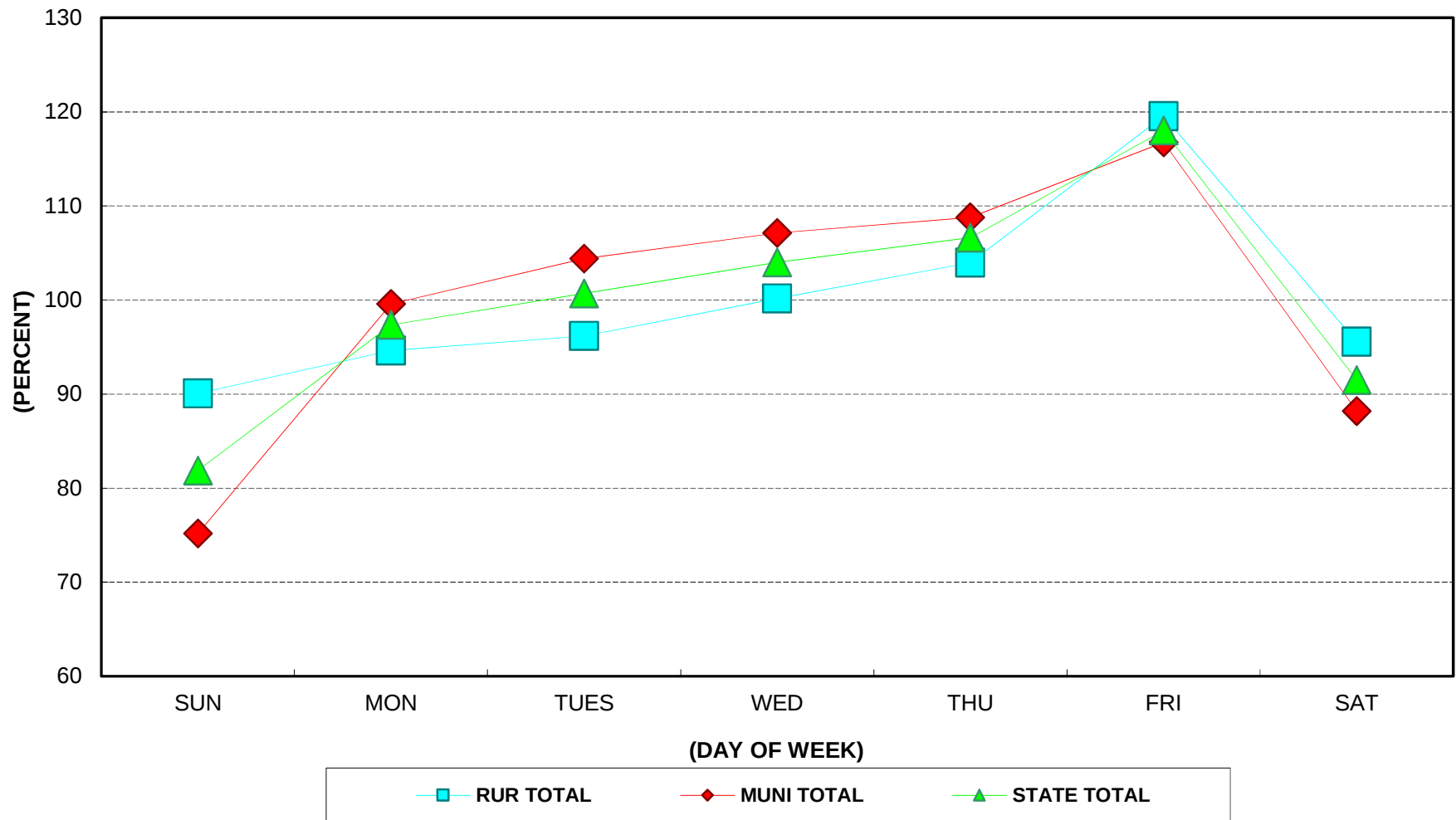
2018 MONTHLY TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



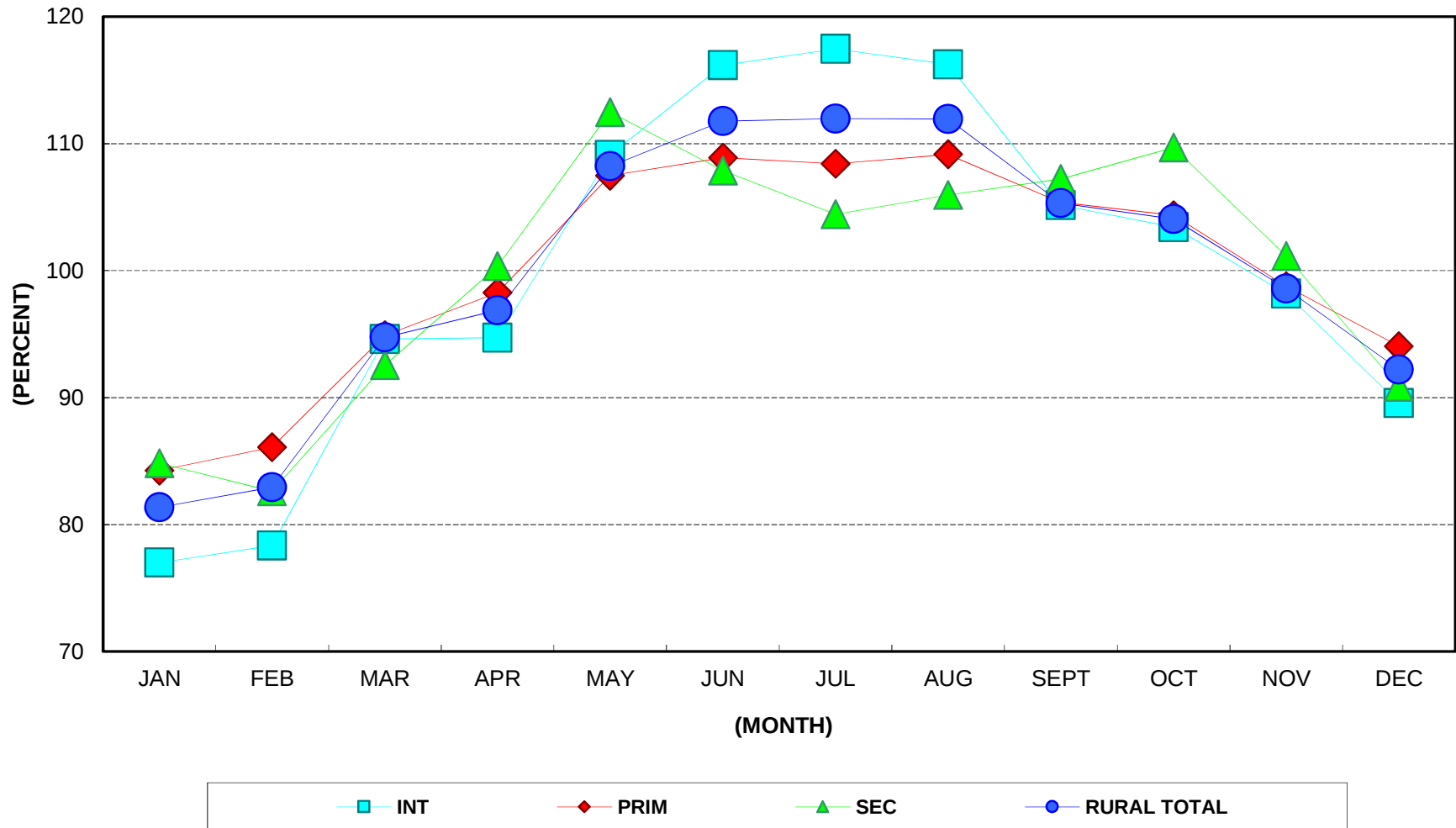
2018 DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



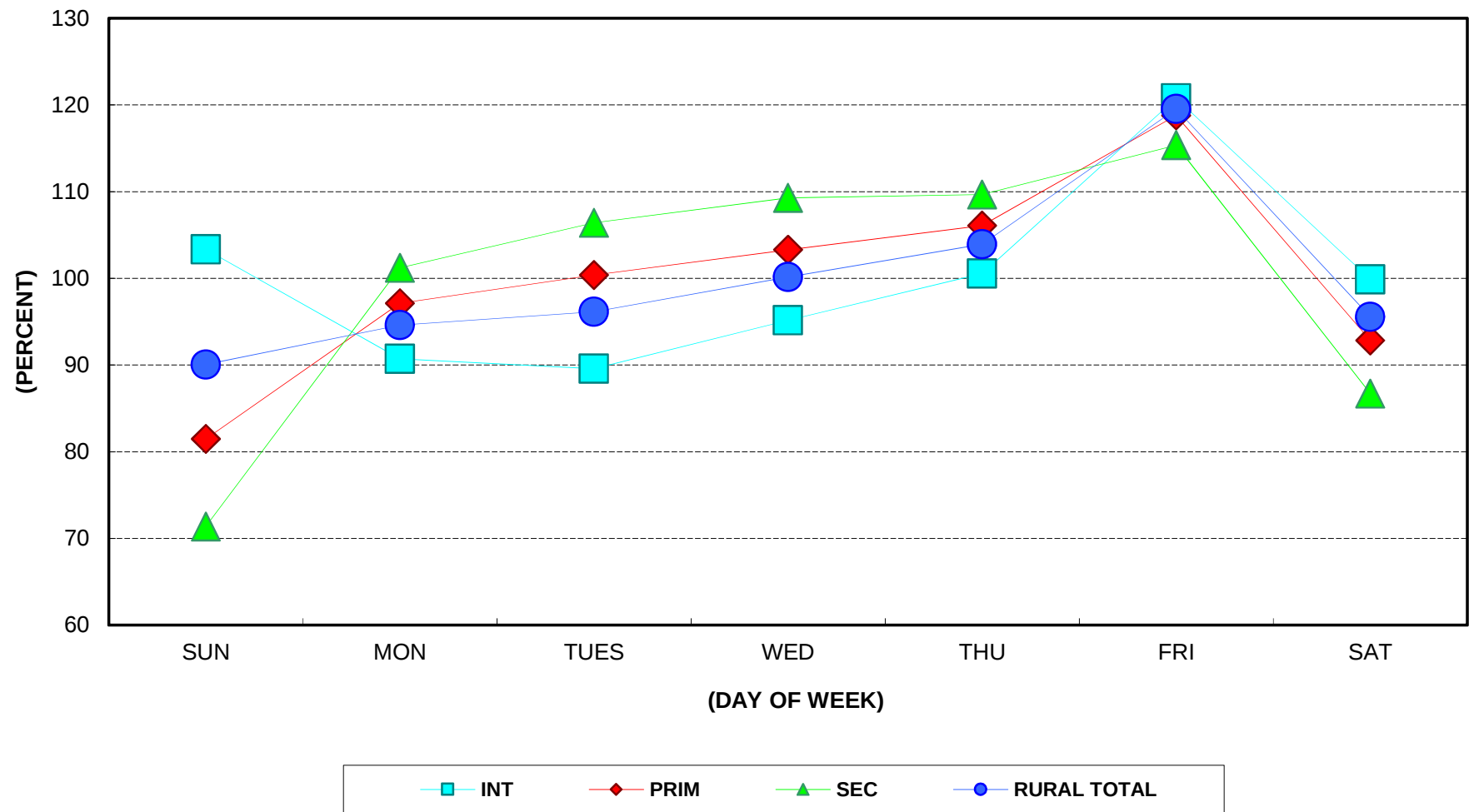
2018 RURAL MONTHLY TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



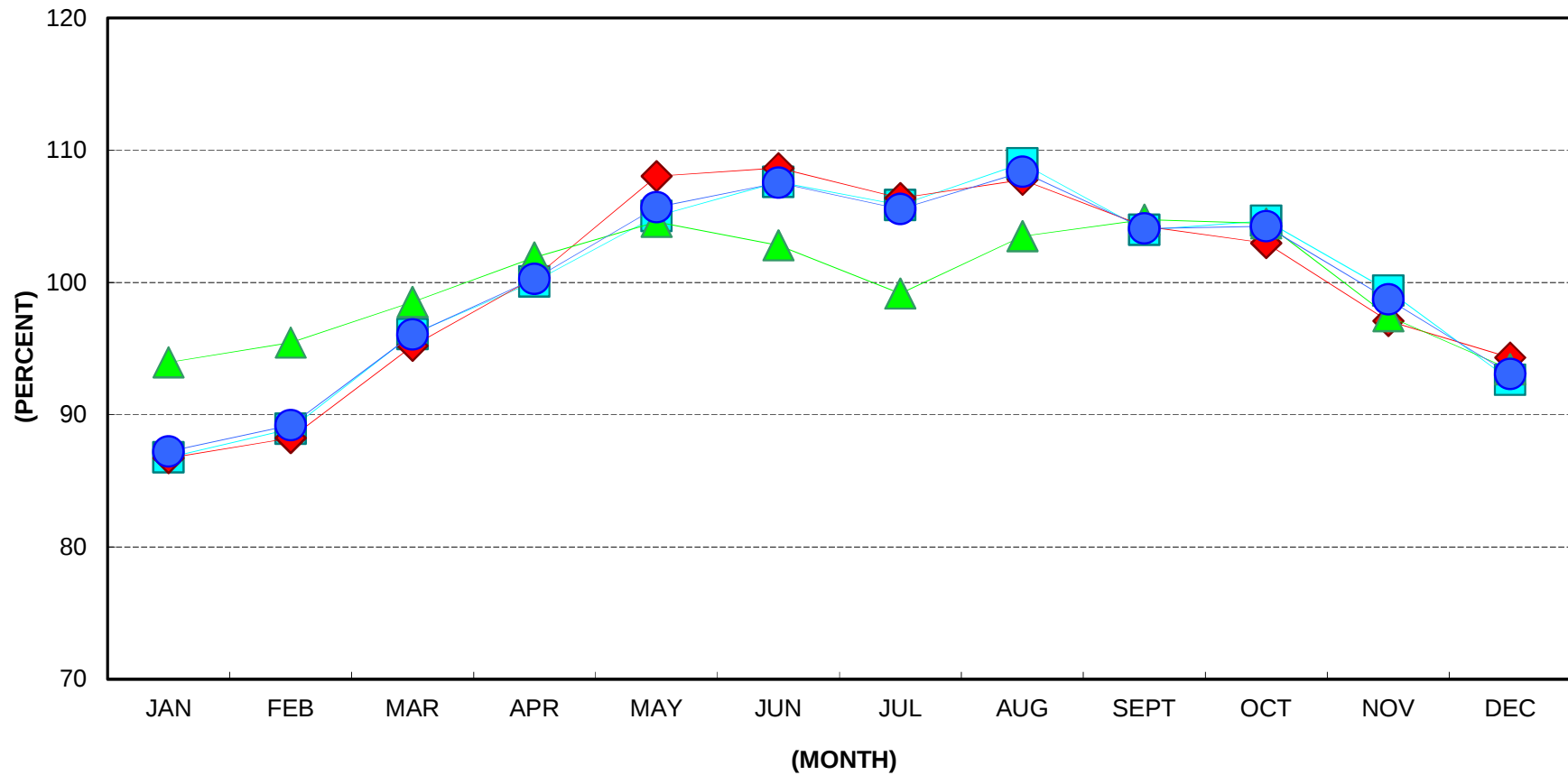
2018 RURAL DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



2018 MUNICIPAL MONTHLY TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



INT

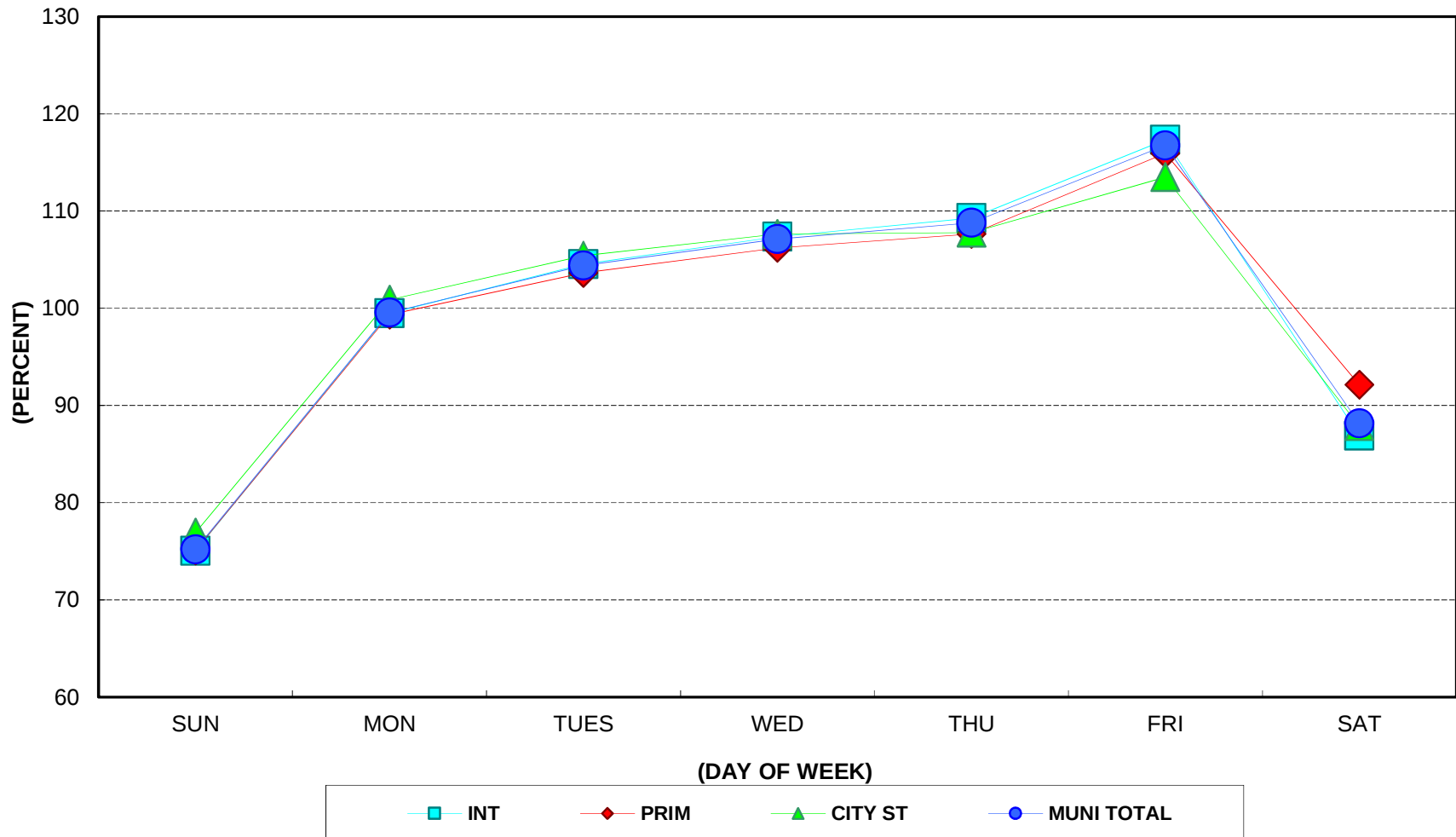
PRIM

CITY ST

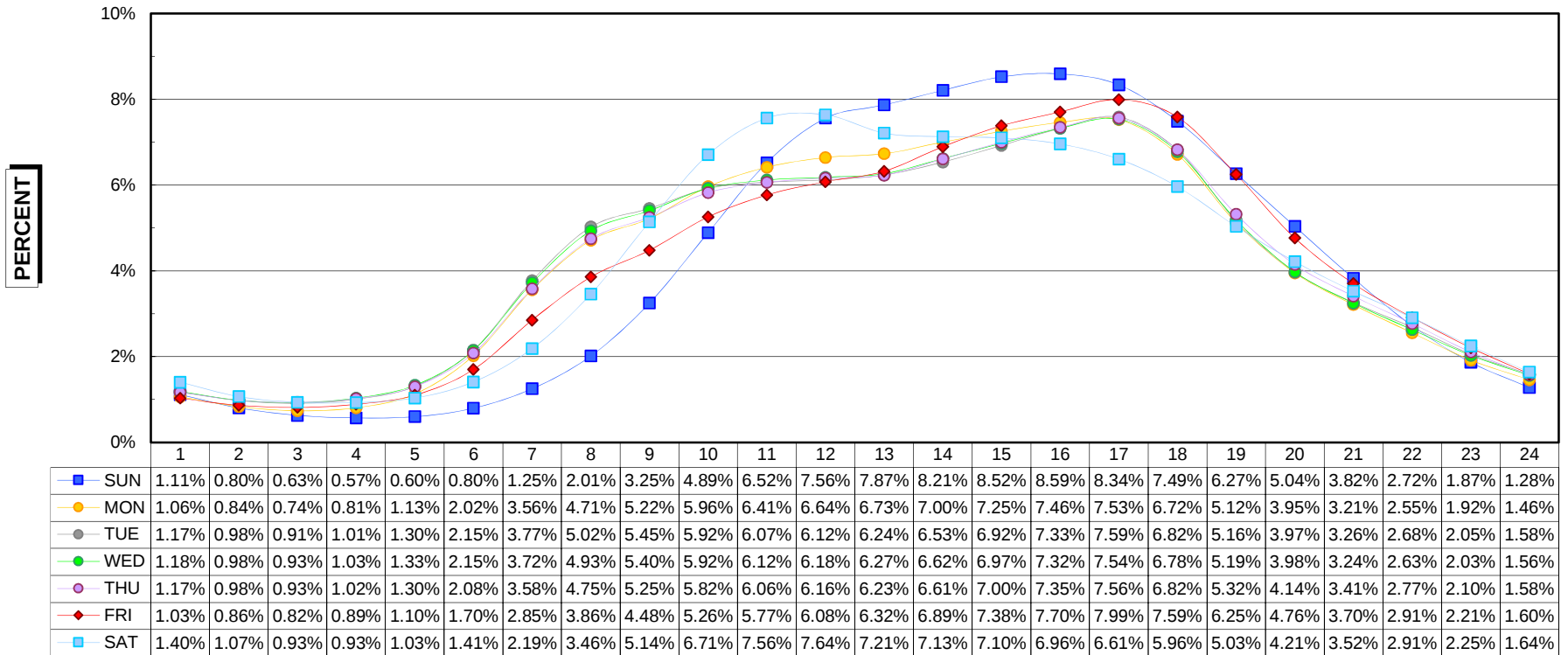
MUNI TOTAL

2018 MUNICIPAL DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC

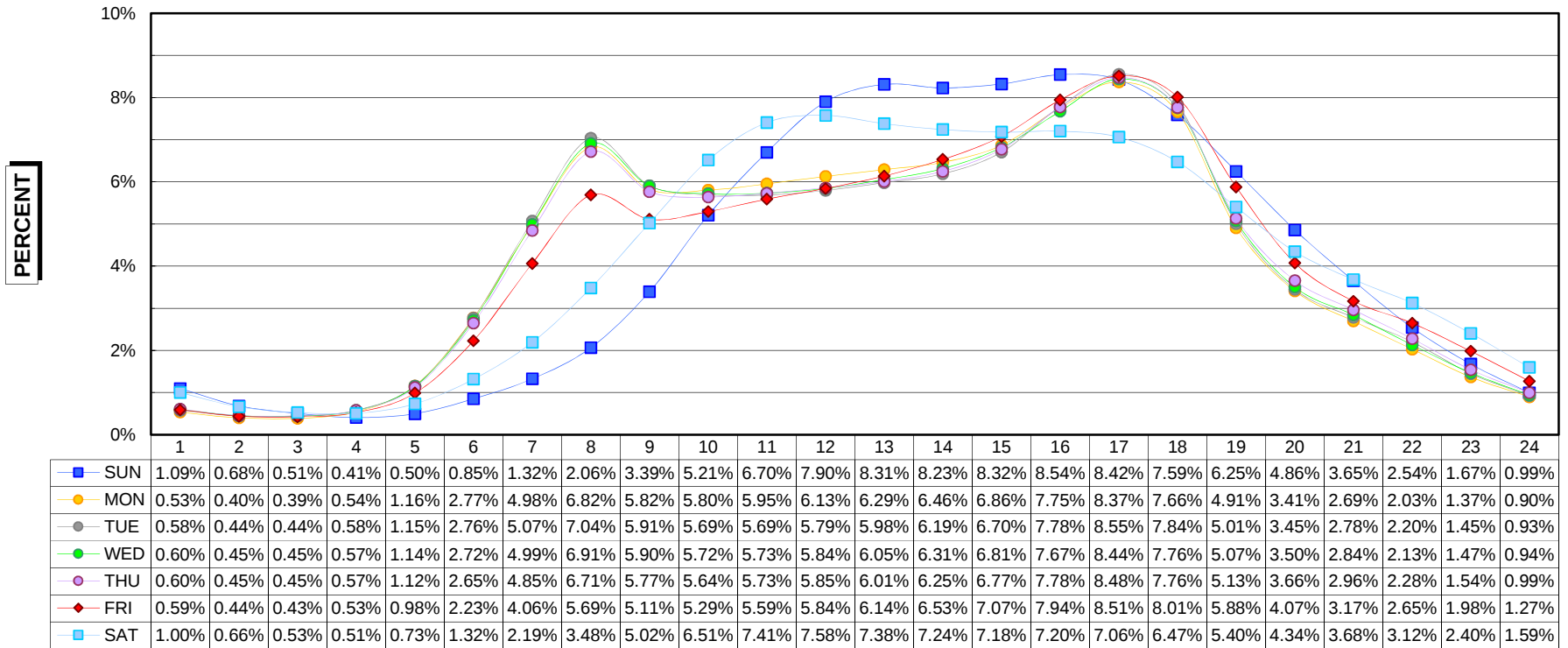


HOURLY DISTRIBUTION OF DAILY TRAFFIC 2018 RURAL INTERSTATE

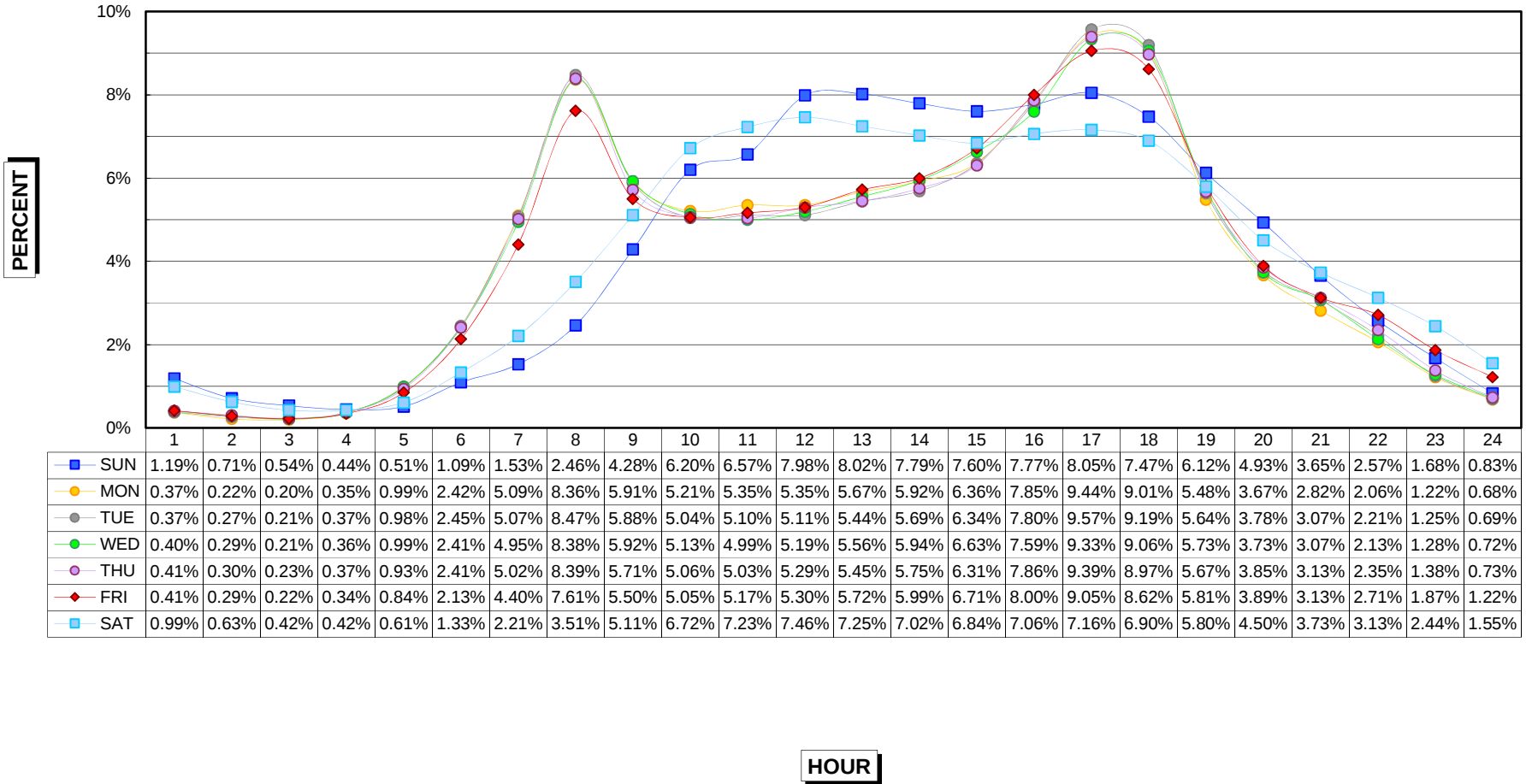


HOUR

HOURLY DISTRIBUTION OF DAILY TRAFFIC 2018 RURAL PRIMARY



HOURLY DISTRIBUTION OF DAILY TRAFFIC 2018 RURAL SECONDARY



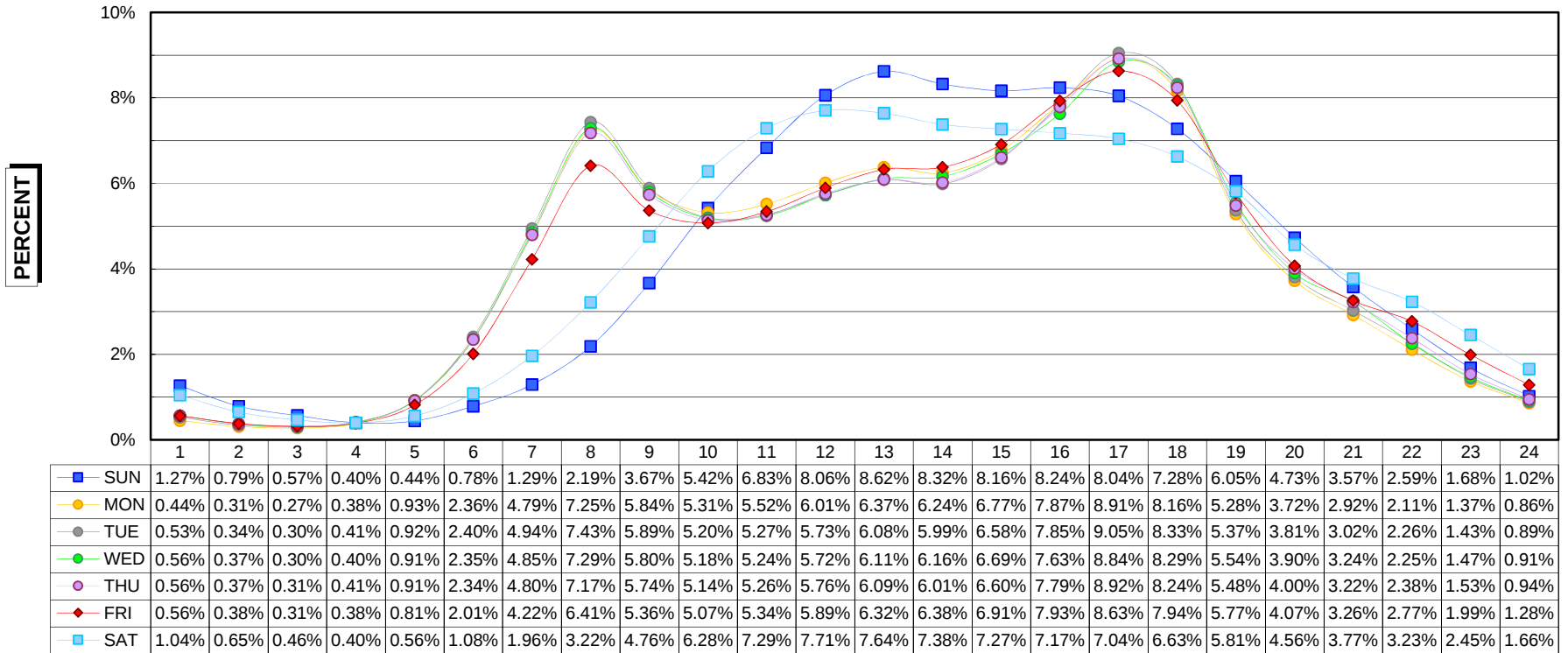
HOURLY DISTRIBUTION OF DAILY TRAFFIC 2018 MUNICIPAL INTERSTATE



0%	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
 SUN	1.45%	1.01%	0.80%	0.59%	0.64%	0.97%	1.58%	2.36%	3.51%	5.02%	6.48%	7.42%	8.00%	7.90%	7.99%	8.11%	7.99%	7.16%	6.06%	4.80%	3.77%	2.90%	2.12%	1.37%
 MON	0.63%	0.45%	0.41%	0.50%	0.96%	2.30%	5.59%	8.50%	6.28%	5.15%	5.14%	5.48%	5.72%	5.73%	6.28%	7.57%	8.86%	8.10%	4.98%	3.51%	2.84%	2.26%	1.63%	1.10%
 TUE	0.66%	0.48%	0.45%	0.55%	0.97%	2.34%	5.74%	8.62%	6.33%	5.05%	4.87%	5.20%	5.40%	5.46%	6.10%	7.56%	9.01%	8.25%	5.09%	3.62%	2.99%	2.39%	1.73%	1.15%
 WED	0.70%	0.51%	0.47%	0.56%	0.98%	2.30%	5.63%	8.47%	6.30%	5.14%	4.95%	5.25%	5.49%	5.57%	6.13%	7.47%	8.84%	8.16%	5.12%	3.62%	3.06%	2.38%	1.75%	1.15%
 THU	0.72%	0.52%	0.49%	0.57%	0.98%	2.27%	5.53%	8.33%	6.23%	5.05%	4.95%	5.29%	5.45%	5.55%	6.14%	7.55%	8.82%	8.05%	5.14%	3.73%	3.12%	2.52%	1.80%	1.19%
 FRI	0.71%	0.51%	0.49%	0.55%	0.91%	2.03%	4.84%	7.31%	5.66%	4.90%	5.01%	5.47%	5.80%	6.01%	6.58%	7.72%	8.55%	7.74%	5.54%	3.91%	3.19%	2.83%	2.23%	1.52%
 SAT	1.30%	0.90%	0.73%	0.65%	0.79%	1.34%	2.38%	3.69%	4.90%	6.02%	6.78%	7.09%	7.16%	6.98%	6.96%	6.97%	6.84%	6.38%	5.58%	4.46%	3.80%	3.46%	2.84%	1.98%

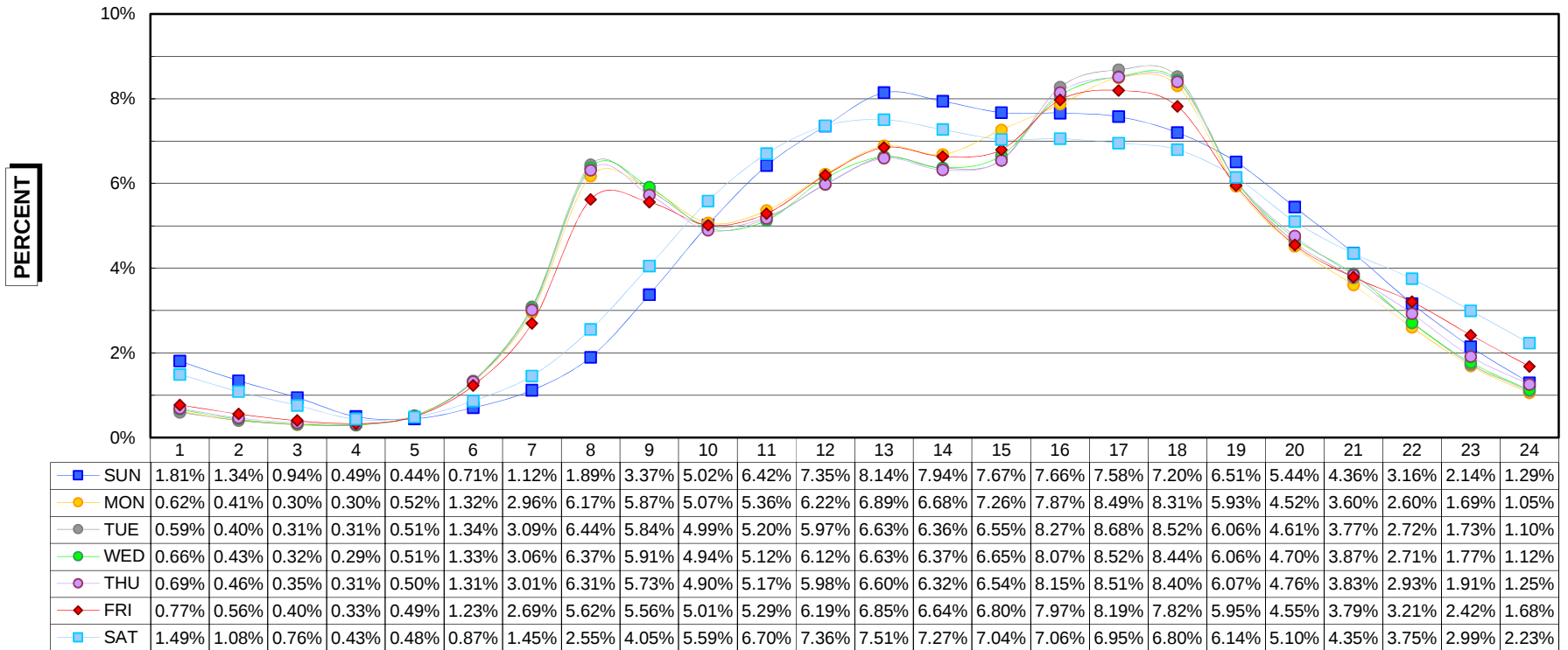
HOUR

HOURLY DISTRIBUTION OF DAILY TRAFFIC 2018 MUNICIPAL PRIMARY



HOUR

HOURLY DISTRIBUTION OF DAILY TRAFFIC 2018 MUNICIPAL STREETS



SUMMARY OF ANALYSIS

Analysis of the Thirtieth Highest Hour at the Permanent Continuous Automatic Traffic Recorder Stations 2009 - 2018

Permanent automatic traffic recorder data is collected on a continuing basis in Iowa to facilitate the expansion of the short-time manual and portable recorder traffic counts to Annual Average Daily Traffic and to make possible a means of estimating design hour volumes from the Annual Average Daily Traffic. A record of the 50 highest hourly volumes at each rural automatic recorder station has been kept since 1949 and at each urban station since 1959, making possible the fitting of first degree curves to desired design hours periodically as the data has been accumulated.

From permanent automatic traffic recorder data a straight-line relationship between the design hour volume and the Annual Average Daily Traffic can be expressed mathematically as:

$$Y = a + bx$$

Where Y = nth high hour volume (design hour)

x = Annual Average Daily Traffic

a = A constant of minimum relationship

b = The slope relationship which can be expressed as a percentage of the Annual Average Daily Traffic

The constant "a" and the relationship "b" have been recomputed for the 30th highest hour as the data for each succeeding year has become available. Table 1 shows the 30th high hour results computed from data collected over a ten-year period, 2009 through 2018.

Table 1

Calculations of Design Hour Volumes (30th high hour) From Annual Average Daily Traffic

	PRIMARY		INTERSTATE		SECONDARY		CITY STREET	
	"a" Constant	"b" %AADT	"a" Constant	"b" %AADT	"a" Constant	"b" %AADT	"a" Constant	"b" %AADT
Rural	14.96	10.79	390.19	9.67	4.02	12.41	-	-
Municipal	3.41	10.69	-85.99	10.83	-	-	50.92	10.00

ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2008 TO 2018

RURAL INTERSTATE

STATION	ROUTE	LOCATION	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
100	I 29	2.0 MI N OF S JCT I 680 HONEY CREEK	20246	20170	20593	NONE	19730	19907	20696	21770	22259	NONE	22409
102	I 29	7.0 MI S OF US 34 PACIFIC JCT	11793	11761	11868	NONE	12008	12337	13563	13530	13780	14226	14056
103	I 80	1.0 MI W OF US 63 GRINNELL	26118	26234	26569	26045	26046	26235	26523	27320	28119	28598	28661
104	I 35	3.0 MI N OF IA 175 JEWELL	20147	20509	NONE	21248	21437	21726	21775	22963	23783	24342	24452
105	I 29	3.8 MI S OF IA 175 ONAWA	12096	12512	12791	NONE	12587	12667	13150	14096	14350	14694	14635
106	I 35	1.5 MI N OF IA 2 LEON	12705	12715	12786	12783	12699	NONE	NONE	13661	14115	14246	14279
109	I 35	3.0 MI N OF CO B20 HANLONTOWN	17794	18757	19118	19192	19254	19184	19324	20097	20923	21338	NONE
110	I 80	1.5 MI W OF CO M16 SHELBY	21727	22189	22950	NONE	NONE	23070	23517	24441	25519	25906	24920
111	I 80	2.0 MI E OF IA 149 WILLIAMSBURG	29718	29950	NONE	NONE	NONE	30642	31210	32352	33298	33865	33735
113	I 380	1.5 MI N OF IA 150 BRANDON	14648	15084	15665	15796	15905	15937	16186	16741	17520	17658	17645
115	I 80	2.0 MI E OF US 71 ATLANTIC	19267	19067	19879	19661	19740	19821	20113	21331	22176	22541	22190
119	I 80	1.5 MI E OF MIDDLE RD LECLAIRE	27436	27398	NONE	29604	29978	29000	30825	32582	NONE	NONE	NONE
120	I 80	2.5 MI E OF CO RD X40 TIPTON	31284	31386	32327	NONE	31963	32640	33523	NONE	NONE	36095	36266
121	I 35	2.0 MI N OF CO RD R75 DOWS	13376	13822	NONE	14291	14270	14195	14506	15227	15730	15995	16050
122	I 35	1.0 MI N OF IA 92 CUMMING	21255	21339	21205	21105	21087	21044	NONE	NONE	21974	22577	23321
123	I 80	4.8 MI E OF E JCT US 65 MITCHELLVILLE			35329	35061	35253	34996	NONE	NONE	NONE	NONE	NONE
124	I 680	6.4 MI W OF I 80 BEEBEETOWN			6196	NONE	5947	5913	6039	6311	NONE	NONE	NONE
126	I 29	9.0 MI S OF IA 2										14507	14520

2018 EXPANSION FACTORS

RURAL INTERSTATE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEASONAL	1.270	1.218	1.027	1.022	0.918	0.865	0.850	0.870	0.942	0.963	0.992	1.113
Sunday	1.038	1.020	0.939	0.949	0.956	0.920	0.919	0.899	0.949	0.907	0.955	1.147
Monday	1.115	1.064	1.127	1.072	1.074	1.101	1.105	1.116	1.040	1.120	1.143	1.105
Tuesday	1.058	1.118	1.129	1.119	1.156	1.145	1.131	1.157	1.151	1.156	1.099	1.030
Wednesday	1.014	1.029	1.069	1.097	1.116	1.081	1.102	1.091	1.121	1.101	0.977	0.970
Thursday	0.994	0.957	0.987	0.972	0.996	0.992	1.010	1.009	1.023	0.999	1.038	0.946
Friday	0.852	0.837	0.810	0.820	0.803	0.833	0.837	0.832	0.818	0.813	0.883	0.836
Saturday	0.985	1.038	1.032	1.055	0.998	1.011	0.983	0.994	0.989	1.012	0.965	1.038

ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2008 TO 2018

MUNICIPAL INTERSTATE

STATION	ROUTE	LOCATION	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
701	I 380	BTWN WILSON AND 33RD CEDAR RAPIDS	63791	65296	66377	66597	66619	66629	67456	69639	71681	NONE	73258
703	I 380	AT J AVE S OF COLDSTREAM CEDAR RAPIDS	80922	80465	84299	82907	82911	82286	83915	85038	81120	NONE	88560
704	I 29/80	0.6 MI W OF IA 192 COUNCIL BLUFFS	76838	75586	75988	NONE	75521	NONE	NONE	NONE	NONE	NONE	NONE
705	I 74	0.6 MI S OF US 6 BETTENDORF	48427	47738	NONE	45756	47653	49404	49577	NONE	NONE	52108	NONE
707	I 29	AT SOUTH DAKOTA BORDER SIOUX CITY	27931	28175	SITE REMOVED JANUARY 2010								
708	I 280	0.3 MI S OF IA 22 DAVENPORT			NONE	19943	NONE	NONE	NONE	NONE	NONE	24970	23577
709	I 35	N OF ORALABOR ROAD ANKENY			NONE	59603	57945	60027	62687	NONE	65440	66343	67231
710	I 235	E. INNERLEG OF 35TH ST WEST DES MOINES			NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
711	I 235	S OF GUTHRIE AVENUE DES MOINES			66548	64950	NONE	NONE	NONE	NONE	NONE	NONE	NONE
712	I 235	E OF SECOND AVENUE DES MOINES			NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
713	I 35/80	E OF MERLE HAY ROAD DES MOINES			NONE	NONE	SITE REMOVED MARCH 2012						
714	I 235	0.7 MI N OF EUCLID AVENUE DES MOINES					NONE	65417	68332	72475	74926	75741	
715	I 29	1.5 MI E OF IA 12 SIOUX CITY								33150	NONE	NONE	36099
716	I 35/80	0.8 MI W OF IA 415 DES MOINES									NONE	NONE	100804
717	I 380	1.0 MI W OF EVANSDALE DR EVANSDALE									NONE	NONE	33972
116	I 80	0.8 MI W OF 74TH ST WAUKEE	33977	34437	35427	35272	35527	NONE	NONE	39315	45973	48840	50147
117	I 80	1.8 MI E OF E JCT I 35/80/235 ALTOONA	67650	69757	72678	73105	74017	74863	75290	NONE	77337	NONE	86136
125	I 380	6.0 MI N OF I 80 NORTH LIBERTY				NONE	48518	49835	51703	53335	NONE	56073	57112

2018 EXPANSION FACTORS

MUNICIPAL INTERSTATE

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEASONAL	1.116	1.073	1.004	0.970	0.938	0.909	0.925	0.900	0.971	0.976	1.005	1.092
Sunday	1.427	1.374	1.304	1.356	1.296	1.279	1.244	1.233	1.267	1.310	1.336	1.459
Monday	1.062	0.990	0.994	0.978	1.058	0.990	1.011	0.998	1.054	0.991	0.976	1.024
Tuesday	0.926	0.989	0.969	0.952	0.963	0.971	0.994	0.983	0.971	0.970	0.934	0.943
Wednesday	0.899	0.930	0.936	0.961	0.949	0.957	0.977	0.957	0.949	0.946	0.905	0.894
Thursday	0.905	0.902	0.912	0.904	0.903	0.924	0.921	0.933	0.917	0.917	0.978	0.880
Friday	0.857	0.850	0.849	0.852	0.848	0.864	0.851	0.867	0.845	0.852	0.892	0.859
Saturday	1.133	1.136	1.191	1.172	1.126	1.139	1.104	1.120	1.118	1.164	1.121	1.180

ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2008 TO 2018

RURAL PRIMARY

STATION	ROUTE	LOCATION	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
201	US 65	2.7 MI N OF IA 3 HAMPTON	2777	2824	NONE	2786	2814	2832	2879	2881	2937	3009	2941
202	US 71	2.0 MI N OF IA 44 HAMLIN	3375	3393	3537	NONE	3505	NONE	NONE	NONE	NONE	3363	3369
204	US 75	1.3 MI N OF CO C60 HINTON	12302	12671	12918	NONE	12953	12985	13148	13820	14353	14378	14519
205	US 218	2.7 MI S OF IA 78 SWEDESBUURG	11063	11484	11812	11809	11768	11798	12074	12816	13208	13444	13397
206	US 30	AT BOONE/STORY CO LINE NAPIER	13039	13356	13578	NONE	13930	14076	14583	14913	15538	NONE	15412
207	US 18	2.2 MI E OF US 169 ALGONA	3226	3326	3377	3402	3444	3460	3361	3425	3372	3340	3322
208	US 6	3.0 MI E OF CO V66 MARENGO	3113	3153	3256	NONE	3202	NONE	3181	3325	3441	3455	3416
209	US 67	1.5 MI S OF CO F45 PRINCETON	4181	4132	NONE	4264	4286	4207	4087	4106	4173	4092	4078
210	US 18	4.2 MI E OF IA 60 SHELTON	4053	4120	4213	4109	4207	4178	4077	4272	4365	NONE	4033
212	IA 92	0.6 MI W OF CO V45 SIGOURNEY	2554	2602	2632	2570	NONE	2445	2501	2560	NONE	NONE	2524
213	US 30	1.8 MI E OF US 65 COLO	4908	5047	NONE	NONE	5719	5872	6248	6587	6891	6999	7117
214	US 61	3.8 MI N OF US 34 BURLINGTON	6953	6814	6635	6520	6592	6612	6690	6882	6977	6804	6888
216	US 34/169	2.5 MI E OF W JCT US 169 AFTON	3537	3665	3870	3864	3845	3701	3661	3708	3688	3657	3671
217	IA 122	2.5 MI E OF I 35 CLEAR LAKE	14173	14489	NONE	13763	13740	13508	13582	13712	NONE	14190	13630
218	IA 44	0.2 MI W OF US 169 ADEL	3396	3406	3457	3476	3559	3458	3561	NONE	3781	3893	3813
219	US 34	1.0 MI W OF I 35 OSCEOLA	4575	4624	4711	4725	4792	4674	4589	4641	4682	4700	4729
220	US 52	1.0 MI NW OF US 18 POSTVILLE	1578	1609	1676	1616	1614	NONE	1516	NONE	NONE	1561	1538
221	IA 9	2.5 MI W OF CO N52 ARMSTRONG	1592	1631	NONE	NONE	1657	NONE	1613	1627	1614	1645	1595
222	IA 3	0.1 MI W OF CO P66 HUMBOLDT	1844	1793	1917	2004	NONE	1732	NONE	NONE	NONE	2011	NONE
223	IA 48	4.0 MI S OF IA 92 GRISWOLD	1171	1164	1190	1199	1225	1218	1212	1213	1215	1240	1254
224	US 59	0.5 MI S OF CO F16 DEFIANCE	2507	2590	2638	NONE	2656	2623	2642	2696	2820	2788	2724
226	US 18	3.8 MI E OF CO W14 WEST UNION	2197	2291	2269	NONE	NONE	2501	2425	2489	NONE	2470	2482
228	IA 117	2.5 MI S OF US 65 MINGO	979	993	951	NONE	NONE	NONE	847	933	NONE	1000	956
229	IA 78	1.2 MI W OF CO X23 WINFIELD	738	748	750	761	NONE	765	781	772	802	795	767
230	US 169	3.5 MI S OF S JCT IA 92 WINTERSET	1588	1651	1686	1657	1677	1631	NONE	1669	1754	1768	1736
231	IA 148	9.3 MI N OF IA 92 ANITA	755	763	NONE	NONE	NONE	NONE	818	853	883	889	897
233	IA 110	1.5 MI S OF CO C65 SCHALLER	1298	1306	NONE	NONE	1331	1293	1322	1307	1331	NONE	1285
234	IA 12	2.5 MI N OF CO K18 AKRON	1304	1277	1342	NONE	1287	1224	1248	1244	1306	1295	1248
235	IA 143	3.4 MI S OF IA 10 MARCUS	765	746	785	NONE	NONE	889	894	NONE	NONE	1047	1036
236	IA 196	3.0 MI S OF US 20 SAC CITY	1088	1131	1169	NONE	1133	1150	1186	NONE	NONE	1653	1697
238	IA 149	2.1 MI N OF IA 78 MARTINSBURG	1071	1102	1180	1164	NONE	1196	1154	1224	1234	1223	1204
240	IA 2	3.0 MI E OF US 275 SIDNEY	1914	1772	1899	NONE	1872	1862	1948	1947	1978	2040	2008
241	IA 13	5.0 MI S OF US 20 RYAN	4034	4069	4270	4142	4184	4205	4226	4340	4448	4537	4529
242	US 61	3.8 MI N OF CO F41 ELDRIDGE	15940	16374	16748	16530	16678	16651	16718	17300	17808	18285	18118
243	US 30	0.3 MI E OF CO Z24 DEWITT	9408	9678	9841	9704	NONE	NONE	NONE	NONE	9869	10134	10066
244	IA 1	0.8 MI S OF CO F67 KALONA	5765	5694	5566	5493	5535	5473	NONE	NONE	5773	5718	5872
245	US 20	1.5 MI E OF CO V62 JESUP	10532	10789	11025	11052	NONE	9964	10566	10976	NONE	11023	11035
246	IA 141	1.0 MI E OF WILLIS AVE PERRY	9315	9478	9556	9256	9581	9239	9332	NONE	9996	10586	10323
247	US 20	1.9 MI E OF E JCT IA 17 WEBSTER CITY	7858	7834	NONE	NONE	NONE	8211	8828	9134	9325	9515	9760
248	IA 21	2.8 MI N OF US 6 BELLE PLAINE	1120	1135	1148	1159	1163	1145	1108	1162	1211	1185	1154
249	US 218	4.3 MI S OF IA 1 HILLS	18686	19548	19804	19698	19594	19810	20472	20683	21112	21103	21326
252	US 18/63	0.5 MI S OF CO B54 NEW HAMPTON	4797	4909	5091	5099	5175	5225	5396	5624	5749	5860	5938
253	US 218	3.5 MI S OF CO T64 CHARLES CITY	8542	8643	NONE	9123	9218	9044	9074	9395	9678	9908	9942
254	IA 60	4.1 MI N OF IA 9 SIBLEY		3296	3378	NONE	NONE	3268	3484	3725	NONE	NONE	4161
255	US 20	1.0 MI E OF US 65 IOWA FALLS	8148	8335	8548	8497	8608	8730	8859	9144	9216	9243	9332
256	US 18	3.3 MI E OF I 35 MASON CITY	7342	7612	7878	7911	8029	7975	7901	8242	NONE	8905	8872
257	US 20	3.6 MI W OF W JCT US 59 HOLSTEIN	2881	2926	2954	NONE	3022	NONE	NONE	3609	NONE	NONE	NONE
258	US 30	0.6 MI E OF CO V66 BLAIRSTOWN	5940	NONE	NONE	NONE	6553	6630	6876	7461	7789	7993	7995
259	US 30	3.5 MI E OF IA 1 LISBON	5427	5610	5753	5739	5812	5584	5598	5792	5978	5969	5893
260	US 71	0.6 MI S OF CO J64 BRADYVILLE	2240	2301	2377	NONE	2404	2346	NONE	NONE	2416	2425	2260
261	US 169	2.3 MI N OF CO D14 FORT DODGE	5360	5389	NONE	NONE	NONE	5604	5679	5790	6015	6001	5861
262	US 63	1.6 MI S OF IA 2 BLOOMFIELD	2217	2288	2318	2253	2225	2218	2255	2297	2305	2277	2231
263	US 52	0.3 MI E OF CO X47 GARNAVILLO	2225	2267	NONE	NONE	2382	2400	2409	2452	2484	2502	2563
264	IA 27	3.0 MI S OF CO W62 ARGYLE	4764	5079	5402	5651	5797	5891	NONE	NONE	6745	6741	6738
265	US 61	1.0 MI N OF CO E17 MAQUOKETA	7053	7236	7475	7444	7537	NONE	NONE	NONE	8097	8351	8317
266	IA 2	0.8 MI W OF US 63 WEST GROVE	1546	1535	1596	1550	1557	1559	1619	1715	1772	1825	1829
267	US 34	3.0 MI W OF US 59 EMERSON	4168	4380	4476	NONE	4421	4225	4162	4308	4580	4589	4522
268	US 30	4.0 MI SW OF CO M14 DOW CITY	2977	3022	NONE	NONE	2995	3028	3064	3143	3180	3201	3155
269	US 30	3.6 MI E OF IA 144 GRAND JUNCTION	4137	4320	4359	4343	4384	4196	4272	4466	4548	NONE	4293
270	US 71	3.1 MI S OF IA 3 STORM LAKE		2441	2594	NONE	2685	2833	3010	3058	NONE	NONE	3056
271	US 18	4.3 MI E OF IA 4 EMMETSBURG	3111	3218	3386	3233	3347	3283	3120	3084	3080	2997	2903
272	US 71	5.2 MI E OF W JCT US 6 ATLANTIC	2112	2228	NONE	NONE	2330	2253	2294	2354	2405	2401	2272
273	US 34	3.6 MI E OF CO RD S56 RUSSELL		2109	2073	2070	2116	2047	2123	2222	2229	2230	2169
274	IA 163	2.6 MI NW OF CO RD G28 PELLA	9872	10331	10795	10858	11056	11215	NONE	11927	12341	12511	12526
275	US 20	0.5 MI W OF CENTER AVE EPWORTH		12096	12376	12573	12661	12652	12696	13205	13478	13866	13867
276	US 63	1.5 MI N OF IA 9 LIME SPRINGS		2870	2961	2920	2903	3016	3096	3169	3281	3248	3351
277	US 34	1.1 MI E OF IA 16 AGENCY		7804	7792	7883	8047	8085	8380	8562	9117	9096	9001
279	IA 13	1.5 MI N OF CO RD C64 DUNDEE		2311	2344	2305	2349	2358	2361	2395	2488	2453	2403
280	IA 2	2.0 MI W OF I 35 LEON			1303	NONE	1262	1232	1274	1299	1326	1334	1353
281	US 151	4.4 MI S OF IA 38 MONTICELLO			10635	10625	10807	10940	11122	11609	11994	12178	12203
282	US 52	9.5 MI S OF IA 62 BELLEVUE			NONE	842	799	824	NONE	888	851	710	
283	US 61/218	0.8 MI S OF N JCT US 61/218 KEOKUK			7810	7666	8009	8004	8257	8684	8730	8422	8187
284	IA 9	1.0 MI W OF 6TH STREET LANSING			2163	NONE	2010	1939	1970	2066	2006	1978	1913
285	US 20	1.3 MI E OF IA 4 ROCKWELL CITY				NONE	3407	4745	5444	5952	6112	6110	6392
286	US 34	2.0 MI W OF I 29 GLENWOOD									6554	6675	7187
287	US 20	0.6 MI E OF US 75 LAWTON									11584	12266	12045
288	US 63	0.5 MI S OF IA 163 OSKALOOSA											NONE
289	US 61	3.3 MI N OF E JCT IA 22 & IA 38 MUSCATINE											NONE

2018 EXPANSION FACTORS

RURAL PRIMARY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEASONAL	1.181	1.131	1.038	0.987	0.921	0.906	0.927	0.929	0.945	0.954	1.006	1.086
Sunday	1.393	1.340	1.247	1.272	1.200	1.191	1.182	1.182	1.214	1.234	1.313	1.412
Monday	1.082	0.991	1.012	0.990	1.057	1.010	1.020	1.019	1.043	1.013	0.998	1.012
Tuesday	0.967	1.011	0.995	0.991	1.008	1.009	1.010	1.012	1.001	1.009	0.966	0.946
Wednesday	0.937	0.957	0.966	1.009	1.001	0.989	1.005	0.986	1.000	0.993	0.928	0.920
Thursday	0.925	0.918	0.939	0.924	0.946	0.954	0.950	0.958	0.949	0.945	0.972	0.907
Friday	0.844	0.859	0.844	0.849	0.845	0.858	0.850	0.855	0.835	0.846	0.878	0.856
Saturday	1.036	1.074	1.121	1.093	1.035	1.075	1.068	1.076	1.065	1.077	1.079	1.146

ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2008 TO 2018

MUNICIPAL PRIMARY

STATION	ROUTE	LOCATION	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
802	US 71	W OF MEMPHIS AVE SPIRIT LAKE	11530	11961	11827	11701	11723	11777	12076	11714	11665	11507	12385
803	IA 12	ON VIADUCT E OF COURT ST SIOUX CITY	22228	NONE	NONE	22563	NONE	20642	NONE	NONE	NONE	NONE	NONE
804	IA 4	N OF 4TH AVE NW POCAHONTAS	2950	2868	2965	3246	3290	3091	3094	3177	3229	3257	3242
805	IA 148	S OF 11TH ST CORNING	2852	2867	2811	2797	2802	2637	2711	2720	2758	2620	2692
806	US 6	E OF SHASTA WINDSOR HEIGHTS	19072	19481	NONE	NONE	18681	19223	18151	18610	18621	NONE	17937
808	US 71	S OF BIRCH ST AUDUBON	4655	4769	NONE	NONE	4675	4601	4567	4545	NONE	NONE	4346
809	IA 14	N OF WOODLAND ST MARSHALLTOWN	6164	6119	6228	6000	5836	5746	5641	5648	NONE	NONE	5517
810	IA 92	W OF N ST INDIANOLA	10837	11024	11061	11036	11047	10985	11251	NONE	NONE	NONE	11457
812	IA 122	W OF VIRGINIA AVE MASON CITY	11825	12186	11450	11754	11469	10842	10768	10542	10542	10238	NONE
813	US 6	E OF PINE ST DAVENPORT	21686	21312	21935	21137	22050	20189	19925	NONE	20323	NONE	18872
815	IA 922	BTWN WILEY BLVD & WESTDALE CDR RPDS	9551	10812	10940	10658	NONE	NONE	NONE	10989	11355	11637	11684
816	US 34	W OF US 61 WEST BURLINGTON	13097	13168	13671	13076	13173	12909	NONE	NONE	NONE	NONE	14325
819	IA 9	EAST OF 14TH ST OSAGE	5264	5237	5262	NONE	5207	5200	5244	5080	4946	NONE	4965
820	IA 17	N OF NW 11TH ST EAGLE GROVE	2739	2722	2832	2898	2810	2891	NONE	NONE	2870	2901	NONE
821	IA 4	S OF EDGEWOOD AVE E JEFFERSON	4074	4154	4138	3995	NONE	3832	3923	4093	4170	4139	4212
823	US 6	BETWEEN SYCAMORE & 1ST AVE IOWA CITY	20946	20652	20543	20148	NONE	NONE	NONE	19998	20069	20967	21289
824	US 69	BETWEEN 15TH AND 16TH ST AMES	17551	17318	18148	17567	NONE	17619	17298	17323	NONE	17099	17307
826	US 65	1.5 MI NE OF I-80 BONDURANT	11761	12272	12608	12446	NONE	12817	12625	NONE	14483	14796	14858
827	US 61/151	W OF MISSISSIPPI R DUBUQUE	20031	20744	21554	21609	21611	21381	21990	22069	22344	22726	22881
828	IA 150	S OF 12TH ST OELWEIN	6295	6461	6550	6490	6354	6305	6196	6198	6167	6195	6206
829	US 59	S OF 5TH AVE SHENANDOAH	9121	8694	8819	SITE REMOVED JUNE 2011							
830	IA 23	S OF IA 92 OSKALOOSA	2951	2871	2866	2808	2794	2742	NONE	2789	NONE	2656	2584
831	IA 5	W OF FLUER DRIVE DES MOINES			NONE	23086	22771	22572	23262	NONE	NONE	29065	28024
250	US 65	2.1 MI N OF IA 163 PLEASANT HILL	23942	24223	24789	24953	25083	25034	25599	27101	28598	29994	30739
278	IA 141	0.5 MI N OF IA 44 GRIMES		20594	20395	20906	21762	21702	21922	23410	NONE	25970	27110

2018 EXPANSION FACTORS

MUNICIPAL PRIMARY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEASONAL	1.138	1.088	1.030	0.976	0.924	0.914	0.933	0.934	0.965	0.971	1.027	1.066
Sunday	1.402	1.370	1.328	1.362	1.280	1.297	1.259	1.310	1.327	1.347	1.417	1.454
Monday	1.054	0.984	0.986	0.977	1.056	0.988	0.993	0.990	1.053	0.985	0.955	1.007
Tuesday	0.950	0.993	0.970	0.966	0.971	0.972	0.982	0.976	0.961	0.970	0.927	0.953
Wednesday	0.919	0.934	0.943	0.976	0.963	0.960	0.981	0.953	0.952	0.952	0.913	0.908
Thursday	0.922	0.919	0.929	0.923	0.927	0.937	0.936	0.937	0.915	0.928	0.979	0.902
Friday	0.859	0.870	0.862	0.864	0.862	0.873	0.865	0.874	0.846	0.856	0.880	0.855
Saturday	1.073	1.083	1.125	1.083	1.056	1.099	1.087	1.086	1.094	1.109	1.111	1.139

ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2008 TO 2018

SECONDARY

PAVED

STATION	ROUTE	LOCATION
300	CO P14	2.7 MI N OF CO E33 CHURDAN
301	CO S14	0.8 MI S OF CO E29 NEVADA
302	CO M55	0.2 MI N OF IA 141 MANILLA
303	CO K45	2.3 MI S OF IA 175 ONAWA
304	CO V45	3.5 MI N OF IA 92 SIGOURNEY
306	CO E53	1.8 MI E OF IA 25 SCRANTON
307	CO R38	2.2 MI N OF CO C54 CLARION
308	CO N32	1.6 MI N OF IA 9 ESTHERVILLE
309	CO K52	1.5 MI S OF US 18 HULL
310	CO Y52	1.5 MI S OF US 30 GRAND MOUND
311	CO W12	3.5 MI S OF US 30 WATKINS
312	CO E26	2.7 MI W OF CO RD R38 BOONE
313	CO D42	0.2 MI E OF IA 13 MANCHESTER
314	CO 105	1.3 MI E OF CO S56 NORTHWOOD
315	CO RD	5.5 MI E OF US 63 DRAKESVILLE
316	CO D36	2.8 MI E OF CO N57 ROCKWELL CITY

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
237	247	239	234	268	237	241	238	247	NONE	258
975	973	958	988	988	965	967	969	992	1009	989
739	736	739	777	798	787	793	804	818	NONE	763
1106	1152	NONE	NONE	NONE	1162	1155	NONE	1120	1105	1051
617	636	665	652	NONE	646	631	636	643	663	671
520	544	NONE	NONE	524	497	507	530	539	NONE	526
1255	1240	1278	NONE	1339	1379	NONE	NONE	1421	1398	1376
330	357	NONE	344	NONE	323	NONE	340	NONE	NONE	348
1001	1063	NONE	1149	1178	1228	1249	NONE	1379	NONE	1415
479	501	NONE	502	498	NONE	NONE	NONE	507	509	505
804	825	NONE	804	799	773	744	756	799	799	818
1213	1269	1395	NONE	1525	NONE	1481	1525	1630	NONE	1714
679	691	702	630	612	623	679	699	756	783	769
775	778	800	767	744	737	731	772	754	NONE	708
656	676	675	665	682	666	665	679	691	NONE	768
3087	3155	3292	1201	1157	1014	974	949	NONE	NONE	929

Note: Station 316 was previously station 211.

Co Rd D36 was US 20 until Dec. 2010 when the US 20 4-lane was extended from Moorland to IA 4.

GRAVEL

STATION	ROUTE	LOCATION
400	CO B30	0.5 MI E OF CO L48 PRIMGHAR
401	LOC RD	1.8 MI N OF CO E36 CLUTIER
402	LOC RD	0.8 MI E OF CO V18 CLUTIER
403	CO H47	5.0 MI SE OF US 34 ALBIA
405	LOC RD	2.5 MI N OF US 18 NEW HAMPTON
406	LOC RD	2.0 MI E OF US 169 LORIMOR
407	CO H23	2.0 MI E OF US 169 LORIMOR

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
21	23	21	23	18	22	22	22	NONE	20	21
31	30	36	36	39	34	35	NONE	NONE	30	29
41	47	51	55	54	47	48	46	NONE	NONE	37
88	98	89	92	104	100	NONE	100	99	102	93
46	48	46	48	51	49	57	NONE	65	NONE	66
57	63	62	57	NONE	70	68	69	59	59	56
68	70	75	66	76	77	75	72	67	70	65

2018 EXPANSION FACTORS

SECONDARY

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEASONAL	1.242	1.234	1.110	0.971	0.883	0.913	0.953	0.979	0.945	0.892	0.978	1.122
Sunday	1.417	1.351	1.342	1.353	1.295	1.317	1.364	1.313	1.270	1.329	1.447	1.443
Monday	1.045	0.998	0.971	0.950	1.045	0.965	0.955	0.970	1.032	0.975	0.969	0.986
Tuesday	0.956	0.979	0.965	0.957	0.961	0.958	0.945	0.955	0.956	0.957	0.906	0.940
Wednesday	0.914	0.933	0.930	0.989	0.957	0.953	0.946	0.937	0.962	0.946	0.920	0.899
Thursday	0.923	0.912	0.928	0.925	0.949	0.936	0.921	0.943	0.926	0.940	0.963	0.922
Friday	0.875	0.910	0.879	0.890	0.892	0.895	0.900	0.903	0.879	0.918	0.915	0.881
Saturday	1.058	1.084	1.144	1.088	1.048	1.117	1.140	1.122	1.100	1.074	1.082	1.153

ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2008 TO 2018 MUNICIPAL STREETS

STATION	ROUTE	LOCATION	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
900	LAKE ST	N OF 3RD ST in STORM LAKE	2756	2848	2811	NONE	2610	2587	2556	2616	2662	2570	2454
901	2ND AVE N	E OF 15TH ST in FORT DODGE	6775	6665	6728	6620	6444	6024	NONE	NONE	NONE	NONE	6243
902	LOCUST ST	E OF SPRING ST in DAVENPORT	21300	20726	20521	NONE	NONE	20336	19630	20177	19332	19515	18481
903	JEFFERSON	NE OF E 5TH ST in OTTUMWA	6272	6006	5694	NONE	5699	5628	NONE	5329	NONE	NONE	4367
904	JOHNSON	W OF JANICE DR in CEDAR RAPIDS	10000	9818	9613	9391	9258	9057	8931	NONE	NONE	NONE	NONE
905	N'WESTERN	N OF 20TH ST in AMES	2202	2264	NONE	2193	NONE	2211	2178	NONE	NONE	2131	2118
906	DUBUQUE	S OF DAVENPORT ST in IOWA CITY	14688	14411	14245	13859	13518	NONE	12861	13339	NONE	NONE	NONE
907	COLLEGE	S OF 23RD ST in CEDAR FALLS	NONE	NONE	NONE	7974	NONE	NONE	7410	7323	7177	7341	7195
908	LIND'WOOD	S OF 35TH ST in SIOUX CITY	969	977	954	976	960	NONE	NONE	NONE	904	874	784
909	HAMILTON	N OF CLIFTON AVE in SIOUX CITY	13854	14159	14586	14388	14584	NONE	13719	14701	15289	15446	15197
910	GRANDVIEW	SE OF PLYMOUTH CT in DUBUQUE	8596	8871	8946	8917	8833	8411	7983	8465	NONE	8541	8453
911	HUMBOLDT	S OF 4TH ST in BODE	776	770	767	739	NONE	684	695	665	660	673	696
912	ELM ST	N OF LUCAS ST in CRESTON	3798	3807	3782	3802	3735	3550	NONE	3364	3440	3310	3212
913	WASHINGTON	E OF HARRISON ST in MOUNT PLEASANT	10540	10161	SITE REMOVED SEPTEMBER 2010								
* 914	16TH ST	S OF AVE N in COUNCIL BLUFFS	9139	9057	8718	NONE	6004	5949	6208	9535	10236	10880	10876

Note: Station 914 was previously station 811

16th Street was IA 192 until 2016 when it was transferred to the city of Council Bluffs.

2018 EXPANSION FACTORS MUNICIPAL STREETS

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEASONAL	1.114	1.058	1.026	0.957	0.953	0.975	1.008	0.971	0.954	0.947	1.021	1.085
Sunday	1.407	1.410	1.375	1.370	1.308	1.339	1.305	1.329	1.332	1.347	1.385	1.421
Monday	1.039	0.971	0.945	0.960	1.048	0.984	0.971	0.965	1.039	0.968	0.945	0.992
Tuesday	0.932	0.956	0.944	0.941	0.943	0.946	0.943	0.949	0.933	0.943	0.910	0.941
Wednesday	0.904	0.903	0.918	0.960	0.933	0.955	0.961	0.940	0.928	0.926	0.904	0.906
Thursday	0.905	0.917	0.913	0.913	0.917	0.939	0.939	0.948	0.915	0.931	0.979	0.910
Friday	0.875	0.885	0.887	0.883	0.890	0.888	0.898	0.892	0.865	0.889	0.915	0.877
Saturday	1.138	1.162	1.226	1.145	1.094	1.107	1.110	1.126	1.157	1.153	1.138	1.165

ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2008 TO 2018

RECREATIONAL

PRIMARY

STATION	ROUTE	LOCATION
500	US 71	0.1 MI S OF CO RD B14 FOSTORIA
501	IA 5	3.8 MI S OF US 34 MORAVIA
503	IA 415	0.5 MI W OF NW POLK CITY RD POLK CITY

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
7877	8067	8213	8250	NONE	NONE	8284	8724	8741	8908	8867
3692	3922	3910	3801	3772	3711	3582	4041	4106	4112	4112
5293	6076	NONE	6130	6445	6697	NONE	7530	8418	8872	9185

SECONDARY

STATION	ROUTE	LOCATION
600	CO F25	0.1 MI W OF CO P18 SPRINGBROOK
602	ENTRANCE	GEORGE WYTH S. P. WATERLOO
603	ENTRANCE	3.3 MI N OF IA 25 GREEN VALLEY S. P.

2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
205	216	207	199	188	181	176	178	182	173	159
643	731	766	759	850	NONE	748	748	789	806	725
273	175	NONE	NONE	262	283	279	NONE	324	321	298

2018 EXPANSION FACTORS RECREATIONAL

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEASONAL	1.705	1.525	1.318	1.018	0.784	0.702	0.715	0.818	0.878	1.110	1.474	1.657
Sunday	1.174	1.117	1.072	1.060	0.936	0.939	0.958	0.976	0.931	1.089	1.249	1.294
Monday	1.112	1.068	0.995	1.051	1.075	1.153	1.074	1.199	1.080	1.073	1.026	1.004
Tuesday	1.070	1.059	1.048	1.133	1.192	1.143	1.101	1.160	1.256	1.098	0.984	0.951
Wednesday	0.995	1.013	1.023	1.165	1.197	1.156	1.126	1.099	1.217	1.049	0.968	0.946
Thursday	1.009	1.042	0.994	1.009	1.078	1.072	1.103	1.074	1.098	1.018	0.981	0.973
Friday	0.916	0.944	0.931	0.937	0.900	0.897	0.920	0.891	0.900	0.897	0.907	0.925
Saturday	0.895	0.920	1.037	0.896	0.866	0.869	0.883	0.844	0.848	0.957	1.003	1.054

AUTOMATIC TRAFFIC RECORDER LOCATIONS

JANUARY 1, 2019

