MAPA

TRAFFIC GROWTH REPORT

for the Omaha Metropolitan Area

2021

METROPOLITAN AREA PLANNING AGENCY

2014 MAPA Traffic Growth Report

The growth analysis in this publication is based on data compiled by MAPA in cooperation with the cities of Bellevue Council Bluffs, La Vista, Omaha, Papillion; counties of Douglas, Pottawattamie, Sarpy; Iowa DOT, Nebraska DOR, FHWA and FTA.

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MAPA Traffic Growth Report: Introduction and Methodology

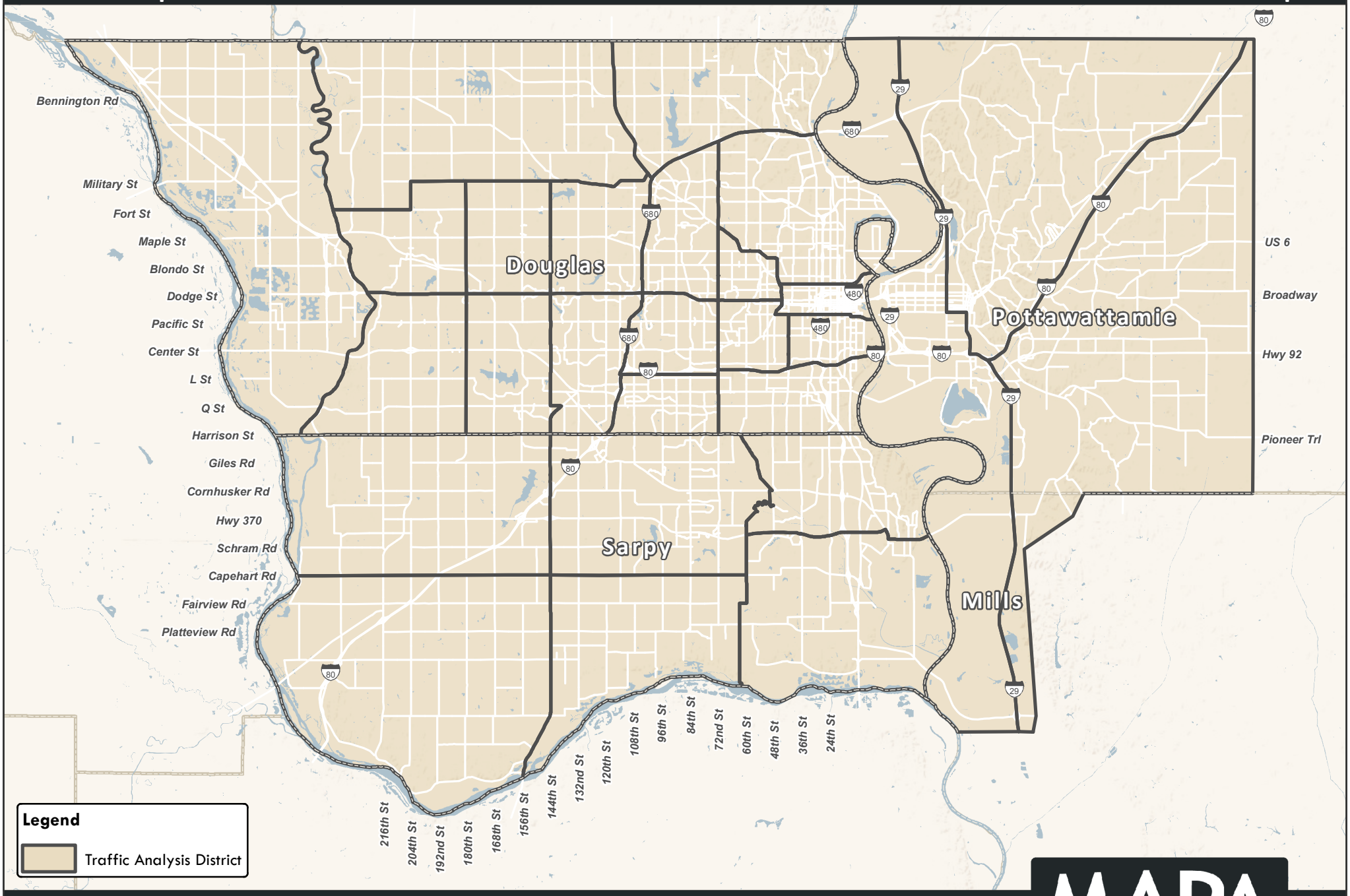
The Traffic Growth Report is published periodically by the Metropolitan Area Planning Agency (MAPA) as part of its on-going process of monitoring transportation in the Omaha-Council Bluffs metropolitan area. This report provides a unique analysis of the change in vehicular traffic from a regional and sub-regional perspective. Traffic is listed in terms of total VMT (vehicle miles traveled), which is calculated by multiplying the length of a road segment by the average weekday daily traffic (AAWT). Statistics in the Traffic Growth Report are primarily derived from volumes shown on the 2014 Traffic Flow Map. For more specific information regarding traffic along or through particular streets or intersections, please consult the MAPA 2014 Traffic Flow Map.

The 2014 Traffic Growth Report utilizes the methodology from the 2012 Traffic Growth Report to measure the changes in VMT at regional and sub-regional levels. Traffic count data for this report is aggregated to Traffic Analysis Districts (TADs)– small areas in each county that are bound by major roadways. Total VMT is derived from the traffic count estimates that include new counts and older data that is factored in relation to the new counts. Growth rates are derived from locations where new data was available for this report (i.e. a location with a 2014 traffic count would be compared back to the AAWT value in 2012).

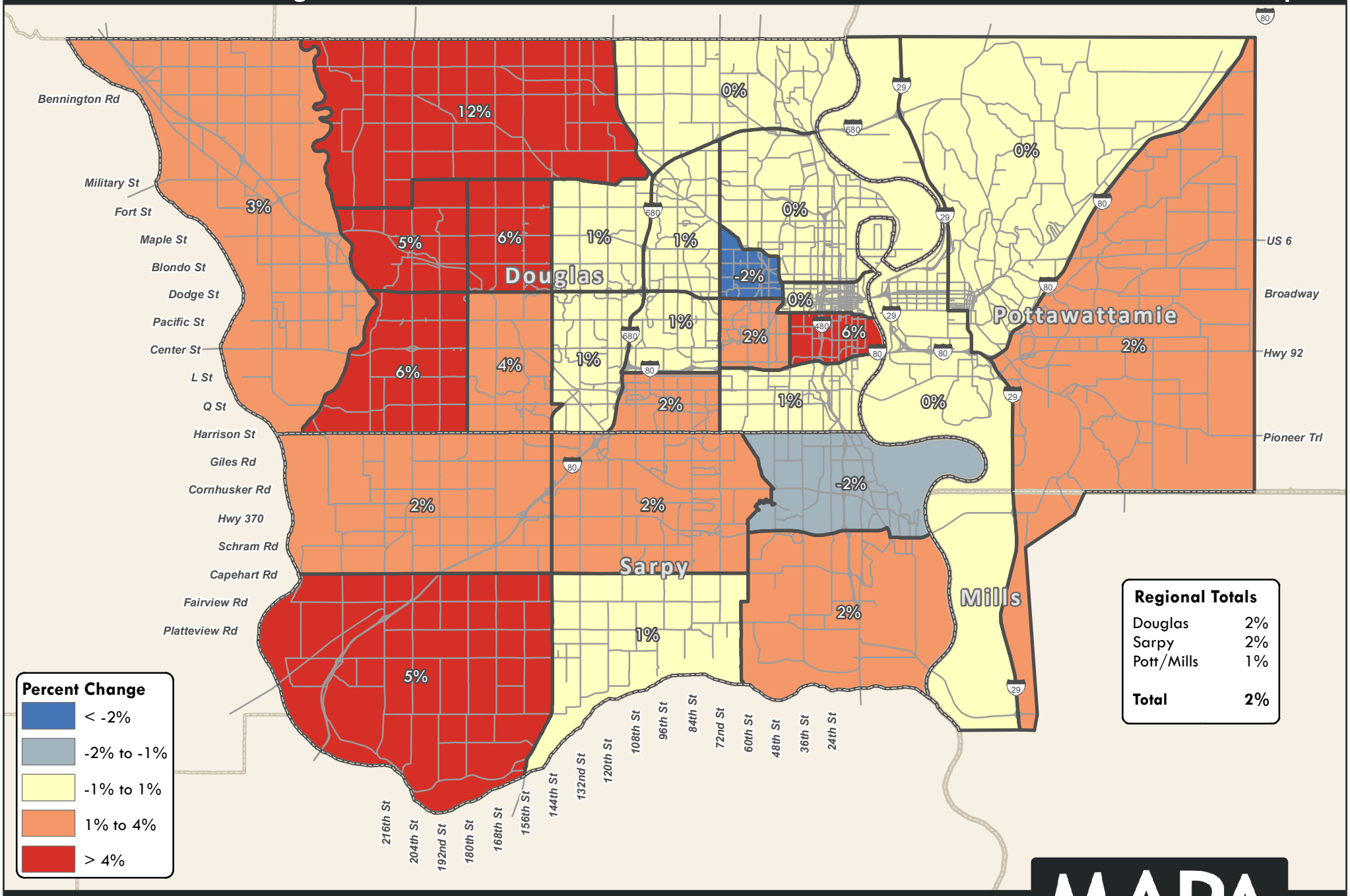
The Regional Traffic Patterns figure was created using data compiled from the MAPA Intersection Report, the MAPA Interchange Report, and the MAPA Travel Demand Model. Traffic flow recorded at each intersection was processed using ArcGIS Spatial Analyst and turned into an interpolated flow surface that demonstrates intersection connectivity. Additional traffic flow at each interchange is displayed with a corresponding point magnitude. Finally, road segments from the travel demand model where the traffic flow exceeds capacity (i.e. the amount of traffic that a given segment can support during normal conditions) show areas for potential capacity improvement. When considered together these three elements provide insight into transportation network performance and traffic flow trends in the region.

Pages 5-8 of the report show average growth rates by Automatic Traffic Recorder (ATR) station over the period 2002 to 2015. The maximum average growth rate of 6.0% is observed at station I2 (North of Gretna). The ATR station on I-92 South of Ave N Council Bluffs experienced an average rate of decrease of over 0.02% during the same period.

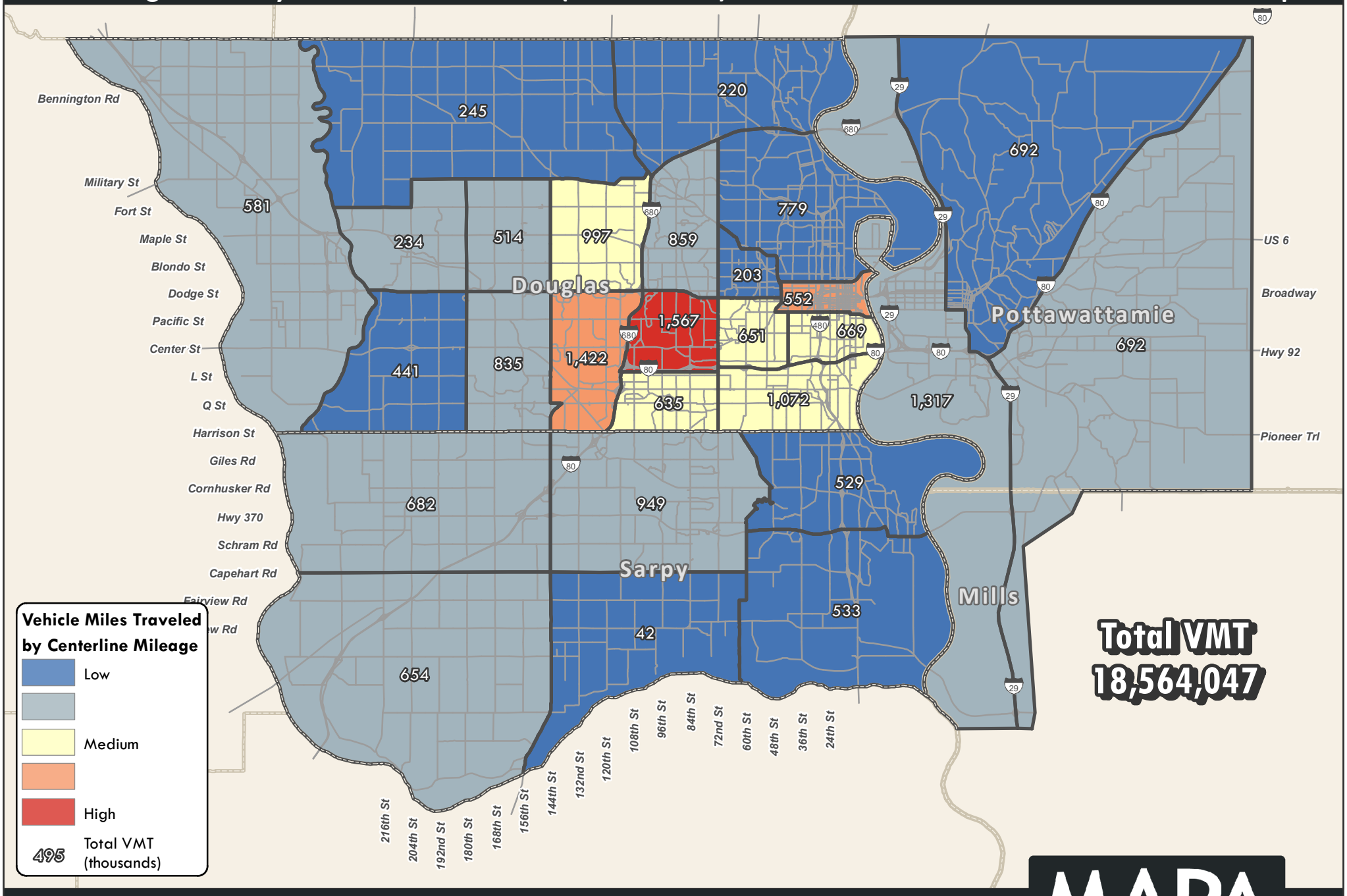
VMT is estimated to have grown by over 2% in Douglas and Sarpy Counties and by slightly over 1% in Pottawattamie County since 2012. The western part of Omaha region along the Dodge Expressway and western Sarpy County continued to grow in accordance with the continued new development in the area. Additionally some areas such as the central parts of Sarpy County showed a decrease in traffic.


Douglas
Sarpy
Pottawattamie
Mills
Bennington Rd
Military St
Fort St
Maple St
Blondo St
Dodge St
Pacific St
Center St
L St
Q St
Harrison St
Giles Rd
Cornhusker Rd
Hwy 370
Schram Rd
Capehart Rd
Fairview Rd
Platteview Rd
US 6
Broadway
Hwy 92
Pioneer Trl
216th St
204th St
192nd St
180th St
168th St
156th St
144th St
132nd St
120th St
108th St
96th St
84th St
72nd St
60th St
48th St
36th St
24th St
Legend
Traffic Analysis District
0 3 6 12
Miles
MAPA

Estimated Percent Change in Vehicles Miles Traveled 2012 - 2014

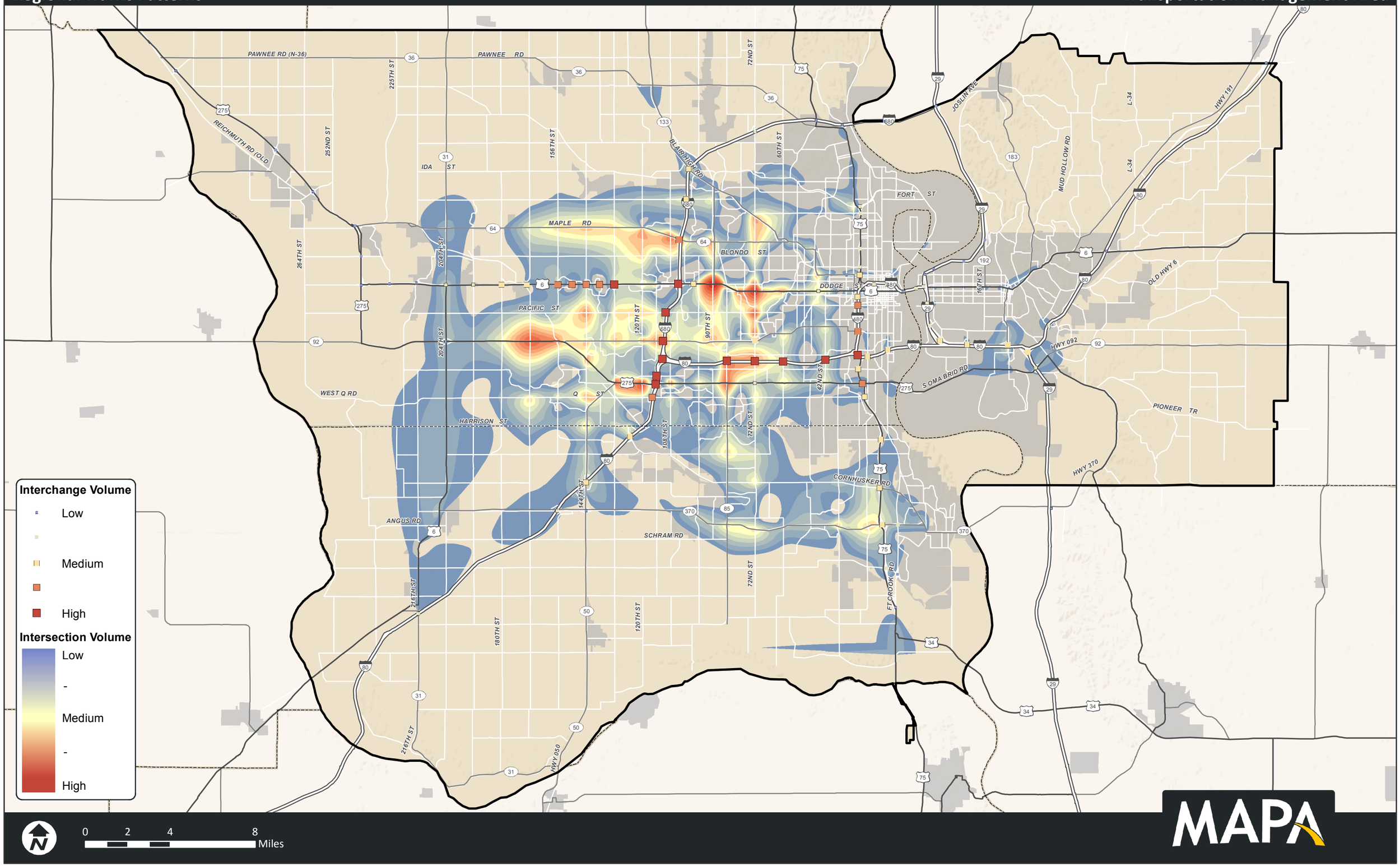


2014 Average Weekday Vehicle Miles Traveled (in thousands)



Regional Traffic Patterns

Transportation Management Area



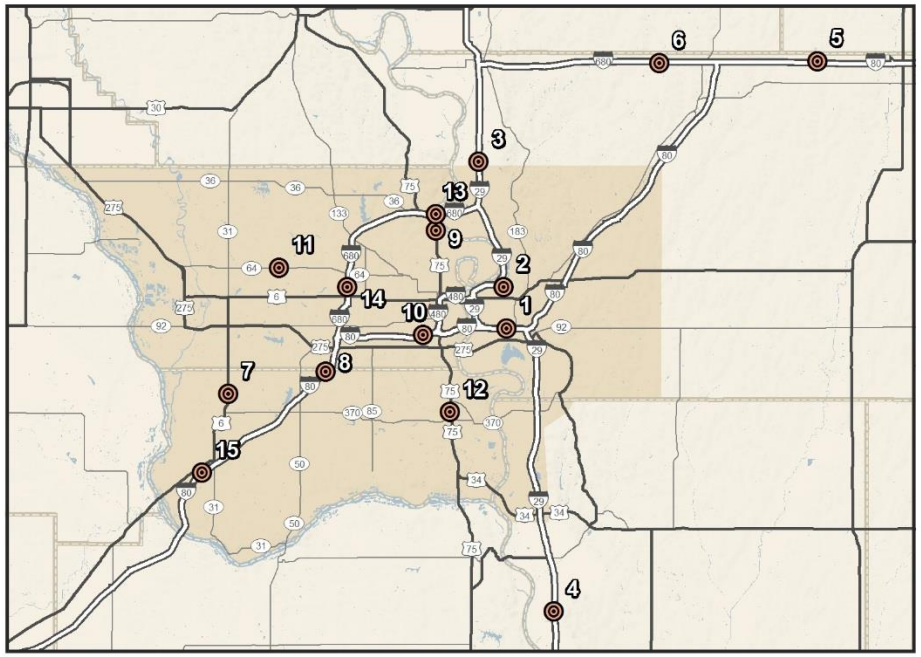
MAPA Area Continuous Traffic Counts

The States of Nebraska and Iowa both have traffic counting sites that count vehicles on a continous basis, for all 365 days of the year, in the Omaha-Council Bluffs metro area. These counters, called "Automatic Traffic Recorders" (ATRs), provide an excellent source of traffic data. Traffic data and growth trends for the locations are shown below.

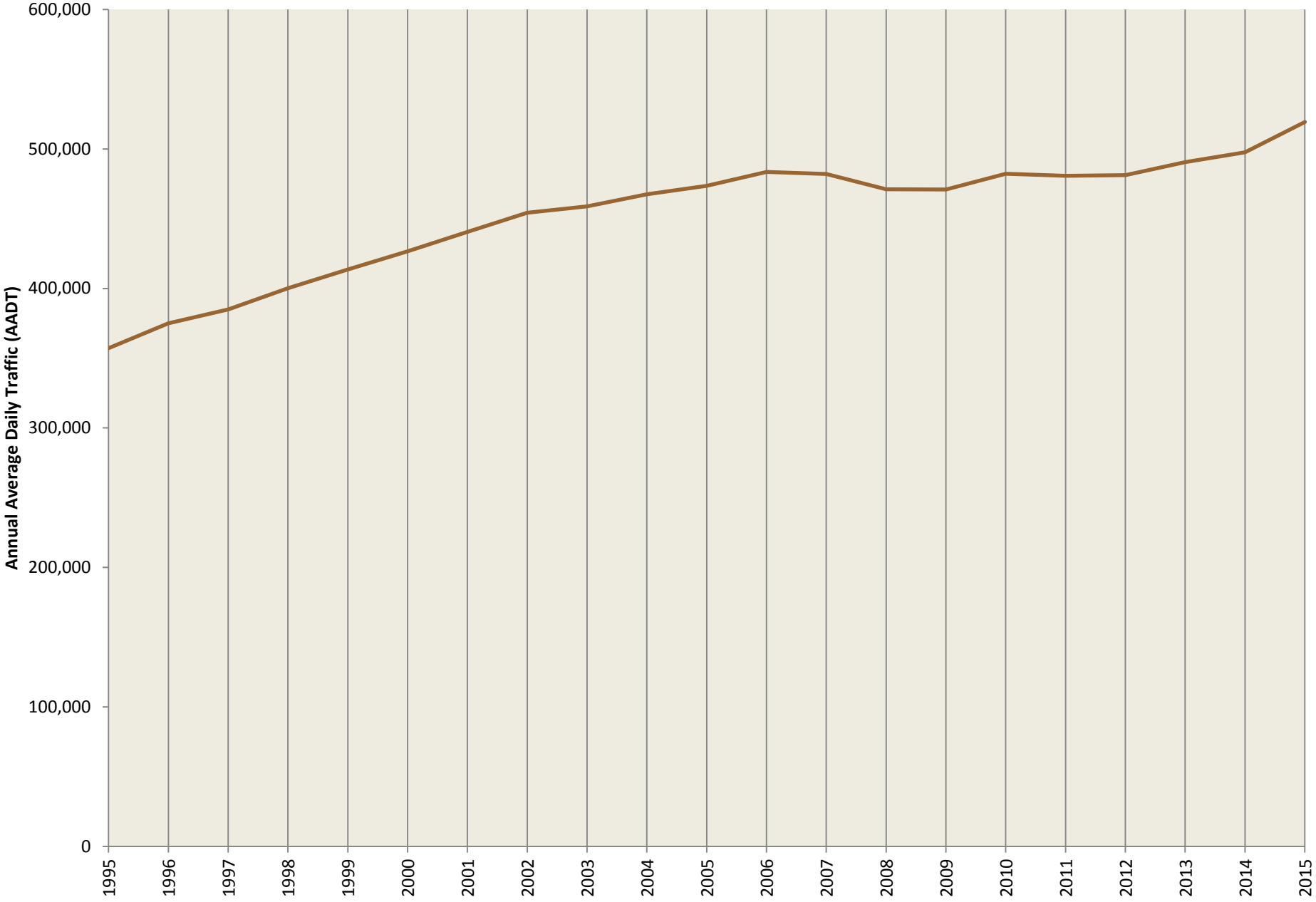
There are currently 15 ATRs in the region, with 9 located inNebraska side and 5 located in Iowa (one location in Iowa was discontinued in after 2012). ATRS are located on freeways and arterials in urban, suburban, and rural areas. Historically, these numbers have been reasonably consistent with data from MAPA's Traffic Growth Report. Between 2012 and 2014, the ATR data increased 3.38%– a rate higher than MAPA's estimates for the entireity of region's roadways. While MAPA's estimates for total VMT growth are closer to 2%, the ATR locations included in this analysis are reflective of the trend for the region's busiest roadways which show higher levels of growth in both analyses. Newly available data for the metro area in 2015 shows a moderate increase of 4.36% between 2014 and 2015 for the MAPA region.

The charts on the following pages track the growth of traffic on roadways monitored by ATRs in the MAPA region. The charts and graphs in this section only include data from ATRs for which a continuous set of data for the period reflected on each graphic. As such the long-term trend charts reflect a subset of the available ATR data but allow us to make comparisons and generalizations for these periods. Additional graphs illustrate the average annual rates of change for the entire region and for each traffic record over the 17 year period and since the last MAPA Traffic Growth Report.

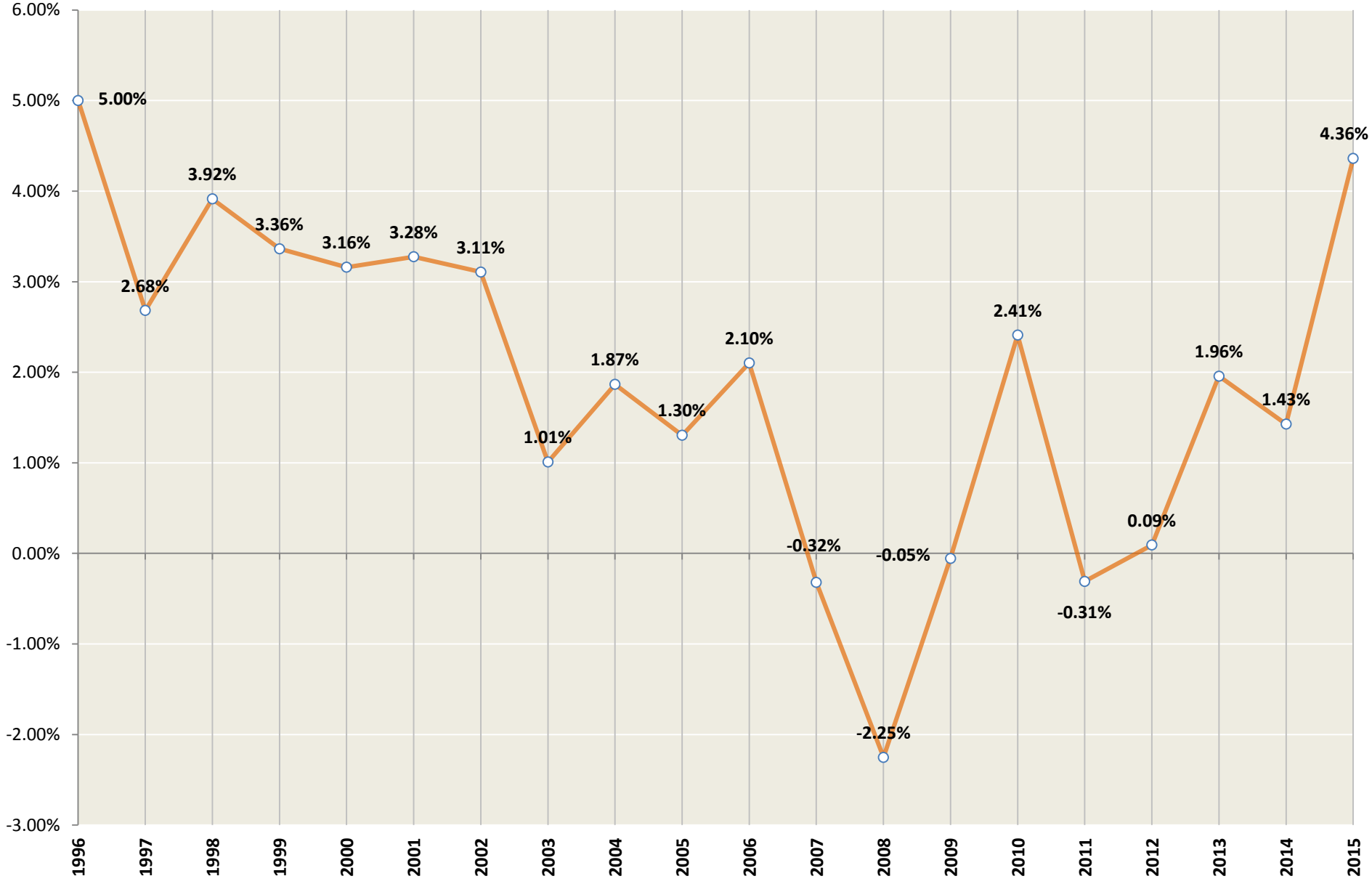
	Iowa ATR Locations										
	Route	Location	2002	2004	2006	2008	2010	2012	2014	2015
1	I-29/80	.6 mi West of IA 192	76,024	75,623	79,350	79,516	75,988	75,521	N/A	N/A
2	IA 192	South of Ave N	10,061	9,442	9,047	8,858	8,719	6,004	6,208	9,535
3	I-29	2 mi North of South I-680 Jct	21,070	21,319	21,484	21,033	20,593	19,730	20,696	21,770
4	I-29	4 mi South of US-34 Jct (Pac. Jct.)	11,917	12,101	12,495	12,300	11,868	12,008	13,563	13,530
5	I-80	1.5 mi West of Co M-16 (Shelby)	22,379	22,496	22,670	22,752	22,950	N/A	23,517	24,441
6	I-680	6.4 mi West of I-80 (Beebeetown)	N/A	N/A	N/A	N/A	6,196	5,947	6,039	6,311
	Nebraska ATR Locations									
	Route	Location	2002	2004	2006	2008	2010	2012	2014	2015
7	US 6	North of Gretna	9,156	11,703	13,424	15,470	15,048	16,162	19,023	19,958
8	I-80	Just South of Douglas-Sarpy Line	53,750	56,682	60,285	57,913	60,148	60,537	64,971	67,773
9	US 75	30th St South of I-680 in Omaha	14,932	14,708	14,607	14,549	14,218	13,544	13,757	14,633
10	I-80	I-80 at 42nd St	185,153	166,966	168,298	170,739	164,863	169,359	171,875	173,168
11	N-64	At 160th St	N/A	N/A	N/A	22,417	22,584	23,678	24,415	25,446
12	US 75	Just North of Jct N-370 Bellevue	43,806	44,441	44,273	42,463	43,712	44,744	45,667	49,058
13	I-680	Mormon Bridge Omaha	16,046	16,254	15,656	15,401	16,000	14,004	15,019	16,094
14	I-680	I-680 North of Dodge St	70,000	73,000	80,095	80,077	84,107	83,817	83,154	86,920
15	I-80	West of Gretna Interchange	36,595	39,500	41,400	38,889	40,830	41,242	43,642	46,845



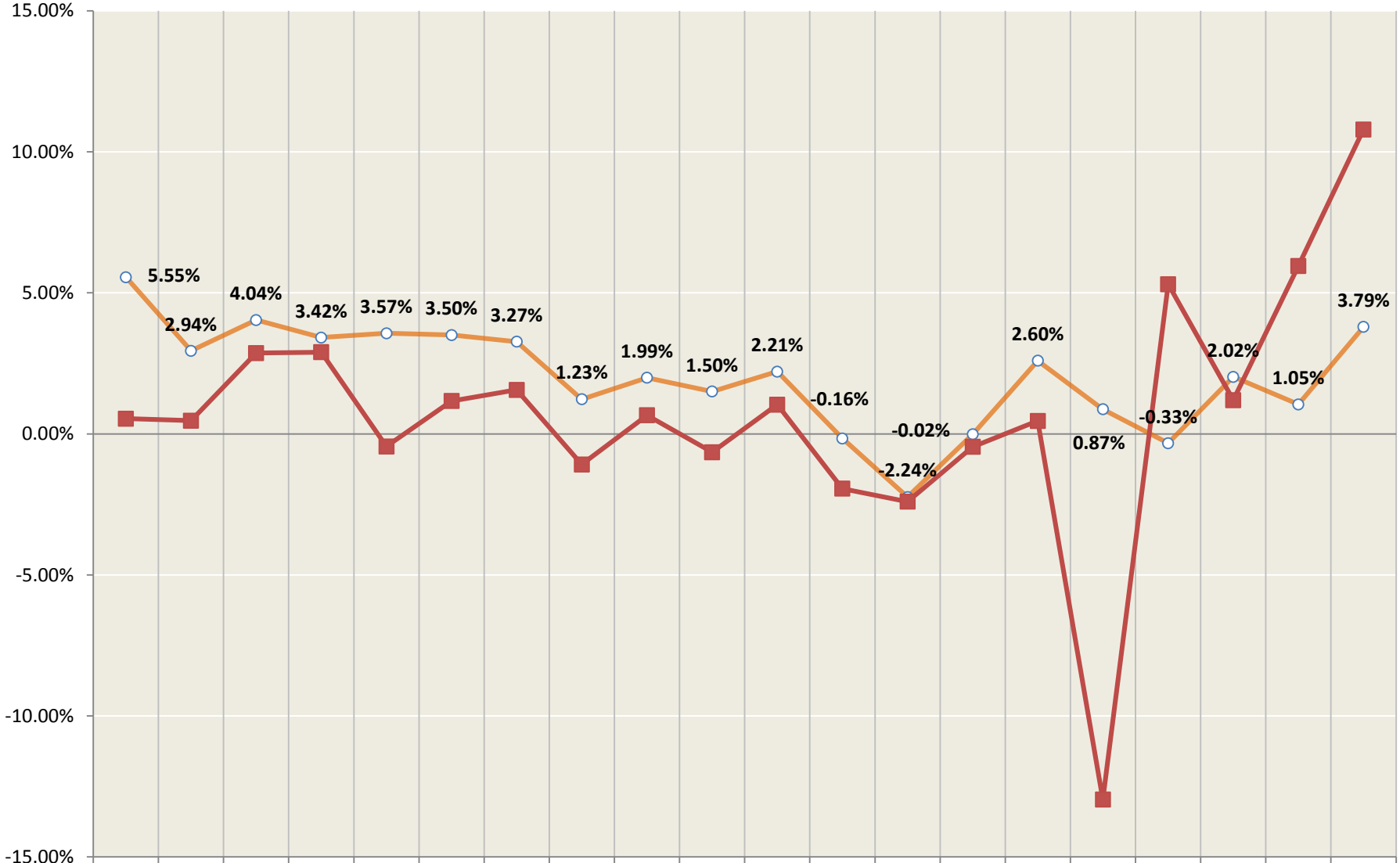
MAPA Regional Automatic Traffic Recorder Counts, 1995-2015



Annual Rate of Change of Automatic Traffic Recorders (ATR) 1995-2015

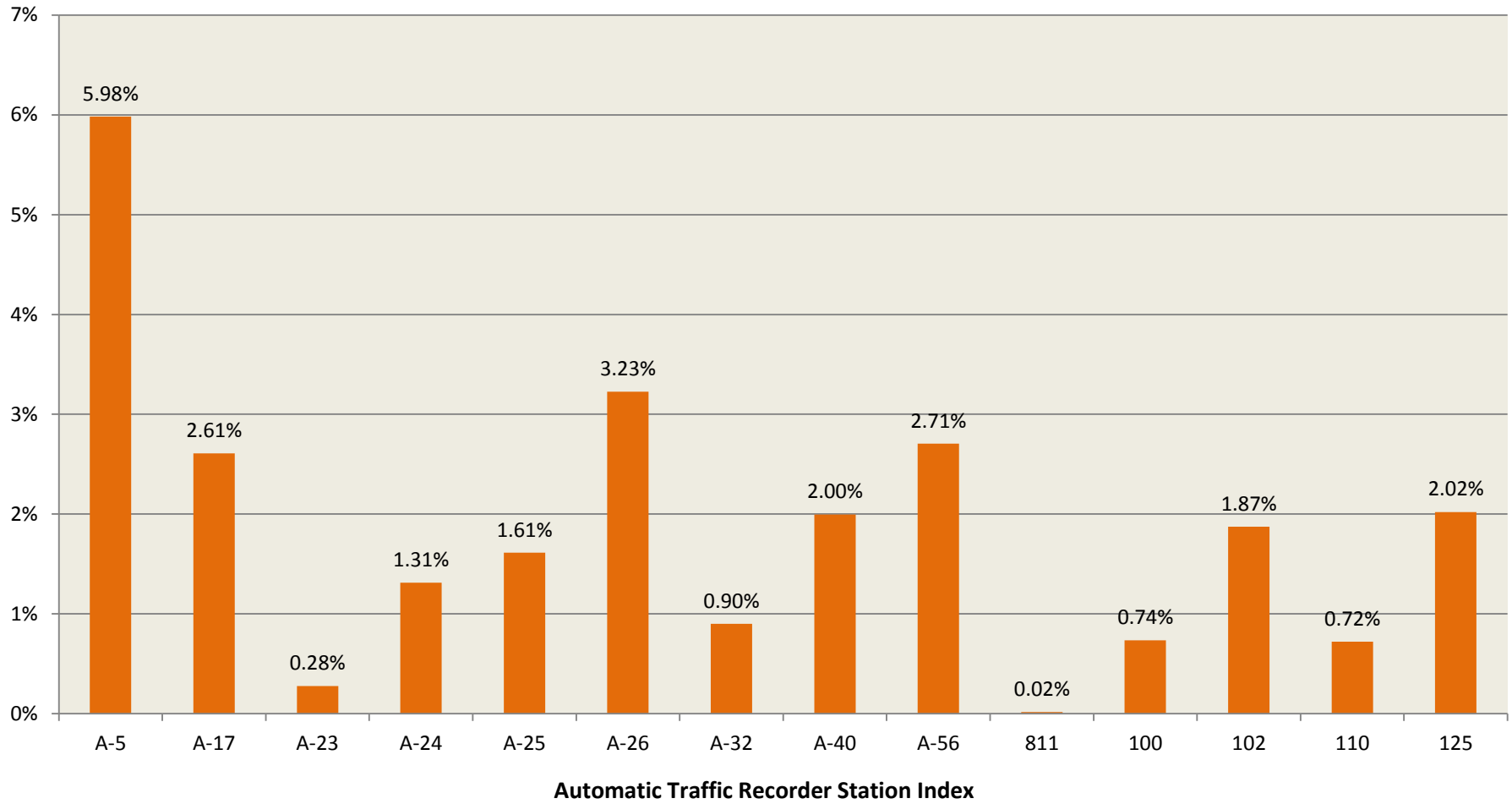


Annual Rate of Change of Automatic Traffic Recorders (ATR) by State
1995-2015



	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Nebraska	5.55%	2.94%	4.04%	3.42%	3.57%	3.50%	3.27%	1.23%	1.99%	1.50%	2.21%	-0.16%	-2.24%	-0.02%	2.60%	0.87%	-0.33%	2.02%	1.05%	3.79%
Iowa	0.54%	0.47%	2.86%	2.89%	-0.45%	1.17%	1.56%	-1.08%	0.66%	-0.65%	1.04%	-1.94%	-2.40%	-0.46%	0.46%	-12.97	5.31%	1.19%	5.95%	10.79%

Annual Growth Rate of Automatic Traffic Recorders by Station 1995-2015



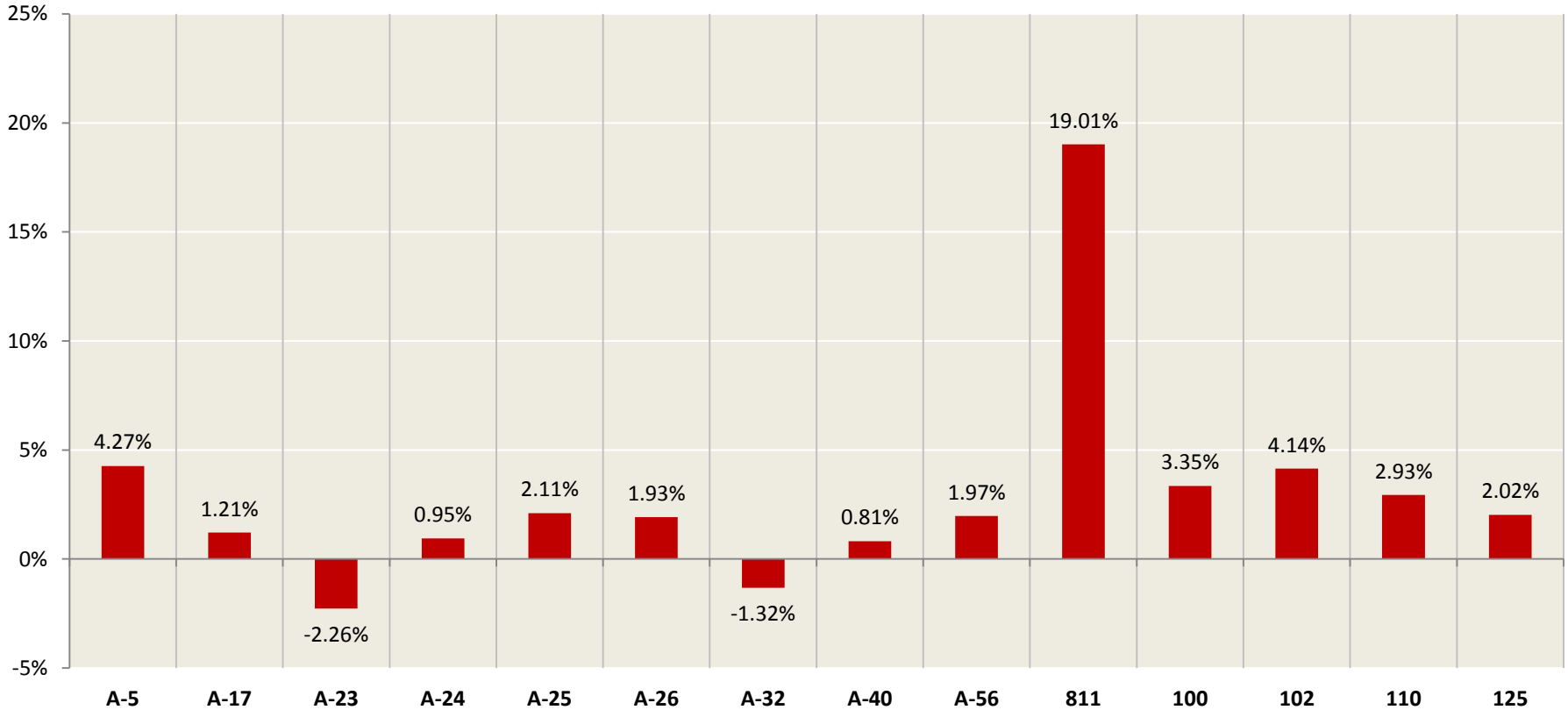
MAP #	ID	Location
7	A-5	US 6 North of Gretna
8	A-17	I-80 Just South of Douglas - Sarpy Line
9	A-23	US 75/30th Street South of I-680 in Omaha
10	A-24	I-80 at 36th Street in Omaha
11	A-25	N-64 At 160th Street

MAP #	ID	Location
12	A-26	US 75 Just North of Jct. N-370 in Bellevue
13	A-32	I-680 Mormon Bridge in Omaha
14	A-40	I-680 North of Dodge Street in Omaha
15	A-56	I-80 West of Gretna Interchange
2	811	IA 192 S of Ave N Council Bluffs

MAP #	ID	Location
3	100	I-29 3.0 MI N of S JCT I 680 Honey Creek
4	102	I-29 4.0 MI S of US 34 Pacific Jct.
5	110	I-80 1.5 MI W of Co M16 Shelby
6	125	I-680 6.4 mi West of I-80

** Data from ATR Location 704 is no longer included in longitudinal analyses as IDOT is not collecting new data at this site*

Annual Growth Rate of Automatic Traffic Recorders by Station 2012-2015



Automatic Traffic Recorder Station Index

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