



# **AUTOMATIC TRAFFIC**

# **RECORDERS**

**1996 - 2006**

**Prepared by**

**OFFICE OF TRANSPORTATION DATA**

**In Cooperation With**

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

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**JANUARY 2007**

## TABLE OF CONTENTS

<b>Introduction.....</b>	<b>3</b>
<b>Summary.....</b>	<b>4</b>
<b>Percent of Change in Traffic from 1980 .....</b>	<b>5</b>
<b>Graphs Showing Monthly Comparison</b>	
<b>All Systems.....</b>	<b>6</b>
<b>Rural.....</b>	<b>8</b>
<b>Municipal.....</b>	<b>10</b>
<b>Graphs Showing Daily Comparison</b>	
<b>All Systems.....</b>	<b>7</b>
<b>Rural.....</b>	<b>9</b>
<b>Municipal.....</b>	<b>11</b>
<b>Graphs Showing Hourly Comparison</b>	
<b>Rural Interstate.....</b>	<b>12</b>
<b>Rural Primary .....</b>	<b>13</b>
<b>Rural Secondary.....</b>	<b>14</b>
<b>Municipal Interstate .....</b>	<b>15</b>
<b>Municipal Primary.....</b>	<b>16</b>
<b>Municipal Streets .....</b>	<b>17</b>
<b>Summary of Analysis of Thirtieth Highest Hour.....</b>	<b>18</b>
<b>Annual Average Daily Traffic by Stations     for the Years 1996 to 2006.....</b>	<b>19 - 25</b>
<b>Map of Automatic Traffic Recorder Locations.....</b>	<b>26</b>

## INTRODUCTION

**This report contains graphic comparisons of daily and monthly traffic collected on Iowa's highway system at 133 Permanent Continuous Automatic Traffic Recorder locations. Sixteen (16) stations are located on the Rural Interstate system, four (4) are on the Municipal Interstate system, fifty (50) are on the Rural Primary system, twenty-four (24) are on the Municipal Primary system, twenty-five (25) 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.**

**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 1997 - 2006.**

**Information from the permanent traffic recorders indicates a 1% increase in statewide travel from 2005 to 2006. The estimated vehicle miles of travel for 2006 is 31.74 billion. Final 2006 traffic figures will be published near June 2007, when all traffic data collected during 2006 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

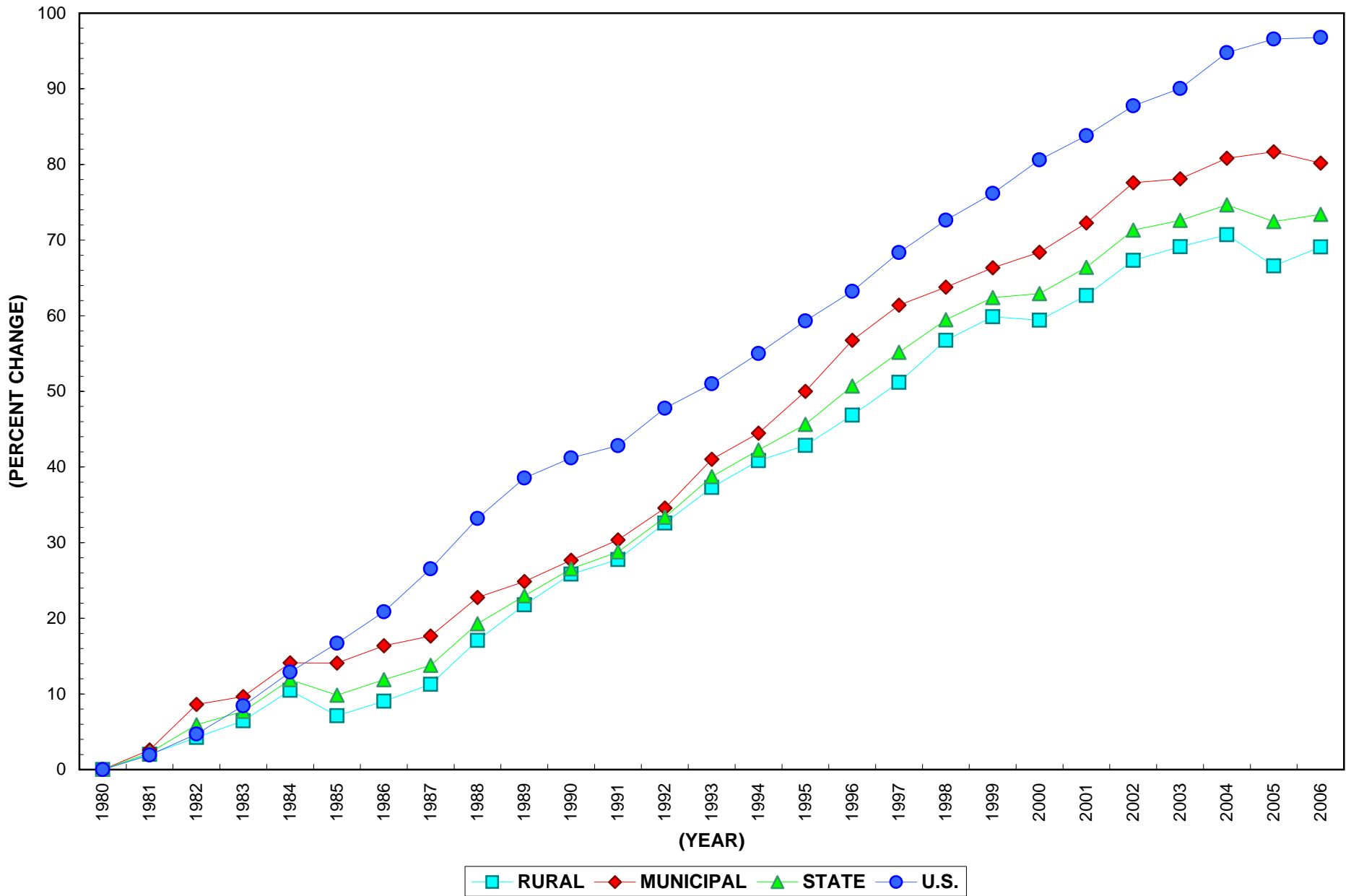
## IOWA ROAD SYSTEMS

	2006 COMPARED TO 2005
RURAL INTERSTATE	+ 2 %
RURAL PRIMARY	No Change
RURAL SECONDARY	+ 3 %
RURAL TOTAL	+ 1 %
MUNICIPAL INTERSTATE	+ 2 %
MUNICIPAL PRIMARY	- 2 %
MUNICIPAL STREETS	- 1 %
MUNICIPAL TOTAL	- 1 %
<b>STATE TOTAL</b>	<b>+ 1 %</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.

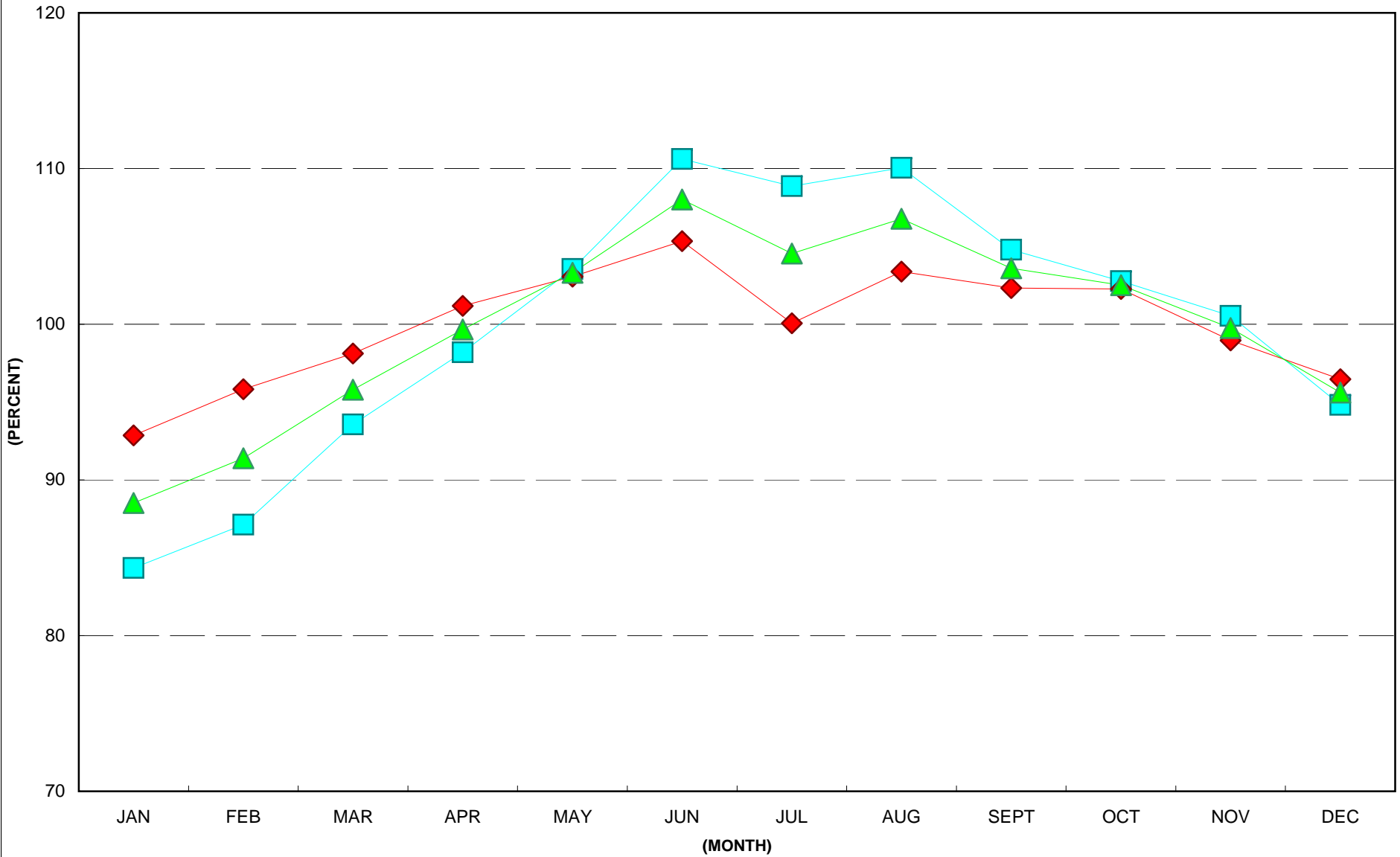
# PERCENT CHANGE IN TRAFFIC

BASE YEAR 1980



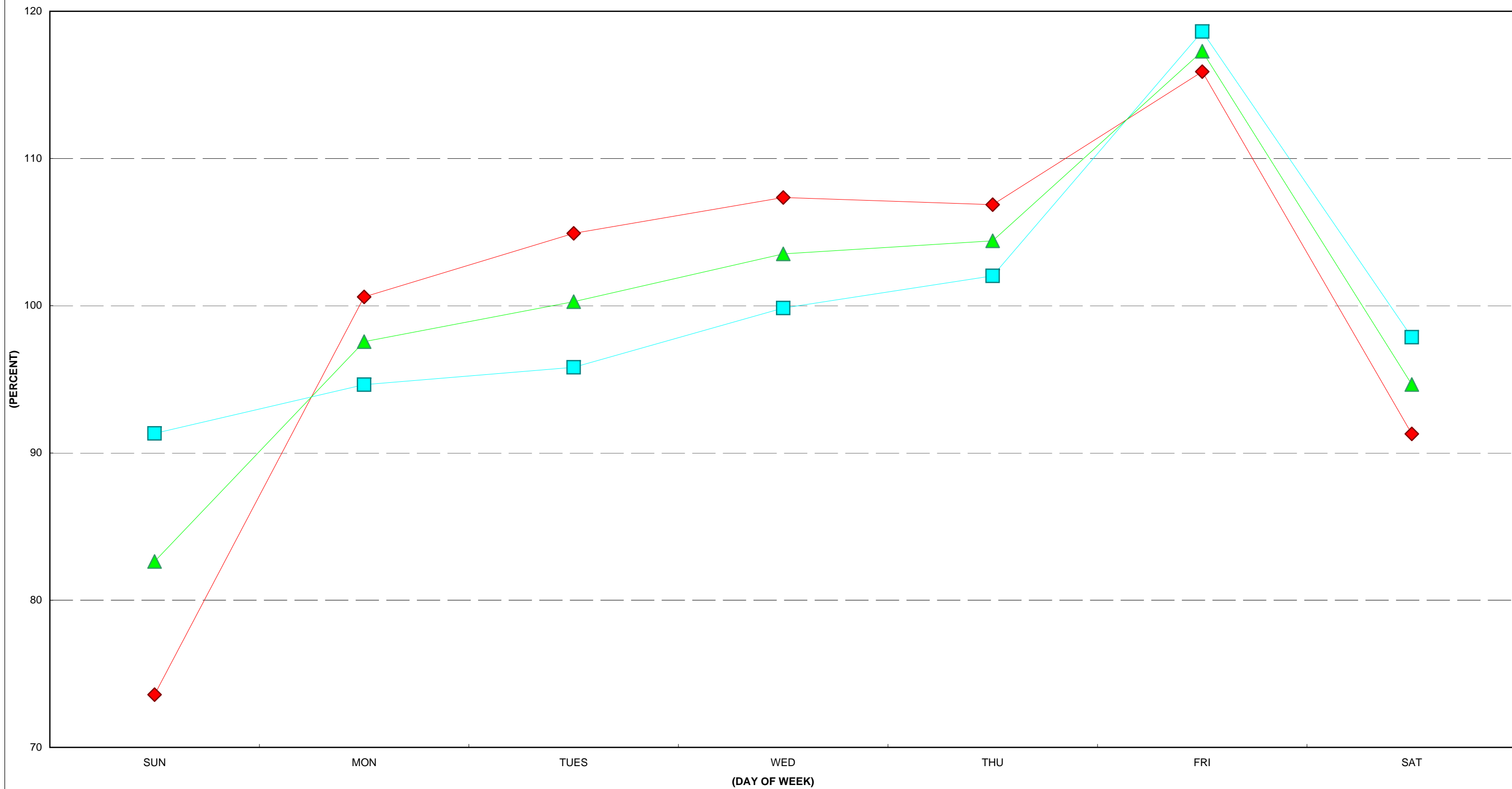
# 2006 MONTHLY TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



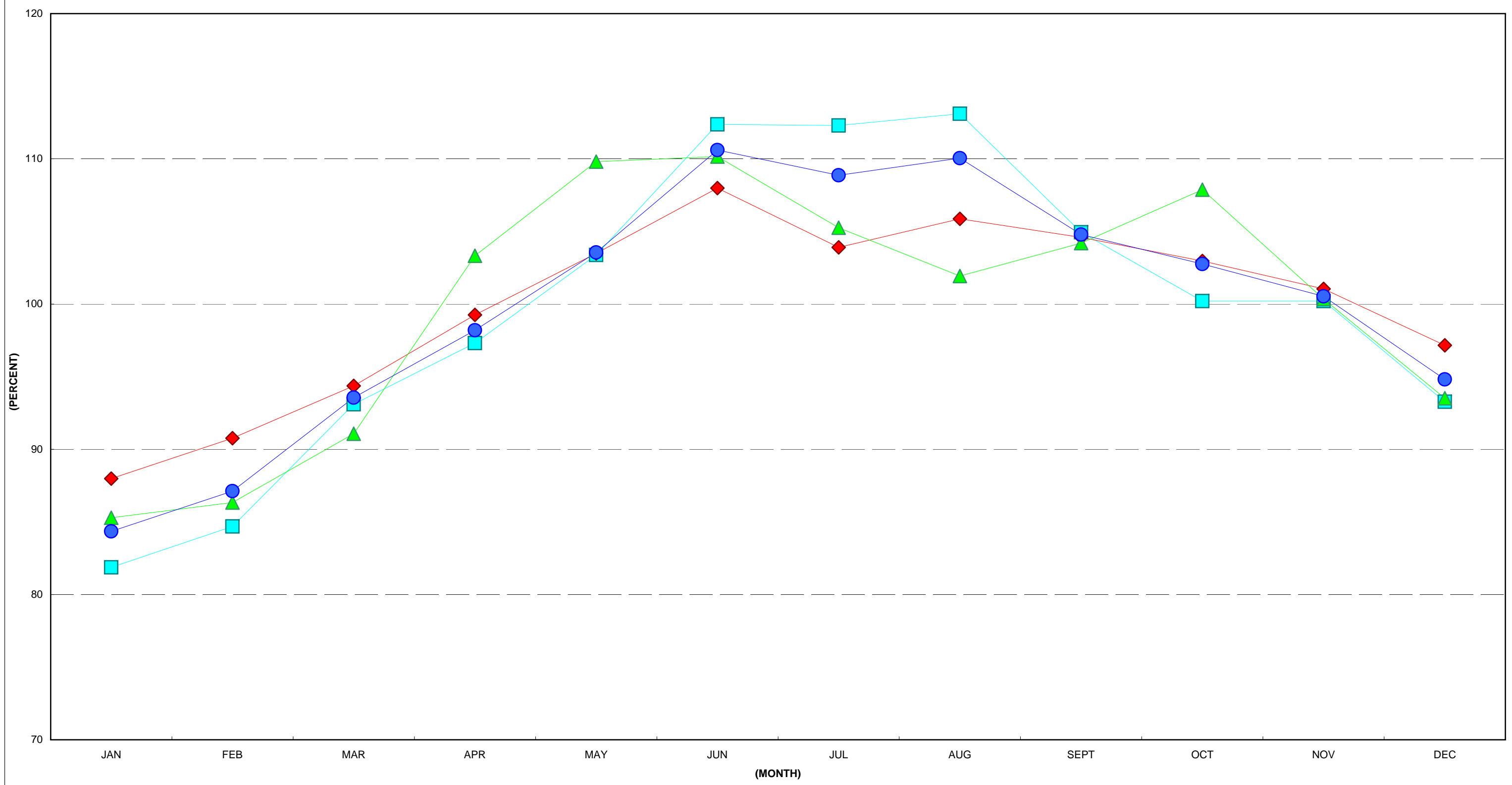
—■— RUR TOTAL      —◆— MUNI TOTAL      —▲— STATE TOTAL

**2006 DAY OF WEEK TRAFFIC**  
AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



—■— RUR TOTAL    —◆— MUNI TOTAL    —▲— STATE TOTAL

**2006 RURAL MONTHLY TRAFFIC**  
AS A % OF ANNUAL AVERAGE DAILY TRAFFIC

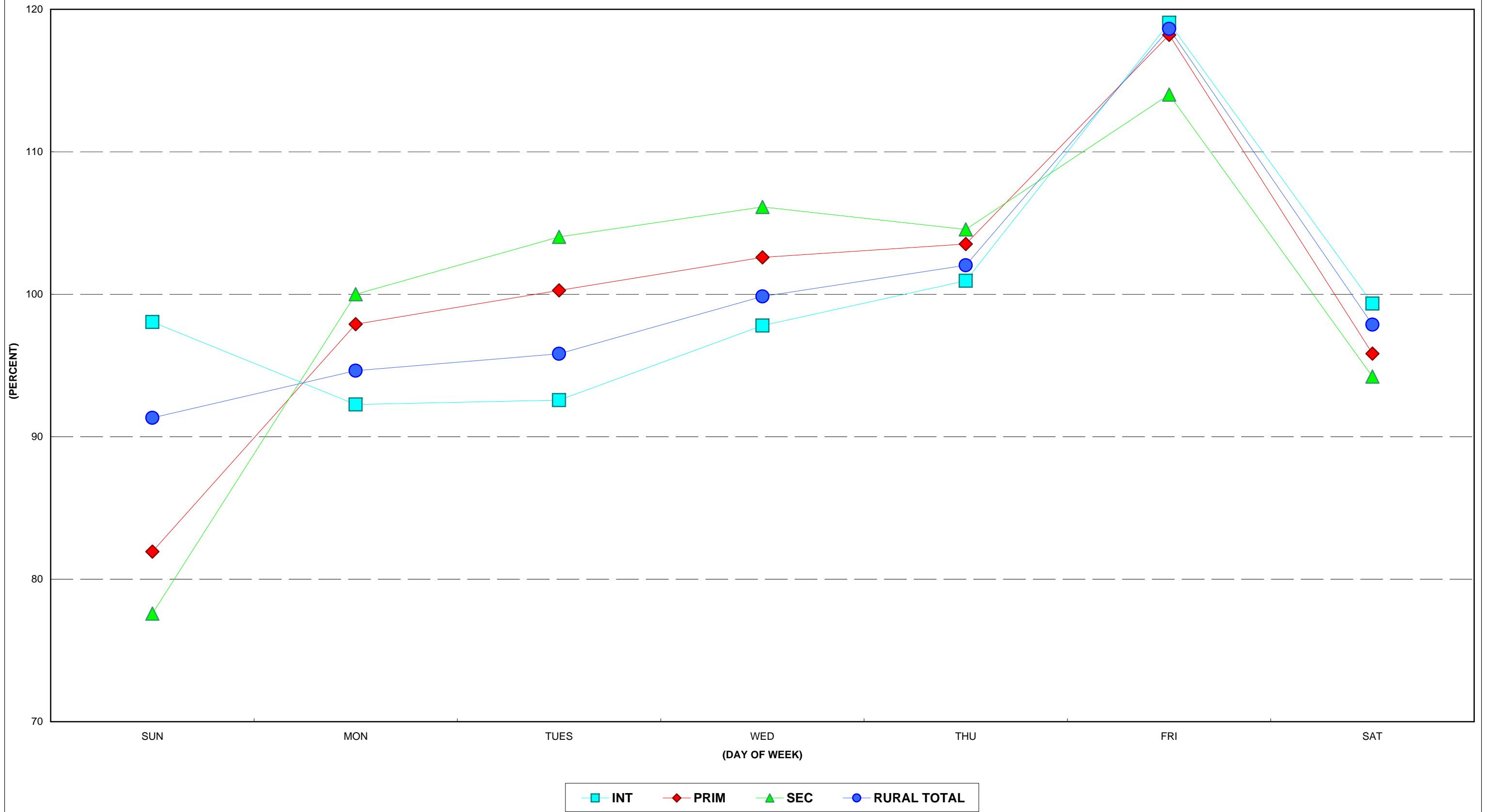


—■— INT    —◆— PRIM    —▲— SEC    —●— RURAL TOTAL



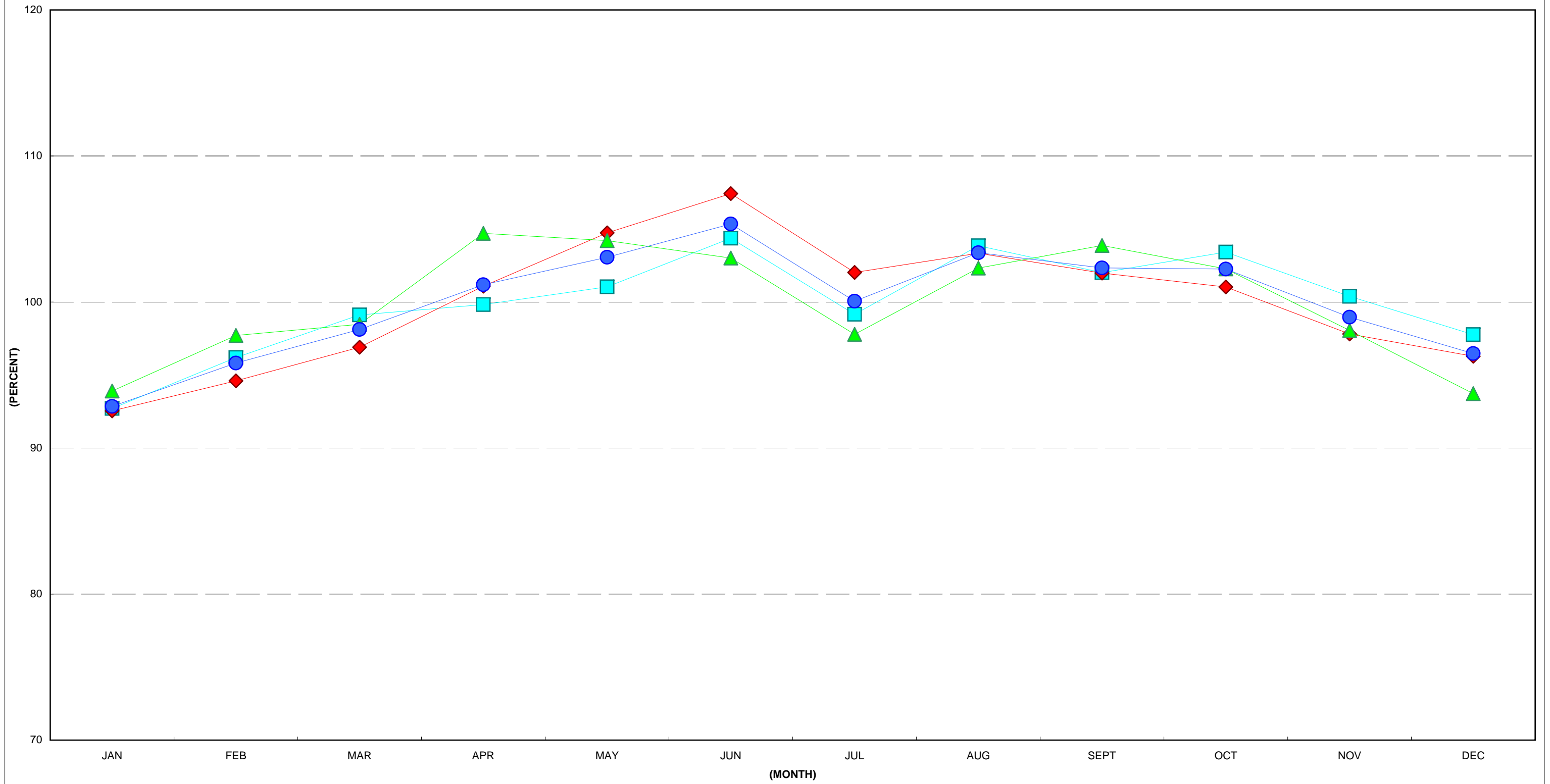
# 2006 RURAL DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



# 2006 MUNICIPAL MONTHLY TRAFFIC

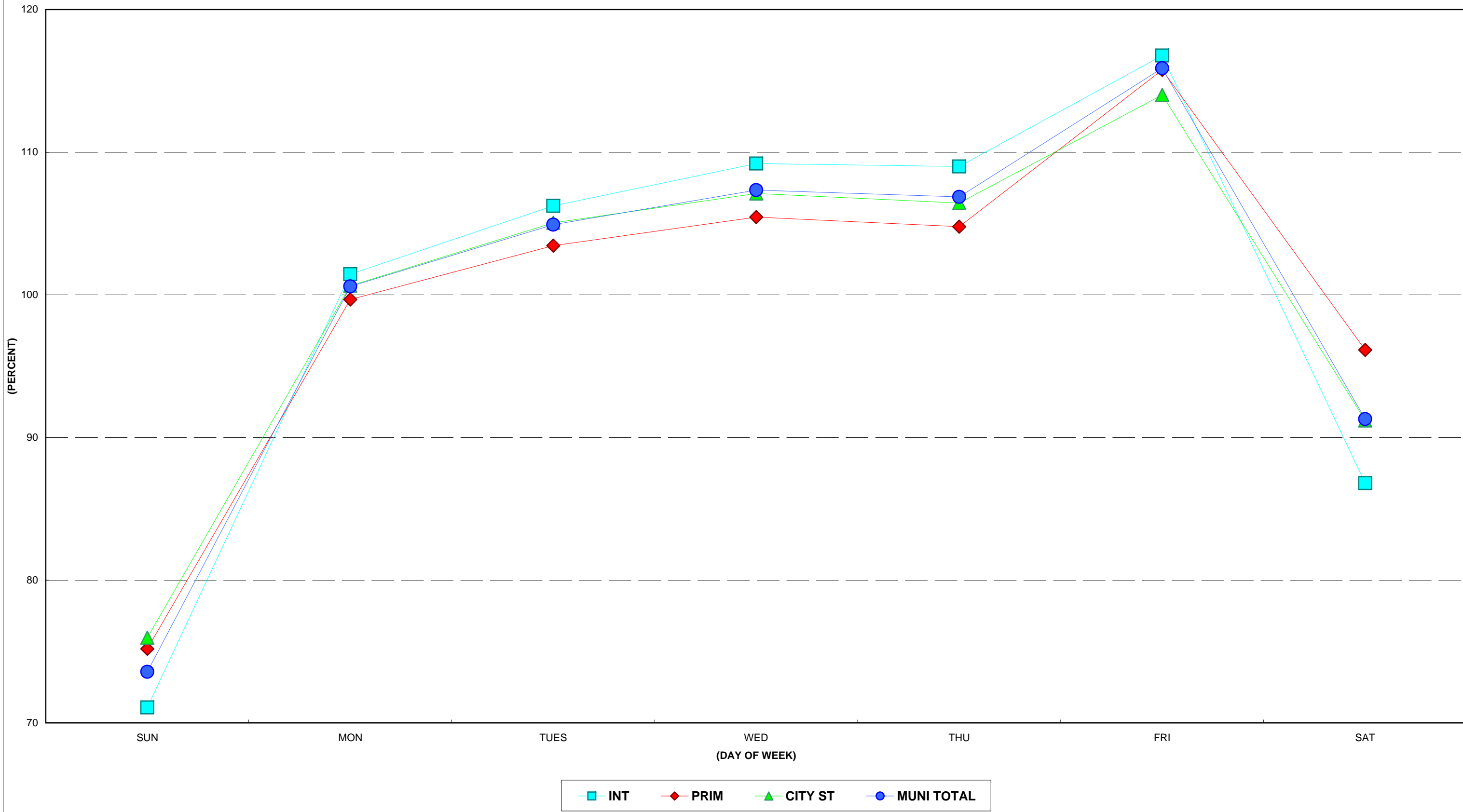
AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



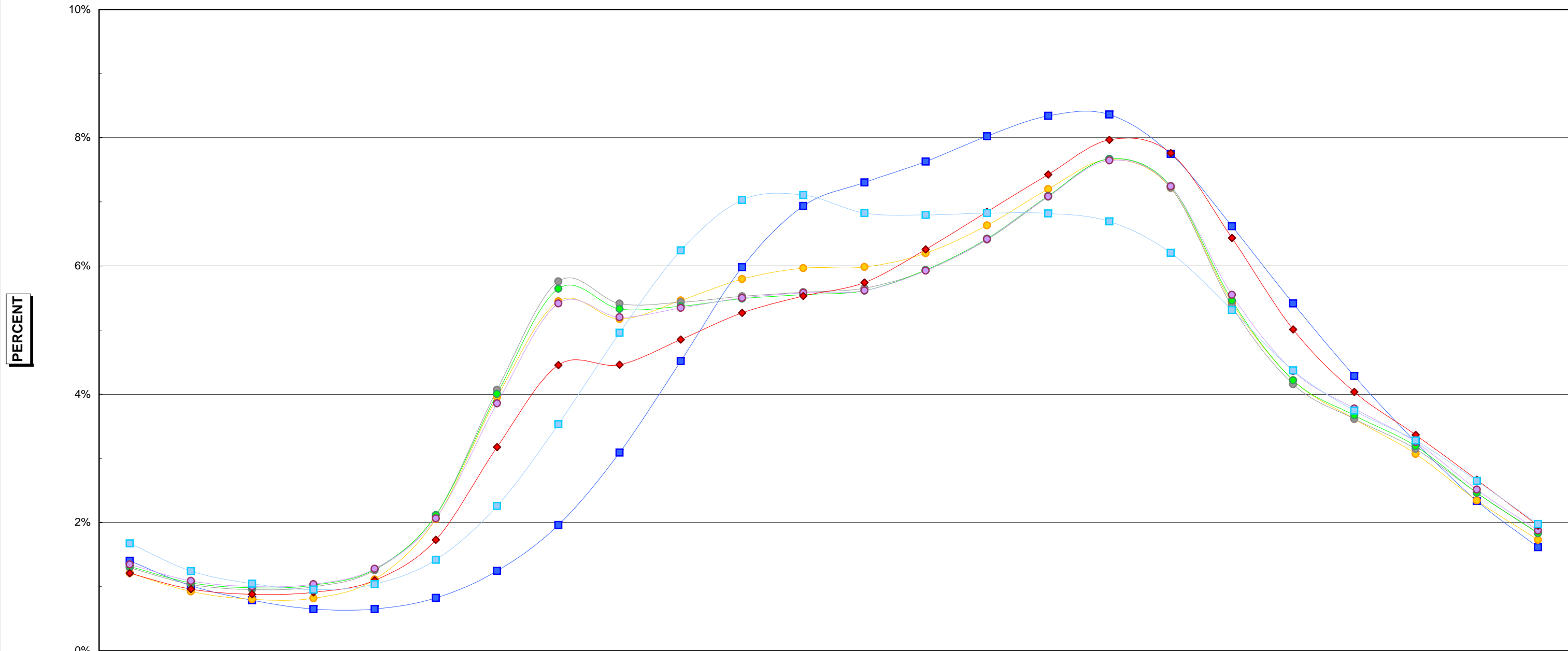
—■— INT    —◆— PRIM    —▲— CITY ST    —●— MUNI TOTAL

# 2006 MUNICIPAL DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



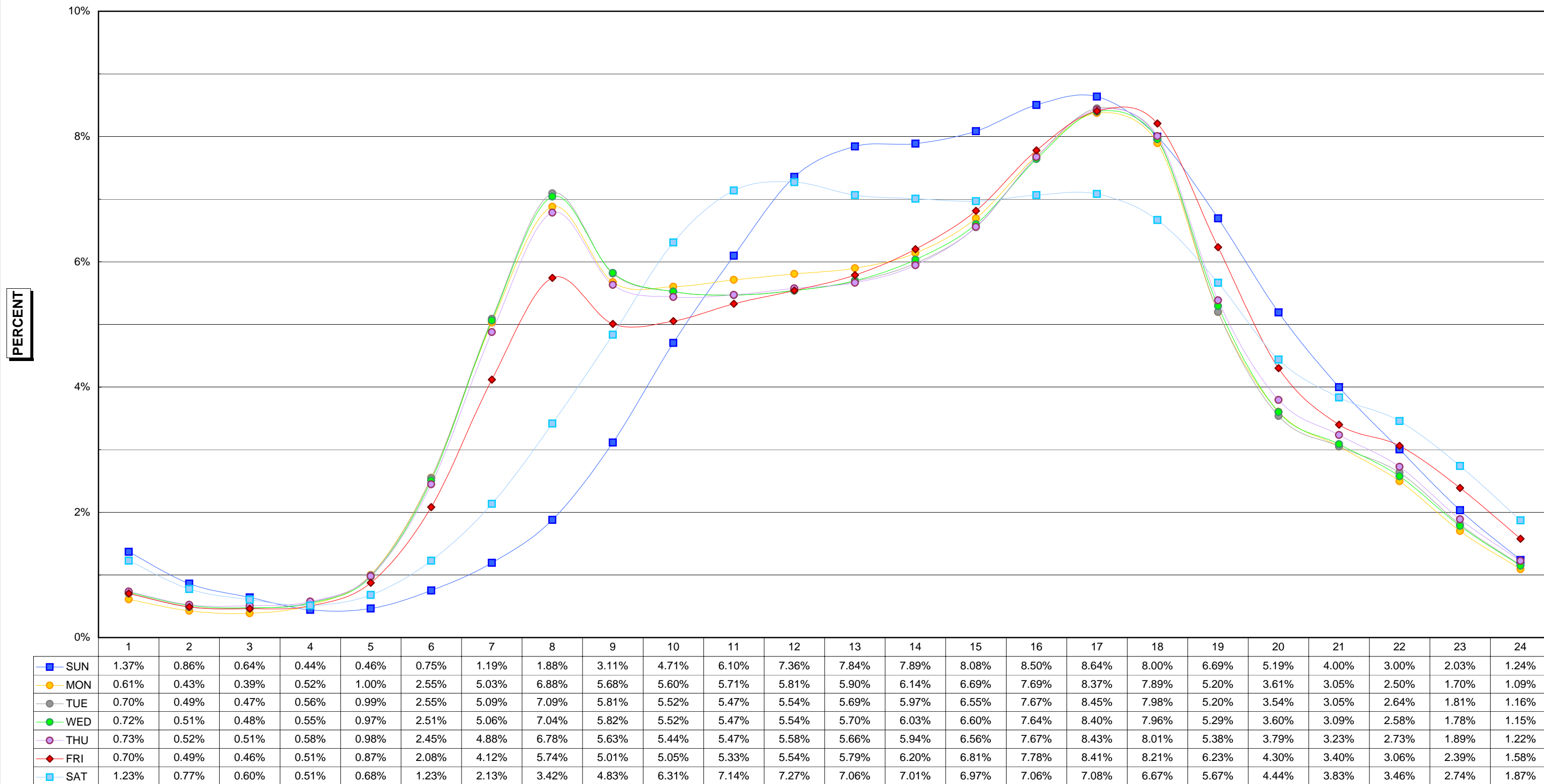
## HOURLY DISTRIBUTION OF DAILY TRAFFIC 2006 RURAL INTERSTATE



	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	1.40%	1.02%	0.79%	0.65%	0.65%	0.83%	1.25%	1.96%	3.09%	4.52%	5.98%	6.93%	7.30%	7.63%	8.02%	8.34%	8.36%	7.75%	6.62%	5.42%	4.28%	3.25%	2.34%	1.61%
—●— MON	1.21%	0.93%	0.80%	0.82%	1.11%	2.05%	3.95%	5.45%	5.17%	5.46%	5.80%	5.97%	5.98%	6.20%	6.63%	7.20%	7.66%	7.22%	5.43%	4.22%	3.61%	3.07%	2.34%	1.73%
—●— TUE	1.29%	1.04%	0.95%	1.00%	1.25%	2.12%	4.07%	5.76%	5.41%	5.44%	5.53%	5.59%	5.65%	5.93%	6.41%	7.08%	7.67%	7.22%	5.37%	4.15%	3.62%	3.15%	2.46%	1.84%
—●— WED	1.32%	1.06%	0.98%	1.02%	1.27%	2.11%	4.01%	5.64%	5.33%	5.37%	5.49%	5.55%	5.62%	5.94%	6.43%	7.09%	7.67%	7.25%	5.46%	4.22%	3.67%	3.19%	2.46%	1.83%
—●— THU	1.35%	1.09%	1.00%	1.04%	1.28%	2.07%	3.86%	5.42%	5.20%	5.35%	5.50%	5.58%	5.62%	5.93%	6.42%	7.09%	7.65%	7.24%	5.55%	4.36%	3.78%	3.26%	2.51%	1.88%
—◆— FRI	1.21%	0.96%	0.88%	0.91%	1.10%	1.73%	3.18%	4.45%	4.46%	4.85%	5.27%	5.53%	5.74%	6.26%	6.84%	7.43%	7.97%	7.76%	6.44%	5.01%	4.04%	3.37%	2.67%	1.95%
—■— SAT	1.67%	1.24%	1.05%	0.95%	1.04%	1.42%	2.26%	3.53%	4.96%	6.24%	7.03%	7.11%	6.82%	6.80%	6.82%	6.82%	6.69%	6.21%	5.31%	4.37%	3.74%	3.28%	2.65%	1.98%

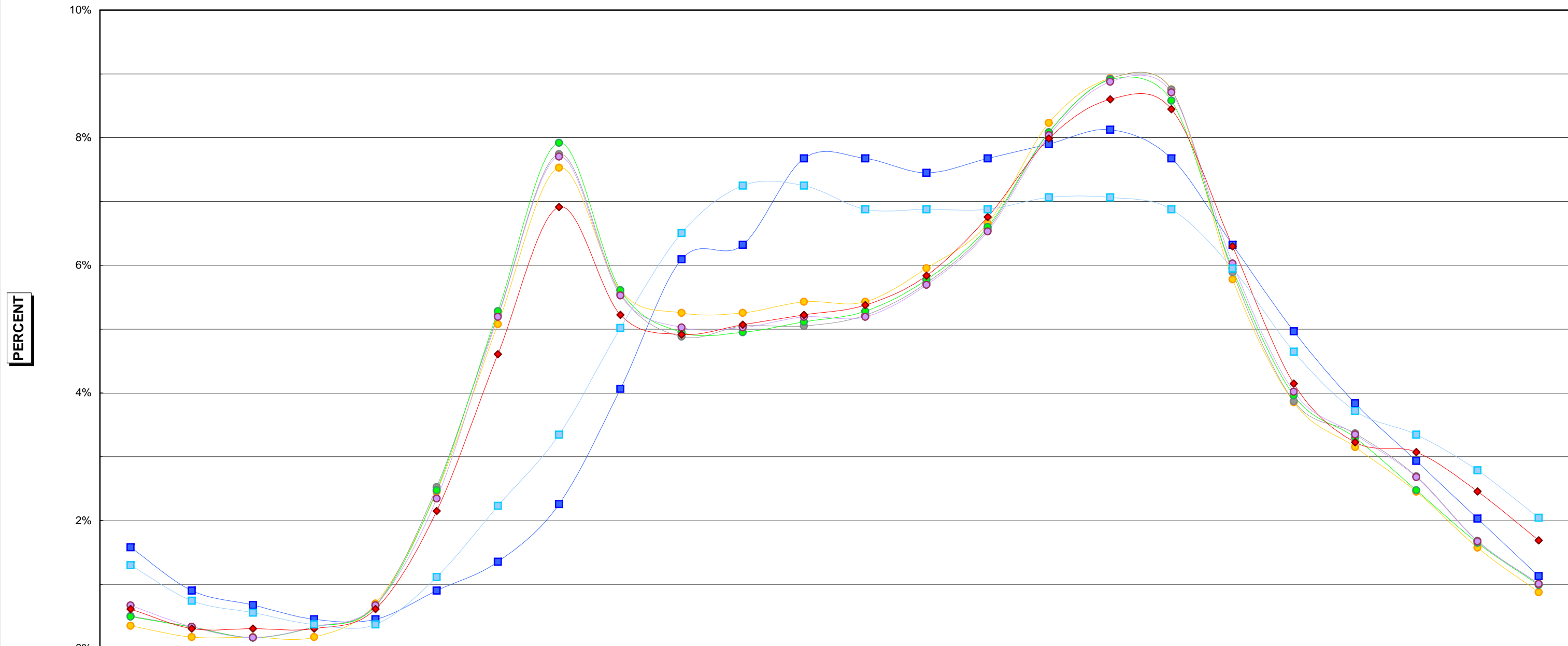
HOUR

## HOURLY DISTRIBUTION OF DAILY TRAFFIC 2006 RURAL PRIMARY



HOUR

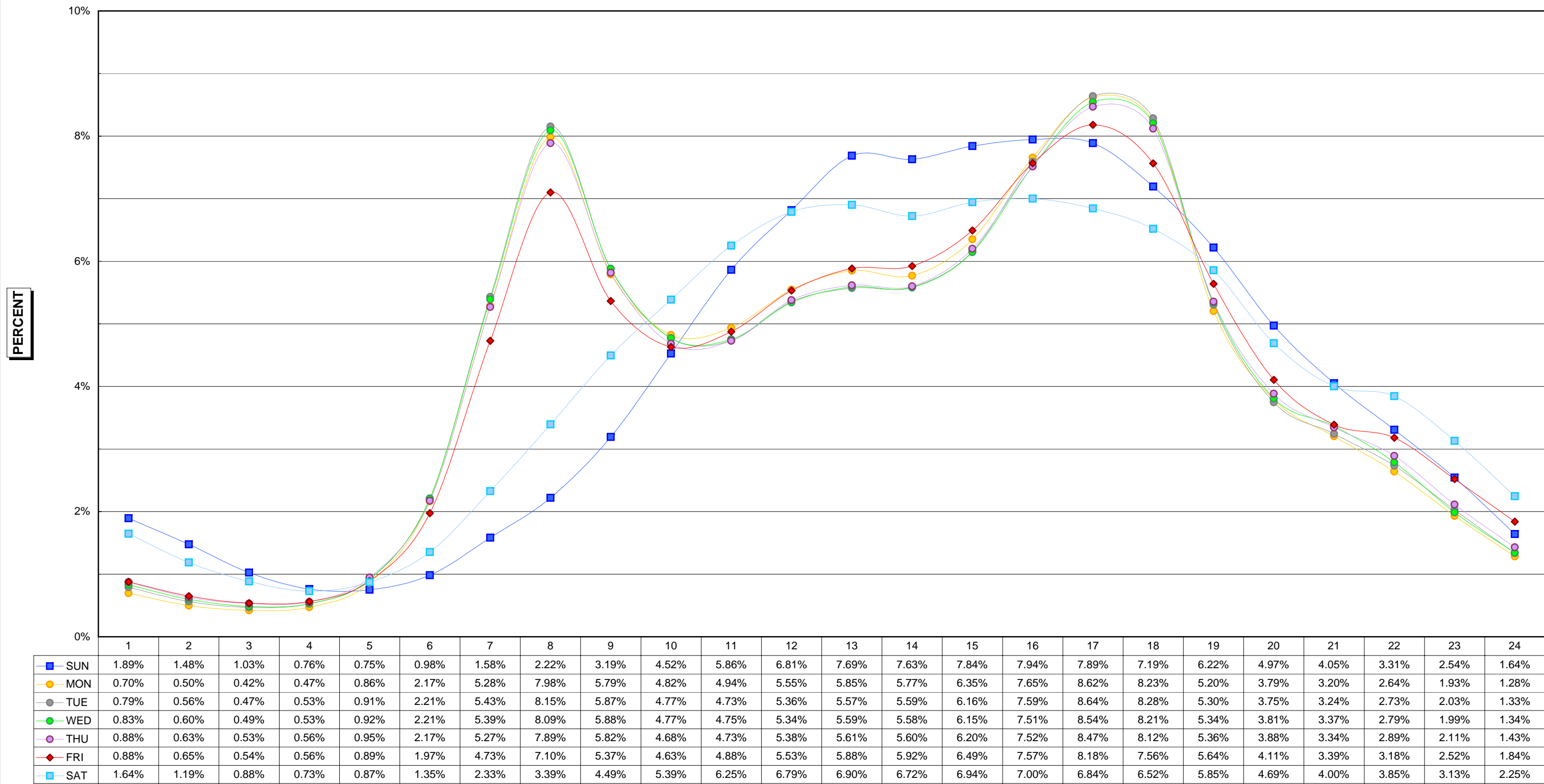
## HOURLY DISTRIBUTION OF DAILY TRAFFIC 2006 RURAL SECONDARY



	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	1.58%	0.90%	0.68%	0.45%	0.45%	0.90%	1.35%	2.26%	4.06%	6.09%	6.32%	7.67%	7.67%	7.45%	7.67%	7.90%	8.13%	7.67%	6.32%	4.97%	3.84%	2.93%	2.03%	1.13%
—●— MON	0.35%	0.18%	0.18%	0.18%	0.70%	2.45%	5.08%	7.53%	5.60%	5.25%	5.25%	5.43%	5.43%	5.95%	6.65%	8.23%	8.93%	8.76%	5.78%	3.85%	3.15%	2.45%	1.58%	0.88%
—●— TUE	0.51%	0.34%	0.17%	0.34%	0.67%	2.53%	5.22%	7.74%	5.56%	4.88%	5.05%	5.05%	5.22%	5.72%	6.57%	8.08%	8.92%	8.75%	5.89%	3.87%	3.37%	2.69%	1.68%	1.01%
—●— WED	0.50%	0.33%	0.17%	0.33%	0.66%	2.48%	5.28%	7.92%	5.61%	4.95%	4.95%	5.12%	5.28%	5.78%	6.60%	8.09%	8.91%	8.58%	5.94%	3.96%	3.30%	2.48%	1.65%	0.99%
—●— THU	0.67%	0.34%	0.17%	0.34%	0.67%	2.35%	5.19%	7.71%	5.53%	5.03%	5.03%	5.19%	5.19%	5.70%	6.53%	8.04%	8.88%	8.71%	6.03%	4.02%	3.35%	2.68%	1.68%	1.01%
—◆— FRI	0.61%	0.31%	0.31%	0.31%	0.61%	2.15%	4.61%	6.91%	5.22%	4.92%	5.07%	5.22%	5.38%	5.84%	6.76%	7.99%	8.60%	8.45%	6.30%	4.15%	3.23%	3.07%	2.46%	1.69%
—■— SAT	1.30%	0.74%	0.56%	0.37%	0.37%	1.12%	2.23%	3.35%	5.02%	6.51%	7.25%	7.25%	6.88%	6.88%	6.88%	7.06%	7.06%	6.88%	5.95%	4.65%	3.72%	3.35%	2.79%	2.04%

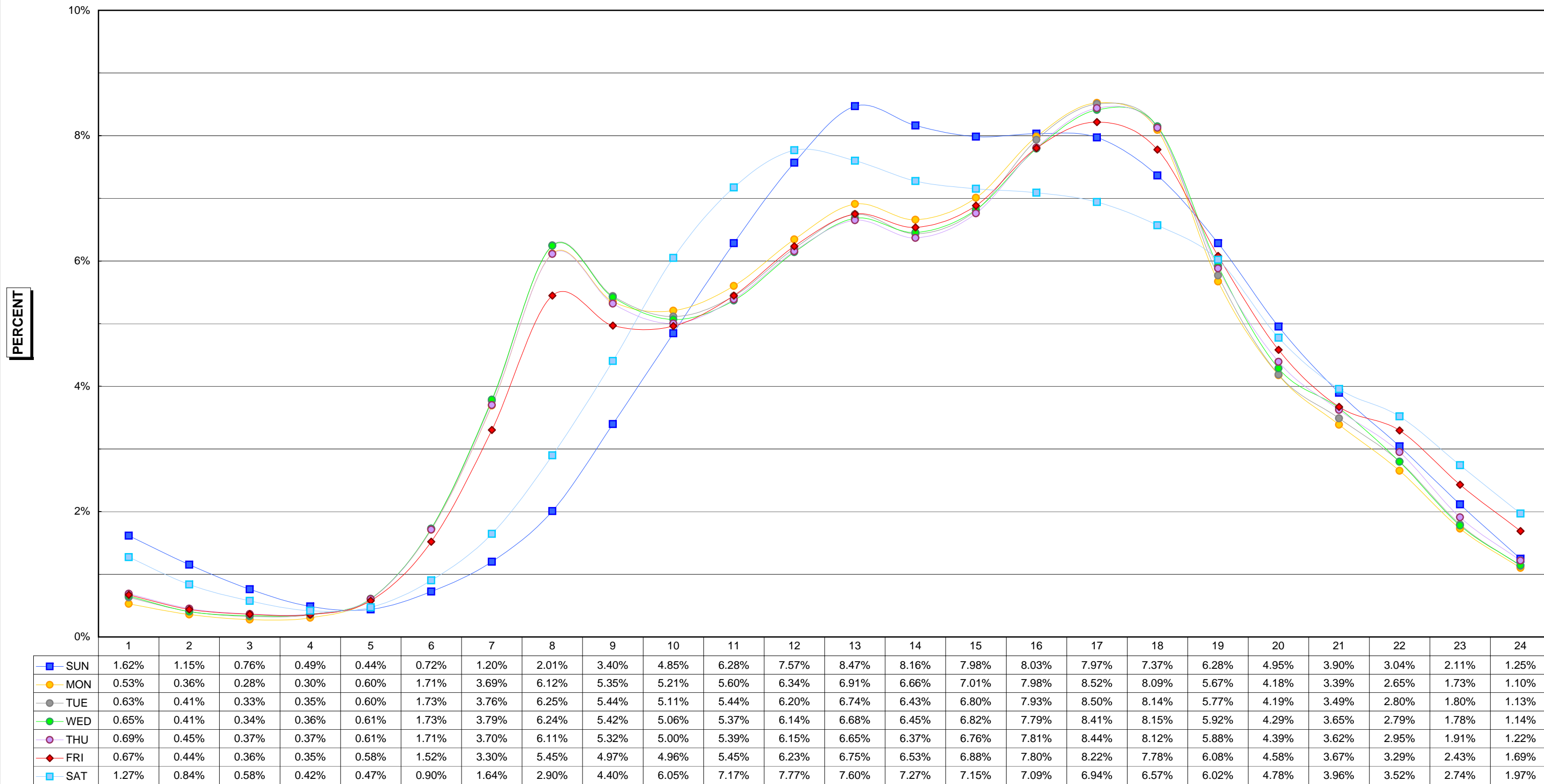
HOUR

## HOURLY DISTRIBUTION OF DAILY TRAFFIC 2006 MUNICIPAL INTERSTATE



HOUR

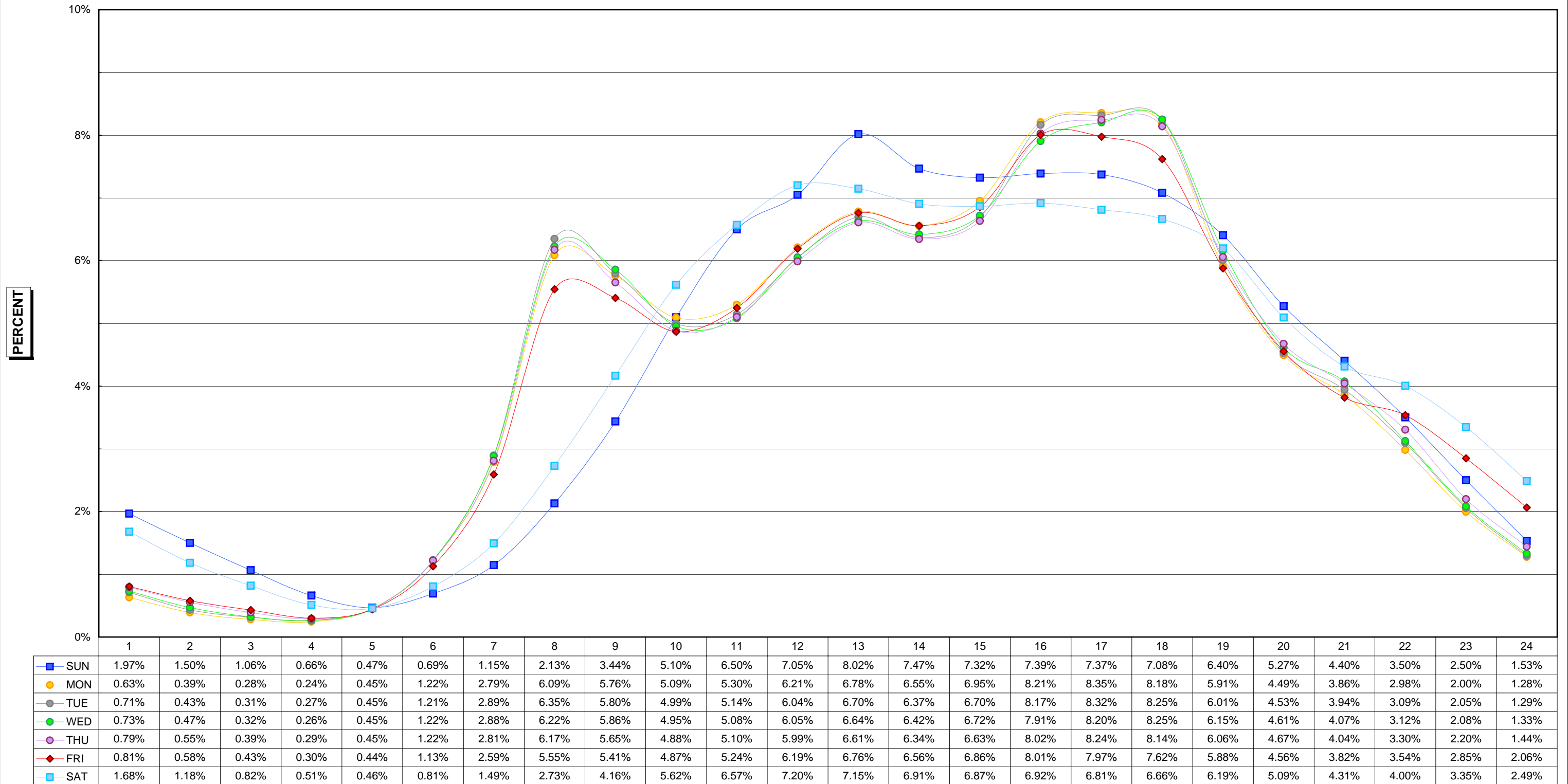
## HOURLY DISTRIBUTION OF DAILY TRAFFIC 2006 MUNICIPAL PRIMARY



HOUR



## HOURLY DISTRIBUTION OF DAILY TRAFFIC 2006 MUNICIPAL STREETS



HOUR

## SUMMARY OF ANALYSIS

### Analysis of the Thirtieth Highest Hour at the Permanent Continuous Automatic Traffic Recorder Stations 1997 - 2006

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, 1997 through 2006.

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	10.31	10.55	385.07	9.63	5.47	11.97	-	-
Municipal	66.12	9.74	268.01	9.73	-	-	65.17	9.76

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 1996 TO 2006  
RURAL INTERSTATE**

STATION	ROUTE	LOCATION	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
100	I 29	3.0 MI N OF S JCT I 680 HONEY CREEK	19092	19300	19983	20419	20202	20192	21070	20906	21319	20959	21484
102	I 29	4.0 MI S OF US 34 PACIFIC JCT	10232	9708	10487	11247	11221	11402	11917	12010	12101	12151	12495
103	I 80	5.0 MI E OF IA 146 GRINNELL	22751	23892	25114	26366	26178	26249	27346	26917	26726	26325	26940
104	I 35	3.0 MI N OF IA 175 JEWELL	15811	16345	17177	17411	17547	17848	18596	18996	20269	20200	20629
105	I 29	3.8 MI S OF IA 175 ONAWA	10361	10011	10316	11200	11016	11092	11346	12031	12171	12015	12283
106	I 35	1.5 MI N OF IA 2 LEON	10683	11076	11907	12271	12486	12659	13234	13265	13233	12982	13290
109	I 35	3.0 MI N OF CO B20 HANLONTOWN	13550	13664	14534	14965	15221	15880	16575	17046	17556	17373	18466
110	I 80	1.5 MI W OF CO M16 SHELBY	19163	19791	20777	21572	21441	21468	22379	22254	22496	22208	22670
111	I 80	2.0 MI E OF IA 149 WILLIAMSBURG	25570	26002	28844	29838	29808	29952	31092	31021	31258	30939	31347
113	I 380	3.75 MI NW OF IA 150 BRANDON	10462	10914	11465	11854	12029	12224	12934	13422	14156	14308	14695
115	I 80	2.0 MI E OF US 71 ATLANTIC	16593	17001	17722	18365	18339	18377	19018	19013	19324	19282	19480
116	I 80	0.8 MI W OF 74TH ST WAUKEE	28581	28235	31267	31937	34507	32492	34059	33413	33870	33880	35190
117	I 80	1.75 MI E OF E JCT I 35/80/235 ALTOONA	52053	52840	58151	60719	60851	62242	65755	66846	69050	70547	70362
119	I 80	1.5 MI E OF MIDDLE RD LECLAIRE						25685	28206	29720	29201	28264	28926
120	I 80	2.5 MI E OF CO RD X40 TIPTON				29391	29329	30323	31234	31513	32318	32239	32583
121	I 35	2.0 MI N OF CO RD R75 DOWS										13800	14112

**2006 EXPANSION FACTORS  
RURAL INTERSTATE**

	MON - THU	MON	TUE	WED	THU	FRI	SAT	SUN
1.195	Jan	1.247	1.216	1.176	1.145	1.039	1.221	1.308
1.182	Feb	1.201	1.180	1.141	1.212	0.965	1.203	1.246
1.107	Mar	1.213	1.169	1.060	1.039	0.869	1.057	1.119
1.043	Apr	1.061	1.093	1.049	0.978	0.844	1.065	1.025
1.019	May	1.066	1.066	1.009	0.949	0.809	0.960	0.954
0.920	Jun	0.951	0.968	0.919	0.866	0.734	0.923	0.875
0.920	Jul	0.941	0.961	0.916	0.861	0.741	0.874	0.859
0.903	Aug	0.938	0.932	0.897	0.854	0.745	0.861	0.838
1.011	Sep	1.058	1.043	1.004	0.949	0.793	0.959	0.950
1.022	Oct	1.052	1.070	1.013	0.948	0.790	0.976	0.912
1.044	Nov	1.112	1.033	1.046	0.992	0.845	1.003	1.065
1.107	Dec	1.185	1.113	1.089	1.051	0.966	1.114	1.210

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 1996 TO 2006  
MUNICIPAL INTERSTATE**

STATION	ROUTE	LOCATION	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
701	I 380	BTWN WILSON AND 33RD CEDAR RAPIDS	53950	55762	58581	60722	60803	61973	63391	63338	64289	64150	64968
703	I 380	AT J AVE S OF COLDSTREAM CEDAR RAPIDS	73819	75550	77246	78696	78969	79802	81023	81222	82356	81384	82503
704	I 29/80	0.6 MI W OF IA 192 COUNCIL BLUFFS	58802	59356	65887	68638	69496	70860	76024	74081	75623	77569	79350
705	I 74	0.6 MI S OF US 6 BETTENDORF	39192	38593	39730	41466	43683	47438	48380	48022	47671	48031	49099

**2006 EXPANSION FACTORS  
MUNICIPAL INTERSTATE**

MON - THU		MON	TUE	WED	THU	FRI	SAT	SUN
0.956	Jan	0.991	0.956	0.938	0.936	0.900	1.191	1.498
0.954	Feb	0.963	0.928	0.928	1.005	0.867	1.164	1.477
0.942	Mar	0.997	0.956	0.917	0.920	0.843	1.110	1.473
0.900	Apr	0.919	0.910	0.892	0.882	0.838	1.130	1.401
0.909	May	0.941	0.918	0.898	0.889	0.837	1.115	1.326
0.887	Jun	0.914	0.901	0.883	0.859	0.822	1.133	1.295
0.895	Jul	0.918	0.906	0.883	0.868	0.828	1.143	1.331
0.894	Aug	0.917	0.897	0.889	0.878	0.829	1.113	1.317
0.892	Sep	0.919	0.903	0.880	0.867	0.812	1.110	1.343
0.894	Oct	0.917	0.905	0.884	0.868	0.806	1.106	1.295
0.900	Nov	0.924	0.895	0.900	0.884	0.827	1.099	1.378
0.899	Dec	0.928	0.901	0.888	0.880	0.850	1.111	1.373

## ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 1996 TO 2006 RURAL PRIMARY

STATION	ROUTE	LOCATION	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
201	US 65	2.7 MI N OF IA 3 HAMPTON	3350	3535	3492	3152	2958	2869	3005	2981	2959	2886	2831
202	US 71	2.0 MI N OF IA 44 HAMLIN	3363	3480	3295	3082	3238	3162	3458	3416	3544	3504	3450
204	US 75	1.3 MI N OF CO C60 HINTON	9888	9812	9565	9934	9960	10003	11049	11440	11718	12095	12296
205	US 218	2.7 MI S OF IA 78 SWEDESBURG	6380	6615	7290	8018	8144	8930	9346	9671	10174	10375	10831
206	US 30	AT BOONE/STORY CO LINE NAPIER	8210	8843	9748	10479	10431	10920	11746	12011	12366	12760	12793
207	US 18	2.2 MI E OF US 169 ALGONA	2937	3118	3177	3186	3158	3220	3363	3353	3381	3332	3306
208	US 6	3.0 MI E OF CO V66 MARENGO	3183	3297	3439	3511	3386	3404	3511	3437	3466	3344	3256
209	US 67	1.5 MI S OF CO F45 PRINCETON	3903	4044	4532	4690	4575	4436	4380	4305	4433	4471	4424
210	US 18	4.2 MI E OF IA 60 SHELTON	3513	3679	3777	3800	3702	3736	3771	3776	3939	4066	4061
211	US 20	2.8 MI E OF CO N57 ROCKWELL CITY	2735	2783	2951	2888	2845	2862	2929	2984	3152	3099	3138
212	IA 92	0.6 MI W OF CO V45 SIGOURNEY	2840	3007	3053	2954	2832	2849	2868	2821	2792	2753	2731
213	US 30	1.8 MI E OF US 65 COLO	4894	5173	5303	5666	5753	5765	5988	5431	5332	5074	5105
214	US 61	3.8 MI N OF US 34 BURLINGTON	7222	7167	7574	7532	7275	7101	7234	7200	7183	7097	7050
216	US 34/169	2.5 MI E OF W JCT US 169 AFTON	3178	3364	3520	3491	3647	3651	3690	3913	3835	3654	3696
217	US 18	2.5 MI E OF I 35 CLEAR LAKE	14886	15646	15833	15625	13978	14089	14615	14916	14876	15140	14373
218	IA 44	0.2 MI W OF US 169 ADEL	3291	3227	3239	3382	3478	3466	3528	3645	3707	3646	3645
219	US 34	1.0 MI W OF I 35 OSCEOLA	4235	4414	4527	4612	4675	4618	4650	4742	4762	4724	4724
220	US 52	1.0 MI NW OF US 18 POSTVILLE	1686	1682	1744	1762	1656	1698	1793	1746	1746	1757	1715
221	IA 9	2.5 MI W OF CO N52 ARMSTRONG	1751	1805	1829	1788	1780	1750	1760	1748	1768	1703	1678
222	IA 3	0.1 MI W OF CO P66 HUMBOLDT	2376	2390	2578	2569	2483	2443	2323	2235	2183	1989	1956
223	IA 48	4.0 MI S OF IA 92 GRISWOLD	1292	1285	1427	1402	1366	1306	1309	1297	1209	1238	1248
224	US 59	0.5 MI S OF CO F16 DEFIANCE	2366	2477	2664	2676	2552	2572	2577	2557	2635	2644	2613
226	US 18	3.8 MI N OF CO W14 WEST UNION	2439	2428	2479	2525	2539	2380	2385	2431	2358	2292	2357
228	IA 117	2.5 MI S OF US 65 MINGO	864	908	915	987	958	965	1189	946	948	967	993
229	IA 78	1.2 MI W OF CO X23 WINFIELD	799	823	885	879	813	829	798	775	733	757	785
230	US 169	3.5 MI S OF S JCT IA 92 WINTERSET	1855	1831	1919	1985	2032	1858	1770	1837	1795	1701	1726
231	IA 148	9.3 MI N OF IA 92 ANITA	703	717	758	780	812	769	761	756	776	756	782
233	IA 110	1.5 MI S OF CO C65 SCHALLER	1380	1356	1378	1321	1284	1299	1299	1301	1337	1318	1260
234	IA 12	2.5 MI N OF CO K18 AKRON	1618	1605	1577	1596	1637	1589	1555	1548	1469	1465	1435
235	IA 143	3.4 MI S OF IA 10 MARCUS	754	749	880	866	821	831	825	800	795	826	825
236	IA 196	3.0 MI S OF US 20 SAC CITY	1078	1140	1117	1139	1079	1106	1109	1082	1094	1037	1060
238	IA 149	2.1 MI N OF IA 78 MARTINSBURG	999	995	998	1013	1014	1096	1153	1175	1216	1158	1153
240	IA 2	3.0 MI E OF US 275 SIDNEY	1900	1864	1935	1969	1840	1841	1882	1887	1936	1857	1879
241	IA 13	5.0 MI S OF US 20 RYAN	4259	4520	4793	5051	5058	5118	5048	4979	4694	4408	4460
242	US 61	3.8 MI N OF CO F41 ELDRIDGE	12668	13008	13960	14614	14483	15108	15911	16104	16459	16082	16108
243	US 30	0.3 MI E OF CO Z24 DEWITT	7959	8428	8528	8387	8477	8723	9222	9295	9413	9488	9124
244	IA 1	0.8 MI S OF CO F67 KALONA	6047	5925	5932	6293	5798	5804	5948	5950	5969	5956	5858
245	US 20	1.5 MI E OF CO V62 JESUP	7777	8231	8686	9105	9115	9185	9538	10032	10392	10194	10345
246	IA 141	1.0 MI E OF WILLIS AVE PERRY	8496	9058	9473	9701	9598	9630	9805	9785	9940	9806	9676
247	US 20	3.0 MI E OF E JCT IA 17 WEBSTER CITY	5650	6000	6415	6537	6560	6685	6848	6995	7827	7958	7888
248	IA 21	2.8 MI N OF US 6 BELLE PLAINE				1303	1248	1260	1297	1283	1318	1270	1246
249	US 218	0.5 MI N OF HILLS INTERCHANGE HILLS						15447	16116	16404	16852	16973	18313
250	US 65	1.5 MI N OF IA 163 PLEASANT HILL				15690	16724	18451	20559	22221	23923	25288	25274
252	US 18/63	0.5 MI S OF CO B54 NEW HAMPTON										4803	4780
253	US 218	3.5 MI S OF CO RD T64 CHARLES CITY										8316	8486
254	IA 60	4.1 MI N OF IA 9 SIBLEY										3013	3078
255	US 20	1.0 MI E OF US 65 IOWA FALLS										7531	7926
256	US 18	3.3 MI E OF I 35 MASON CITY										7066	7290

Note: Stations 500 & 501 are used in the calculation of the Rural Primary Factors and the Recreational Factors.

### 2006 EXPANSION FACTORS RURAL PRIMARY

MON - THU		MON	TUE	WED	THU	FRI	SAT	SUN
1.056	Jan	1.091	1.063	1.044	1.027	0.956	1.149	1.474
1.058	Feb	1.053	1.021	1.027	1.143	0.930	1.132	1.446
1.042	Mar	1.092	1.069	1.008	1.019	0.888	1.083	1.417
0.962	Apr	0.976	0.978	0.963	0.934	0.854	1.063	1.278
0.959	May	0.994	0.973	0.950	0.927	0.823	0.975	1.137
0.908	Jun	0.931	0.924	0.906	0.882	0.791	0.996	1.122
0.925	Jul	0.944	0.936	0.919	0.898	0.806	1.000	1.139
0.925	Aug	0.949	0.931	0.922	0.903	0.811	0.985	1.116
0.946	Sep	0.972	0.951	0.947	0.916	0.802	0.984	1.168
0.963	Oct	0.976	0.973	0.968	0.934	0.810	0.997	1.156
0.965	Nov	0.988	0.958	0.969	0.947	0.867	1.040	1.287
0.980	Dec	1.006	0.976	0.979	0.962	0.879	1.043	1.319

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 1996 TO 2006  
MUNICIPAL PRIMARY**

STATION	ROUTE	LOCATION	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
** 802	US 71	W OF MEMPHIS AVE SPIRIT LAKE	15391	13768	13090	13207	12667	12948	12038	11884	12408	12408	12102
803	IA 12	ON VIADUCT E OF COURT ST SIOUX CITY	27859	27939	28682	27834	26772	27293	26866	26579	25631	25518	23924
804	IA 4	N OF 4TH AVE NW POCAHONTAS	3089	3230	3480	3213	3059	3049	3019	2962	3012	3052	3082
805	IA 148	S OF 11TH ST CORNING	3383	3360	3389	3351	3256	3208	3325	3230	3223	3098	3202
806	US 6	E OF SHASTA WINDSOR HEIGHTS	22286	22545	22960	22551	22199	21766	21952	21382	22129	22989	21425
808	US 71	S OF BIRCH ST AUDUBON	5813	5705	6305	6862	5177	4592	4811	4757	4992	4858	4750
809	IA 14	N OF WOODLAND ST MARSHALLTOWN	6956	6709	6771	6736	6729	6401	6636	6604	6540	6484	6268
810	IA 92	W OF N ST INDIANOLA	9835	9966	10830	11109	10513	11077	11793	11634	11725	11582	11203
811	IA 192	S OF AVE N COUNCIL BLUFFS	10252	10754	10431	10419	10474	10792	10061	9665	9442	9474	9047
812	IA 122	W OF VIRGINIA AVE MASON CITY	16094	15996	15697	15650	12925	13941	13489	13326	13052	12706	12014
813	US 6	E OF PINE ST DAVENPORT	21037	21055	20998	21129	20440	20584	19789	19891	21888	22078	21648
815	IA 922	BTWN WILEY BLVD & WESTDALE CDR RPDS	8033	8062	8136	8107	8044	8249	8560	8783	9027	9006	9474
816	US 34	W OF US 61 WEST BURLINGTON	12599	12557	13117	13716	13015	13036	13162	13096	13085	12814	13878
819	IA 9	EAST OF 14TH ST OSAGE	5810	6299	6900	7047	6750	6024	5857	5627	5546	5536	5391
820	IA 17	N OF NW 11TH ST EAGLE GROVE	3381	3491	3591	3609	3443	3151	2970	2934	2902	2997	2867
821	IA 4	S OF EDGEWOOD AVE E JEFFERSON	4459	4504	4796	4790	4548	4405	4285	4206	4343	4211	4166
823	US 6	BETWEEN SYCAMORE & 1ST AVE IOWA CITY	20619	21396	21554	21880	20968	21027	21564	21677	21858	21726	21526
824	US 69	BETWEEN 15TH AND 16TH ST AMES	17393	18458	19802	19468	19214	19331	19624	19394	19737	20080	19804
826	US 65	1.5 MI NE OF I-80 BONDURANT	9498	9956	10509	10708	10710	10863	11068	11293	11824	12737	12397
827	US 61/151	W OF MISSISSIPPI R DUBUQUE	17266	17003	17629	18001	18133	18270	18716	19036	19188	19238	19396
828	IA 150	S OF 12TH ST OELWEIN				6928	6840	6652	6600	6470	6555	6505	6654
829	US 59	S OF 5TH AVE SHENANDOAH					10383	9688	9842	9697	9964	10054	10053
830	IA 23	S OF IA 92 OSKALOOSA							3622	3506	3279	3204	3159

Note: Station 802 is not used in the calculation of the Municipal Primary Factors.  
It is used in the calculation of the Recreational Factors.

**2006 EXPANSION FACTORS  
MUNICIPAL PRIMARY**

MON - THU		MON	TUE	WED	THU	FRI	SAT	SUN
1.027	Jan	1.059	1.032	1.012	1.005	0.938	1.122	1.461
1.025	Feb	1.029	0.995	1.002	1.080	0.926	1.120	1.454
1.020	Mar	1.059	1.042	0.990	1.005	0.893	1.070	1.449
0.951	Apr	0.965	0.965	0.942	0.936	0.859	1.022	1.356
0.944	May	0.977	0.952	0.928	0.931	0.848	0.980	1.236
0.917	Jun	0.937	0.924	0.920	0.897	0.837	1.022	1.257
0.948	Jul	0.964	0.954	0.941	0.931	0.864	1.049	1.286
0.952	Aug	0.971	0.953	0.950	0.939	0.870	1.051	1.284
0.958	Sep	0.978	0.965	0.952	0.940	0.845	1.040	1.314
0.965	Oct	0.981	0.967	0.964	0.949	0.848	1.038	1.286
0.968	Nov	0.988	0.960	0.964	0.961	0.891	1.072	1.364
0.967	Dec	0.983	0.967	0.963	0.956	0.883	1.030	1.353

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 1996 TO 2006**

**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	2.25 MI S OF IA 175 ONAWA
304	CO V45	3.5 MI N OF IA 92 SIGOURNEY
306	CO E53	1.75 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

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
275	297	297	302	294	288	292	286	303	296	303
942	964	1005	1043	964	931	1005	985	1001	979	1008
948	976	963	923	943	975	936	875	845	824	830
1174	1230	1189	1177	1138	1107	1115	1075	1005	1025	1029
616	583	630	646	623	572	599	614	643	640	645
526	524	531	572	558	568	625	595	575	579	570
1232	1317	1315	1316	1230	1257	1308	1309	1341	1292	1361
343	335	357	364	369	353	360	361	361	361	370
705	699	748	803	959	972	998	992	999	974	1017
578	570	588	559	526	518	533	531	529	529	534
835	869	856	795	758	800	861	847	864	835	852
1316	1259	1295	1438	1386	1364	1405	1383	1406	1336	1370
606	627	545	659	675	682	734	746	707	715	719
712	721	781	740	697	675	647	638	667	675	766
661	655	716	743	706	706	721	734	712	722	733

**GRAVEL**

STATION	ROUTE	LOCATION
400	CO B30	0.5 MI E OF CO L48 PRIMGHAR
401	LOC RD	1.75 MI N OF CO E36 CLUTIER
402	LOC RD	0.75 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

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
28	28	28	25	22	24	26	27	28	26	29
31	31	28	30	29	36	33	36	52	32	33
39	37	40	42	39	38	38	40	51	42	50
99	90	78	87	75	77	91	103	115	109	111
67	62	54	57	54	43	60	57	56	47	55
81	81	93	86	80	73	68	67	76	71	67
68	61	73	66	69	62	62	73	75	81	77

Note: Stations 600 & 603 are used in the calculation of the Secondary Factors and the Recreational Factors.

**2006 EXPANSION FACTORS  
SECONDARY**

MON - THU		MON	TUE	WED	THU	FRI	SAT	SUN
1.078	Jan	1.127	1.089	1.047	1.047	0.987	1.241	1.550
1.084	Feb	1.072	1.016	1.050	1.215	1.022	1.291	1.530
1.060	Mar	1.143	1.086	1.007	1.038	0.936	1.145	1.515
0.906	Apr	0.924	0.932	0.886	0.881	0.839	1.009	1.255
0.886	May	0.927	0.890	0.864	0.876	0.791	0.883	1.086
0.859	Jun	0.871	0.869	0.853	0.844	0.777	0.954	1.093
0.901	Jul	0.926	0.905	0.882	0.882	0.807	0.941	1.083
0.937	Aug	0.955	0.937	0.927	0.929	0.852	1.020	1.183
0.918	Sep	0.938	0.916	0.909	0.910	0.810	0.980	1.205
0.906	Oct	0.917	0.900	0.902	0.897	0.795	0.939	1.108
0.932	Nov	0.957	0.928	0.917	0.924	0.910	1.059	1.224
1.000	Dec	1.015	0.975	1.003	1.008	0.902	1.092	1.332

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 1996 TO 2006  
MUNICIPAL STREETS**

STATION	ROUTE	LOCATION	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
900	LAKE ST	N OF 3RD ST STORM LAKE	3562	3284	3511	3662	3508	3502	3266	3128	3046	2911	2818
901	2ND AVE N	E OF 15TH ST FORT DODGE	6870	6932	7331	7264	7211	7368	6681	6471	6795	6780	6695
902	LOCUST ST	E OF SPRING ST DAVENPORT	21731	21483	22938	23322	22415	22498	23162	22986	22382	22369	21934
903	JEFFERSON	NE OF E 5TH ST OTTUMWA	7392	7203	7030	6905	6678	6768	6935	6862	6901	6549	6627
904	JOHNSON	W OF JANICE DR CEDAR RAPIDS	10221	9965	10036	9527	9821	10174	9499	10202	10381	10360	10086
905	N'WESTERN	N OF 20TH ST AMES	3092	2854	2910	2842	2727	2741	2791	2797	2652	2460	2348
906	DUBUQUE	S OF DAVENPORT ST IOWA CITY	13976	13572	14484	15358	15324	15899	16201	15593	15615	15177	15448
907	COLLEGE	S OF 23RD ST CEDAR FALLS	8978	8963	9454	9469	9564	9973	9272	9036	8440	7947	7862
908	LIND'WOOD	S OF 35TH ST SIOUX CITY	1176	1138	1177	1171	1193	1139	1171	1134	1129	1056	1026
909	HAMILTON	N OF CLIFTON AVE SIOUX CITY	14688	14675	14979	15700	15280	15448	15596	15335	14789	14529	14547
910	GRANDVIEW	SE OF PLYMOUTH CT DUBUQUE	9158	9940	8982	9020	8973	9090	9218	9272	9402	9094	8836
911	HUMBOLDT	S OF 4TH ST BODE	939	926	916	942	886	898	869	794	773	796	796
912	ELM ST	N OF LUCAS ST CRESTON			4301	4207	4066	4024	4054	4081	4422	4126	3938
** 913	WASHINGTON	E OF HARRISON ST	14415	14245	15316	16087	14866	14032	13998	13942	13728	12834	11283

Note: Station 913 was previously site 801.  
Washington Street was US 34 until Nov. 2005 when the US 34 bypass opened.

**2006 EXPANSION FACTORS  
MUNICIPAL STREETS**

MON - THU		MON	TUE	WED	THU	FRI	SAT	SUN
1.014	Jan	1.048	1.014	0.992	1.000	0.956	1.177	1.412
1.002	Feb	1.016	0.968	0.977	1.054	0.926	1.178	1.398
1.012	Mar	1.064	1.036	0.978	0.993	0.919	1.146	1.418
0.919	Apr	0.936	0.938	0.905	0.900	0.861	1.064	1.307
0.938	May	0.968	0.944	0.928	0.919	0.866	1.042	1.274
0.952	Jun	0.972	0.958	0.956	0.931	0.897	1.124	1.312
0.986	Jul	1.006	0.999	0.975	0.963	0.923	1.134	1.336
0.967	Aug	0.978	0.963	0.968	0.961	0.913	1.101	1.292
0.932	Sep	0.956	0.940	0.924	0.911	0.843	1.074	1.251
0.948	Oct	0.966	0.946	0.945	0.932	0.871	1.089	1.245
0.947	Nov	0.979	0.938	0.935	0.940	0.891	1.123	1.302
0.969	Dec	0.993	0.967	0.961	0.958	0.885	1.085	1.332



**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 1996 TO 2006**

**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

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
7488	7712	7823	7985	8197	8178	8174	8358	8497	8263	8343
3264	3264	3434	3557	3292	3328	3437	3492	3650	3644	3765
3945	4178	4207	4540	4531	4344	4544	4926	5541	5789	5870

**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.

1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
277	248	250	250	250	260	223	203	210	204	209
1274	1222	1319	1170	1200	1032	994	937	826	822	777
		329	324	257	256	301	346	348	339	352

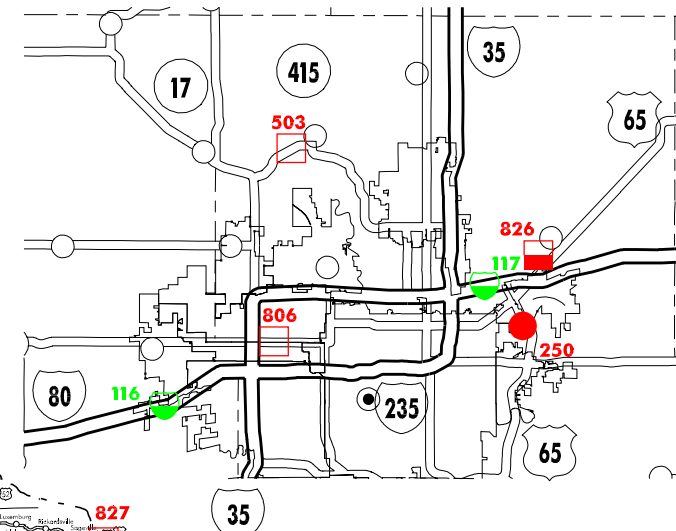
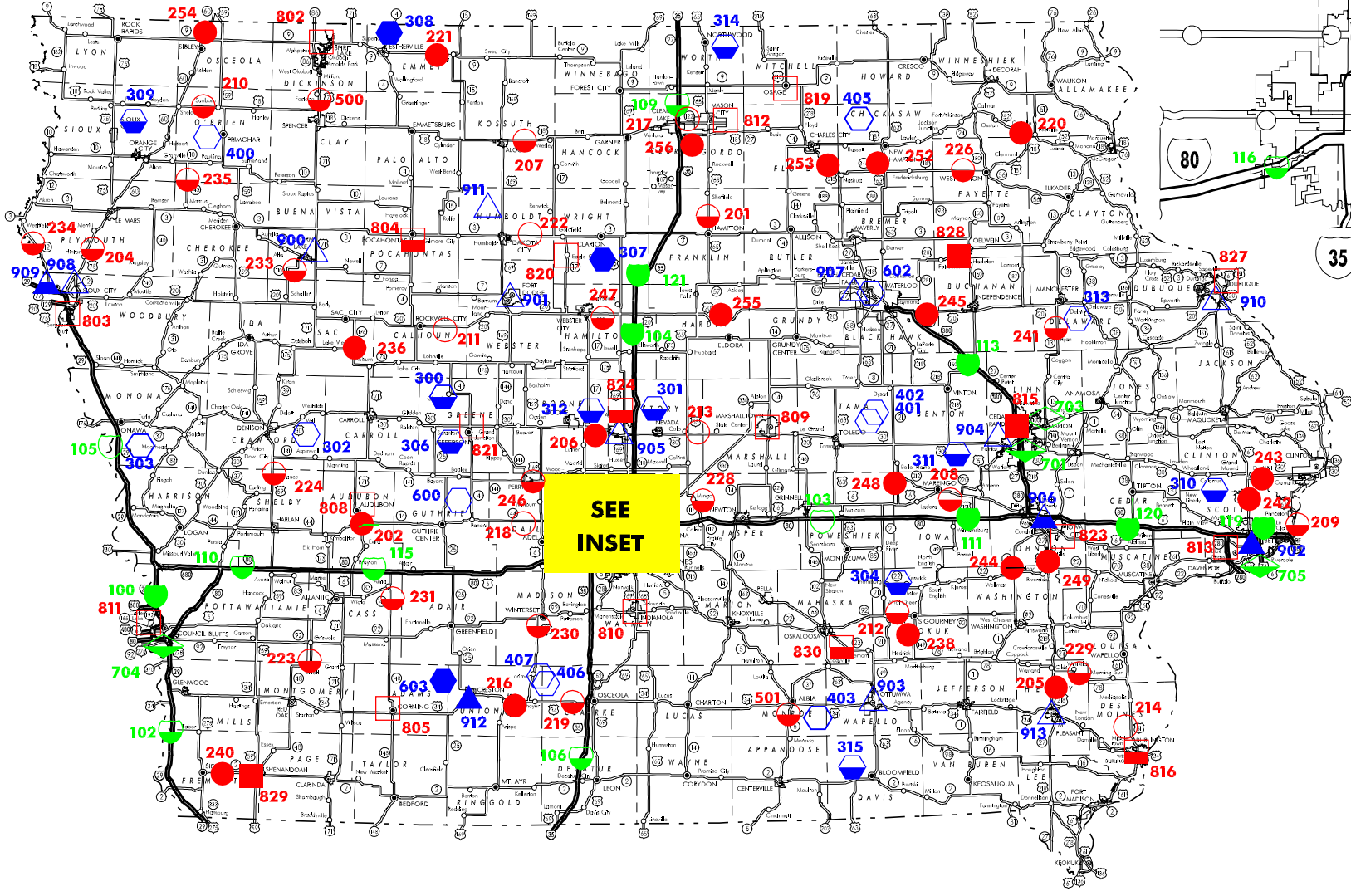
Notes: Stations 500 & 501 are used in the calculation of the Rural Primary Factors and the Recreational Factors.  
 Stations 600 & 603 are used in the calculation of the Secondary Factors and the Recreational Factors.  
 Station 802 is used in the calculation of the Recreational Factors.

**2006 EXPANSION FACTORS  
RECREATIONAL**

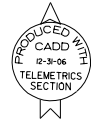
MON - THU		MON	TUE	WED	THU	FRI	SAT	SUN
1.137	Jan	1.169	1.143	1.138	1.105	1.009	1.204	1.695
1.161	Feb	1.157	1.126	1.161	1.210	1.049	1.246	1.760
1.154	Mar	1.252	1.142	1.121	1.128	0.994	1.161	1.620
1.022	Apr	1.046	1.036	1.020	0.991	0.919	1.069	1.370
0.937	May	0.963	0.948	0.928	0.915	0.814	0.880	1.085
0.831	Jun	0.849	0.846	0.837	0.803	0.702	0.784	0.905
0.845	Jul	0.859	0.860	0.845	0.816	0.722	0.772	0.886
0.880	Aug	0.912	0.884	0.873	0.856	0.763	0.841	0.970
0.936	Sep	0.960	0.947	0.931	0.908	0.812	0.909	1.109
1.033	Oct	1.047	1.030	1.044	1.014	0.908	1.087	1.292
1.062	Nov	1.090	1.048	1.065	1.051	1.013	1.200	1.529
1.096	Dec	1.114	1.073	1.105	1.096	0.987	1.188	1.596







# AUTOMATIC TRAFFIC RECORDER LOCATIONS

JANUARY 1, 2007



 Iowa Department  
of Transportation  
  
Office of  
Transportation Data  
Phone 515-239-1526



	13 CLASSES AND SPEED BY AXLE	3 CLASSES AND SPEED BY LENGTH	VOLUME ONLY	
RURAL INTERSTATE		7	7	2
MUNICIPAL INTERSTATE		0	3	1
RURAL PRIMARY		21	23	6
MUNICIPAL PRIMARY		3	5	16
RURAL SECONDARY		3	10	12
MUNICIPAL STREETS		2	2	10
<b>TOTAL</b>	<b>133</b>	<b>36</b>	<b>50</b>	<b>47</b>