

The logo for the Metropolitan Area Planning Agency (MAPA) features the word "MAPA" in a bold, blue, sans-serif font. A stylized, dark blue swoosh or arrow-like graphic element is positioned to the right of the letter "A".

MAPA

TRAFFIC GROWTH REPORT

for the Omaha Metropolitan Area



METROPOLITAN AREA PLANNING AGENCY

2016 MAPA Traffic Growth Report

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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.

The preparation of this document was financed in part with funding from the United States Department of Transportation (USDOT), administered by the Nebraska Department of Roads (NDOR) and Iowa Department of Transportation (Iowa DOT). The opinions, findings and conclusions expressed in this publication are those of the authors and do not necessarily represent USDOT, NDOR or Iowa DOT.

MAPA Traffic Growth Report: Introduction and Methodology

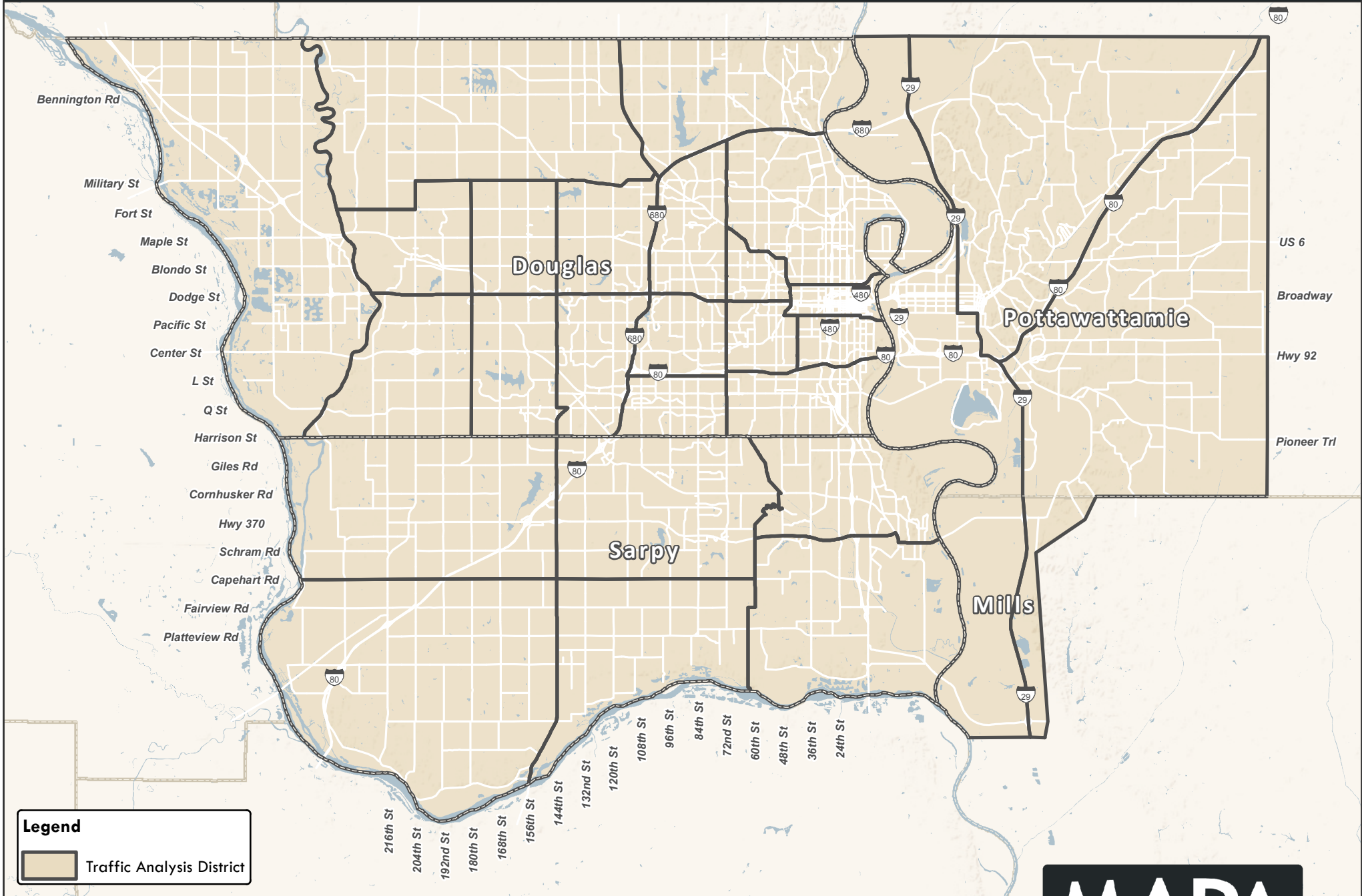
The Traffic Growth Report is published periodically by the Metropolitan Area Planning Agency (MAPA) as part of its on-going process of monitoring transportation in the Omaha-Council Bluffs metropolitan area. This report provides a unique analysis of the change in vehicular traffic from a regional and 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 2016 Traffic Flow Map. For more specific information regarding traffic along or through particular streets or intersections, please consult the MAPA 2016 Traffic Flow Map.

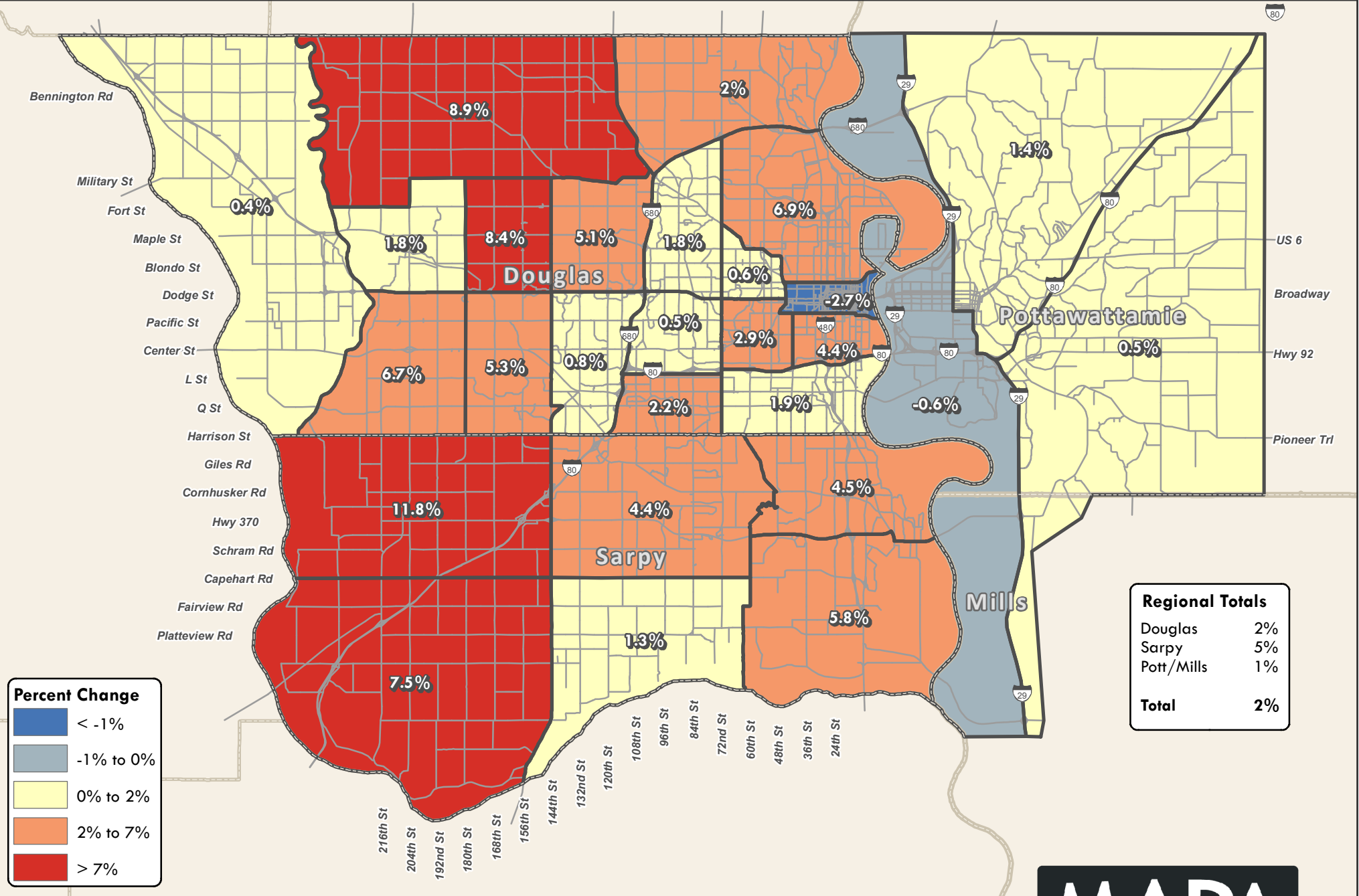
The 2016 Traffic Growth Report utilizes the methodology from the 2014 Traffic Growth Report to measure the changes in VMT at regional and sub-regional levels. Traffic count data for this report is aggregated to Traffic Analysis Districts (TADs)— small areas in each county that are bound by major roadways. 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 2016 traffic count would be compared back to the AAWT value in 2014).

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 7-11 of the report show average growth rates by Automatic Traffic Recorder (ATR) station over the period 2002 to 2016. The maximum average growth rate of 5.97% is observed at station I2 (North of Gretna). The ATR station on IA 192 South of Ave N Council Bluffs experienced an average rate of decrease of over 0.35% during the same period.

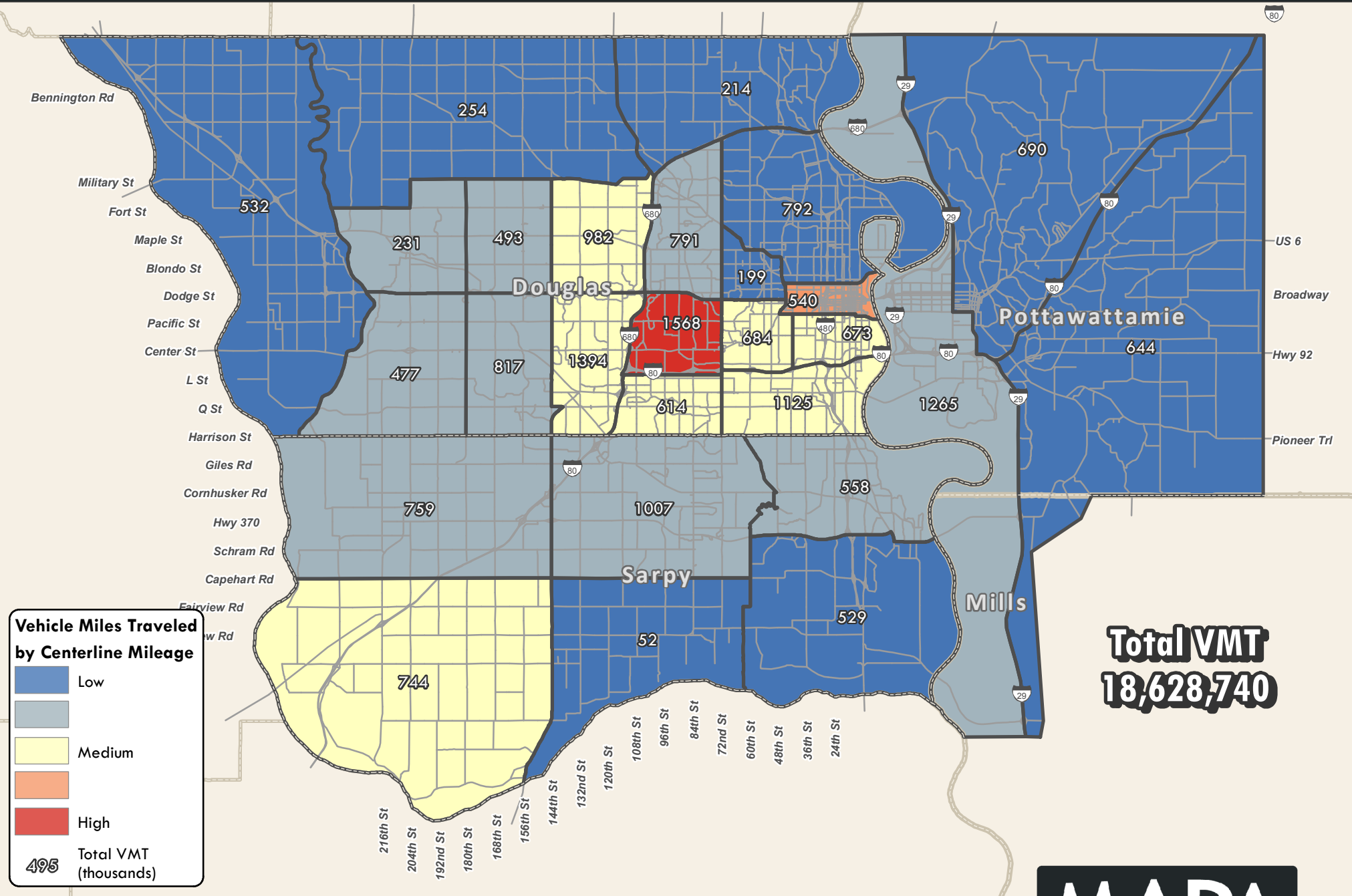
VMT is estimated to have grown by over 2% in Douglas County, 5% in Sarpy County and by 1% in Pottawattamie and Mills Counties since 2014. The western part of Omaha region along the Dodge Expressway and western Sarpy County continued to grow in accordance with the continued new development in the area. Additionally, some areas such as the central parts of Sarpy County showed a decrease in traffic.

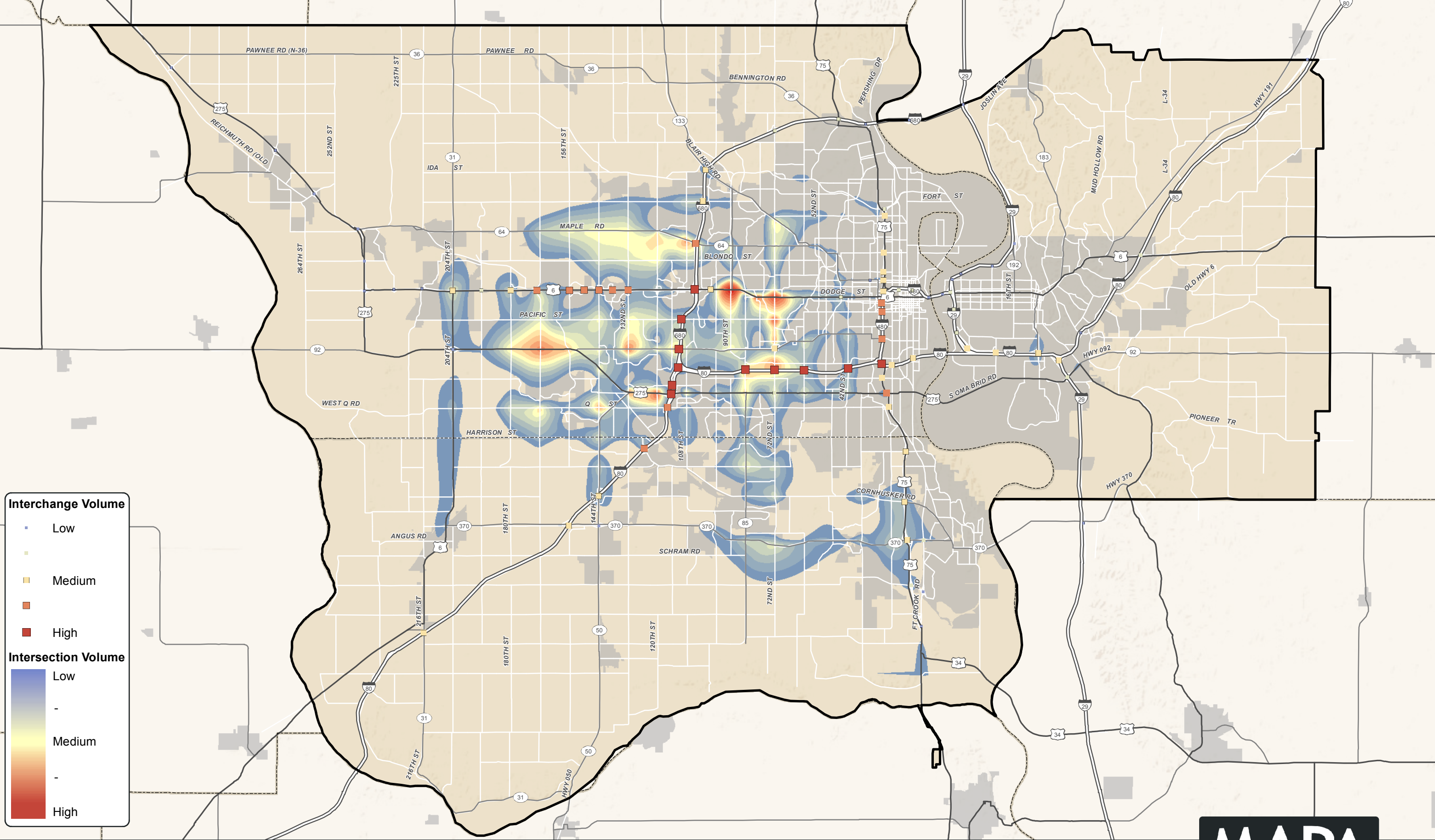




0 3 6 12 Miles

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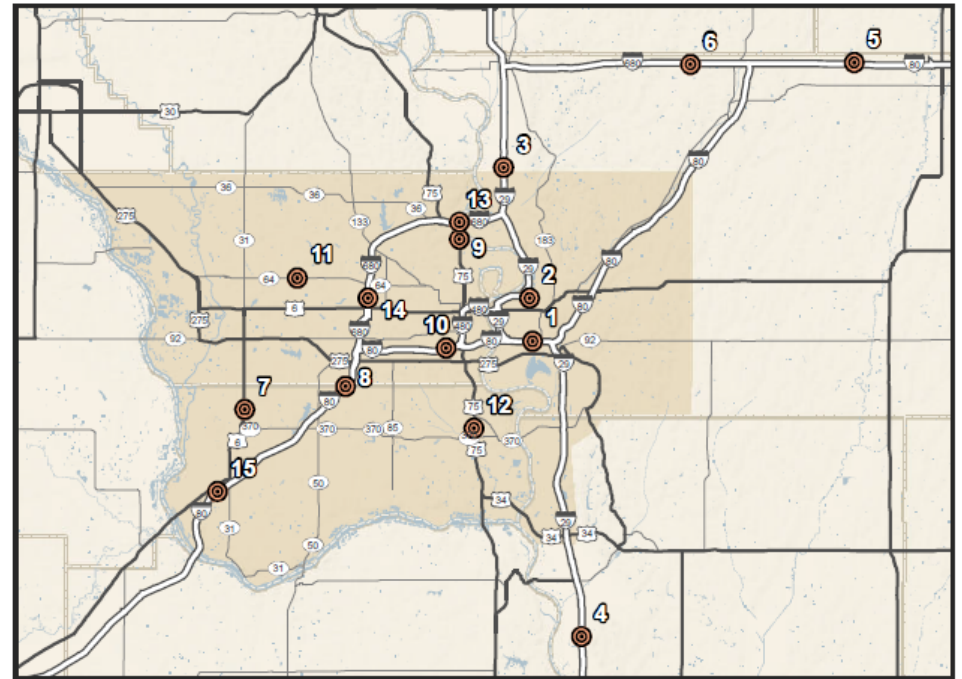
MAPA Area Continuous Traffic Counts

The States of Nebraska and Iowa both have traffic counting sites that count vehicles on a continuous 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.

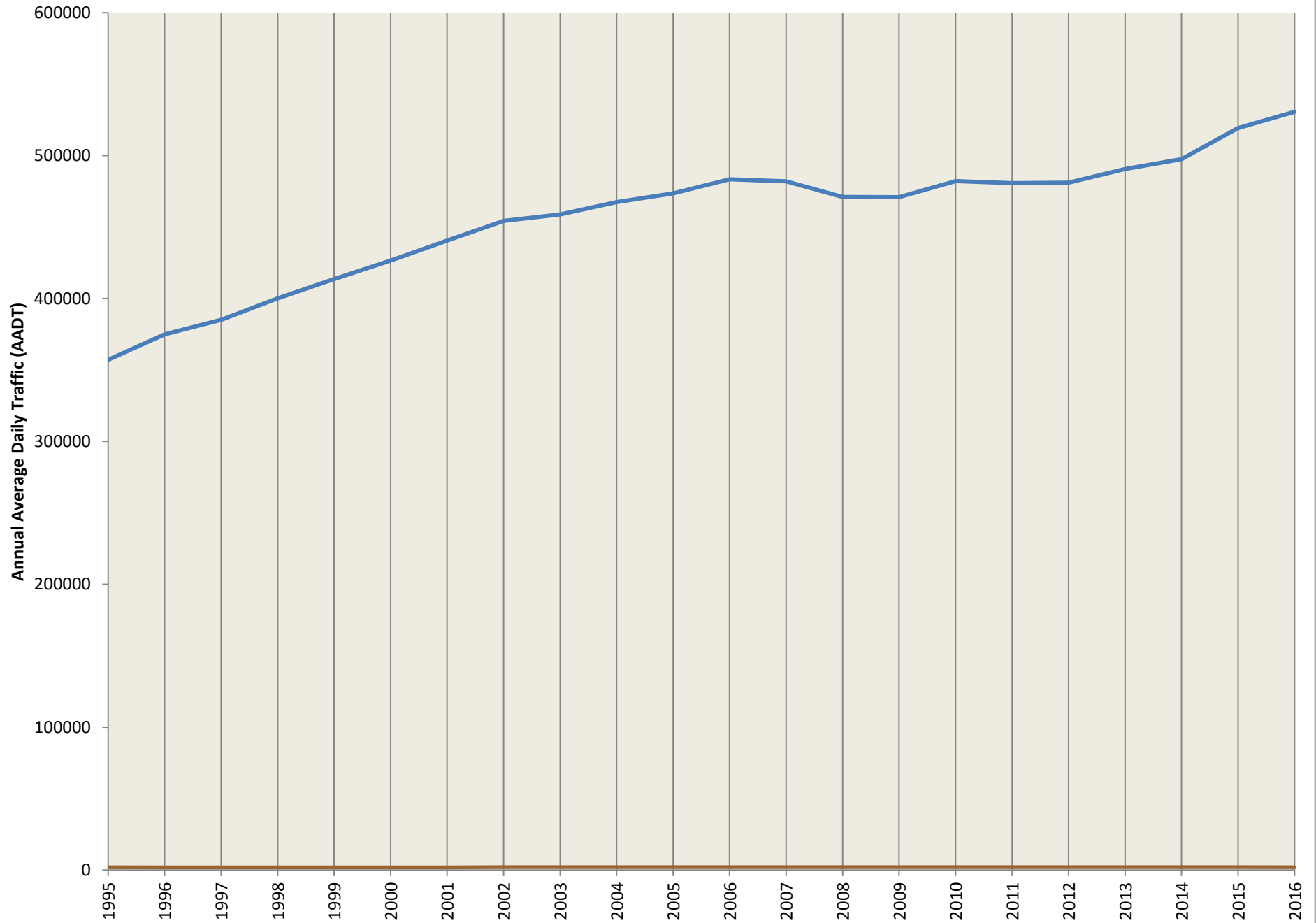
There are currently 15 ATRs in the region, with 9 located in Nebraska and 5 located in Iowa (one location in Iowa was discontinued in after 2012). ATRs are located on freeways and arterials in urban, suburban, and rural areas. Historically, these numbers have been reasonably consistent with data from MAPA’s Traffic Growth Report. Between 2014 and 2016, the ATR data increased 5.4%—a rate higher than MAPA’s estimates for the entirety 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.

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.

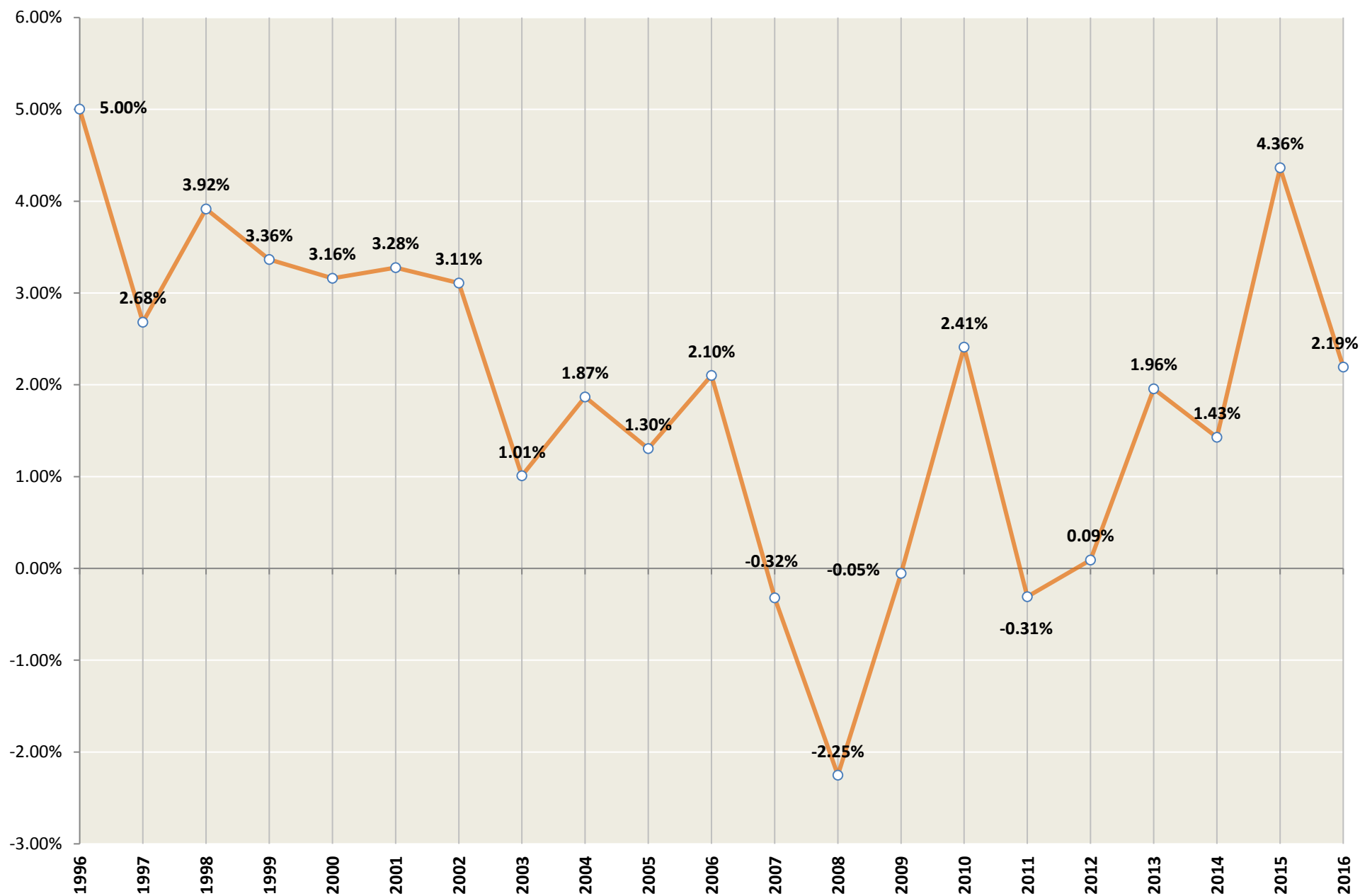
Iowa ATR Locations									
Route	Location	2004	2006	2008	2010	2012	2014	2015	2016
1	I-29/80 6 mi West of IA 192	75,623	79,350	79,516	75,988	75,521	N/A	N/A	N/A
2	IA 192 South of Ave N	9,442	9,047	8,858	8,719	6,004	6,208	9,535	10,236
3	I-29 3 mi North of South I-680 Jct	21,319	21,484	21,033	20,593	19,730	20,696	21,770	22,259
4	I-29 4 mi South of US-34 Jct (Pacific)	12,101	12,495	12,300	11,868	12,008	13,563	13,530	13,780
5	I-80 1.5 mi West of Co M-16 (Shelby)	22,496	22,670	22,752	22,950	N/A	23,517	24,441	25,519
6	I-680 6.4 mi West of I-80	N/A	N/A	N/A	6,196	5,947	6,039	6,311	N/A
Nebraska ATR Locations									
Route	Location	2004	2006	2008	2010	2012	2014	2015	2016
7	US 6 North of Gretna	11,703	13,424	15,470	15,048	16,162	19,023	19,958	21,110
8	I-80 Just South of Douglas-Sarpy Line	56,682	60,285	57,913	60,148	60,537	64,971	67,773	71,452
9	US 75 30th St South of I-680 in Omaha	14,708	14,607	14,549	14,218	13,544	13,757	14,633	14,931
10	I-80 I-80 at 36 th St	166,966	168,298	170,739	164,863	169,359	171,875	173,168	171,272
11	N-64 At 160th St	N/A	N/A	22,417	22,584	23,678	24,415	25,446	26,905
12	US 75 Just North of Jct N-370 Bellevue	44,441	44,273	42,463	43,712	44,744	45,667	49,058	49,718
13	I-680 Mormon Bridge Omaha	16,254	15,656	15,401	16,000	14,004	15,019	16,094	16,498
14	I-680 I-680 North of Dodge St	73,000	80,095	80,077	84,107	83,817	83,154	86,920	90,120
15	I-80 West of Gretna Interchange	39,500	41,400	38,889	40,830	41,242	43,642	46,845	49,292



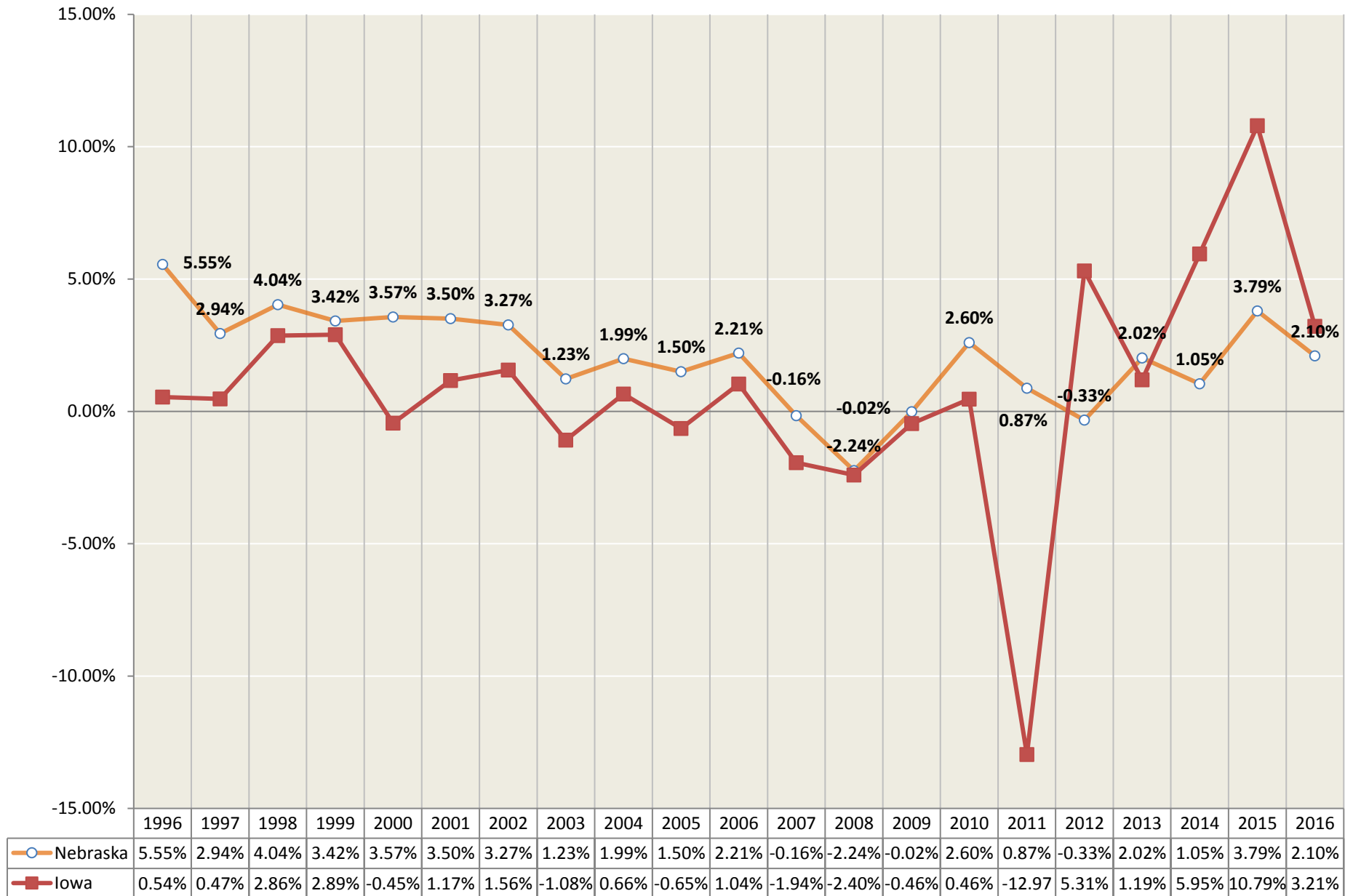
MAPA Regional Automatic Traffic Recorder Counts, 1995-2016



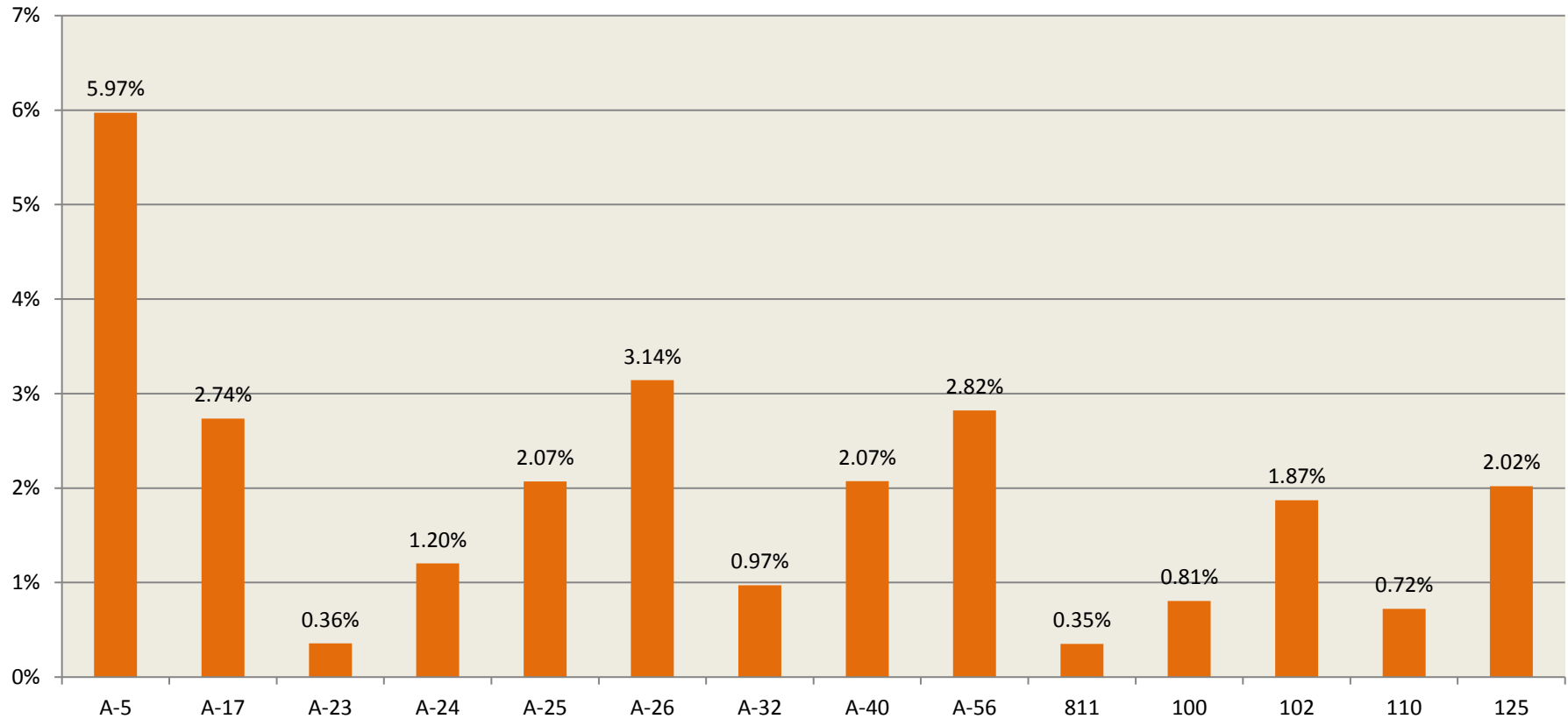
Annual Rate of Change of Automatic Traffic Recorders (ATR) 1995-2016



Annual Rate of Change of Automatic Traffic Recorders (ATR) by State 1995-2016



Annual Growth Rate of Automatic Traffic Recorders by Station 1995-2016



Automatic Traffic Recorder Station Index

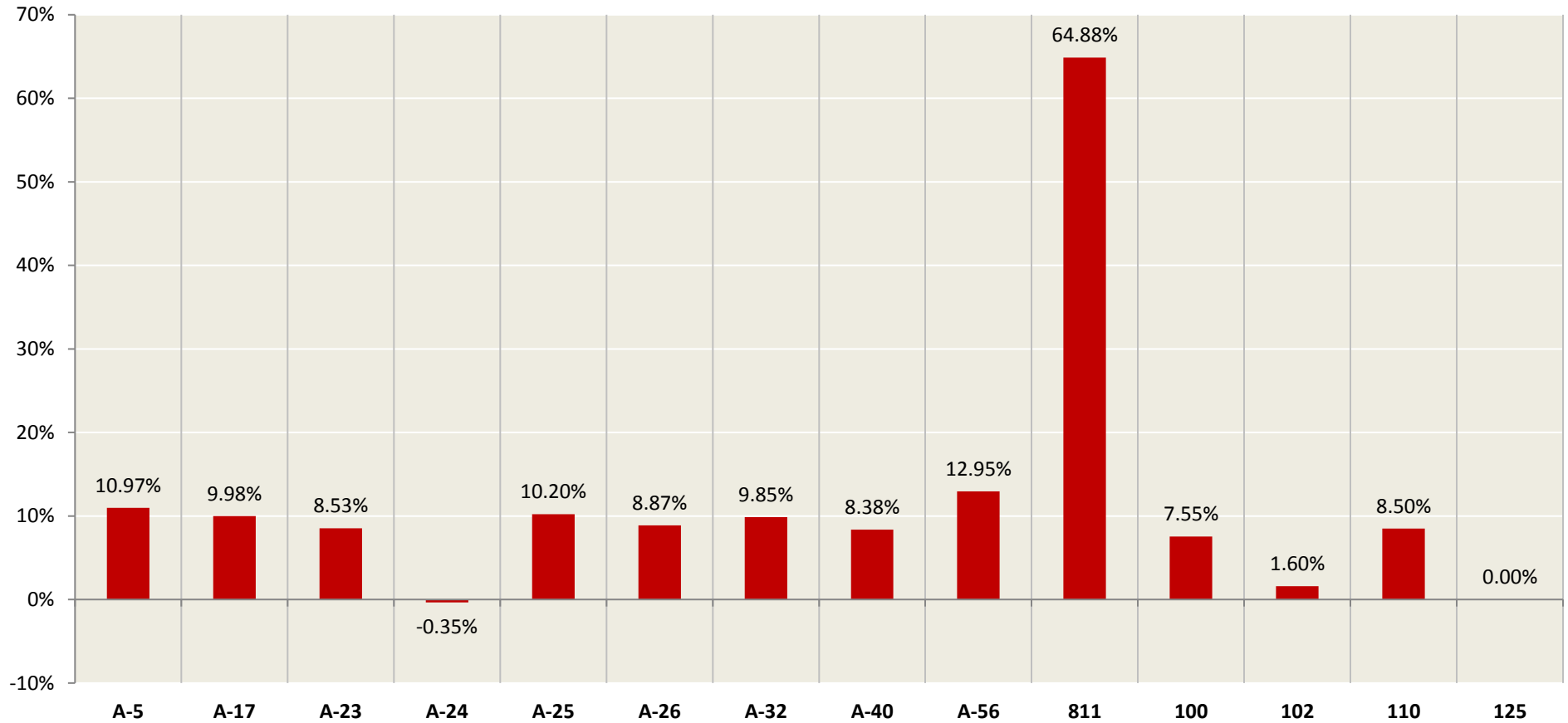
MAP #	ID	Location
7	A-5	US 6 North of Gretna
8	A-17	I-80 Just South of Douglas - Sarpy Line
9	A-23	US 75/30th Street South of I-680 in Omaha
10	A-24	I-80 at 36th Street in Omaha
11	A-25	N-64 At 160th Street

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 2014-2016



Automatic Traffic Recorder Station Index

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