



# **AUTOMATIC TRAFFIC RECORDERS**

**2011 - 2021**

**Prepared by**

**OFFICE OF SYSTEMS PLANNING**

**In Cooperation With**

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

**PHONE 515-239-1526**

**FEBRUARY 2022**

## 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 2011 to 2021.....</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 174 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-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 AADT's for the previous eleven years for each station, start on page 19. Sites without an AADT for 2021 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 2012 - 2021.**

**Information from the permanent traffic recorders indicates a 11.4% increase in statewide travel from 2020 to 2021. The estimated vehicle miles of travel for 2021 is 33.38 billion. Final 2021 traffic figures will be published near June 2022, when all traffic data collected during 2021 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

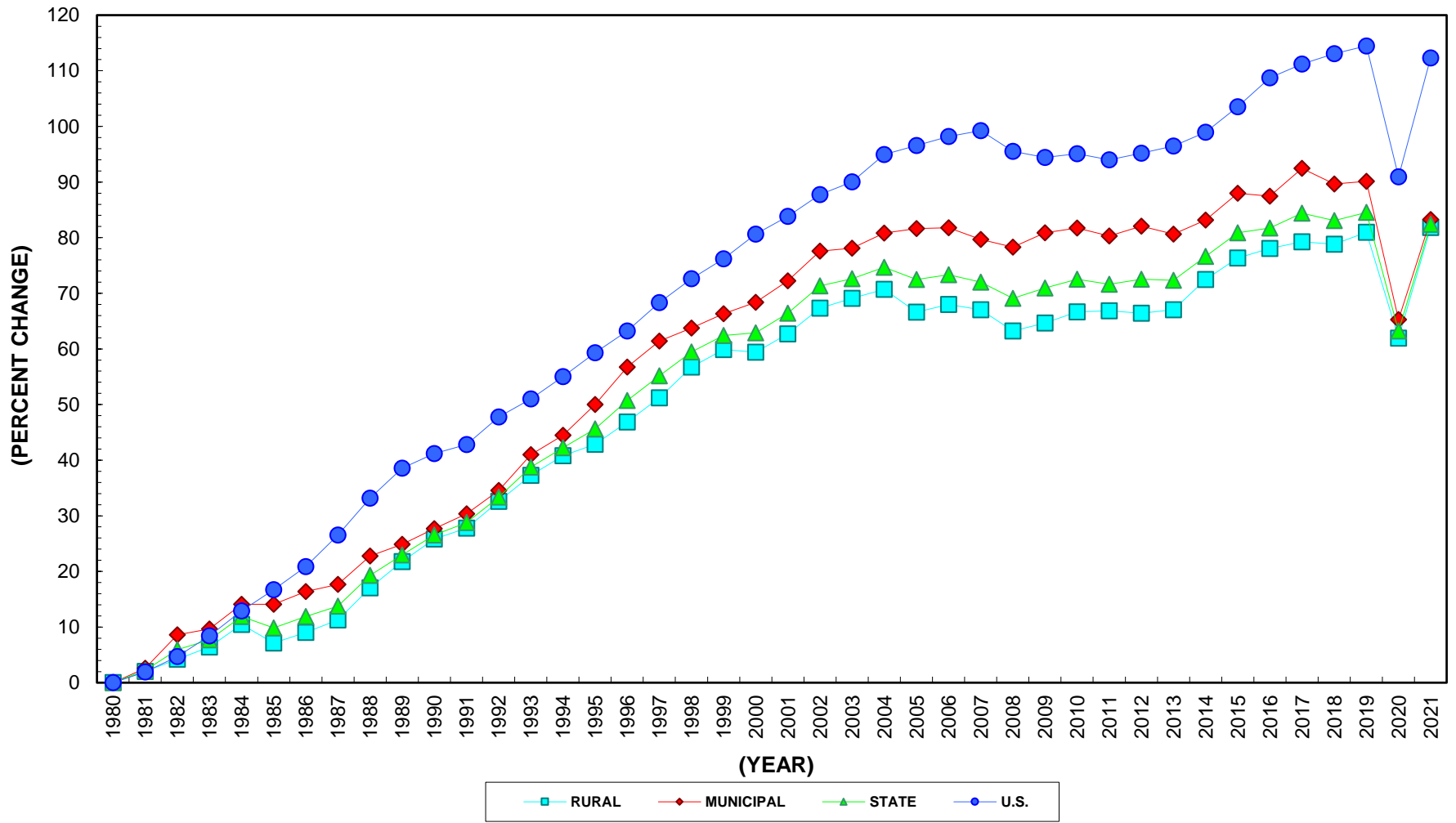
## IOWA ROAD SYSTEMS

	2021 COMPARED TO 2020
RURAL INTERSTATE	+ 18.6 %
RURAL PRIMARY	+ 11.6 %
RURAL SECONDARY	+ 6.9 %
<b>RURAL TOTAL</b>	<b>+ 12.1 %</b>
MUNICIPAL INTERSTATE	+ 13.7 %
MUNICIPAL PRIMARY	+ 9.9 %
MUNICIPAL STREETS	+ 9.4 %
<b>MUNICIPAL TOTAL</b>	<b>+ 10.4 %</b>
<b>STATE TOTAL</b>	<b>+ 11.4 %</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.

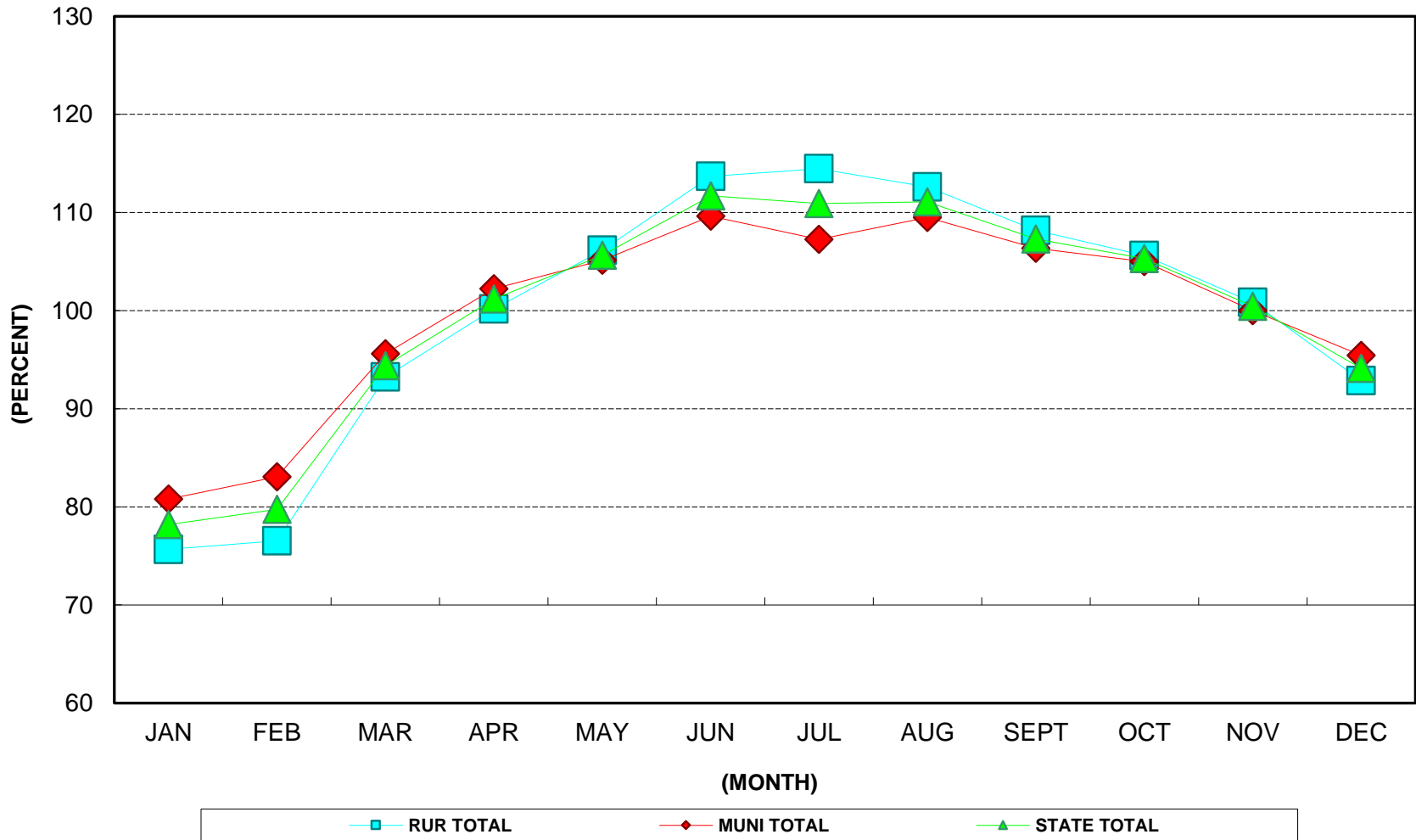
# PERCENT CHANGE IN TRAFFIC

## BASE YEAR 1980



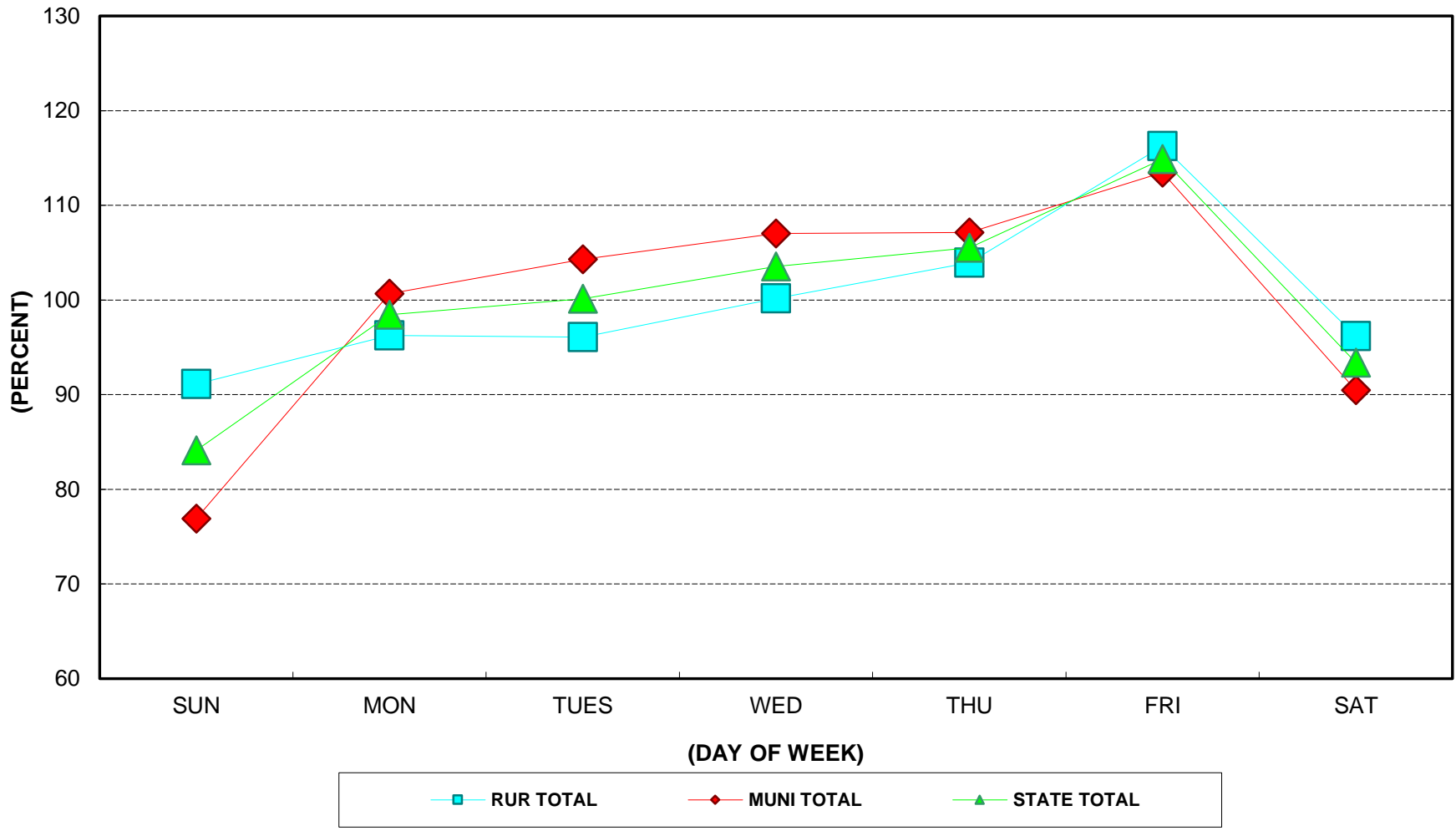
# 2021 MONTHLY TRAFFIC

## AS A % OF ANNUAL AVERAGE DAILY TRAFFIC

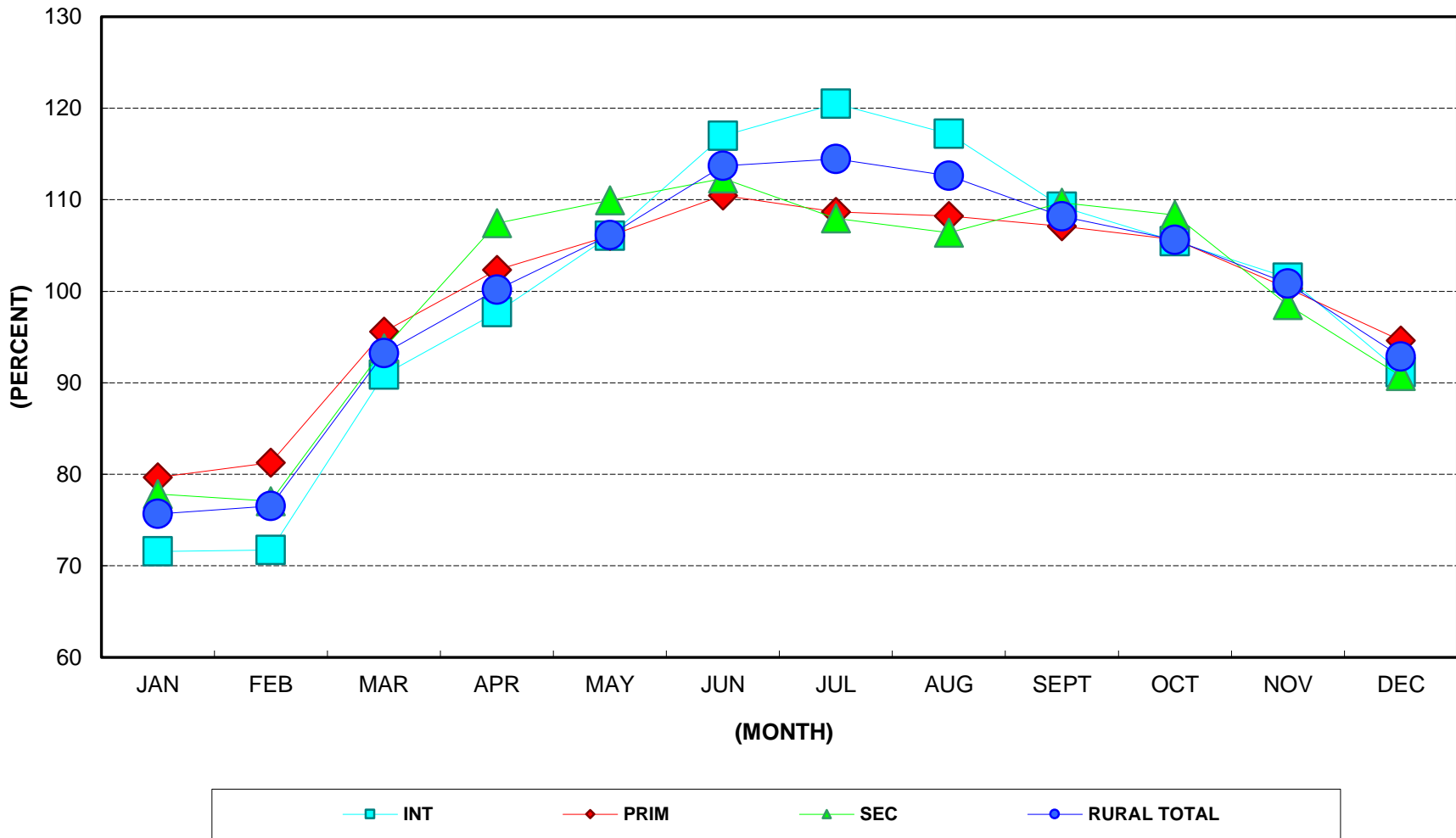


# 2021 DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



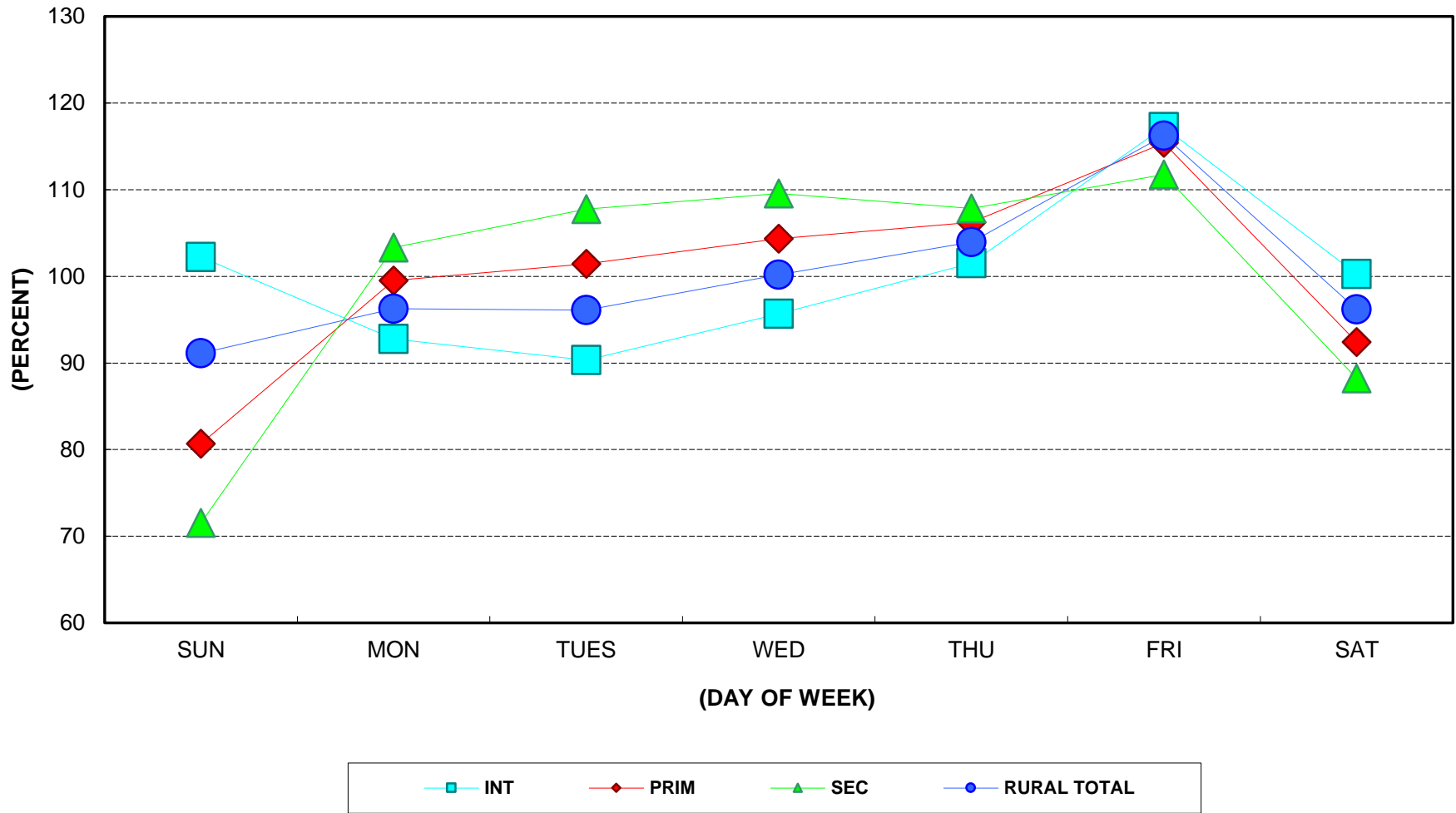
# 2021 RURAL MONTHLY TRAFFIC AS A % OF ANNUAL AVERAGE DAILY TRAFFIC





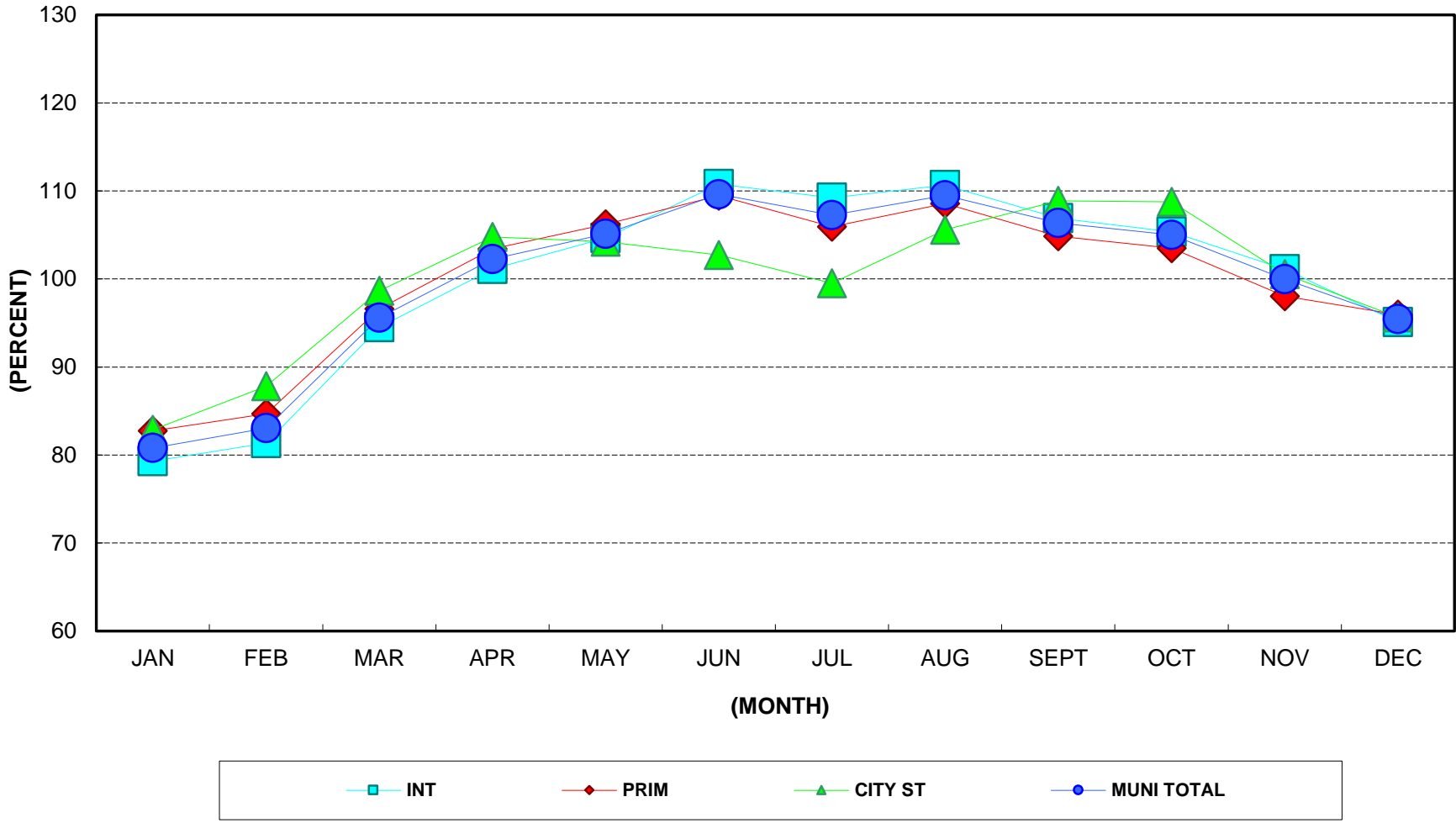
# 2021 RURAL DAY OF WEEK TRAFFIC

AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



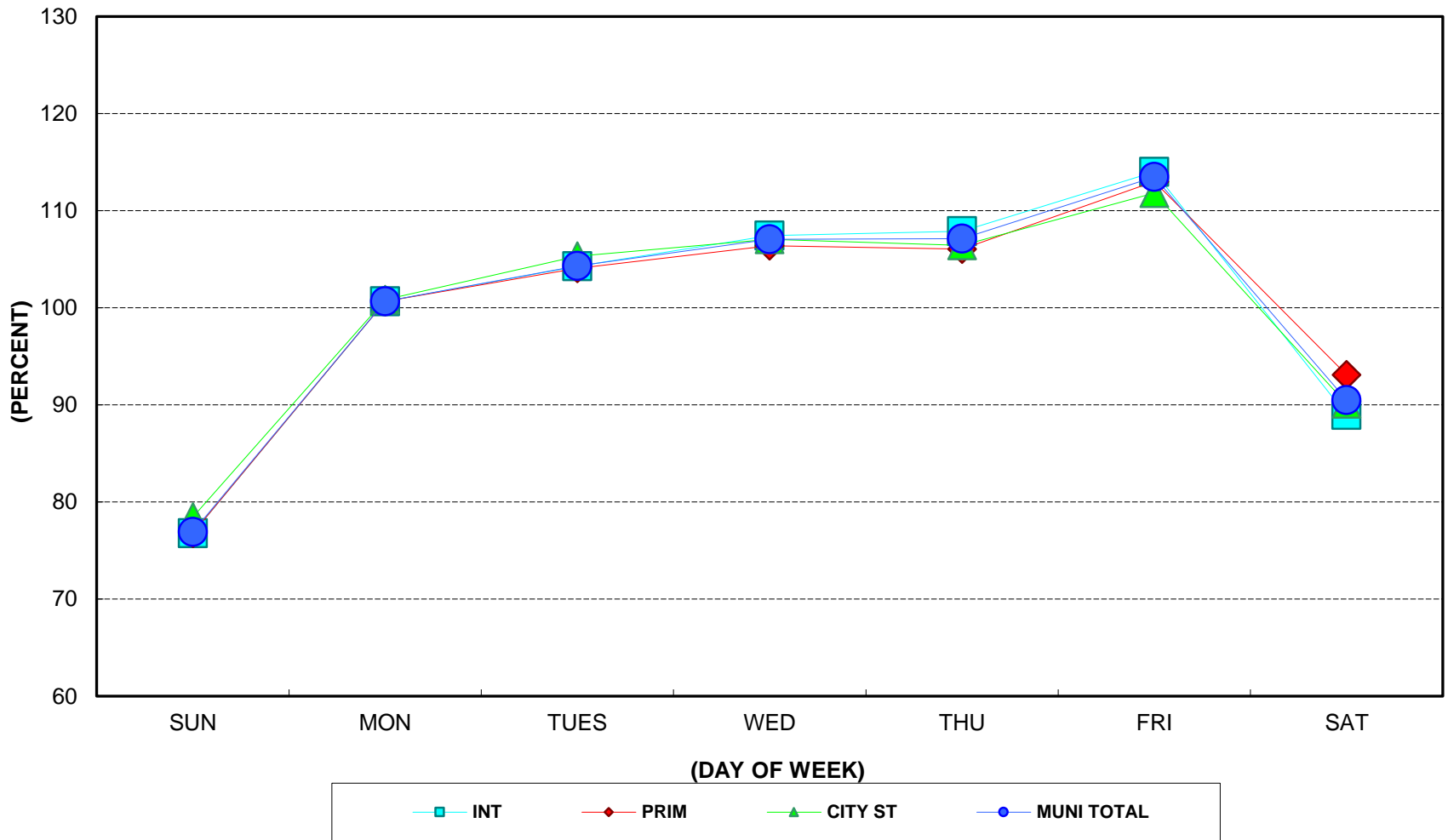
# 2021 MUNICIPAL MONTHLY TRAFFIC

## AS A % OF ANNUAL AVERAGE DAILY TRAFFIC

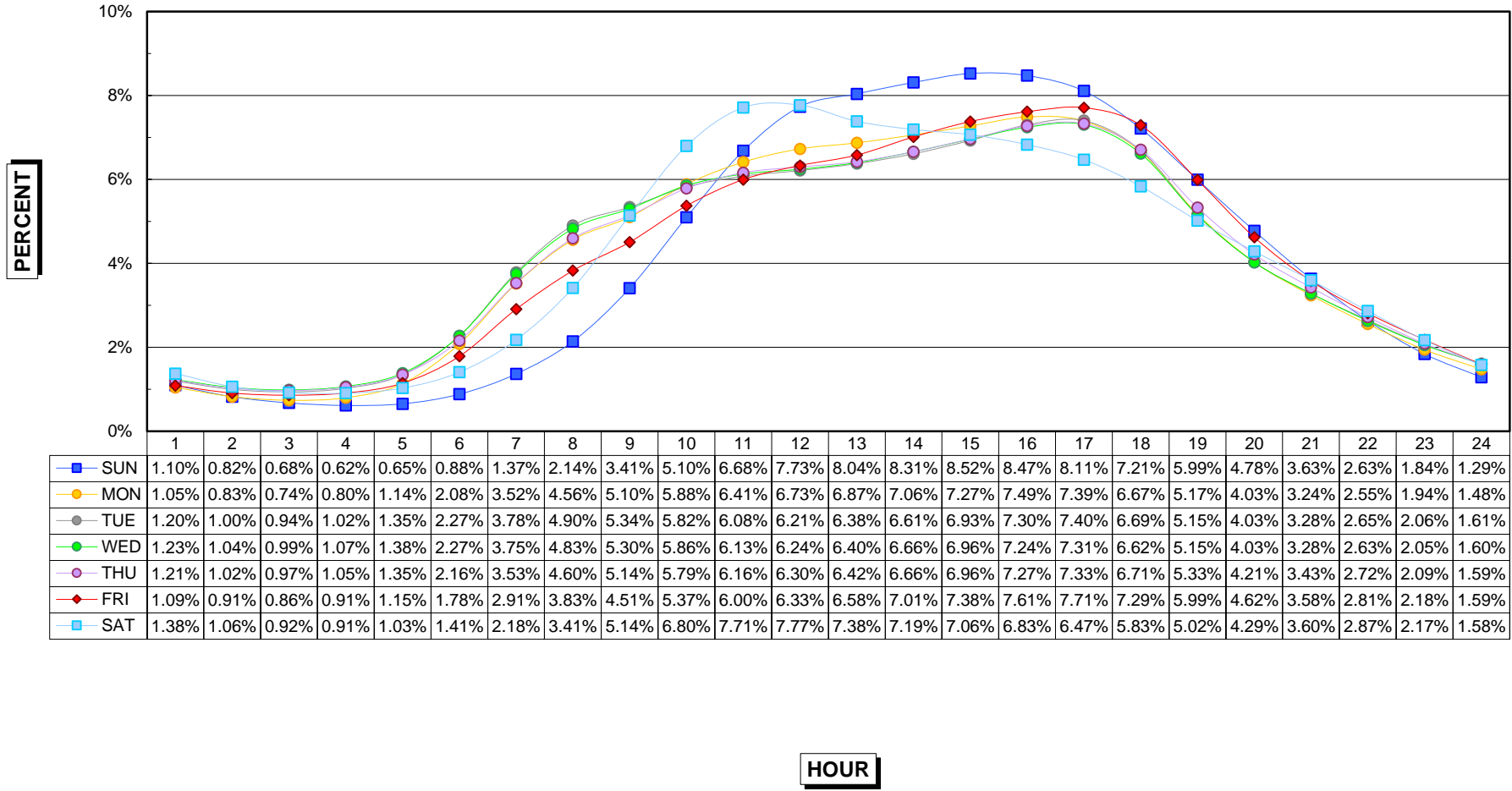


# 2021 MUNICIPAL DAY OF WEEK TRAFFIC

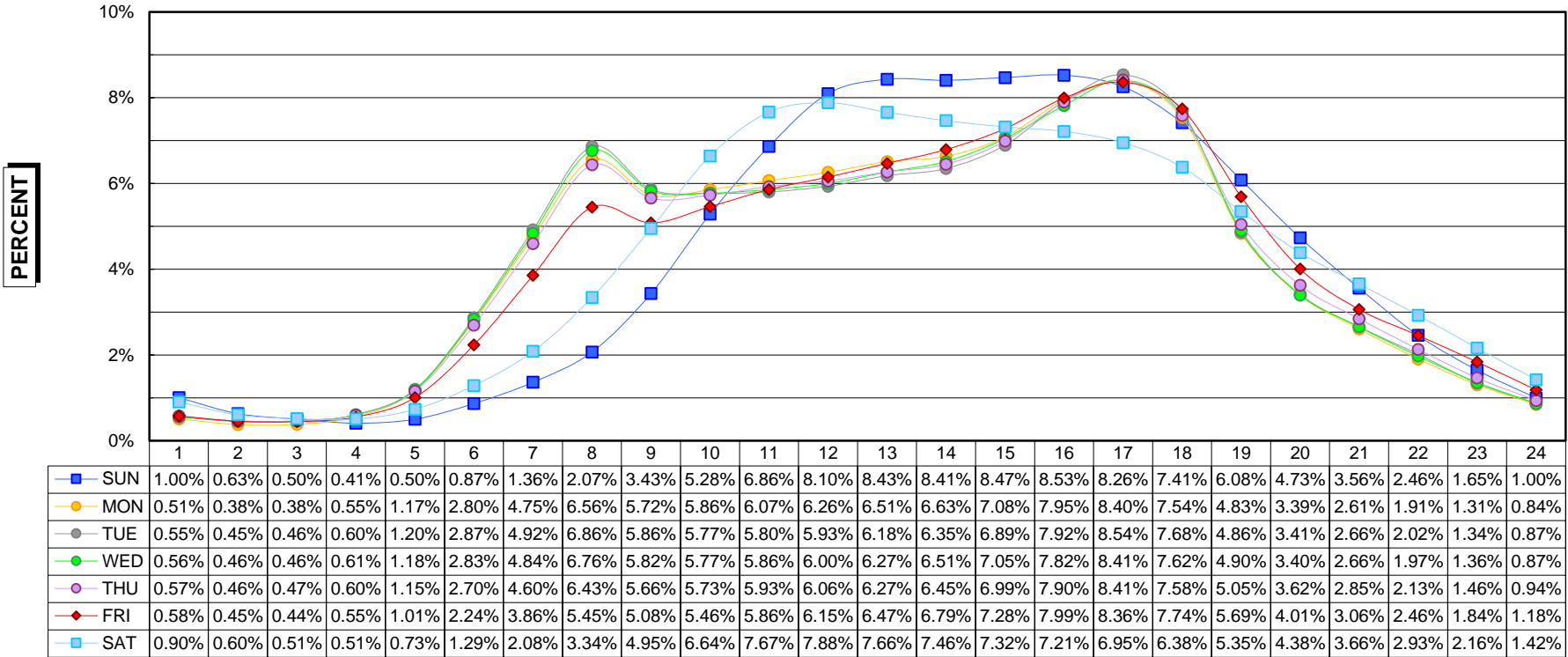
AS A % OF ANNUAL AVERAGE DAILY TRAFFIC



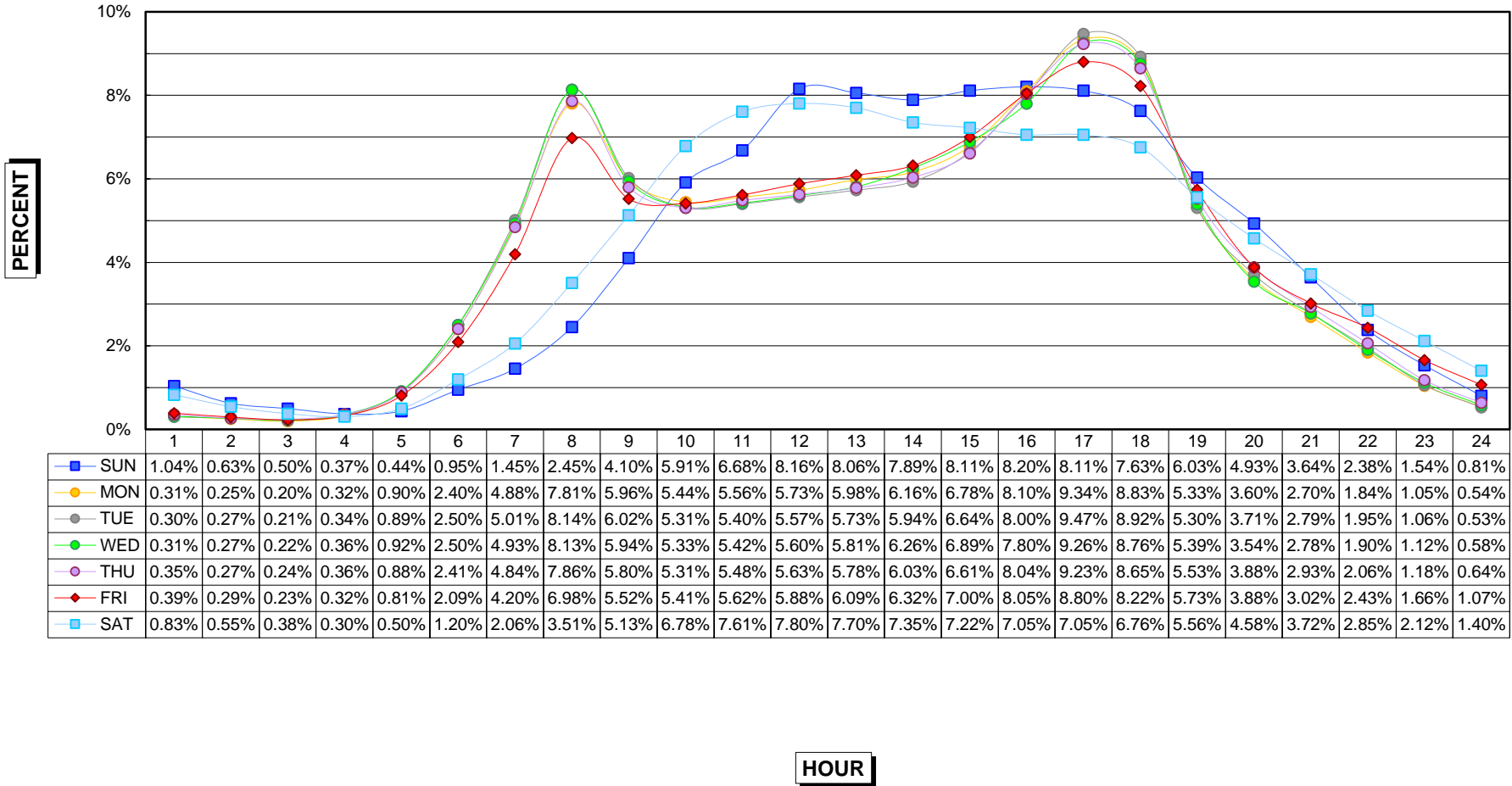
### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2021 RURAL INTERSTATE



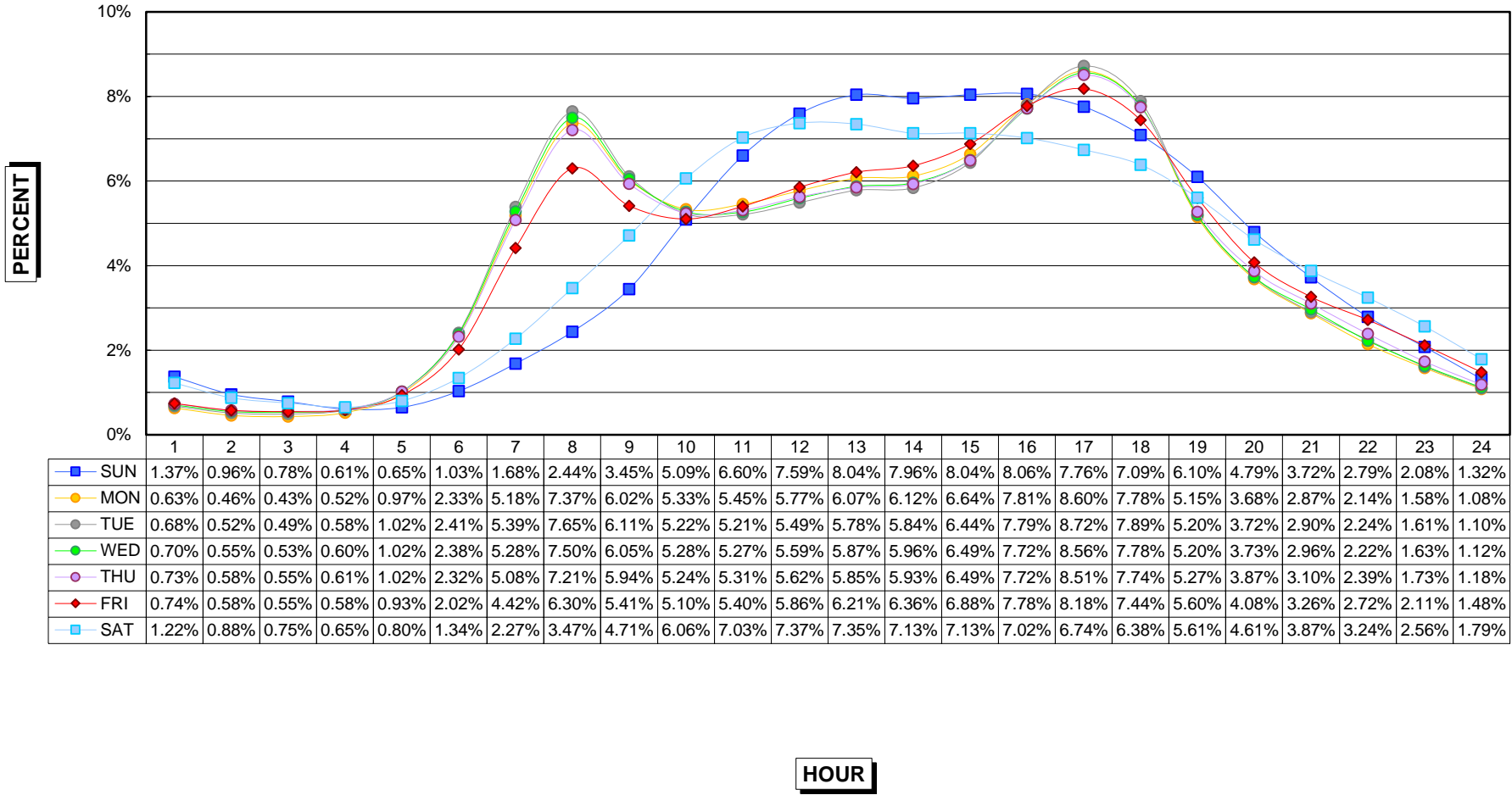
### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2021 RURAL PRIMARY



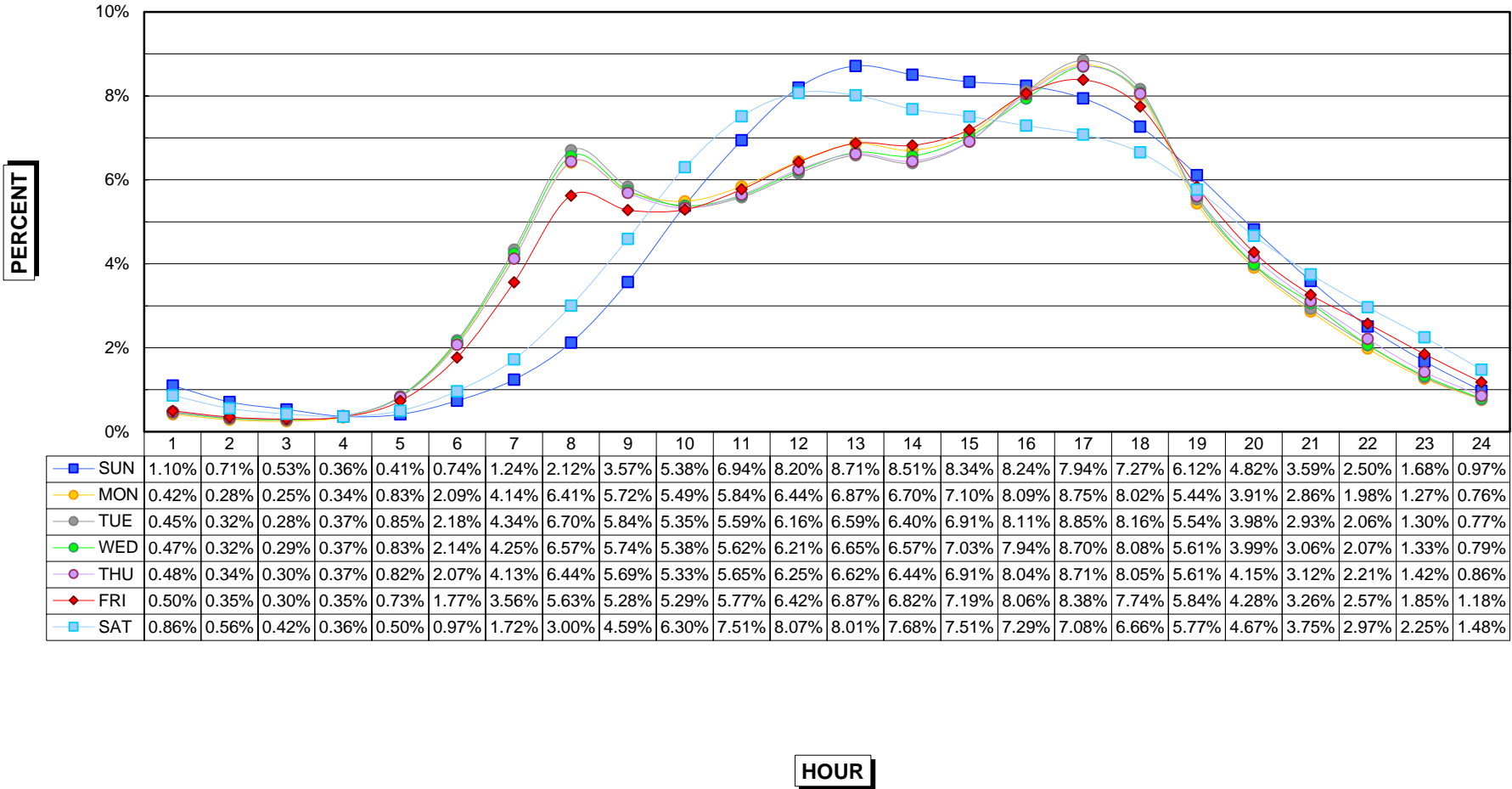
### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2021 RURAL SECONDARY



### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2021 MUNICIPAL INTERSTATE

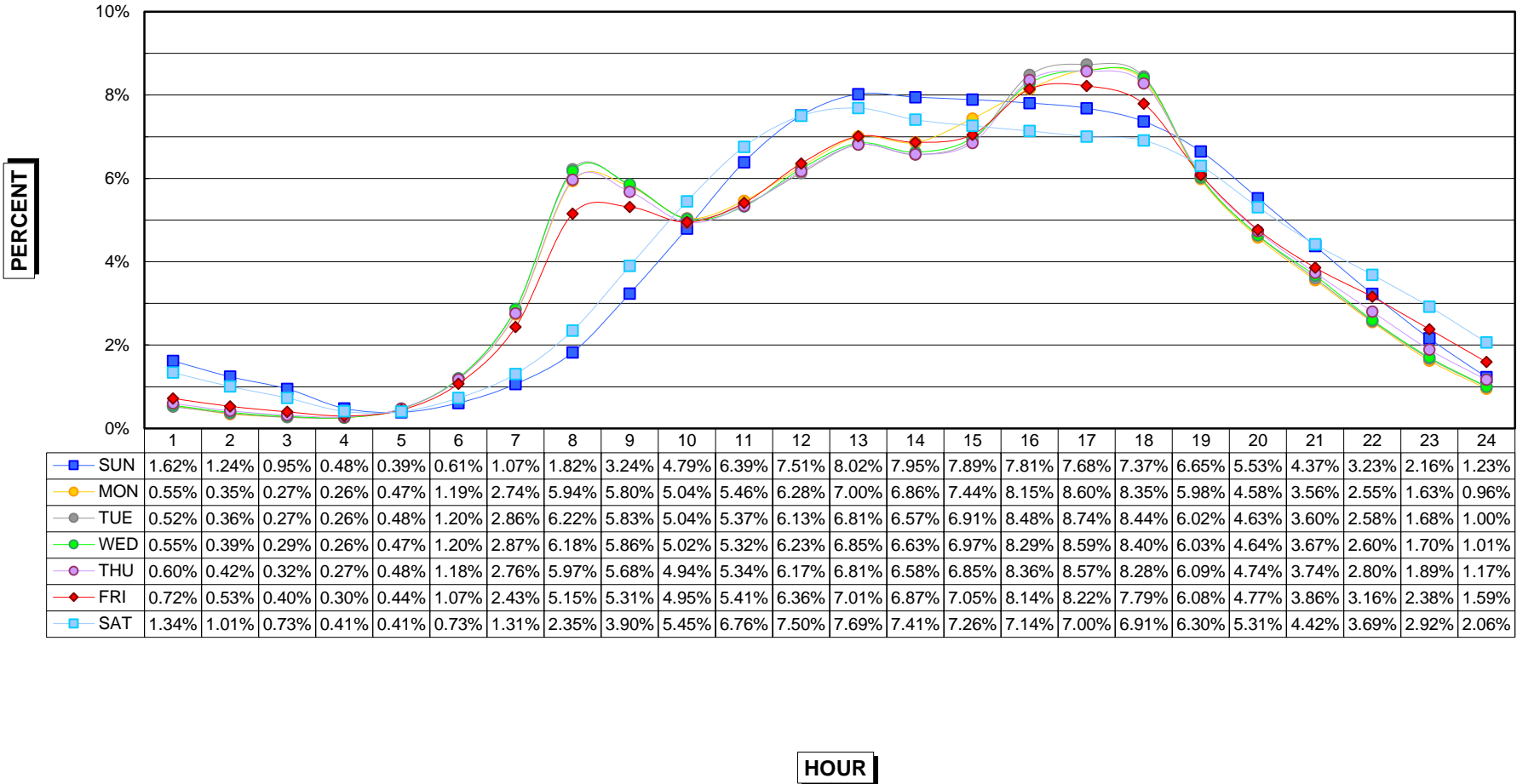


### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2021 MUNICIPAL PRIMARY





### HOURLY DISTRIBUTION OF DAILY TRAFFIC 2021 MUNICIPAL STREETS



## SUMMARY OF ANALYSIS

### Analysis of the Thirtieth Highest Hour at the Permanent Continuous Automatic Traffic Recorder Stations 2012 - 2021

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, 2012 through 2021.

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	18.29	10.72	394.10	9.60	3.91	12.51	-	-
Municipal	-15.25	10.97	24.16	10.65	-	-	47.01	10.20

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2011 TO 2021  
RURAL INTERSTATE**

STATION	ROUTE	LOCATION	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
100	I 29	2.0 MI N OF S JCT I 680 HONEY CREEK	NONE	19730	19907	20696	21770	22259	NONE	22409	NONE	18548	21917
102	I 29	7.0 MI S OF US 34 PACIFIC JCT	NONE	12008	12337	13563	13530	13780	14226	14056	NONE	10926	13483
103	I 80	1.0 MI W OF US 63 GRINNELL	26045	26046	26235	26523	27320	28119	28598	28661	28414	24320	28408
104	I 35	3.0 MI N OF IA 175 JEWELL	21248	21437	21726	21775	22963	23783	24342	24452	24908	20352	24505
105	I 29	3.8 MI S OF IA 175 ONAWA	NONE	12587	12667	13150	14096	14350	14694	14635	NONE	12085	14873
106	I 35	1.5 MI N OF IA 2 LEON	12783	12699	NONE	NONE	13661	14115	14246	14279	14590	12621	15378
109	I 35	3.0 MI N OF CO B20 HANLONTOWN	19192	19254	19184	19324	20097	20923	21338	NONE	21581	17255	20795
110	I 80	1.5 MI W OF CO M16 SHELBY	NONE	NONE	23070	23517	24441	25519	25906	24920	24999	22217	26764
111	I 80	2.0 MI E OF IA 149 WILLIAMSBURG	NONE	NONE	30642	31210	32352	33298	33865	33735	33414	28556	33092
113	I 380	1.5 MI N OF IA 150 BRANDON	15796	15905	15937	16186	16741	17520	17658	17645	17725	15217	17702
115	I 80	2.0 MI E OF US 71 ATLANTIC	19661	19740	19821	20113	21331	22176	22541	22190	21747	19415	23160
119	I 80	1.5 MI E OF MIDDLE RD LECLAIRE	29604	29978	29000	30825	32582	NONE	NONE	NONE	NONE	NONE	NONE
120	I 80	2.5 MI E OF CO RD X40 TIPTON	NONE	31963	32640	33523	NONE	NONE	36095	36266	36045	31494	36893
121	I 35	2.0 MI N OF CO RD R75 DOWS	14291	14270	14195	14506	15227	15730	15995	16050	16060	13189	16143
122	I 35	1.0 MI N OF IA 92 CUMMING	21105	21087	21044	NONE	NONE	21974	22577	23321	23792	20953	24562
123	I 80	4.8 MI E OF E JCT US 65 MITCHELLVILLE	35061	35253	34996	NONE	NONE	NONE	NONE	NONE	NONE	34291	39375
124	I 680	6.4 MI W OF I 80 BEEBETOWN	NONE	5947	5913	6039	6311	NONE	NONE	NONE	NONE	4809	5949
126	I 29	9.0 MI S OF IA 2							14507	14520	NONE	NONE	15427

**2021 EXPANSION FACTORS  
RURAL INTERSTATE**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.411	1.407	1.104	1.026	0.941	0.853	0.827	0.855	0.916	0.947	0.986	1.093
<b>Sunday</b>	1.055	1.184	0.984	0.953	0.970	0.925	1.007	0.921	0.962	0.954	0.915	0.991
<b>Monday</b>	1.089	1.055	1.162	1.084	1.073	1.084	1.039	1.100	1.059	1.083	1.118	1.013
<b>Tuesday</b>	1.058	1.026	1.103	1.131	1.164	1.129	1.137	1.150	1.145	1.124	1.105	1.046
<b>Wednesday</b>	0.953	0.951	1.048	1.088	1.098	1.076	1.094	1.073	1.102	1.098	0.985	1.019
<b>Thursday</b>	0.913	1.023	0.975	0.983	0.989	1.009	0.972	0.996	1.010	0.998	1.049	0.913
<b>Friday</b>	0.966	0.809	0.824	0.826	0.809	0.851	0.829	0.850	0.819	0.821	0.900	0.953
<b>Saturday</b>	1.007	1.047	0.986	1.016	0.990	0.994	0.995	0.989	0.989	1.005	0.988	1.100

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2011 TO 2021  
MUNICIPAL INTERSTATE**

STATION	ROUTE	LOCATION	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
701	I 380	BTWN WILSON AND 33RD CEDAR RAPIDS	66597	66619	66629	67456	69639	71681	NONE	73258	71146	58550	65268	
703	I 380	AT J AVE S OF COLDSTREAM CEDAR RAPIDS	82907	82911	82286	83915	85038	81120	NONE	88560	86233	70725	78837	
704	I 29/80	0.6 MI W OF IA 192 COUNCIL BLUFFS	NONE	75521	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	
705	I 74	0.6 MI S OF US 6 BETTENDORF	45756	47653	49404	49577	NONE	NONE	52108	NONE	NONE	NONE	NONE	
707	I 29	AT SOUTH DAKOTA BORDER SIOUX CITY	<b>SITE REMOVED JANUARY 2010</b>											
708	I 280	0.3 MI S OF IA 22 DAVENPORT	19943	NONE	NONE	NONE	NONE	NONE	24970	23577	NONE	NONE	NONE	
709	I 35	N OF ORALABOR ROAD ANKENY	59603	57945	60027	62687	NONE	65440	66343	67231	66246	NONE	NONE	
710	I 235	E. INNERLEG OF 35TH ST WEST DES MOINES	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE	
711	I 235	S OF GUTHRIE AVENUE DES MOINES	64950	NONE	NONE	NONE	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	NONE	NONE	
713	I 35/80	E OF MERLE HAY ROAD DES MOINES	NONE	<b>SITE REMOVED MARCH 2012</b>										
714	I 235	0.7 MI N OF EUCLID AVENUE DES MOINES			NONE	65417	68332	72475	74926	75741	75688	61178	69983	
715	I 29	1.5 MI E OF IA 12 SIOUX CITY					33150	NONE	NONE	36099	NONE	NONE	39609	
716	I 35/80	0.8 MI W OF IA 415 DES MOINES						NONE	NONE	100804	99952	85676	97583	
717	I 380	1.0 MI W OF EVANSDALE DR EVANSDALE						NONE	NONE	33972	33819	29121	32908	
116	I 80	0.8 MI W OF 74TH ST WAUKEE	35272	35527	NONE	NONE	39315	45973	48840	50147	50360	44062	51934	
117	I 80	1.8 MI E OF E JCT I 35/80/235 ALTOONA	73105	74017	74863	75290	NONE	77337	NONE	86136	87038	76230	87909	
125	I 380	6.0 MI N OF I 80 NORTH LIBERTY	NONE	48518	49835	51703	53335	NONE	56073	57112	56200	48855	54443	

**2021 EXPANSION FACTORS  
MUNICIPAL INTERSTATE**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.264	1.248	1.059	0.990	0.954	0.906	0.918	0.913	0.942	0.952	0.993	1.062
<b>Sunday</b>	1.405	1.518	1.299	1.294	1.256	1.241	1.288	1.240	1.257	1.297	1.272	1.290
<b>Monday</b>	0.960	0.946	1.029	0.989	1.042	0.988	1.029	0.994	1.055	0.993	0.964	0.931
<b>Tuesday</b>	0.972	0.905	0.974	0.973	0.982	0.981	0.963	0.990	0.967	0.966	0.936	0.951
<b>Wednesday</b>	0.869	0.859	0.944	0.962	0.951	0.949	0.950	0.950	0.950	0.967	0.909	0.926
<b>Thursday</b>	0.869	1.064	0.926	0.925	0.928	0.939	0.907	0.930	0.919	0.929	1.003	0.875
<b>Friday</b>	0.965	0.834	0.853	0.863	0.853	0.880	0.861	0.870	0.853	0.857	0.908	0.964
<b>Saturday</b>	1.155	1.183	1.102	1.117	1.097	1.115	1.126	1.123	1.112	1.113	1.115	1.208



**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2011 TO 2021  
MUNICIPAL PRIMARY**

STATION	ROUTE	LOCATION	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
802	US 71	W OF MEMPHIS AVE SPIRIT LAKE	11701	11723	11777	12076	11714	11665	11507	12385	11380	10675	11249
803	IA 12	ON VIADUCT E OF COURT ST SIOUX CITY	22563	NONE	20642	NONE	NONE	NONE	NONE	NONE	NONE	NONE	NONE
804	IA 4	N OF 4TH AVE NW POCAHONTAS	3246	3290	3091	3094	3177	3229	3257	3242	3091	2857	3049
805	IA 148	S OF 11TH ST CORNING	2797	2802	2637	2711	2720	2758	2620	2692	2567	2472	2641
806	US 6	E OF SHASTA WINDSOR HEIGHTS	NONE	18681	19223	18151	18610	18621	NONE	17937	17661	15132	16965
808	US 71	S OF BIRCH ST AUDUBON	NONE	4675	4601	4567	4545	NONE	NONE	4346	4314	3956	4474
809	IA 14	N OF WOODLAND ST MARSHALLTOWN	6000	5836	5746	5641	5648	NONE	NONE	5517	5482	NONE	NONE
810	IA 92	W OF N ST INDIANOLA	11036	11047	10985	11251	NONE	NONE	NONE	11457	11025	10132	10993
812	IA 122	W OF VIRGINIA AVE MASON CITY	11754	11469	10842	10768	10542	10542	10238	NONE	NONE	8491	9576
813	US 6	E OF PINE ST DAVENPORT	21137	22050	20189	19925	NONE	20323	NONE	18872	NONE	18278	19464
815	IA 922	BTWN WILEY BLVD & WESTDALE CDR RPDS	10658	NONE	NONE	NONE	10989	11355	11637	11684	11485	NONE	9749
816	US 34	W OF US 61 WEST BURLINGTON	13076	13173	12909	NONE	NONE	NONE	NONE	14325	14745	12146	13301
819	IA 9	EAST OF 14TH ST OSAGE	NONE	5207	5200	5244	5080	4946	NONE	4965	4803	4250	3994
820	IA 17	N OF NW 11TH ST EAGLE GROVE	2898	2810	2891	NONE	NONE	2870	2901	NONE	2830	2814	2948
821	IA 4	S OF EDGEWOOD AVE E JEFFERSON	3995	NONE	3832	3923	4093	4170	4139	4212	4055	3618	3954
823	US 6	BETWEEN SYCAMORE & 1ST AVE IOWA CITY	20148	NONE	NONE	NONE	19998	20069	20967	21289	21318	19635	21131
824	US 69	BETWEEN 15TH AND 16TH ST AMES	17567	NONE	17619	17298	17323	NONE	17099	17307	16806	14353	16050
826	US 65	1.5 MI NE OF I-80 BONDURANT	12446	NONE	12817	12625	NONE	14483	14796	14868	15106	14032	15560
827	US 61/151	W OF MISSISSIPPI R DUBUQUE	21609	21611	21381	21990	22069	22344	22726	22881	22104	18815	21870
828	IA 150	S OF 12TH ST OELWEIN	6490	6354	6305	6196	6198	6167	6195	6206	6090	5686	5974
829	US 59	S OF 5TH AVE SHENANDOAH	SITE REMOVED JUNE 2011										
830	IA 23	S OF IA 92 OSKALOOSA	2808	2794	2742	NONE	2789	NONE	2656	2584	2578	2485	2591
831	IA 5	W OF FLUER DRIVE DES MOINES	23086	22771	22572	23262	NONE	NONE	29065	28024	28579	22505	NONE
250	US 65	2.1 MI N OF IA 163 PLEASANT HILL	24953	25083	25034	25599	27101	28598	29994	30739	31061	27892	31083
278	IA 141	0.5 MI N OF IA 44 GRIMES	20906	21762	21702	21922	23410	NONE	25970	27110	28395	26423	30612

**2021 EXPANSION FACTORS  
MUNICIPAL PRIMARY**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.206	1.181	1.036	0.964	0.942	0.916	0.949	0.937	0.953	0.962	1.022	1.046
<b>Sunday</b>	1.485	1.594	1.356	1.362	1.308	1.322	1.328	1.300	1.321	1.391	1.401	1.377
<b>Monday</b>	0.932	0.968	1.002	0.982	1.040	0.974	1.018	0.977	1.053	0.974	0.932	0.928
<b>Tuesday</b>	0.953	0.912	0.964	0.962	0.964	0.960	0.945	0.971	0.946	0.951	0.908	0.938
<b>Wednesday</b>	0.879	0.868	0.940	0.959	0.942	0.944	0.952	0.947	0.936	0.962	0.899	0.925
<b>Thursday</b>	0.878	1.001	0.931	0.926	0.940	0.940	0.911	0.936	0.919	0.941	1.021	0.878
<b>Friday</b>	0.970	0.850	0.863	0.870	0.868	0.890	0.874	0.882	0.861	0.853	0.904	0.941
<b>Saturday</b>	1.165	1.130	1.105	1.090	1.066	1.106	1.122	1.123	1.118	1.102	1.119	1.216

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2011 TO 2021**

**SECONDARY**

**PAVED**

STATION	ROUTE	LOCATION	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
300	CO P14	2.7 MI N OF CO E33 CHURDAN	234	268	237	241	238	247	NONE	258	253	234	261
301	CO S14	0.8 MI S OF CO E29 NEVADA	988	988	965	967	969	992	1009	989	960	937	997
302	CO M55	0.2 MI N OF IA 141 MANILLA	777	798	787	793	804	818	NONE	763	778	714	787
303	CO K45	2.3 MI S OF IA 175 ONAWA	NONE	NONE	1162	1155	NONE	1120	1105	1051	1100	1049	1119
304	CO V45	3.5 MI N OF IA 92 SIGOURNEY	652	NONE	646	631	636	643	663	671	670	NONE	631
306	CO E53	1.8 MI E OF IA 25 SCRANTON	NONE	524	497	507	530	539	NONE	526	518	531	555
307	CO R38	2.2 MI N OF CO C54 CLARION	NONE	1339	1379	NONE	NONE	1421	1398	1376	1332	1203	1293
308	CO N32	1.6 MI N OF IA 9 ESTHERVILLE	344	NONE	323	NONE	340	NONE	NONE	348	329	361	367
309	CO K52	1.5 MI S OF US 18 HULL	1149	1178	1228	1249	NONE	1379	NONE	1415	1423	1422	1566
310	CO Y52	1.5 MI S OF US 30 GRAND MOUND	502	498	NONE	NONE	NONE	507	509	505	509	492	506
311	CO W12	3.5 MI S OF US 30 WATKINS	804	799	773	744	756	799	799	818	831	751	776
312	CO E26	2.7 MI W OF CO RD R38 BOONE	NONE	1525	NONE	1481	1525	1630	NONE	1714	1717	1542	1760
313	CO D42	2.0 MI E OF IA 13 MANCHESTER	630	612	623	679	699	756	783	769	770	762	818
314	CO 105	1.3 MI E OF CO S56 NORTHWOOD	767	744	737	731	772	754	NONE	708	683	665	718
315	CO RD	5.5 MI E OF US 63 DRAKESVILLE	665	682	666	665	679	691	NONE	768	678	694	727
316	CO D36	2.8 MI E OF CO N57 ROCKWELL CITY	1201	1157	1014	974	949	NONE	NONE	929	947	901	927

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	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
400	CO B30	0.5 MI E OF CO L48 PRIMGHAR	23	18	22	22	22	NONE	20	21	22	24	25
401	LOC RD	1.8 MI N OF CO E36 CLUTIER	36	39	34	35	NONE	NONE	30	29	27	31	31
402	LOC RD	0.8 MI E OF CO V18 CLUTIER	55	54	47	48	46	NONE	NONE	37	42	52	45
403	CO H47	5.0 MI SE OF US 34 ALBIA	92	104	100	NONE	100	99	102	93	89	98	87
405	LOC RD	2.5 MI N OF US 18 NEW HAMPTON	48	51	49	57	NONE	65	NONE	66	59	63	62
406	LOC RD	2.0 MI E OF US 169 LORIMOR	57	NONE	70	68	69	59	59	56	55	57	56
407	CO H23	2.0 MI E OF US 169 LORIMOR	66	76	77	75	72	67	70	65	64	63	60

**2021 EXPANSION FACTORS**

**SECONDARY**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.266	1.307	1.096	0.909	0.896	0.927	0.934	0.988	0.924	0.912	1.009	1.096
<b>Sunday</b>	1.571	1.735	1.368	1.469	1.435	1.412	1.315	1.406	1.378	1.439	1.499	1.380
<b>Monday</b>	0.916	0.998	0.991	0.954	0.998	0.948	1.017	0.971	1.038	0.984	0.910	0.922
<b>Tuesday</b>	0.932	0.908	0.939	0.938	0.942	0.940	0.915	0.958	0.918	0.907	0.899	0.945
<b>Wednesday</b>	0.871	0.814	0.950	0.945	0.891	0.915	0.924	0.922	0.919	1.001	0.883	0.923
<b>Thursday</b>	0.855	0.999	0.923	0.914	0.958	0.936	0.917	0.947	0.914	0.969	0.988	0.875
<b>Friday</b>	0.975	0.843	0.880	0.896	0.922	0.895	0.912	0.879	0.925	0.890	0.944	0.986
<b>Saturday</b>	1.242	1.175	1.152	1.147	1.095	1.198	1.207	1.149	1.119	1.057	1.128	1.203

**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2011 TO 2021  
MUNICIPAL STREETS**

STATION	ROUTE	LOCATION	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
900	LAKE ST	N OF 3RD ST in STORM LAKE	NONE	2610	2587	2556	2616	2662	2570	2454	2437	2260	2586
901	2ND AVE N	E OF 15TH ST in FORT DODGE	6620	6444	6024	NONE	NONE	NONE	NONE	6243	6152	6002	6191
902	LOCUST ST	E OF SPRING ST in DAVENPORT	NONE	NONE	20336	19630	20177	19332	19515	18481	17935	16703	18158
903	JEFFERSON	NE OF E 5TH ST in OTTUMWA	NONE	5699	5628	NONE	5329	NONE	NONE	4367	NONE	4209	4341
904	JOHNSON	W OF JANICE DR in CEDAR RAPIDS	9391	9258	9057	8931	NONE	NONE	NONE	NONE	NONE	NONE	NONE
905	N'WESTERN	N OF 20TH ST in AMES	2193	NONE	2211	2178	NONE	NONE	2131	2118	2117	1596	1803
906	DUBUQUE	S OF DAVENPORT ST in IOWA CITY	13859	13518	NONE	12861	13339	NONE	NONE	NONE	12357	9612	11639
907	COLLEGE	S OF 23RD ST in CEDAR FALLS	7974	NONE	NONE	7410	7323	7177	7341	7195	7163	5889	6642
908	LIND'WOOD	S OF 35TH ST in SIOUX CITY	976	960	NONE	NONE	NONE	904	874	784	8810	760	843
909	HAMILTON	N OF CLIFTON AVE in SIOUX CITY	14388	14584	NONE	13719	14701	15289	15446	15197	14956	13950	15250
910	GRANDVIEW	SE OF PLYMOUTH CT in DUBUQUE	8917	8833	8411	7983	8465	NONE	8541	8453	8583	7790	8076
911	HUMBOLDT	S OF 4TH ST in BODE	739	NONE	684	695	665	660	673	696	675	657	668
912	ELM ST	N OF LUCAS ST in CRESTON	3802	3735	3550	NONE	3364	3440	3310	3212	3080	2868	2987
913	WASHINGTON	E OF HARRISON ST in MOUNT PLEASANT	SITE REMOVED SEPTEMBER 2010										
* 914	16TH ST	S OF AVE N in COUNCIL BLUFFS	NONE	6004	5949	6208	9535	10236	10880	10876	10829	9529	10069

Note: Station 914 was previously station 811  
16th Street was IA 192 until 2016 when it was transferred to the city of Council Bluffs.

**2021 EXPANSION FACTORS  
MUNICIPAL STREETS**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SEASONAL	1.202	1.152	1.015	0.948	0.945	0.960	1.007	0.959	0.929	0.931	1.007	1.058
Sunday	1.411	1.517	1.327	1.347	1.330	1.332	1.278	1.312	1.333	1.359	1.366	1.363
Monday	0.946	0.976	0.995	0.967	1.022	0.974	1.029	0.958	1.047	0.968	0.922	0.944
Tuesday	0.942	0.918	0.957	0.947	0.943	0.939	0.948	0.946	0.937	0.946	0.897	0.932
Wednesday	0.890	0.871	0.928	0.942	0.927	0.928	0.955	0.941	0.917	0.947	0.896	0.915
Thursday	0.880	0.980	0.930	0.930	0.931	0.932	0.917	0.940	0.915	0.935	1.024	0.889
Friday	0.966	0.855	0.882	0.890	0.877	0.905	0.884	0.893	0.863	0.874	0.920	0.932
Saturday	1.176	1.151	1.122	1.125	1.115	1.131	1.116	1.150	1.153	1.131	1.155	1.218



**ANNUAL AVERAGE DAILY TRAFFIC BY STATIONS FOR THE YEARS 2011 TO 2021**

**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

2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
8250	NONE	NONE	8284	8724	8741	8908	8867	8859	8027	8820
3801	3772	3711	3582	4041	4106	4112	4112	4122	4008	4252
6130	6445	6697	NONE	7530	8418	8872	9185	9377	9125	10300

**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.

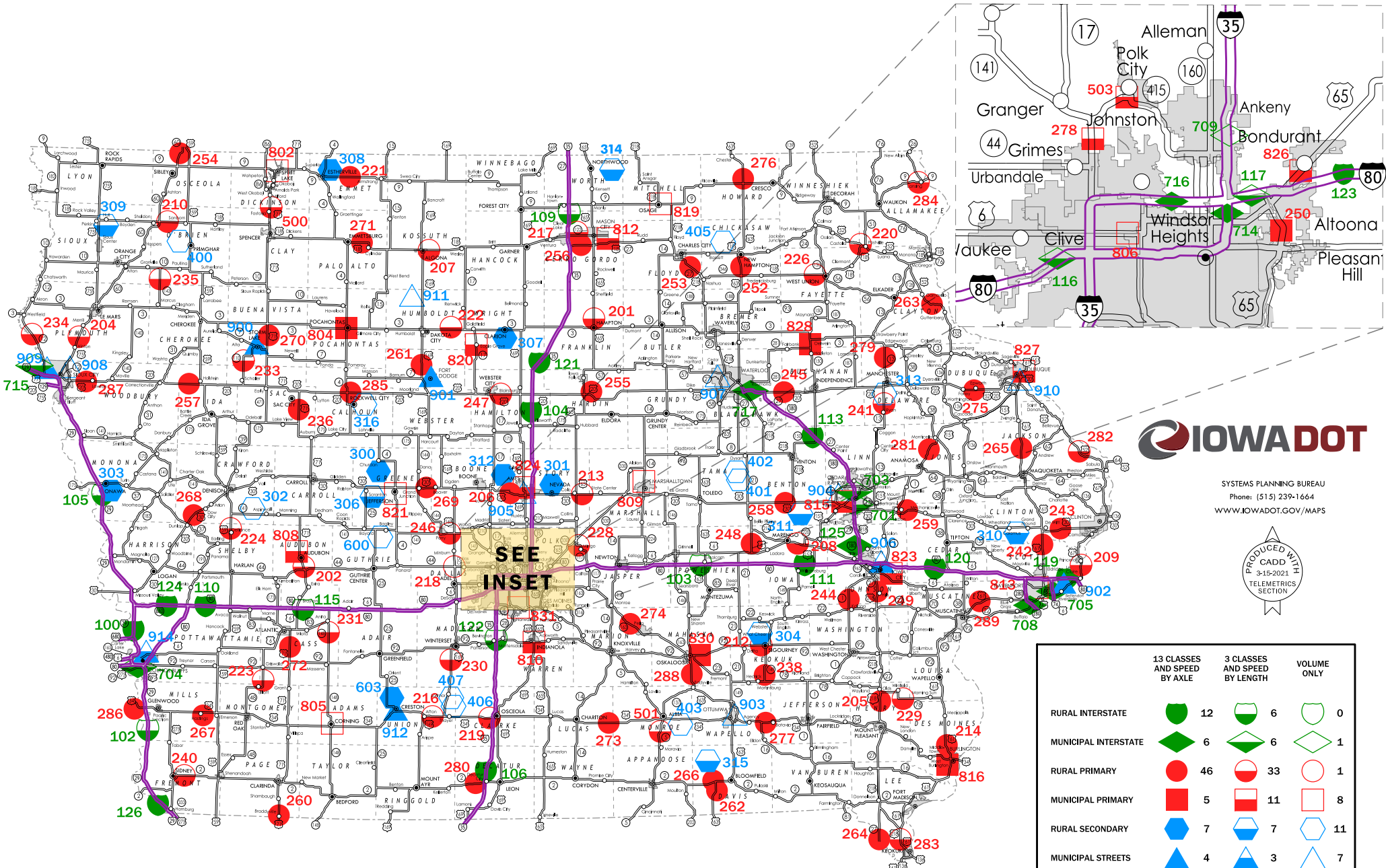
2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
199	188	181	176	178	182	173	159	151	175	177
759	850	NONE	748	748	789	806	725	595	974	849
NONE	262	283	279	NONE	324	321	298	277	375	360

**2021 EXPANSION FACTORS  
RECREATIONAL**

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>SEASONAL</b>	1.510	1.618	1.158	0.939	0.823	0.733	0.757	0.849	0.896	1.072	1.414	1.586
Sunday	1.206	1.499	1.049	1.047	1.001	0.991	0.966	0.980	0.983	1.135	1.298	1.199
Monday	1.023	1.064	1.125	1.085	1.054	1.127	1.049	1.173	1.059	1.097	0.944	0.966
Tuesday	1.000	0.955	1.102	1.105	1.169	1.162	1.125	1.181	1.138	1.015	0.946	0.988
Wednesday	0.944	0.896	1.086	1.136	1.092	1.067	1.171	1.090	1.142	1.107	0.989	0.976
Thursday	0.970	1.052	1.050	1.054	1.137	1.079	1.040	1.087	1.082	1.067	1.063	0.932
Friday	1.007	0.906	0.911	0.922	0.925	0.904	0.924	0.889	0.901	0.880	0.968	0.981
Saturday	1.017	0.934	0.920	0.887	0.860	0.870	0.924	0.874	0.903	0.910	0.943	1.080

# AUTOMATIC TRAFFIC RECORDER LOCATIONS

JANUARY 1, 2022



**IOWADOT**

SYSTEMS PLANNING BUREAU  
 Phone: (515) 239-1664  
[WWW.IOWADOT.GOV/MAPS](http://WWW.IOWADOT.GOV/MAPS)

PRODUCED WITH  
 CADD  
 9-15-2021  
 TELEMETRICS  
 SECTION

	13 CLASSES AND SPEED BY AXLE	3 CLASSES AND SPEED BY LENGTH	VOLUME ONLY
RURAL INTERSTATE	12	6	0
MUNICIPAL INTERSTATE	6	6	1
RURAL PRIMARY	46	33	1
MUNICIPAL PRIMARY	5	11	8
RURAL SECONDARY	7	7	11
MUNICIPAL STREETS	4	3	7
<b>TOTAL</b>	<b>174</b>	<b>80</b>	<b>28</b>