

Rapid City Area
Metropolitan Planning Organization

**2019 TRAFFIC VOLUME COUNTS
REPORT**



In cooperation with:

City of Rapid City
Engineering Services Division
Public Works Department

January 2020

TABLE OF CONTENTS

INTRODUCTION/PURPOSE.....	1
DATA & METHODOLOGY.....	1
COMPARISON OF ANNUAL VOLUMES.....	2
PERMANENT COUNT STATIONS.....	2
TRAFFIC VOLUMES.....	3 - 6

INTRODUCTION/PURPOSE

Traffic volume studies are conducted to obtain accurate information about the number and movement of vehicles within or through an area or at selected points within an area. Current and historical volume counts provide vital information that is used in operational evaluations, traffic modeling and in the selection and design of road network improvements. The general public and the business community also use this report to make more informed decisions. The Traffic Volume Counts Report is designated in the Rapid City Area Metropolitan Planning Organization's (MPO) Operations Plan as one of the transportation products to be presented to the MPO's three transportation process committees. This report is an informational document and as such does not require any formal approval process. Traffic volume information is presented for the years 2016 – 2019.

DATA & METHODOLOGY

The Traffic Volume Counts Report presents the most recent four years of data collected by the City's Engineering Services Division - Public Works Department and the South Dakota Department of Transportation (SDDOT). Note that the identification of regular counting sites is a dynamic process and not every location may have associated with it four years of history. Volume information is also provided for all counts that were conducted in conjunction with other engineering studies.

- All volumes presented in this document are counts conducted over a 1-3 day period that have been adjusted to account for seasonal variations. Seasonal adjustment factors for each year are developed using data from the South Dakota Department of Transportation's permanent count stations.
- Data provided by the City's Engineering Services Division - Public Works Department has been collected using portable traffic counters while the data provided by the SDDOT has been collected at permanent counting stations. The permanent stations count traffic volumes daily and provide a basis for determining the variation of traffic volumes throughout the year.
- In accordance with accepted traffic engineering protocol, volume counts were only conducted on Tuesdays, Wednesdays, or Thursdays. Mondays and Fridays do not generally represent typical weekdays due to the influence of higher numbers of people being absent from the workplace and a higher percentage of recreational travel.
- Volumes have not been factored to account for vehicles with more than two axles, i.e. trucks, certain recreational vehicles, vehicle/trailer combinations, etc. The actual vehicular volumes are generally lower than the published counts and can be determined if the percentage of vehicles with more than two axles is known. The correction factor is given by the formula **$1.0 - 0.5 * \text{percentage of truck traffic}$** .

COMPARISON OF ANNUAL VOLUMES

The count summary includes the percent change between the most recent and previous year counts. Extreme caution should be exercised when interpreting annual changes in volumes for the following reasons:

- Traffic volumes will vary on a particular section of roadway depending on the month the count was conducted or the day of the week of the count. Additionally, there is an inherent variability in traffic volumes due to factors that are not easily explained or quantified.
- Construction projects, on or adjacent to a section of road, can significantly alter traffic volumes.
- Traffic count reliability is directly related to the amount of data collected. The more counts taken at a particular location, the higher the accuracy of conclusions drawn from the data. A 2-3 day volume provides a “snapshot” of traffic that traveled on that roadway on those specific days. Trend analyses should most accurately be limited to using permanent count station data.

PERMANENT COUNT STATIONS

Data from the following three SDDOT permanent count stations are included in this report:

- 5th Street, north of St. Cloud Street
- Anamosa Street, east of Haines Avenue
- I-90, east of I-190

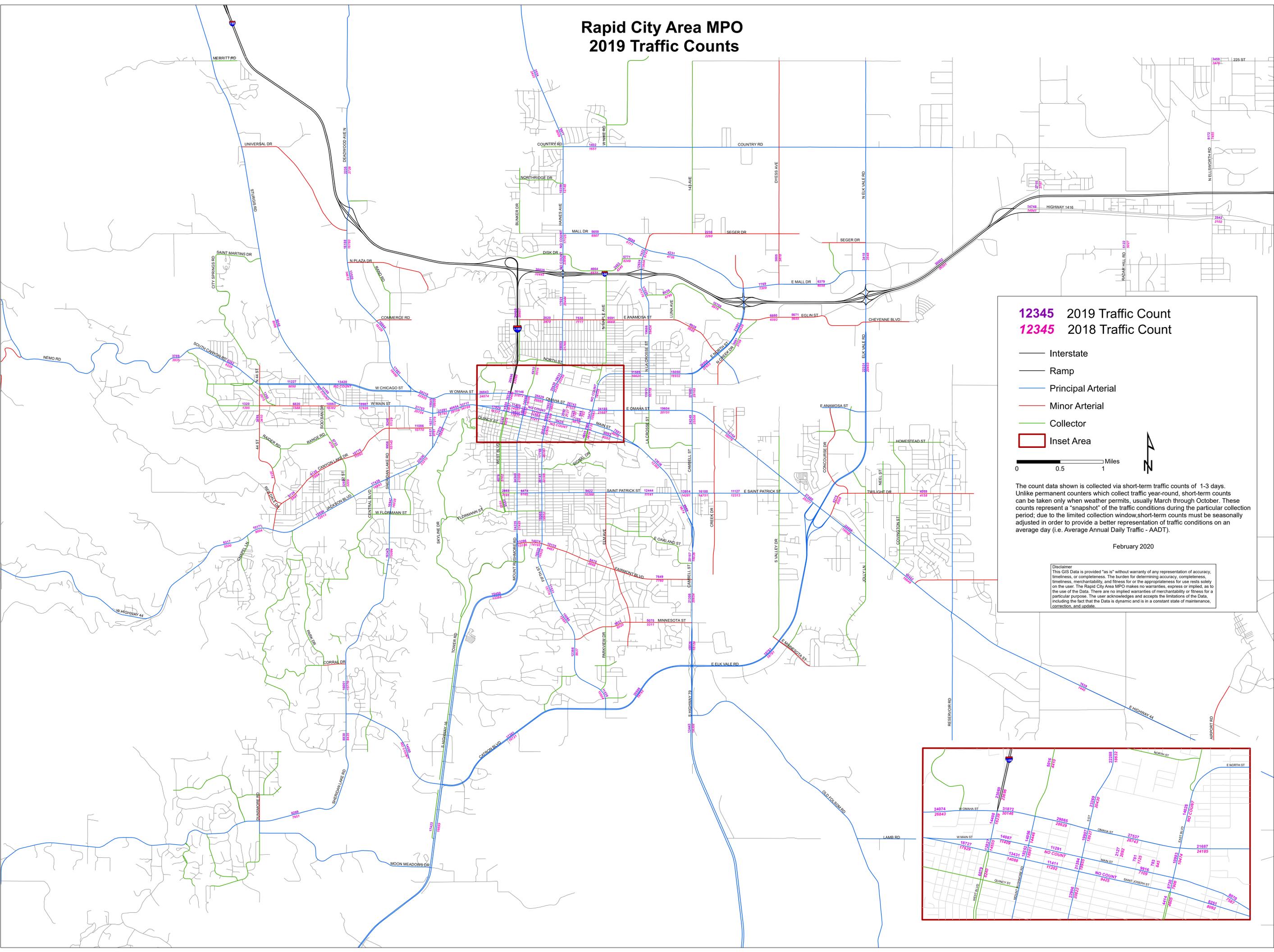
ROAD	LIMITS	2016 SEASONALLY ADJUSTED COUNT	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	2019 SEASONALLY ADJUSTED COUNT	% CHANGE 2018/2019
1ST ST	OMAHA TO MAIN	859	516	783	645	-18%
2ND ST	MAIN TO OMAHA	681	790	781	1,125	44%
3RD ST	MAIN TO OMAHA	2,092	2,153	2,127	2,092	-2%
5TH ST	CATRON TO PARKIEW	10,211	11,063	10,804	11,539	7%
5TH ST	PARKVIEW TO MINNESOTA	10,938	9,938	9,937	12,366	24%
5TH ST	MINNESOTA TO TEXAS	14,938	14,099	13,991	15,098	8%
5TH ST	TEXAS TO 3RD	17,115	15,843	15,774	17,531	11%
5TH ST	3RD TO FAIRMONT	19,004	18,529	18,929	18,020	-5%
5TH ST	FAIRMONT TO ST PATRICK	20,294	20,989	18,953	18,065	-5%
5TH ST	ST. PATRICK TO ST. CLOUD	22,237	19,646	22,198	20,141	-9%
5TH ST	ST. CLOUD TO COLUMBUS	18,398	19,136	20,783	17,766	-15%
5TH ST	COLUMBUS TO ST. JOSEPH	21,452	21,846	22,906	20,822	-9%
5TH ST	ST JOSEPH TO MAIN	18,604	19,984	21,394	19,955	-7%
5TH ST	MAIN TO OMAHA	17,432	18,365	19,907	18,927	-5%
5TH ST	OMAHA TO NEW YORK	18,601	18,448	23,269	20,430	-12%
5TH ST	NEW YORK TO NORTH	18,898	18,312	22,288	18,632	-16%
32ND ST	JACKSON TO CANYON LAKE	7,835	4,084	3,209	3,259	2%
44TH ST	RAIDER TO MAIN	4,159	3,643	3,410	3,853	13%
225TH ST	N ELLSWORTH TO BRIGGS	3,248	3,106	3,476	3,459	0%
ANAMOSA ST	WEST BLVD N. TO HAINES	5,332	4,549	2,970	2,820	-5%
ANAMOSA ST	HAINES TO MAPLE	8,320	7,821	7,777	7,538	-3%
ANAMOSA (E) ST	MAPLE TO LACROSSE	10,001	9,010	9,669	9,591	-1%
ANAMOSA (E) ST	LACROSSE TO E. NORTH	4,974	4,927	5,688	5,928	4%
CAMBELL ST	CATRON TO MINNESOTA	17,249	16,657	18,120	18,826	4%
CAMBELL ST	MINNESOTA TO FAIRMONT	19,458	16,608	20,654	21,308	3%
CAMBELL ST	FAIRMONT TO ST PATRICK	22,616	22,621	19,036	20,157	6%
CAMBELL ST	ST PATRICK TO OMAHA	22,560	21,944	25,508	24,249	-5%
CAMBELL (E) ST	OMAHA TO E. NORTH ST	24,541	24,747	29,165	27,883	-4%
CANYON LAKE DR	JACKSON TO CLIFTON	6,846	6,353	5,941	5,726	-4%
CANYON LAKE DR	CLIFTON TO SOO SAN	6,758	6,226	7,894	9,125	16%
CANYON LAKE DR	SOO SAN TO SHERIDAN LAKE	12,396	10,712	11,092	10,775	-3%
CANYON LAKE DR	SHERIDAN LAKE TO MTVIEW	12,672	11,687	10,770	11,086	3%
CATHEDRAL DR	MT RUSHMORE TO TOWER	12,855	12,961	13,186	13,296	1%
CATHEDRAL DR	TOWER TO 5TH	13,121	13,102	14,195	14,074	-1%
CATRON BLVD	SHERIDAN LAKE TO US-16	13,297	6,076	CONSTRUCTION	14,080	
CATRON BLVD	US-16 TO 5TH	15,309	16,478	16,721	17,351	4%
CATRON (E) BLVD	5TH TO SD-79	17,673	19,038	19,762	20,506	4%
COUNTRY RD	HAINES TO W NIKE	1,565	2,303	1,651	1,402	-15%
CREEK (N) DR	ANAMOSA TO EGLIN ST	4,514	4,805	3,709	3,861	4%
DEADWOOD AVE	OMAHA TO CEMENT PLANT	18,238	18,569	18,490	17,481	-5%
DEADWOOD AVE	CEMENT PLANT TO LIEN	17,540	17,523	18,228	16,944	-7%
DEADWOOD AVE	LIEN TO N PLAZA	13,206	13,860	14,612	13,520	-7%
DEADWOOD AVE	N PLAZA TO I-90	15,611	15,811	16,780	16,188	-4%
DEADWOOD AVE	I-90 TO CITY LIMIT	3,499	3,713	2,728	2,235	-18%
DISK DR	HAINES TO MAPLE	5,914	6,080	6,571	4,664	-29%

ROAD	LIMITS	2016 SEASONALLY ADJUSTED COUNT	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	2019 SEASONALLY ADJUSTED COUNT	% CHANGE 2018/2019
DISK (E) DR	MAPLE TO LACROSSE	6,802	7,285	8,249	5,771	-30%
DYESS AVE	MALL TO SEGER	CONSTRUCTION	4,992	3,418	3,805	11%
E NORTH ST	MILWAUKEE TO LACROSSE	12,727	13,426	16,621	11,585	-30%
E NORTH ST	LACROSSE TO CAMBELL	15,196	15,258	16,932	15,050	-11%
E NORTH ST	CAMBELL TO ANAMOSA	23,360	23,074	27,653	24,904	-10%
E NORTH ST	ANAMOSA TO I-90	18,406	18,473	22,928	21,891	-5%
EAST BLVD	KANSAS CITY TO ST JOSEPH	4,000	4,089	4,414	4,605	4%
EAST BLVD	ST JOSEPH TO MAIN	7,523	8,829	8,730	7,906	-9%
EAST BLVD	MAIN TO OMAHA	10,098	11,659	10,983	10,474	-5%
EAST BLVD	OMAHA TO E NORTH	12,546	13,390	14,025	CONSTRUCTION	
EGLIN ST	LACROSSE TO LUNA	6,478	7,192	6,799	8,029	18%
EGLIN ST	LUNA TO E. NORTH	10,186	10,820	8,916	10,708	20%
EGLIN ST	E.NORTH TO DYESS	5,356	6,581	6,593	6,660	1%
EGLIN ST	DYESS TO ELK VALE	4,394	5,428	5,655	5,671	0%
ELK VALE RD	SD-79 TO SD-44	19,411	20,136	19,781	18,781	-5%
ELK VALE RD	SD-44 TO I-90	21,179	21,855	20,453	22,331	9%
ELK VALE RD	I-90 TO SEGER	4,509	3,490	3,548	3,418	-4%
FAIRMONT BLVD	5TH TO WISCONSIN	9,559	9,717	9,461	10,125	7%
FAIRMONT (E) BLVD	WISCONSIN TO ELM	9,294	9,471	8,888	8,470	-5%
FAIRMONT(E) BLVD	ELM TO CAMBELL	8,715	8,737	7,760	7,649	-1%
HAINES AVE	NORTH TO ANAMOSA	20,435	19,671	21,769	19,083	-12%
HAINES AVE	ANAMOSA TO I-90	20,358	19,750	20,444	17,921	-12%
HAINES AVE	I-90 TO DISK	24,230	22,508	23,898	CONSTRUCTION	
HAINES AVE	DISK TO MALL	16,726	17,731	17,125	CONSTRUCTION	
HAINES AVE	MALL TO COUNTRY	12,657	14,389	12,748	10,359	-19%
HAINES AVE	COUNTRY TO COBALT	5,835	6,035	6,009	5,911	-2%
HAINES AVE	COBALT TO CITY LIMIT	2,444	2,533	2,422	2,534	5%
HILLSVIEW DR	AUDUBON TO RAIDER	3,227	2,776	3,514	3,645	4%
I-190	OMAHA TO SILVER	CONSTRUCTION	CONSTRUCTION	23,060	25,696	11%
I-190	SILVER TO I-90	CONSTRUCTION	CONSTRUCTION	20,657	24,488	19%
I-90	I-190 TO HAINES	36,571	38,615	32,445	38,835	20%
I-90	ELK VALE TO EAST CITY LIMIT	25,380	28,257	26,201	30,002	15%
JACKSON BLVD	CITY LIMIT TO CHAPEL LN	5,883	5,081	5,500	6,317	15%
JACKSON BLVD	CHAPEL LN TO CANYON LAKE	8,248	8,166	9,004	10,171	13%
JACKSON BLVD	CANYON LAKE TO 32ND	11,037	10,867	12,813	13,854	8%
JACKSON BLVD	32ND TO SHERIDAN LAKE	13,387	12,168	16,993	17,439	3%
JACKSON BLVD	SHERIDAN LK TO MT VIEW (S)	20,026	19,670	23,215	22,626	-3%
JACKSON BLVD	MT VIEW (N) TO MAIN (W)	17,386	16,429	18,440	17,975	-3%
LACROSSE (N) ST	OMAHA TO E NORTH	10,320	9,819	10,778	11,913	11%
LACROSSE (N) ST	E NORTH TO ANAMOSA	18,702	17,885	19,434	19,686	1%
LACROSSE (N) ST	ANAMOSA TO I-90	19,799	17,817	17,178	17,020	-1%
LACROSSE (N) ST	I-90 TO DISK	13,101	10,210	13,604	12,624	-7%
LACROSSE (N) ST	DISK TO MALL	7,528	CONSTRUCTION	6,743	7,422	10%
LIBERTY BLVD	N ELLSWORTH TO I-90	5,158	6,211	7,084	8,018	13%
MAIN (W) ST	BERRY PINE TO 44TH	2,045	2,080	1,395	1,320	-5%

ROAD	LIMITS	2016 SEASONALLY ADJUSTED COUNT	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	2019 SEASONALLY ADJUSTED COUNT	% CHANGE 2018/2019
MAIN (W) ST	44TH TO SOO SAN	4,824	4,897	7,588	6,820	-10%
MAIN (W) ST	SOO SAN TO STURGIS	12,100	10,171	10,382	10,863	5%
MAIN (W) ST	STURGIS TO SHERIDAN LAKE	16,362	17,348	17,926	18,987	6%
MAIN (W) ST	SHERIDAN LAKE TO MTVIEW	19,111	20,249	20,724	21,753	5%
MAIN (W) ST	MT VIEW TO JACKSON	20,922	21,268	21,792	21,091	-3%
MAIN (W) ST	JACKSON TO CROSS	32,542	39,187	39,104	40,654	4%
MAIN (W) ST	CROSS TO WEST STREET	32,483	31,656	34,788	33,717	-3%
MAIN ST	WEST BLVD TO MT RUSHMORE	12,883	13,127	14,087	11,409	-19%
MAIN ST	MT RUSHMORE TO 5TH	10,619	11,220	11,291	CONSTRUCTION	
MAIN ST	5TH TO EAST BLVD	7,731	8,458	9,916	7,109	-28%
MAIN ST	EAST BLVD TO STEELE	8,544	7,537	8,070	7,587	-6%
MALL DR	HAINES TO MAPLE	4,922	4,421	6,907	5,658	-18%
MALL DR	MAPLE TO LACROSSE	4,704	4,702	6,111	4,889	-20%
MALL DR	LACROSSE TO E. NORTH	4,152	4,412	4,736	4,231	-11%
MALL (E) DR	E NORTH TO DYESS	6,408	9,626	7,309	7,769	6%
MALL (E) DR	DYESS TO ELK VALE	4,740	5,770	6,058	6,379	5%
MAPLE (N) AVE	DISK (W) TO DISK (E)	2,174	2,514	4,245	2,463	-42%
MINNESOTA (E) ST	5TH TO ELM	5,935	6,729	6,520	5,821	-11%
MINNESOTA (E) ST	ELM TO CAMBELL	5,913	5,646	5,311	5,075	-4%
MOUNTAINVIEW RD	JACKSON TO CANYON LAKE	9,212	8,642	9,781	9,157	-6%
MOUNTAINVIEW RD	CANYON LAKE TO MAIN	16,255	16,175	17,279	16,371	-5%
MOUNTAINVIEW RD	MAIN TO OMAHA	17,866	15,878	18,609	18,645	0%
MT RUSHMORE RD	CATHEDRAL TO ST PATRICK	17,357	16,616	21,429	24,235	13%
MT RUSHMORE RD	ST PATRICK TO ST JOSEPH	15,810	15,093	21,569	24,349	13%
MT RUSHMORE RD	ST JOSEPH TO MAIN	13,417	12,879	18,252	18,981	4%
MT RUSHMORE RD	MAIN TO OMAHA	11,869	11,498	14,056	14,446	3%
MT RUSHMORE RD	OMAHA TO NORTH	8,072	7,549	5,016	4,410	-12%
N ELLSWORTH RD	US-14/16 TO LIBERTY	5,965	6,181	7,455	8,172	10%
NEMO RD	WESTBERRY TRAIL TO BERRY PINE	3,742	3,885	3,935	3,789	-4%
OMAHA (W) ST	DEADWOOD TO MTVIEW	23,691	21,064	22,555	24,318	8%
OMAHA (W) ST	MTVIEW TO WEST BLVD	29,970	27,025	24,074	26,843	11%
OMAHA ST	WEST BLVD TO MT RUSHMORE	31,813	30,564	31,872	30,146	-5%
OMAHA ST	MT RUSHMORE TO 5TH	29,177	28,464	29,865	28,629	-4%
OMAHA ST	5TH TO EAST BLVD	25,035	26,246	27,537	26,743	-3%
OMAHA ST	EAST BLVD TO LACROSSE	20,216	20,666	21,687	24,185	12%
OMAHA (E) ST	LACROSSE TO CAMBELL	14,734	19,185	20,151	19,604	-3%
RADAR HILL RD	MULE DEER TO US-14/16	4,957	4,949	5,027	5,122	2%
SD-44 (E)	CAMBELL TO ST PATRICK	16,952	17,171	16,076	15,154	-6%
SD-44 (E)	ST PATRICK TO TWILIGHT	24,805	24,598	25,277	27,480	9%
SD-44 (E)	TWILIGHT TO JOLLY	17,556	19,570	19,998	22,058	10%
SD-44 (E)	JOLLY TO RESERVOIR	15,728	15,014	16,649	18,442	11%
SD-44 (E)	RESERVOIR TO AIRPORT	7,196	7,328	7,440	7,639	3%
SD-79	CITY LIMIT TO ELK VALE	14,618	14,184	14,302	13,443	-6%
SEGER DR	LACROSSE TO DYESS	CONSTRUCTION	CONSTRUCTION	2,260	2,238	-1%

ROAD	LIMITS	2016 SEASONALLY ADJUSTED COUNT	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	2019 SEASONALLY ADJUSTED COUNT	% CHANGE 2018/2019
SHERIDAN LAKE RD	DUNSMORE TO S WILDWOOD	8,861	8,603	7,951	8,299	4%
SHERIDAN LAKE RD	S WILDWOOD TO CATRON	8,417	8,450	8,435	8,838	5%
SHERIDAN LAKE RD	CATRON TO CORRAL	16,551	16,235	15,770	16,051	2%
SHERIDAN LAKE RD	CORRAL TO FLORMANN	15,127	15,126	15,094	16,343	8%
SHERIDAN LAKE RD	FLORMANN TO JACKSON	15,249	16,149	16,028	16,947	6%
SHERIDAN LAKE RD	JACKSON TO CANYON LAKE	9,189	9,212	10,145	9,956	-2%
SHERIDAN LAKE RD	CANYON LAKE TO W MAIN	9,100	8,201	11,129	9,248	-17%
SOO SAN DR	CANYON LAKE TO RANGE	8,183	5,920	4,700	5,733	22%
SOUTH CANYON RD	BERRY PINE TO 44TH	6,426	6,312	6,229	6,262	1%
SOUTH CANYON RD	W MAIN TO 44TH	1,096	964	2,075	1,250	-40%
ST JOSEPH (W) ST	WEST ST TO WEST BLVD	16,223	15,411	18,727	17,929	-4%
ST JOSEPH ST	WEST BLVD TO MT RUSHMORE	12,043	12,876	13,431	14,088	5%
ST JOSEPH ST	MT RUSHMORE TO 5TH	9,629	11,778	11,411	11,202	-2%
ST JOSEPH ST	5TH TO EAST BLVD	7,951	8,895	CONSTRUCTION	9,425	
ST JOSEPH ST	EAST BLVD TO STEELE	7,862	7,285	8,251	8,092	-2%
ST JOSEPH (E) ST	STEELE TO ST PATRICK	12,808	11,279	12,382	13,636	10%
ST JOSEPH (E) ST	ST PATRICK TO CAMBELL	7,372	6,667	6,674	6,668	0%
ST PATRICK ST	WEST BLVD TO MT RUSHMORE	5,991	3,203	3,191	2,983	-7%
ST PATRICK ST	MT RUSHMORE TO 5TH	7,996	5,835	6,165	6,474	5%
ST PATRICK ST	5TH TO ELM	10,986	9,848	10,368	9,422	-9%
ST PATRICK (E) ST	ELM TO ST JOSEPH	14,485	12,607	11,141	12,444	12%
ST PATRICK (E) ST	ST JOSEPH TO CAMBELL	14,313	13,138	14,281	13,914	-3%
ST PATRICK (E) ST	CAMBELL TO CREEK	15,292	14,290	14,751	16,100	9%
ST PATRICK (E) ST	CREEK TO SD-44	9,502	9,610	12,313	11,127	-10%
STURGIS RD	MAIN TO W CHICAGO	12,642	11,432	CONSTRUCTION	11,190	
STURGIS RD	W CHICAGO TO ST MARTINS	10,860	10,992	8,086	9,048	12%
TWILIGHT DR	SD-44 TO JOLLY LN	6,159	5,843	8,508	8,275	-3%
TWILIGHT DR	JOLLY LN TO RESERVOIR	7,724	7,561	4,158	4,058	-2%
US-14/16	I-90 TO WESTGATE	14,227	14,644	14,941	14,748	-1%
US-14/16	S ELLSWORTH TO OAK	1,853	1,929	2,102	2,542	21%
US-16	CITY LIMIT TO CATRON	19,181	19,565	16,699	17,423	4%
US-16	CATRON TO CATHEDRAL	11,213	12,171	13,393	15,450	15%
W CHICAGO ST	44TH TO STURGIS	11,934	11,512	9,050	11,227	24%
W CHICAGO ST	STURGIS TO DEADWOOD	15,880	17,069	CONSTRUCTION	13,420	
WEST BLVD	FLORMANN TO ST PATRICK	1,951	1,976	1,922	1,935	1%
WEST BLVD	ST PATRICK TO ST CLOUD	10,942	6,582	5,162	4,876	-6%
WEST BLVD	ST CLOUD TO ST JOSEPH	11,701	8,500	6,079	6,240	3%
WEST BLVD	ST. JOSEPH TO MAIN	14,907	14,385	12,827	14,555	13%
WEST BLVD	MAIN ST TO OMAHA ST	14,590	13,509	14,408	16,239	13%
WEST GATE RD	US-14/16 TO BLUEBIRD	3,372	3,709	3,797	3,715	-2%

Rapid City Area MPO 2019 Traffic Counts



12345 2019 Traffic Count
12345 2018 Traffic Count

- Interstate
- Ramp
- Principal Arterial
- Minor Arterial
- Collector
- Inset Area

0 0.5 1 Miles



The count data shown is collected via short-term traffic counts of 1-3 days. Unlike permanent counters which collect traffic year-round, short-term counts can be taken only when weather permits, usually March through October. These counts represent a "snapshot" of the traffic conditions during the particular collection period; due to the limited collection window, short-term counts must be seasonally adjusted in order to provide a better representation of traffic conditions on an average day (i.e. Average Annual Daily Traffic - AADT).

February 2020

Disclaimer
 This GIS Data is provided "as is" without warranty of any representation of accuracy, timeliness, or completeness. The burden for determining accuracy, completeness, timeliness, merchantability, and fitness for or the appropriateness for use rests solely on the user. The Rapid City Area MPO makes no warranties, express or implied, as to the use of the Data. There are no implied warranties of merchantability or fitness for a particular purpose. The user acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction, and update.

