



# **AUTOMATIC TRAFFIC**

# **RECORDERS**

**2002 - 2012**

**Prepared by**

**OFFICE OF TRANSPORTATION DATA**

**In Cooperation With**

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

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**JANUARY 2013**

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## INTRODUCTION

**This report contains graphic comparisons of daily and monthly traffic collected on Iowa's highway system at 174 Permanent Continuous Automatic Traffic Recorder locations. Twenty (20) stations are located on the Rural Interstate system, eleven (11) are on the Municipal Interstate system, seventy-eight (78) 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 an eleven year summary of AADT's for each station, start on page 19. Sites without an AADT for 2012 were not used not in the calculations or graphs.**

**The report compares travel trends from 1987 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 2003 - 2012.**

**Information from the permanent traffic recorders indicates a 0.6% increase in statewide travel from 2011 to 2012. The estimated vehicle miles of travel for 2012 is 31.61 billion. Final 2012 traffic figures will be published near June 2013, when all traffic data collected during 2012 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

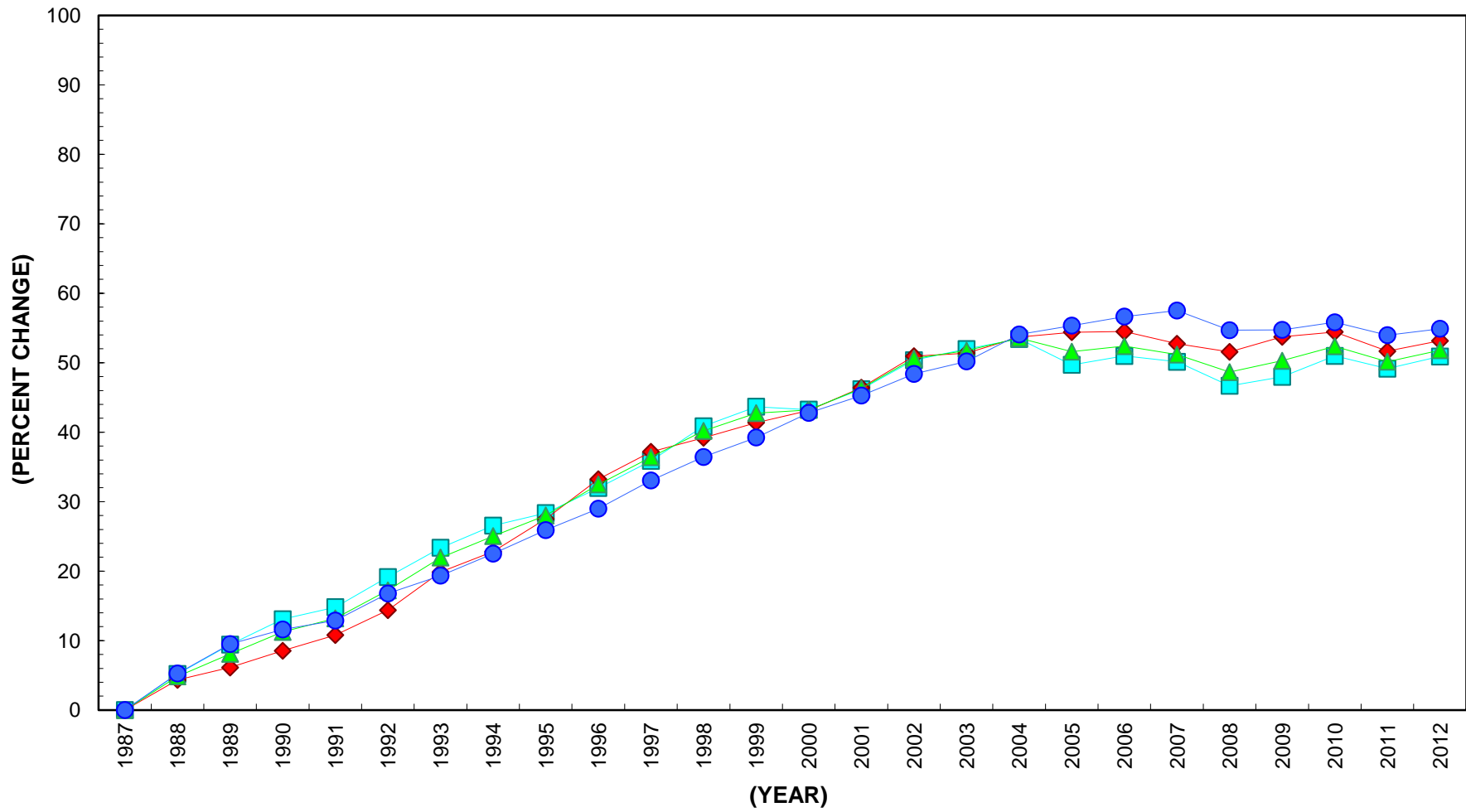
## IOWA ROAD SYSTEMS

	2012 COMPARED TO 2011
RURAL INTERSTATE	+ 0.7 %
RURAL PRIMARY	+ 1.3%
RURAL SECONDARY	+ 1.3 %
<b>RURAL TOTAL</b>	<b>+ 1.1 %</b>
MUNICIPAL INTERSTATE	+ 0.6 %
MUNICIPAL PRIMARY	- 0.1 %
MUNICIPAL STREETS	- 0.3 %
<b>MUNICIPAL TOTAL</b>	<b>- 0.1 %</b>
<b>STATE TOTAL</b>	<b>+ 0.6 %</b>

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

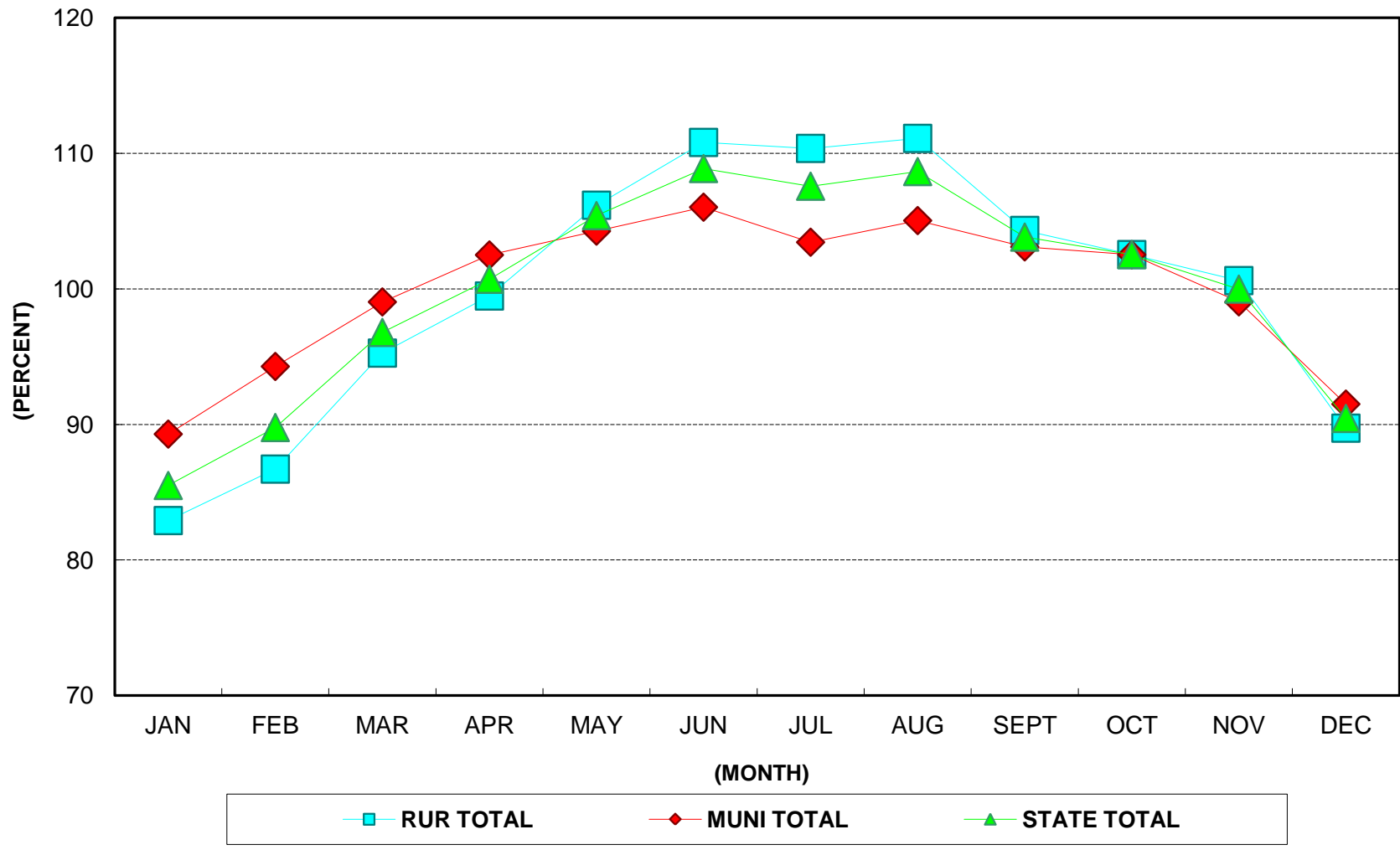
BASE YEAR 1987



—■— RURAL    —◆— MUNICIPAL    —▲— STATE    —●— U.S.

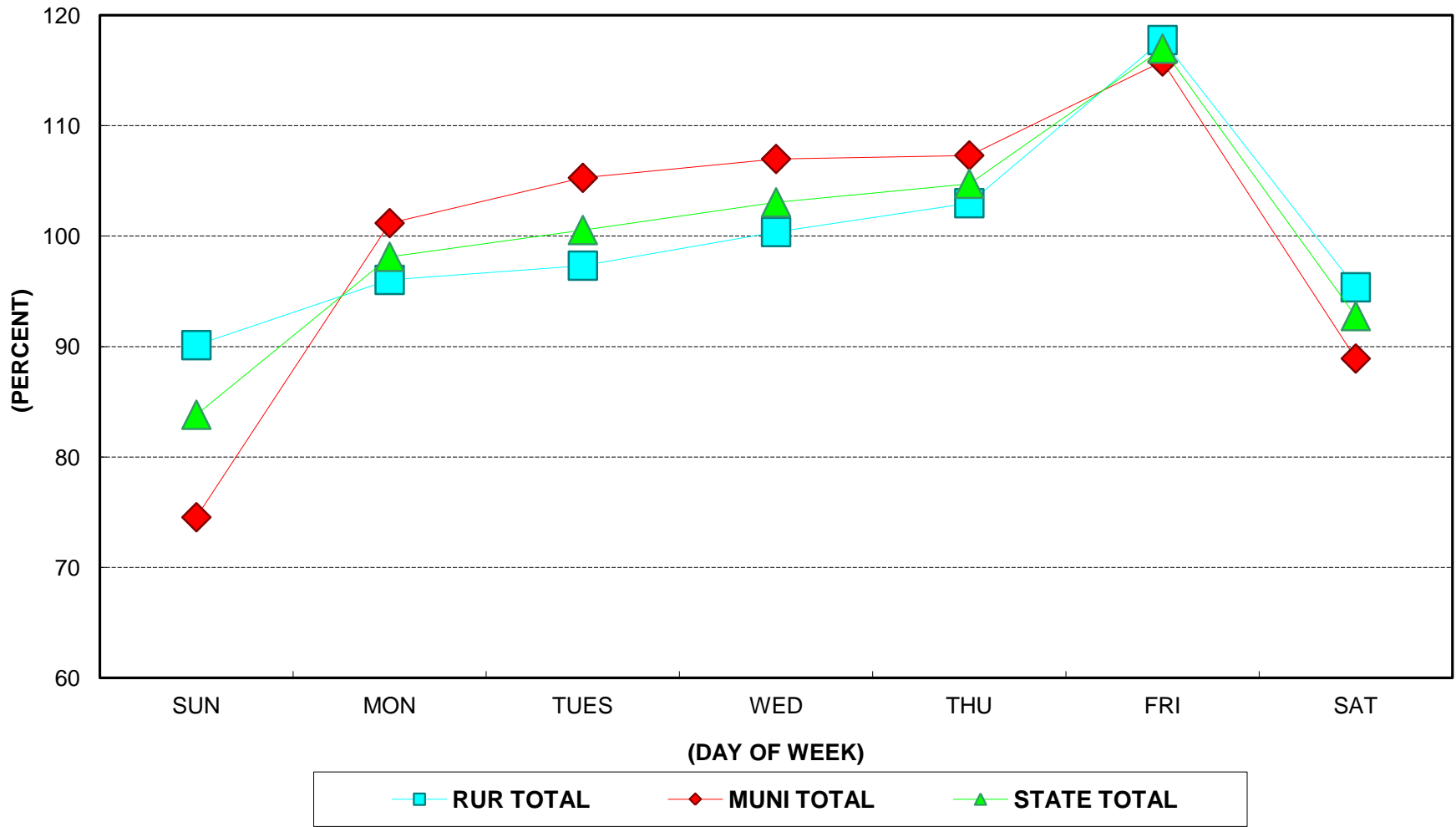
# 2012 MONTHLY TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC

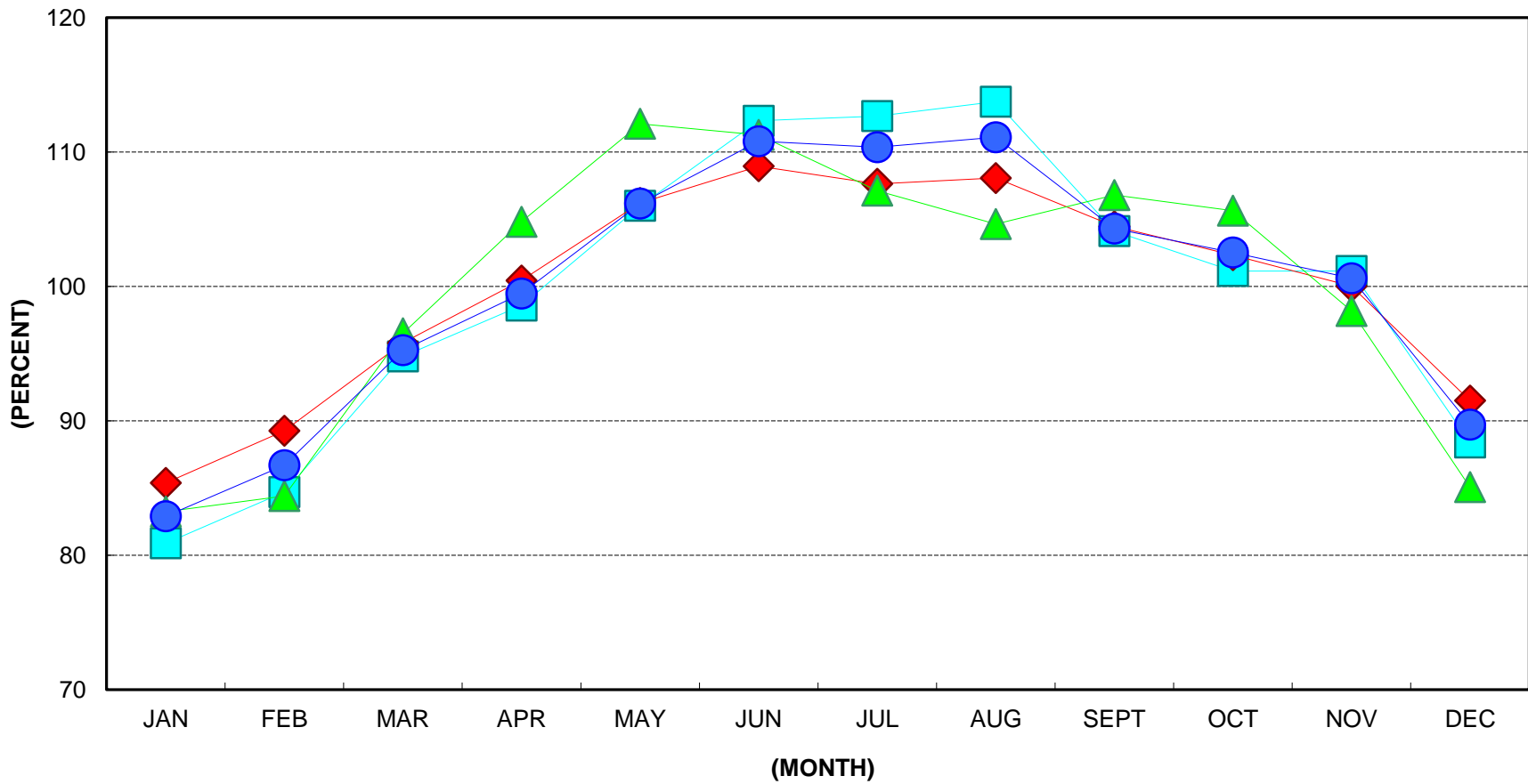


# 2012 DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



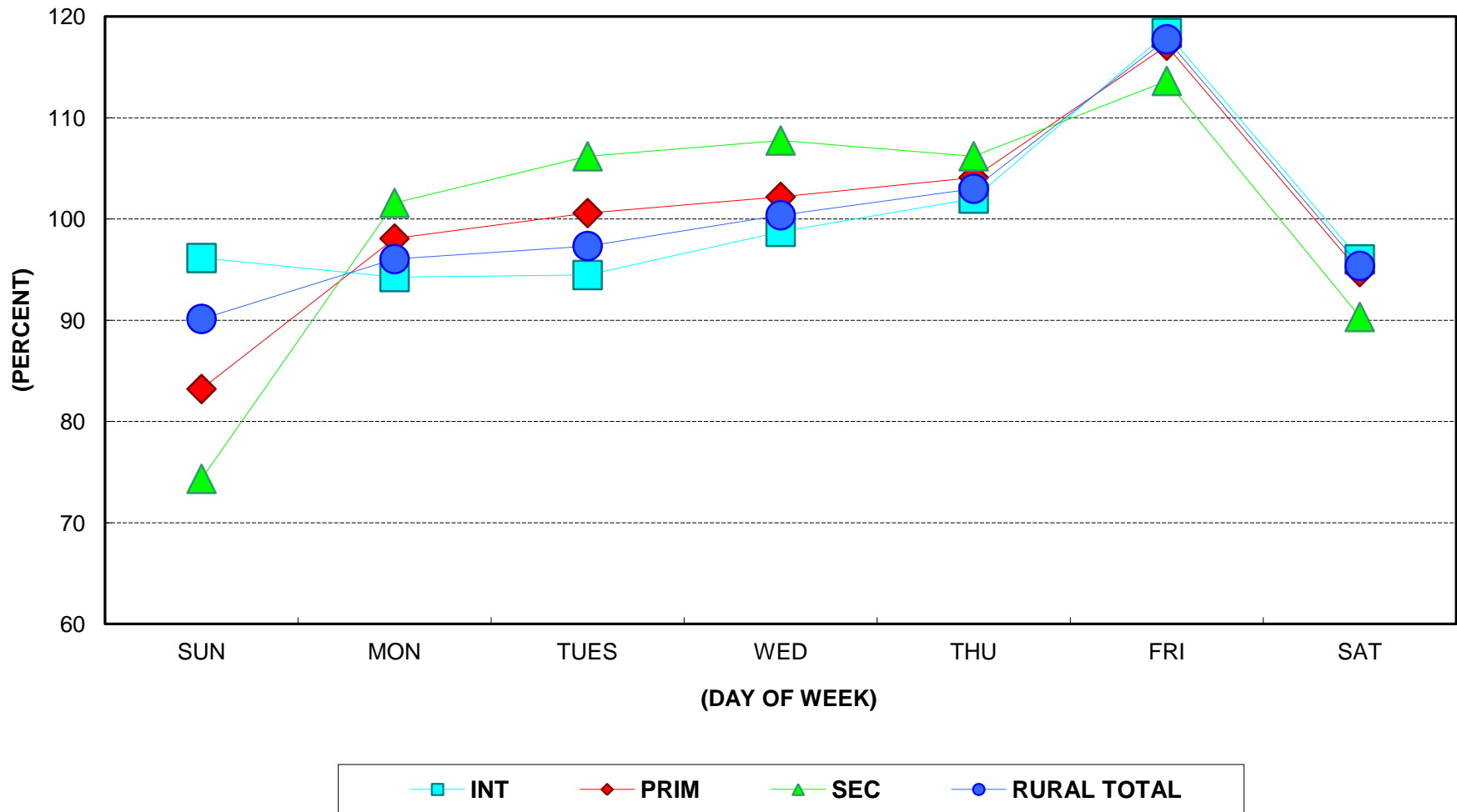
# 2012 RURAL MONTHLY TRAFFIC AS A % OF ANNUAL AVERAGE DAILY TRAFFIC





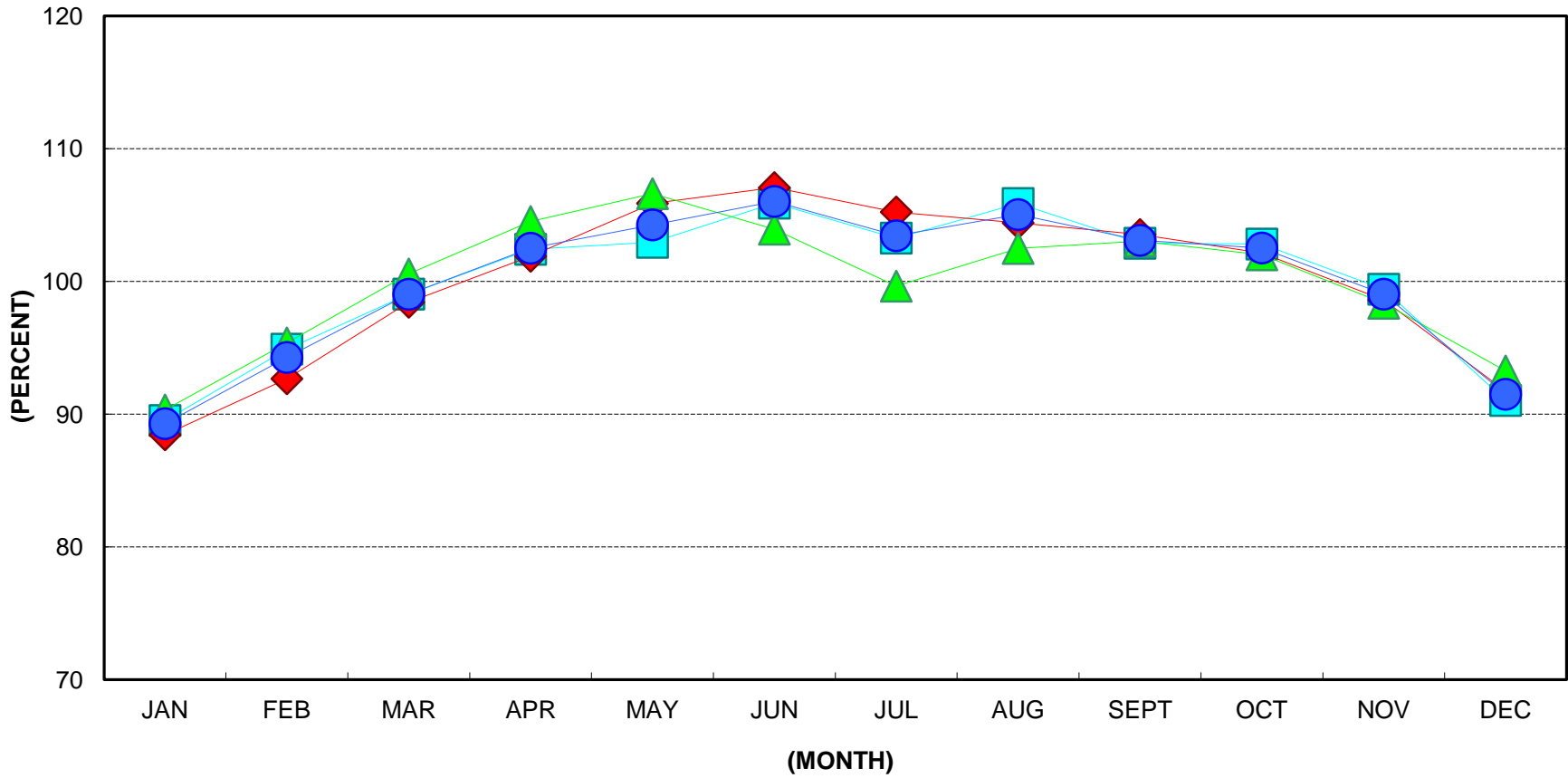
# 2012 RURAL DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



# 2012 MUNICIPAL MONTHLY TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



INT

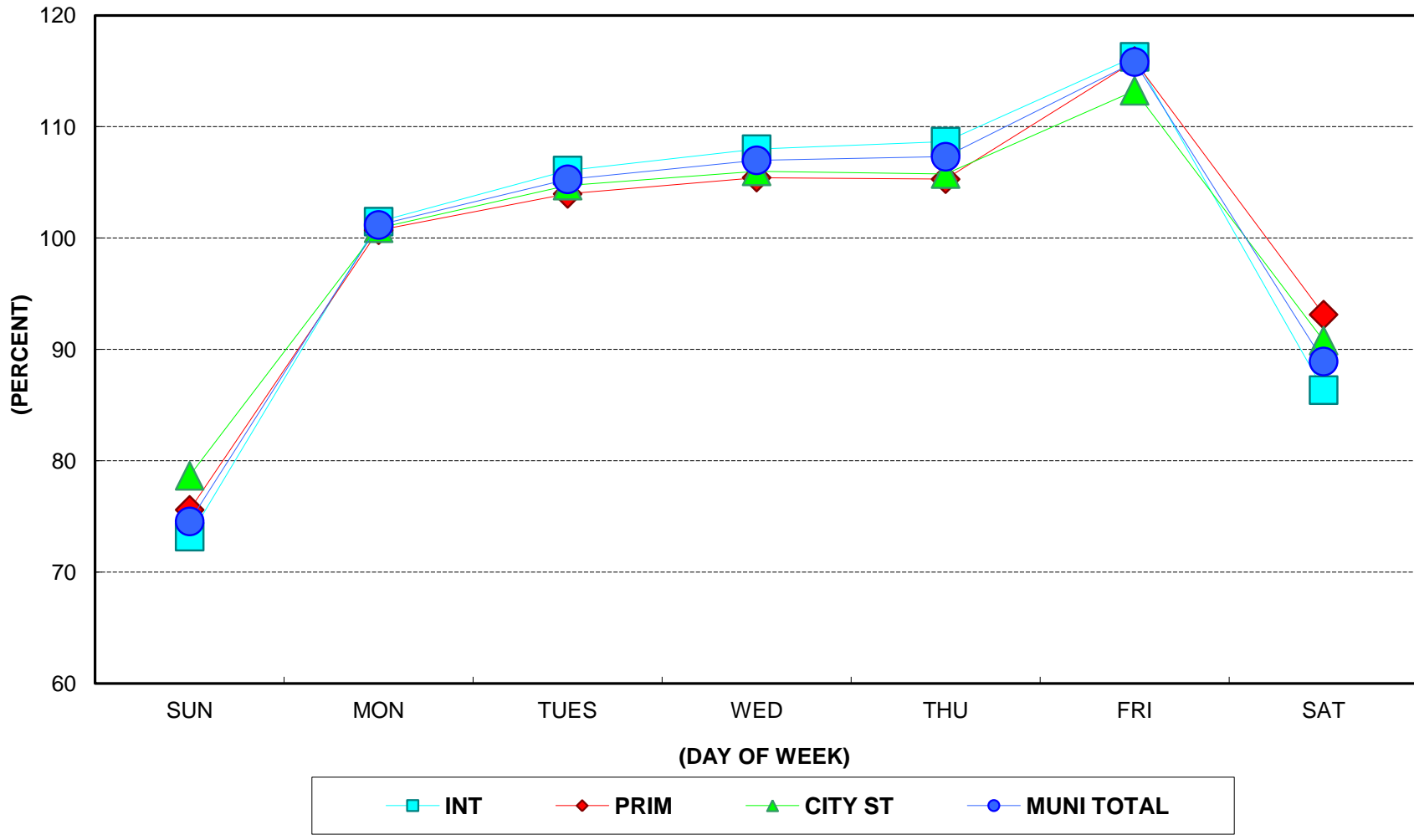
PRIM

CITY ST

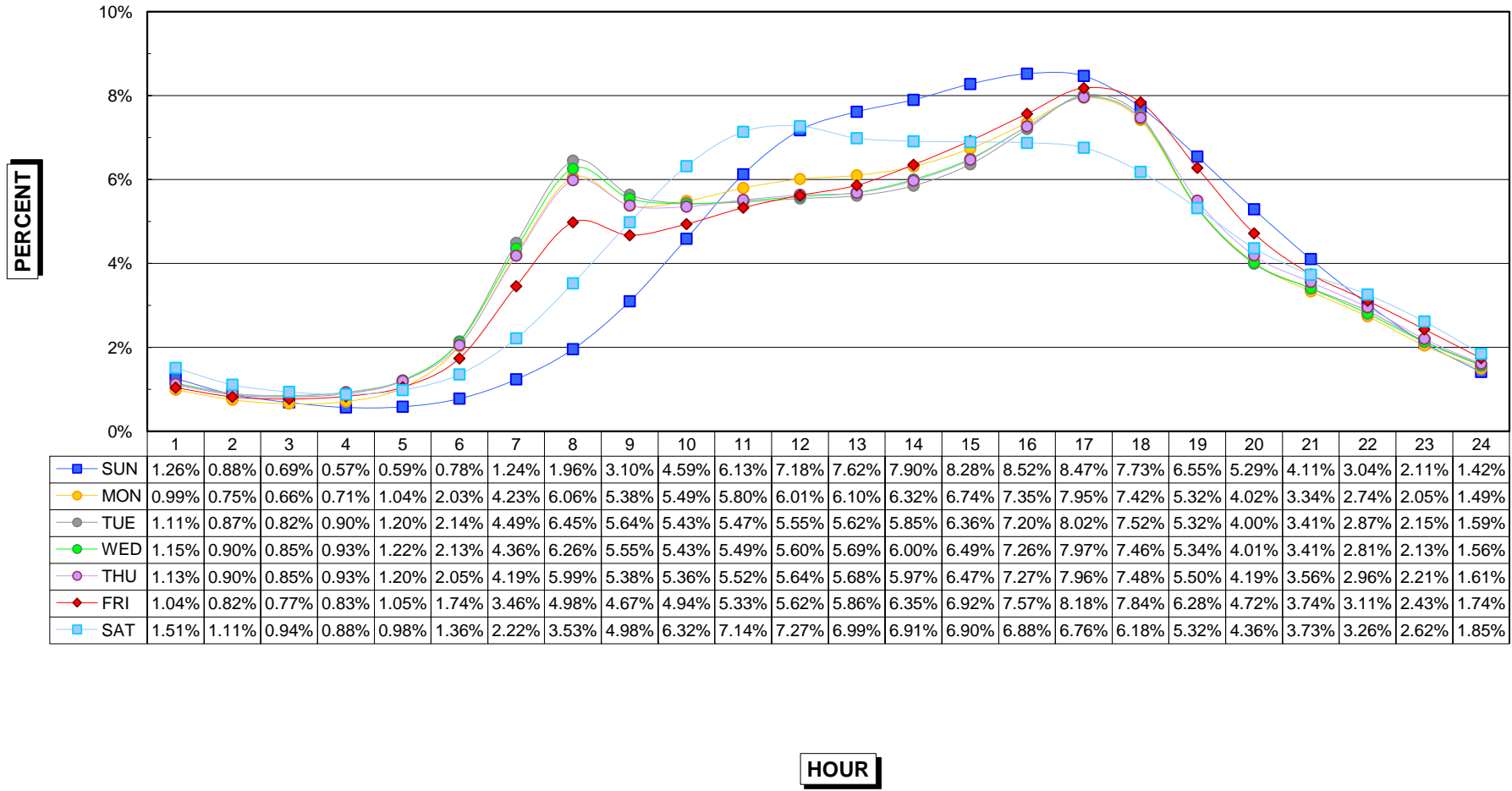
MUNI TOTAL

# 2012 MUNICIPAL DAY OF WEEK TRAFFIC

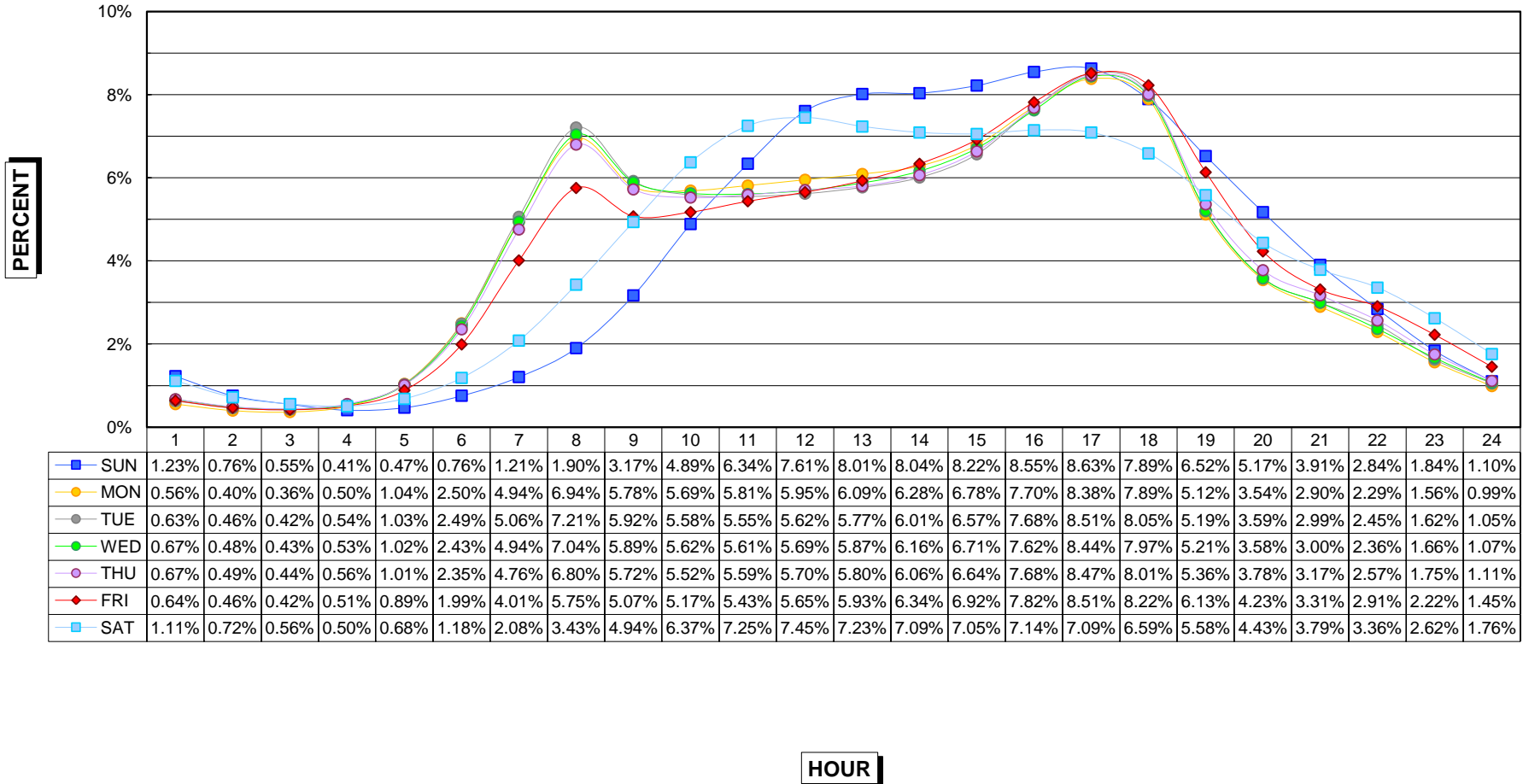
AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



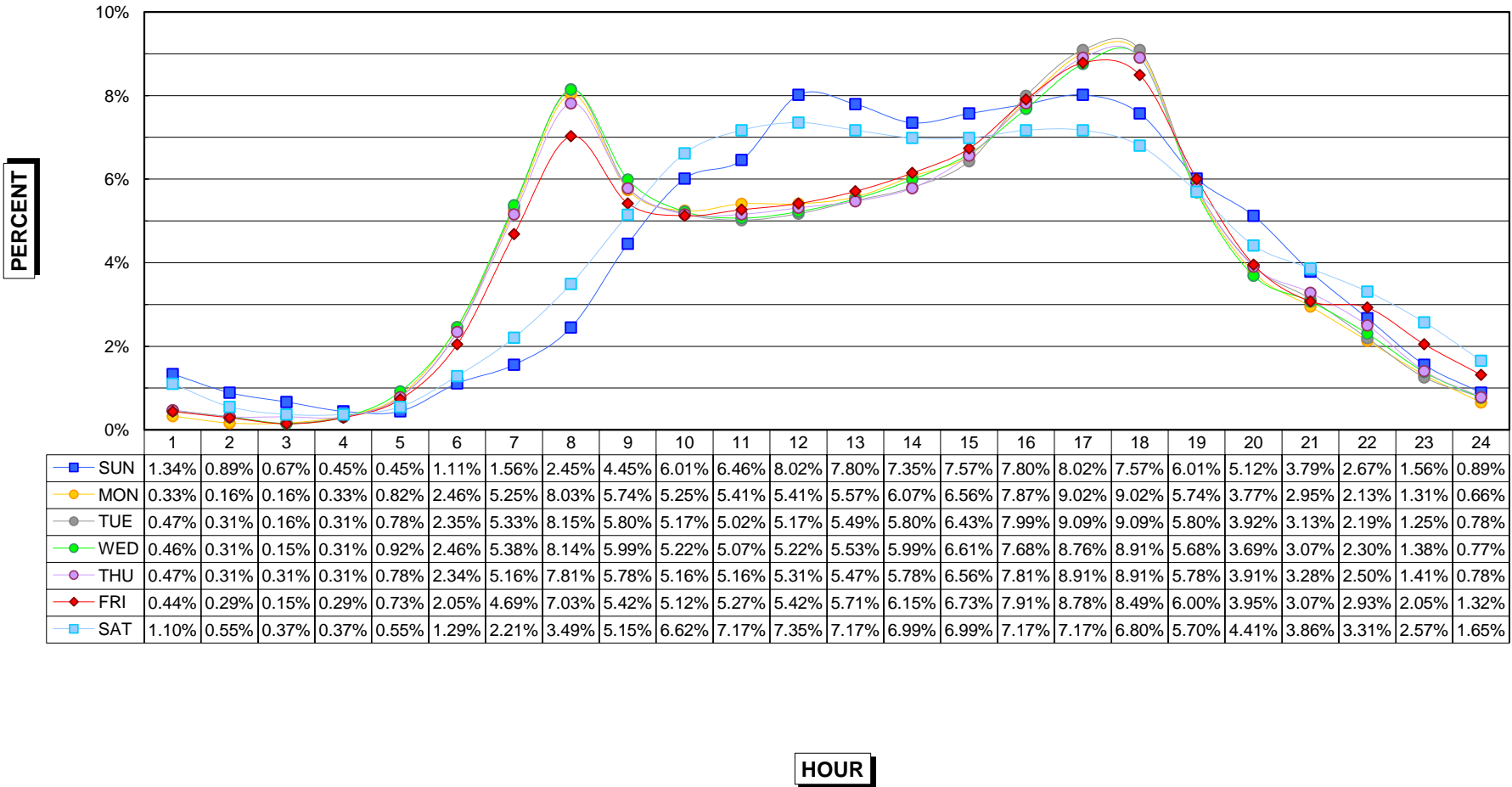
### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2012 RURAL INTERSTATE



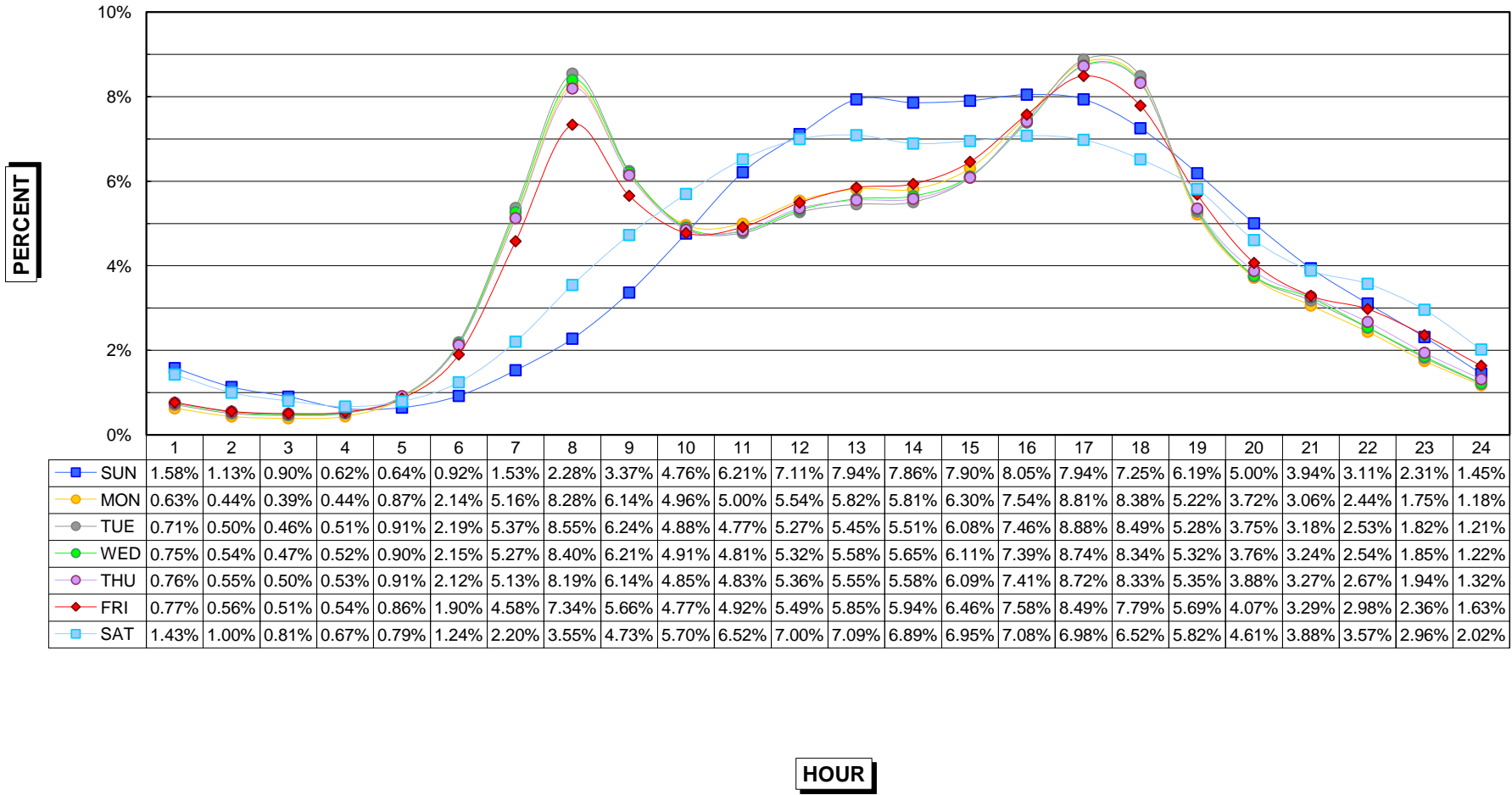
### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2012 RURAL PRIMARY



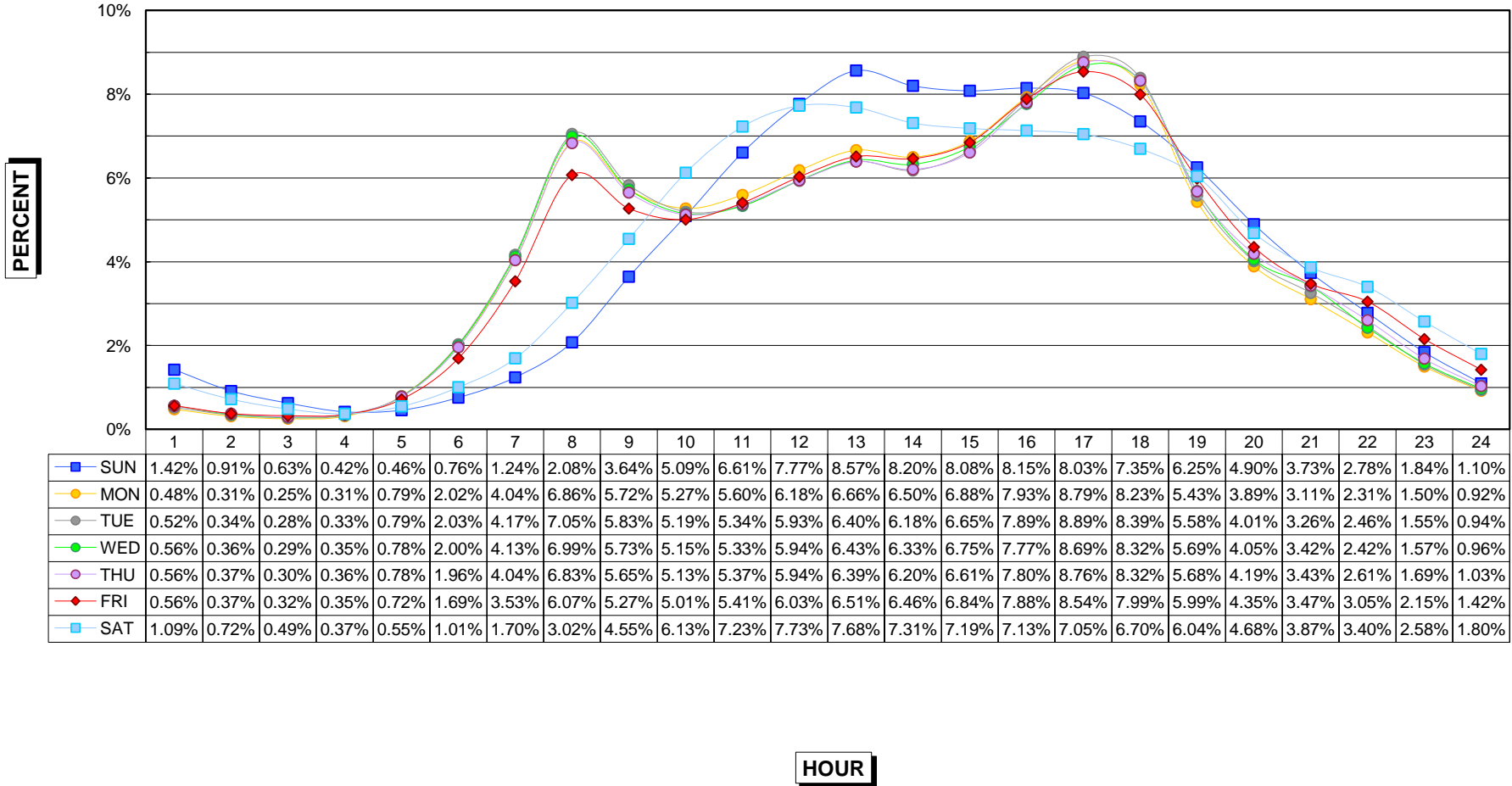
### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2012 RURAL SECONDARY



### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2012 MUNICIPAL INTERSTATE

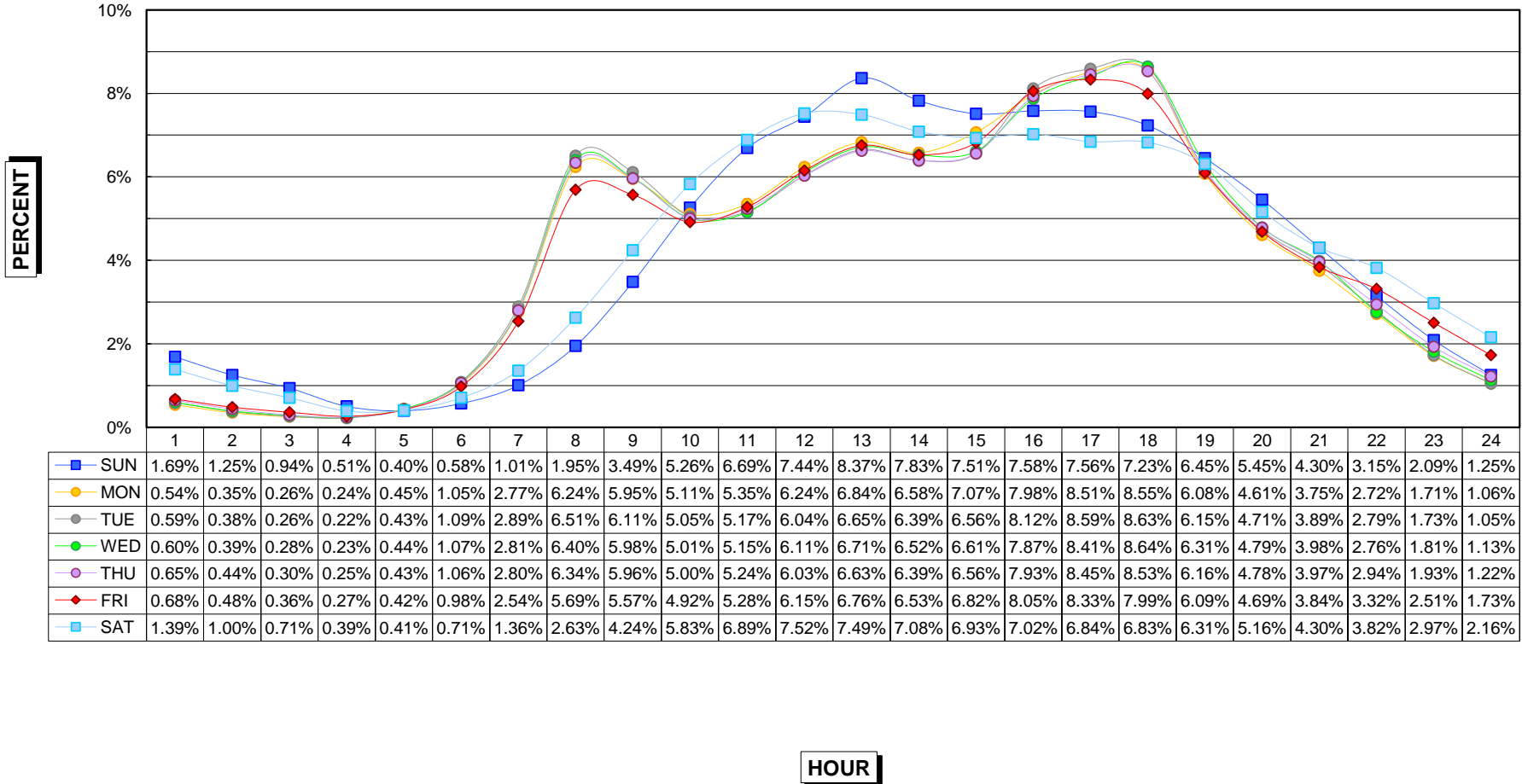


## HOURLY DISTRIBUTION OF DAILY TRAFFIC 2012 MUNICIPAL PRIMARY





## HOURLY DISTRIBUTION OF DAILY TRAFFIC 2012 MUNICIPAL STREETS



## SUMMARY OF ANALYSIS

### Analysis of the Thirtieth Highest Hour at the Permanent Continuous Automatic Traffic Recorder Stations 2003 - 2012

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, 2003 through 2012.

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	9.92	10.79	352.84	9.77	5.13	12.15	-	-
Municipal	54.61	9.95	188.33	9.99	-	-	59.20	9.85

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2002 TO 2012  
RURAL INTERSTATE**

STATION	ROUTE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
100	I 29	3.0 MI N OF S JCT I 680 HONEY CREEK	21070	20906	21319	20959	21484	21033	20246	20170	20593	NONE	19730
102	I 29	4.0 MI S OF US 34 PACIFIC JCT	11917	12010	12101	12151	12495	12300	11793	11761	11868	NONE	12008
103	I 80	5.0 MI E OF IA 146 GRINNELL	27346	26917	26726	26325	26940	26853	26118	26234	26569	26045	26046
104	I 35	3.0 MI N OF IA 175 JEWELL	18596	18996	20269	20200	20629	20598	20147	20509	NONE	21248	21437
105	I 29	3.8 MI S OF IA 175 ONAWA	11346	12031	12171	12015	12283	12418	12096	12512	12791	NONE	12587
106	I 35	1.5 MI N OF IA 2 LEON	13234	13265	13233	12982	13290	13227	12705	12715	12786	12783	12699
109	I 35	3.0 MI N OF CO B20 HANLONTOWN	16575	17046	17556	17373	18466	18611	17794	18757	19118	19192	19254
110	I 80	1.5 MI W OF CO M16 SHELBY	22379	22254	22496	22208	22670	22752	21727	22189	22950	NONE	NONE
111	I 80	2.0 MI E OF IA 149 WILLIAMSBURG	31092	31021	31258	30939	31347	31325	29718	29950	NONE	NONE	NONE
113	I 380	3.75 MI NW OF IA 150 BRANDON	12934	13422	14156	14308	14695	14976	14648	15084	15665	15796	15905
115	I 80	2.0 MI E OF US 71 ATLANTIC	19018	19013	19324	19282	19480	19697	19267	19067	19879	19661	19740
116	I 80	0.8 MI W OF 74TH ST WAUKEE	34059	33413	33870	33880	35190	34897	33977	34437	35427	35272	35527
117	I 80	1.75 MI E OF E JCT I 35/80/235 ALTOONA	65755	66846	69050	70547	70362	68589	67650	69757	72678	73105	74017
119	I 80	1.5 MI E OF MIDDLE RD LECLAIRE	28206	29720	29201	28264	28926	28639	27436	27398	NONE	29604	29978
120	I 80	2.5 MI E OF CO RD X40 TIPTON	31234	31513	32318	32239	32583	32755	31284	31386	32327	NONE	31963
121	I 35	2.0 MI N OF CO RD R75 DOWS				13800	14112	13858	13376	13822	NONE	14291	14270
122	I 35	1.0 MI N OF IA 92 CUMMING							21255	21339	21205	21105	21087
123	I 80	4.8 MI E OF E JCT US 65 MITCHELLVILLE									35329	35061	35253
124	I 680	6.4 MI W OF I 80 BEEBEETOWN									6196	NONE	5947
125	I 380	6.0 MI N OF I 80 NORTH LIBERTY										NONE	48518

**2012 EXPANSION FACTORS  
RURAL INTERSTATE**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.216	1.154	1.006	0.974	0.913	0.881	0.864	0.872	0.959	0.966	0.975	1.103
<b>Sunday</b>	1.040	1.096	0.993	0.964	1.004	0.962	0.980	0.940	0.990	0.946	0.910	1.101
<b>Monday</b>	1.085	1.088	1.101	1.067	1.054	1.082	1.080	1.096	1.049	1.099	1.142	1.042
<b>Tuesday</b>	1.012	1.091	1.093	1.109	1.121	1.112	1.099	1.137	1.130	1.128	1.097	1.014
<b>Wednesday</b>	1.014	1.008	1.041	1.063	1.084	1.056	1.095	1.065	1.095	1.077	0.965	0.936
<b>Thursday</b>	0.997	0.936	0.979	0.967	0.980	0.976	0.990	0.993	1.013	0.991	1.030	0.977
<b>Friday</b>	0.869	0.821	0.830	0.829	0.813	0.845	0.833	0.849	0.811	0.815	0.897	0.887
<b>Saturday</b>	1.027	1.043	1.036	1.082	1.021	1.034	0.997	1.000	1.004	1.042	1.034	1.094

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2002 TO 2012  
MUNICIPAL INTERSTATE**

STATION	ROUTE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
701	I 380	BTWN WILSON AND 33RD CEDAR RAPIDS	63391	63338	64289	64150	64968	64650	63791	65296	66377	66597	66619
703	I 380	AT J AVE S OF COLDSTREAM CEDAR RAPIDS	81023	81222	82356	81384	82503	82450	80922	80465	84299	82907	82911
704	I 29/80	0.6 MI W OF IA 192 COUNCIL BLUFFS	76024	74081	75623	77569	79350	79516	76838	75586	75988	NONE	75521
705	I 74	0.6 MI S OF US 6 BETTENDORF	48380	48022	47671	48031	49099	48849	48427	47738	NONE	45756	47653
707	I 29	AT SOUTH DAKOTA BORDER SIOUX CITY						28070	27931	28175	NONE	NONE	NONE
708	I 280	0.3 MI S OF IA 22 DAVENPORT									NONE	19943	NONE
709	I 35	N OF ORALABOR ROAD ANKENY									NONE	59603	57945
710	I 235	E. INNERLEG OF 35TH ST WEST DES MOINES									NONE	NONE	NONE
711	I 235	S OF GUTHRIE AVENUE DES MOINES									66548	64950	NONE
712	I 235	E OF SECOND AVENUE DES MOINES									NONE	NONE	NONE
713	I 35/80	E OF MERLE HAY ROAD DES MOINES									NONE	NONE	NONE

**2012 EXPANSION FACTORS  
MUNICIPAL INTERSTATE**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.086	1.028	0.983	0.954	0.951	0.942	0.977	0.945	0.963	0.960	1.002	1.078
<b>Sunday</b>	1.513	1.480	1.424	1.406	1.382	1.409	1.435	1.401	1.417	1.390	1.364	1.442
<b>Monday</b>	0.987	0.976	0.972	0.962	1.043	0.961	1.010	0.962	1.028	0.969	0.952	0.967
<b>Tuesday</b>	0.896	0.967	0.948	0.945	0.946	0.938	0.914	0.942	0.935	0.952	0.925	0.926
<b>Wednesday</b>	0.904	0.934	0.924	0.929	0.932	0.921	0.935	0.927	0.920	0.937	0.901	0.872
<b>Thursday</b>	0.894	0.887	0.906	0.904	0.895	0.900	0.878	0.906	0.893	0.910	0.993	0.914
<b>Friday</b>	0.867	0.838	0.856	0.864	0.844	0.864	0.846	0.864	0.831	0.844	0.880	0.891
<b>Saturday</b>	1.228	1.166	1.190	1.202	1.153	1.224	1.226	1.210	1.214	1.207	1.158	1.228

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2002 TO 2012**  
**RURAL PRIMARY**

STATION	ROUTE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
201	US 65	2.7 MI N OF IA 3 HAMPTON	3005	2981	2959	2886	2831	2808	2777	2824	NONE	2786	2814
202	US 71	2.0 MI N OF IA 44 HAMLIN	3458	3416	3544	3504	3450	3473	3375	3393	3537	NONE	3505
204	US 75	1.3 MI N OF CO C60 HINTON	11049	11440	11718	12095	12296	12264	12302	12671	12918	NONE	12953
205	US 218	2.7 MI S OF IA 78 SWEDESBUURG	9346	9671	10174	10375	10831	11292	11063	11484	11812	11809	11768
206	US 30	AT BOONE/STORY CO LINE NAPIER	11746	12011	12366	12760	12793	12929	13039	13356	13578	NONE	13930
207	US 18	2.2 MI E OF US 169 ALGONA	3363	3353	3381	3332	3306	3449	3226	3326	3377	3402	3444
208	US 6	3.0 MI E OF CO V66 MARENGO	3511	3437	3466	3344	3256	3157	3113	3153	3256	NONE	3202
209	US 67	1.5 MI S OF CO F45 PRINCETON	4380	4305	4433	4471	4424	4372	4181	4132	NONE	4264	4286
210	US 18	4.2 MI E OF IA 60 SHELDON	3771	3776	3939	4066	4061	4066	4053	4120	4213	4109	4207
212	IA 92	0.6 MI W OF CO V45 SIGOURNEY	2868	2821	2792	2753	2731	2684	2554	2602	2632	2570	NONE
213	US 30	1.8 MI E OF US 65 COLO	5988	5431	5332	5074	5105	5058	4908	5047	NONE	NONE	5719
214	US 61	3.8 MI N OF US 34 BURLINGTON	7234	7200	7183	7097	7050	6985	6953	6814	6635	6520	6592
216	US 34/169	2.5 MI E OF W JCT US 169 AFTON	3690	3913	3835	3654	3696	3671	3537	3665	3870	3864	3845
217	US 18	2.5 MI E OF I 35 CLEAR LAKE	14615	14916	14876	15140	14373	14364	14173	14489	NONE	13763	13740
218	IA 44	0.2 MI W OF US 169 ADEL	3528	3645	3707	3646	3645	3444	3396	3406	3457	3476	3559
219	US 34	1.0 MI W OF I 35 OSCEOLA	4650	4742	4762	4724	4724	4702	4575	4624	4711	4725	4792
220	US 52	1.0 MI NW OF US 18 POSTVILLE	1793	1746	1746	1757	1715	1658	1578	1609	1676	1616	1614
221	IA 9	3.4 MI W OF CO N52 ARMSTRONG	1760	1748	1768	1703	1678	1690	1592	1631	NONE	NONE	1657
222	IA 3	0.1 MI W OF CO P66 HUMBOLDT	2323	2235	2183	1989	1956	1919	1844	1793	1917	2004	NONE
223	IA 48	4.0 MI S OF IA 92 GRISWOLD	1309	1297	1209	1238	1248	1221	1171	1164	1190	1199	1225
224	US 59	0.5 MI S OF CO F16 DEFIANCE	2577	2557	2635	2644	2613	2561	2507	2590	2638	NONE	2656
226	US 18	3.8 MI E OF CO W14 WEST UNION	2385	2431	2358	2292	2357	2339	2197	2291	2269	NONE	NONE
228	IA 117	2.5 MI S OF US 65 MINGO	1189	946	948	967	993	986	979	993	951	NONE	NONE
229	IA 78	1.2 MI W OF CO X23 WINFIELD	798	775	733	757	785	742	738	748	750	761	NONE
230	US 169	3.5 MI S OF S JCT IA 92 WINTERSET	1770	1837	1795	1701	1726	1610	1588	1651	1686	1657	1677
231	IA 148	9.3 MI N OF IA 92 ANITA	761	756	776	756	782	761	755	763	NONE	NONE	NONE
233	IA 110	1.5 MI S OF CO C65 SCHALLER	1299	1301	1337	1318	1260	1294	1298	1306	NONE	NONE	1331
234	IA 12	2.5 MI N OF CO K18 AKRON	1555	1548	1469	1465	1435	1415	1304	1277	1342	NONE	1287
235	IA 143	3.4 MI S OF IA 10 MARCUS	825	800	795	826	825	802	765	746	785	NONE	NONE
236	IA 196	3.0 MI S OF US 20 SAC CITY	1109	1082	1094	1037	1060	1082	1088	1131	1169	NONE	1133
238	IA 149	2.1 MI N OF IA 78 MARTINSBURG	1153	1175	1216	1158	1153	1132	1071	1102	1180	1164	NONE
240	IA 2	3.0 MI E OF US 275 SIDNEY	1882	1887	1936	1857	1879	1949	1914	1772	1899	NONE	1719
241	IA 13	5.0 MI S OF US 20 RYAN	5048	4979	4694	4408	4460	4280	4034	4069	4270	4142	4184
242	US 61	3.8 MI N OF CO F41 ELDRIDGE	15911	16104	16459	16082	16108	16214	15940	16374	16748	16530	16678
243	US 30	0.3 MI E OF CO Z24 DEWITT	9222	9295	9413	9488	9124	9448	9408	9678	9841	9704	NONE
244	IA 1	0.8 MI S OF CO F67 KALONA	5948	5950	5969	5956	5858	5624	5765	5694	5566	5493	5535
245	US 20	1.5 MI E OF CO V62 JESUP	9538	10032	10392	10194	10345	10571	10532	10789	11025	11052	NONE
246	IA 141	1.0 MI E OF WILLIS AVE PERRY	9805	9785	9940	9806	9676	9448	9315	9478	9556	9256	9581
247	US 20	3.0 MI E OF E JCT IA 17 WEBSTER CITY	6848	6995	7827	7958	7888	7945	7858	7834	NONE	NONE	NONE
248	IA 21	2.8 MI N OF US 6 BELLE PLAINE	1297	1283	1318	1270	1246	1193	1120	1135	1148	1159	1163
249	US 218	0.5 MI N OF HILLS INTERCHANGE HILLS	16116	16404	16852	16973	18313	19527	18686	19548	19804	19698	19594
250	US 65	1.5 MI N OF IA 163 PLEASANT HILL	20559	22221	23923	25288	25274	24416	23942	24223	24789	24953	25083
252	US 18/63	0.5 MI S OF CO B54 NEW HAMPTON				4803	4780	4831	4797	4909	5091	5099	5175
253	US 218	3.5 MI S OF CO T64 CHARLES CITY				8316	8436	8649	8542	8643	NONE	9123	9218
254	IA 60	4.1 MI N OF IA 9 SIBLEY								3296	3378	NONE	NONE
255	US 20	1.0 MI E OF US 65 IOWA FALLS				7531	7926	8057	8148	8335	8548	8497	8608
256	US 18	3.3 MI E OF I 35 MASON CITY				7066	7290	7507	7342	7612	7878	7911	8029
257	US 20	3.6 MI W OF W JCT US 59 HOLSTEIN						2781	2881	2926	2954	NONE	3022
258	US 30	0.6 MI E OF CO V66 BLAIRSTOWN						6424	5940	NONE	NONE	NONE	6553
259	US 30	3.5 MI E OF IA 1 LISBON							5427	5610	5753	5739	5812
260	US 71	0.6 MI S OF CO J64 BRADYVILLE						2182	2240	2301	2377	NONE	2404
261	US 169	2.3 MI N OF CO D14 FORT DODGE						5783	5360	5389	NONE	NONE	NONE
262	US 63	1.6 MI S OF IA 2 BLOOMFIELD						2247	2217	2288	2318	2253	2225
263	US 52	0.3 MI E OF CO X47 GARNAVILLO						2395	2225	2267	NONE	NONE	2382
264	IA 27	3.0 MI S OF CO W62 ARGYLE						4532	4764	5079	5402	5651	5797
265	US 61	1.0 MI N OF CO E17 MAQUOKETA						7349	7053	7236	7475	7444	7537
266	IA 2	0.8 MI W OF US 63 WEST GROVE						1560	1546	1535	1596	1550	1557
267	US 34	3.0 MI W OF US 59 EMERSON						4176	4168	4380	4476	NONE	4421
268	US 30	4.0 MI SW OF CO M14 DOW CITY						2997	2977	3022	NONE	NONE	2995
269	US 30	3.6 MI E OF IA 144 GRAND JUNCTION							4137	4320	4359	4343	4384
270	US 71	3.1 MI S OF IA 3 STORM LAKE								2441	2594	NONE	2685
271	US 18	4.3 MI E OF IA 4 EMMETSBURG							3111	3218	3386	3233	3347
272	US 71	5.2 MI S OF W JCT US 6 ATLANTIC							2112	2228	NONE	NONE	2330
273	US 34	3.6 MI E OF CO RD S56 RUSSELL								2109	2073	2070	2116
274	IA 163	2.6 MI NW OF CO RD G28 PELLA							9872	10331	10795	10858	11056
275	US 20	0.5 MI W OF CENTER AVE EPWORTH								12096	12376	12573	12661
276	US 63	1.5 MI N OF IA 9 LIME SPRINGS								2870	2961	2920	2903
277	US 34	1.1 MI E OF IA 16 AGENCY								7804	7792	7883	8047
278	IA 141	0.5 MI N OF IA 44 GRIMES								20594	20395	20906	21762
279	IA 13	1.5 MI N OF CO RD C64 DUNDEE								2311	2344	2305	2349
280	IA 2	2.0 MI W OF I 35 LEON									1303	NONE	1262
281	US 151	4.4 MI S OF IA 38 MONTICELLO									10635	10625	10807
282	US 52	9.5 MI S OF IA 62 BELLEVUE									NONE	842	842
283	US 61/218	0.8 MI S OF N JCT US 61/218 KEOKUK									7810	7666	8009
284	IA 9	1.0 MI W OF 6TH STREET LANSING									2163	NONE	2010
285	US 20	1.3 MI E OF IA 4 ROCKWELL CITY										NONE	3407

**2012 EXPANSION FACTORS**  
**RURAL PRIMARY**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.166	1.113	1.022	0.969	0.930	0.914	0.918	0.931	0.945	0.954	1.000	1.089
Sunday	1.338	1.364	1.286	1.219	1.192	1.167	1.171	1.149	1.158	1.186	1.262	1.316
Monday	1.016	1.011	1.005	1.002	1.041	1.016	1.042	1.031	1.043	1.023	0.997	0.984
Tuesday	0.937	1.015	0.987	1.000	1.014	1.016	1.005	1.028	1.018	1.021	0.976	0.947
Wednesday	0.954	0.976	0.969	0.984	1.011	0.993	1.018	1.000	1.016	1.007	0.940	0.914
Thursday	0.949	0.914	0.941	0.942	0.960	0.956	0.954	0.965	0.967	0.967	0.979	0.950
Friday	0.873	0.839	0.856	0.866	0.848	0.863	0.848	0.857	0.835	0.843	0.873	0.887
Saturday	1.074	1.044	1.078	1.080	1.018	1.067	1.047	1.052	1.052	1.052	1.087	1.143

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2002 TO 2012  
MUNICIPAL PRIMARY**

STATION	ROUTE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
802	US 71	W OF MEMPHIS AVE SPIRIT LAKE	12038	11884	12408	12408	12102	11721	11530	11961	11827	11701	11723
803	IA 12	ON VIADUCT E OF COURT ST SIOUX CITY	26866	26579	25631	25518	23924	23112	22228	NONE	NONE	22563	NONE
804	IA 4	N OF 4TH AVE NW POCAHONTAS	3019	2962	3012	3052	3082	3012	2950	2868	2965	3246	3290
805	IA 148	S OF 11TH ST CORNING	3325	3230	3223	3098	3202	3046	2852	2867	2811	2797	2802
806	US 6	E OF SHASTA WINDSOR HEIGHTS	21952	21382	22129	22989	21425	19954	19072	19481	NONE	NONE	18681
808	US 71	S OF BIRCH ST AUDUBON	4811	4757	4992	4858	4750	4701	4655	4769	NONE	NONE	4675
809	IA 14	N OF WOODLAND ST MARSHALLTOWN	6636	6604	6540	6484	6268	6304	6164	6119	6228	6000	5836
810	IA 92	W OF N ST INDIANOLA	11793	11634	11725	11582	11203	10858	10837	11024	11061	11036	11047
811	IA 192	S OF AVE N COUNCIL BLUFFS	10061	9665	9442	9474	9047	8858	9139	9057	8718	NONE	6004
812	IA 122	W OF VIRGINIA AVE MASON CITY	13489	13326	13052	12706	12014	12035	11825	12186	11450	11754	11469
813	US 6	E OF PINE ST DAVENPORT	19789	19891	21888	22078	21648	22022	21686	21312	21935	21137	22050
815	IA 922	BTWN WILEY BLVD & WESTDALE CDR RPDS	8560	8783	9027	9006	9474	9565	9551	10812	10940	10658	NONE
816	US 34	W OF US 61 WEST BURLINGTON	13162	13096	13085	12814	13878	13666	13097	13168	13671	13076	13173
819	IA 9	EAST OF 14TH ST OSAGE	5857	5627	5546	5536	5391	5374	5264	5237	5262	NONE	5207
820	IA 17	N OF NW 11TH ST EAGLE GROVE	2970	2934	2902	2997	2867	2818	2739	2722	2832	2898	2810
821	IA 4	S OF EDGEWOOD AVE E JEFFERSON	4285	4206	4343	4211	4166	4102	4074	4154	4138	3995	NONE
823	US 6	BETWEEN SYCAMORE & 1ST AVE IOWA CITY	21564	21677	21858	21726	21526	21187	20946	20652	20543	20148	NONE
824	US 69	BETWEEN 15TH AND 16TH ST AMES	19624	19394	19737	20080	19804	19440	17551	17318	18148	17567	NONE
826	US 65	1.5 MI NE OF I-80 BONDURANT	11068	11293	11824	12737	12397	12052	11761	12272	12608	12446	NONE
827	US 61/151	W OF MISSISSIPPI R DUBUQUE	18716	19036	19188	19238	19396	20588	20031	20744	21554	21609	21611
828	IA 150	S OF 12TH ST OELWEIN	6600	6470	6555	6505	6654	6298	6295	6461	6550	6490	6354
829	US 59	S OF 5TH AVE SHENANDOAH	9842	9697	9964	10054	10053	9698	9121	8694	8819	NONE	NONE
830	IA 23	S OF IA 92 OSKALOOSA	3622	3506	3279	3204	3159	3073	2951	2871	2866	2808	2794
831	IA 5	W OF FLUER DRIVE DES MOINES									NONE	23086	22771

**2012 EXPANSION FACTORS  
MUNICIPAL PRIMARY**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.144	1.089	1.022	0.963	0.931	0.928	0.946	0.951	0.962	0.969	1.025	1.084
<b>Sunday</b>	1.447	1.453	1.400	1.379	1.313	1.313	1.313	1.323	1.330	1.344	1.404	1.437
<b>Monday</b>	0.984	0.980	0.970	0.976	1.036	0.986	1.022	0.980	1.051	0.981	0.948	0.958
<b>Tuesday</b>	0.917	0.981	0.954	0.966	0.967	0.967	0.954	0.975	0.958	0.972	0.930	0.940
<b>Wednesday</b>	0.924	0.948	0.940	0.946	0.966	0.955	0.975	0.951	0.948	0.958	0.915	0.894
<b>Thursday</b>	0.939	0.909	0.929	0.931	0.941	0.940	0.932	0.940	0.933	0.943	0.995	0.932
<b>Friday</b>	0.878	0.846	0.868	0.872	0.860	0.872	0.860	0.870	0.842	0.853	0.872	0.878
<b>Saturday</b>	1.115	1.092	1.114	1.087	1.038	1.094	1.082	1.100	1.090	1.096	1.117	1.175

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2002 TO 2012**

**SECONDARY**

**PAVED**

STATION	ROUTE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
300	CO P14	2.7 MI N OF CO E33 CHURDAN	292	286	303	296	303	250	237	247	239	234	268
301	CO S14	0.8 MI S OF CO E29 NEVADA	1005	985	1001	979	1008	989	975	973	958	988	988
302	CO M55	0.2 MI N OF IA 141 MANILLA	936	875	845	824	830	783	739	736	739	777	798
303	CO K45	2.25 MI S OF IA 175 ONAWA	1115	1075	1005	1025	1029	1059	1106	1152	NONE	NONE	NONE
304	CO V45	3.5 MI N OF IA 92 SIGOURNEY	599	614	643	640	645	634	617	636	665	652	NONE
306	CO E53	1.75 MI E OF IA 25 SCRANTON	625	595	575	579	570	515	520	544	NONE	NONE	524
307	CO R38	2.2 MI N OF CO C54 CLARION	1308	1309	1341	1292	1361	1293	1255	1240	1278	NONE	1339
308	CO N32	1.6 MI N OF IA 9 ESTHERVILLE	360	360	361	361	370	341	330	357	NONE	344	NONE
309	CO K52	1.5 MI S OF US 18 HULL	998	992	999	974	1017	987	1001	1063	NONE	1149	1178
310	CO Y52	1.5 MI S OF US 30 GRAND MOUND	533	531	529	529	534	504	479	501	NONE	502	498
311	CO W12	3.5 MI S OF US 30 WATKINS	861	847	864	835	852	853	804	825	NONE	804	799
312	CO E26	2.7 MI W OF CO RD R38 BOONE	1405	1383	1406	1336	1370	1327	1213	1269	1395	NONE	1525
313	CO D42	0.2 MI E OF IA 13 MANCHESTER	734	746	707	715	719	698	679	691	702	630	612
314	CO 105	1.3 MI E OF CO S56 NORTHWOOD	647	638	667	675	766	771	775	778	800	767	744
315	CO RD	5.5 MI E OF US 63 DRAKESVILLE	721	734	712	722	733	720	656	676	675	665	682
316	CO D36	2.8 MI E OF CO N57 ROCKWELL CITY	2929	2984	3152	3099	3138	3111	3087	3155	3292	1201	1157

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	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
400	CO B30	0.5 MI E OF CO L48 PRIMGHAR	26	27	28	26	29	27	21	23	21	23	18
401	LOC RD	1.75 MI N OF CO E36 CLUTIER	33	36	52	32	33	35	31	30	36	36	39
402	LOC RD	0.75 MI E OF CO V18 CLUTIER	38	40	51	42	50	50	41	47	51	55	54
403	CO H47	5.0 MI SE OF US 34 ALBIA	91	103	115	109	111	102	88	98	89	92	104
405	LOC RD	2.5 MI N OF US 18 NEW HAMPTON	60	57	56	47	55	55	46	48	46	48	51
406	LOC RD	2.0 MI E OF US 169 LORIMOR	68	67	76	71	67	70	57	63	62	57	NONE
407	CO H23	2.0 MI E OF US 169 LORIMOR	62	73	75	81	77	76	68	70	75	66	76

**2012 EXPANSION FACTORS**

**SECONDARY**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.273	1.282	1.082	0.946	0.878	0.903	0.919	0.947	0.916	0.863	0.987	1.154
<b>Sunday</b>	1.352	1.362	1.346	1.323	1.283	1.329	1.271	1.308	1.293	1.313	1.362	1.353
<b>Monday</b>	1.019	1.008	0.975	0.980	1.008	0.975	1.020	0.971	1.076	0.964	0.964	0.970
<b>Tuesday</b>	0.921	1.026	0.958	0.966	0.952	0.954	0.971	0.971	0.950	0.989	0.945	0.933
<b>Wednesday</b>	0.927	0.948	0.938	0.932	0.962	0.927	0.952	0.960	0.924	0.958	0.948	0.907
<b>Thursday</b>	0.952	0.906	0.935	0.934	0.980	0.937	0.934	0.948	0.936	0.955	0.980	0.959
<b>Friday</b>	0.903	0.853	0.906	0.929	0.916	0.925	0.920	0.896	0.888	0.922	0.888	0.941
<b>Saturday</b>	1.079	1.071	1.087	1.089	1.025	1.107	1.041	1.085	1.096	1.049	1.067	1.096

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2002 TO 2012  
MUNICIPAL STREETS**

STATION	ROUTE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
900	LAKE ST	N OF 3RD ST in STORM LAKE	3266	3128	3046	2911	2818	2872	2756	2848	2811	NONE	2610
901	2ND AVE N	E OF 15TH ST in FORT DODGE	6681	6471	6795	6780	6695	6760	6775	6665	6728	6620	6444
902	LOCUST ST	E OF SPRING ST in DAVENPORT	23162	22986	22382	22369	21934	21750	21300	20726	20521	NONE	NONE
903	JEFFERSON	NE OF E 5TH ST in OTTUMWA	6935	6862	6901	6549	6627	6456	6272	6006	5694	NONE	5699
904	JOHNSON	W OF JANICE DR in CEDAR RAPIDS	9499	10202	10381	10360	10086	9947	10000	9818	9613	9391	9258
905	N'WESTERN	N OF 20TH ST in AMES	2791	2797	2652	2460	2348	2304	2202	2264	NONE	2193	NONE
906	DUBUQUE	S OF DAVENPORT ST in IOWA CITY	16201	15593	15615	15177	15448	15230	14688	14411	14245	13859	13518
907	COLLEGE	S OF 23RD ST in CEDAR FALLS	9272	9036	8440	7947	7862	7444	NONE	NONE	NONE	7974	NONE
908	LIND'WOOD	S OF 35TH ST in SIOUX CITY	1171	1134	1129	1056	1026	1008	969	977	954	976	960
909	HAMILTON	N OF CLIFTON AVE in SIOUX CITY	15596	15335	14789	14529	14547	14314	13854	14159	14586	14388	14584
910	GRANDVIEW	SE OF PLYMOUTH CT in DUBUQUE	9218	9272	9402	9094	8836	8779	8596	8871	8946	8917	8833
911	HUMBOLDT	S OF 4TH ST in BODE	869	794	773	796	796	786	776	770	767	739	NONE
912	ELM ST	N OF LUCAS ST in CRESTON	4054	4081	4422	4126	3938	3710	3798	3807	3782	3802	3735
** 913	WASHINGTON	E OF HARRISON ST in MOUNT PLEASANT	13998	13942	13728	12834	11283	10632	10540	10161	NONE	NONE	NONE

Note: Station 913 was previously station 801.

Washington Street was US 34 until Nov. 2005 when the US 34 bypass opened.

**2012 EXPANSION FACTORS  
MUNICIPAL STREETS**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.151	1.086	1.022	0.963	0.934	0.957	0.976	0.968	0.977	0.965	1.041	1.091
<b>Sunday</b>	1.390	1.385	1.354	1.346	1.336	1.352	1.295	1.319	1.301	1.325	1.350	1.375
<b>Monday</b>	0.984	0.984	0.971	0.982	1.016	0.969	1.011	0.964	1.054	0.977	0.944	0.969
<b>Tuesday</b>	0.909	0.968	0.947	0.954	0.940	0.944	0.941	0.958	0.940	0.962	0.914	0.955
<b>Wednesday</b>	0.936	0.944	0.928	0.935	0.945	0.934	0.960	0.944	0.931	0.945	0.915	0.904
<b>Thursday</b>	0.927	0.914	0.930	0.926	0.922	0.927	0.929	0.936	0.922	0.941	0.997	0.928
<b>Friday</b>	0.885	0.861	0.888	0.888	0.874	0.886	0.881	0.887	0.863	0.875	0.894	0.884
<b>Saturday</b>	1.162	1.131	1.151	1.121	1.106	1.135	1.111	1.130	1.138	1.118	1.149	1.163



**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2002 TO 2012**

**RECREATIONAL**

**PRIMARY**

STATION	ROUTE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
500	US 71	0.1 MI S OF CO RD B14 FOSTORIA	8174	8358	8497	8263	8343	8346	7877	8067	8213	8250	NONE
501	IA 5	3.8 MI S OF US 34 MORAVIA	3437	3492	3650	3644	3765	3745	3692	3922	3910	3801	3772
503	IA 415	0.5 MI W OF NW POLK CITY RD POLK CITY	4544	4926	5541	5789	5870	5162	5293	6076	NONE	6130	6445

**SECONDARY**

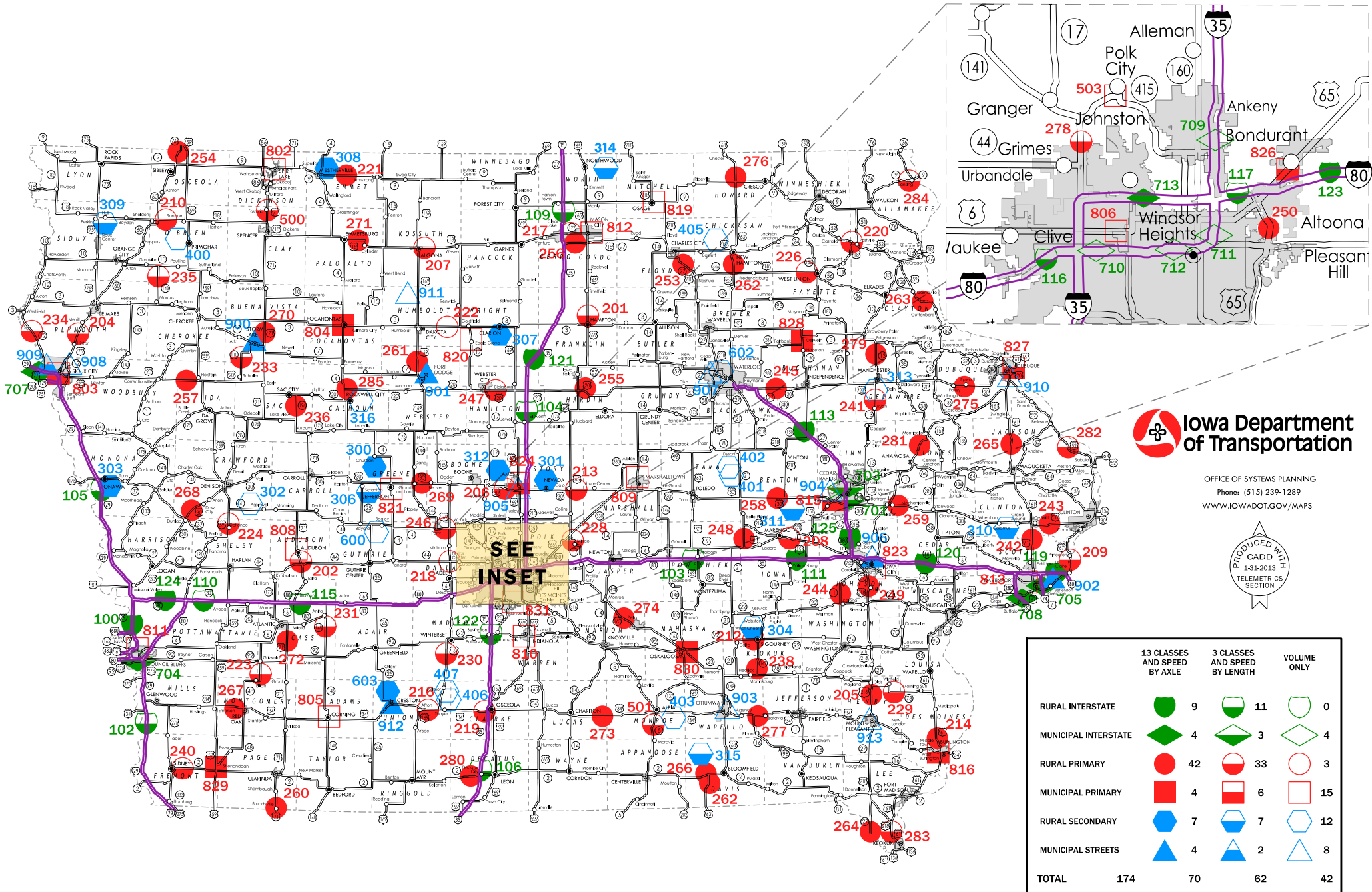
STATION	ROUTE	LOCATION	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
600	CO F25	0.1 MI W OF CO P18 SPRINGBROOK	223	203	210	204	209	226	205	216	207	199	188
602	ENTRANCE	GEORGE WYTH S. P. WATERLOO	994	937	826	822	777	799	643	731	766	759	850
603	ENTRANCE	3.3 MI N OF IA 25 GREEN VALLEY S. P.	301	346	348	339	352	339	273	175	NONE	NONE	262

**2012 EXPANSION FACTORS  
RECREATIONAL**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.602	1.531	1.160	0.995	0.798	0.721	0.738	0.870	0.933	1.035	1.472	1.721
<b>Sunday</b>	1.151	1.207	1.110	1.033	0.979	0.852	0.881	0.899	0.891	0.987	1.178	1.153
<b>Monday</b>	1.065	1.087	1.108	1.119	1.023	1.192	1.174	1.193	1.101	1.119	1.037	0.996
<b>Tuesday</b>	0.962	1.079	1.011	1.060	1.155	1.181	1.280	1.240	1.299	1.080	0.991	0.990
<b>Wednesday</b>	1.020	1.024	1.011	1.026	1.188	1.105	1.160	1.138	1.261	1.137	0.996	0.960
<b>Thursday</b>	1.023	0.960	1.040	1.015	1.108	1.108	1.117	1.082	1.159	1.071	1.000	0.996
<b>Friday</b>	0.947	0.897	0.958	0.959	0.923	0.944	0.876	0.887	0.906	0.885	0.928	0.961
<b>Saturday</b>	0.955	0.948	0.944	0.940	0.840	0.859	0.784	0.824	0.811	0.886	0.949	1.012

# AUTOMATIC TRAFFIC RECORDER LOCATIONS

JANUARY 1, 2013



**Iowa Department of Transportation**

OFFICE OF SYSTEMS PLANNING  
Phone: (515) 239-1289  
WWW.IOWADOT.GOV/MAPS

PRODUCED WITH  
CADD  
1-31-2013  
TELEMETRICS SECTION

	13 CLASSES AND SPEED BY AXLE	3 CLASSES AND SPEED BY LENGTH	VOLUME ONLY
RURAL INTERSTATE	9	11	0
MUNICIPAL INTERSTATE	4	3	4
RURAL PRIMARY	42	33	3
MUNICIPAL PRIMARY	4	6	15
RURAL SECONDARY	7	7	12
MUNICIPAL STREETS	4	2	8
<b>TOTAL</b>	<b>174</b>	<b>70</b>	<b>62</b>