

Rapid City Area
Metropolitan Planning Organization

**2020 TRAFFIC VOLUME COUNTS
REPORT**



In cooperation with:

City of Rapid City
Engineering Services Division
Public Works Department

March 2021

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 2017 – 2020.

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 2 or 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 count 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 were significantly impacted by the Covid-19 pandemic.
- 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	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	2019 SEASONALLY ADJUSTED COUNT	2020 SEASONALLY ADJUSTED COUNT	% CHANGE 2019/2020
1ST ST	OMAHA TO MAIN	516	783	645	951	47%
2ND ST	MAIN TO OMAHA	790	781	1,125	1,303	16%
3RD ST	MAIN TO OMAHA	2,153	2,127	2,092	1,897	-9%
5TH ST	CATRON TO PARKIEW	11,063	10,804	11,539	12,215	6%
5TH ST	PARKVIEW TO MINNESOTA	9,938	9,937	12,366	12,575	2%
5TH ST	MINNESOTA TO TEXAS	14,099	13,991	15,098	14,908	-1%
5TH ST	TEXAS TO 3RD	15,843	15,774	17,531	17,044	-3%
5TH ST	3RD TO FAIRMONT	18,529	18,929	18,020	17,959	0%
5TH ST	FAIRMONT TO ST PATRICK	20,989	18,953	18,065	16,887	-7%
5TH ST	ST. PATRICK TO ST. CLOUD	19,646	22,198	20,141	20,268	1%
5TH ST	ST. CLOUD TO COLUMBUS	19,136	20,783	17,766	16,088	-9%
5TH ST	COLUMBUS TO ST. JOSEPH	21,846	22,906	20,822	19,682	-5%
5TH ST	ST JOSEPH TO MAIN	19,984	21,394	19,955	16,557	-17%
5TH ST	MAIN TO OMAHA	18,365	19,907	18,927	16,054	-15%
5TH ST	OMAHA TO NEW YORK	18,448	23,269	20,430	21,344	4%
5TH ST	NEW YORK TO NORTH	18,312	22,288	18,632	19,070	2%
32ND ST	JACKSON TO CANYON LAKE	4,084	3,209	3,259	2,930	-10%
44TH ST	RAIDER TO MAIN	3,643	3,410	3,853	2,005	-48%
225TH ST	N ELLSWORTH TO BRIGGS	3,106	3,476	3,459	2,985	-14%
ANAMOSA ST	WEST BLVD N. TO HAINES	4,549	2,970	2,820	3,052	8%
ANAMOSA ST	HAINES TO MAPLE	7,821	7,777	7,538	9,377	24%
ANAMOSA (E) ST	MAPLE TO LACROSSE	9,010	9,669	9,591	10,372	8%
ANAMOSA (E) ST	LACROSSE TO E. NORTH	4,927	5,688	5,928	6,013	1%
CAMBELL ST	CATRON TO MINNESOTA	16,657	18,120	18,826	19,311	3%
CAMBELL ST	MINNESOTA TO FAIRMONT	16,608	20,654	21,308	21,840	2%
CAMBELL ST	FAIRMONT TO ST PATRICK	22,621	19,036	20,157	21,231	5%
CAMBELL ST	ST PATRICK TO OMAHA	21,944	25,508	24,249	21,310	-12%
CAMBELL (E) ST	OMAHA TO E. NORTH ST	24,747	29,165	27,883	30,350	9%
CANYON LAKE DR	JACKSON TO CLIFTON	6,353	5,941	5,726	5,890	3%
CANYON LAKE DR	CLIFTON TO SOO SAN	6,226	7,894	9,125	8,030	-12%
CANYON LAKE DR	SOO SAN TO SHERIDAN LAKE	10,712	11,092	10,775	9,564	-11%
CANYON LAKE DR	SHERIDAN LAKE TO MTVIEW	11,687	10,770	11,086	10,110	-9%
CATHEDRAL DR	MT RUSHMORE TO TOWER	12,961	13,186	13,296	13,559	2%
CATHEDRAL DR	TOWER TO 5TH	13,102	14,195	14,074	14,645	4%
CATRON BLVD	SHERIDAN LAKE TO US-16	6,076	CONSTRUCTION	14,080	13,421	-5%
CATRON BLVD	US-16 TO 5TH	16,478	16,721	17,351	18,293	5%
CATRON (E) BLVD	5TH TO SD-79	19,038	19,762	20,506	21,511	5%
COUNTRY RD	HAINES TO W NIKE	2,303	1,651	1,402	1,512	8%
CREEK (N) DR	ANAMOSA TO EGLIN ST	4,805	3,709	3,861	4,327	12%
DEADWOOD AVE	OMAHA TO CEMENT PLANT	18,569	18,490	17,481	CONSTRUCTION	
DEADWOOD AVE	CEMENT PLANT TO LIEN	17,523	18,228	16,944	14,871	-12%
DEADWOOD AVE	LIEN TO N PLAZA	13,860	14,612	13,520	11,825	-13%
DEADWOOD AVE	N PLAZA TO I-90	15,811	16,780	16,188	14,018	-13%
DEADWOOD AVE	I-90 TO CITY LIMIT	3,713	2,728	2,235	2,161	-3%
DISK DR	HAINES TO MAPLE	6,080	6,571	4,664	3,591	-23%

ROAD	LIMITS	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	2019 SEASONALLY ADJUSTED COUNT	2020 SEASONALLY ADJUSTED COUNT	% CHANGE 2019/2020
DISK (E) DR	MAPLE TO LACROSSE	7,285	8,249	5,771	4,957	-14%
DYESS AVE	MALL TO SEGER	4,992	3,418	3,805	4,177	10%
E NORTH ST	MILWAUKEE TO LACROSSE	13,426	16,621	11,585	9,874	-15%
E NORTH ST	LACROSSE TO CAMBELL	15,258	16,932	15,050	12,999	-14%
E NORTH ST	CAMBELL TO ANAMOSA	23,074	27,653	24,904	23,585	-5%
E NORTH ST	ANAMOSA TO I-90	18,473	22,928	21,891	20,573	-6%
EAST BLVD	KANSAS CITY TO ST JOSEPH	4,089	4,414	4,605	CONSTRUCTION	
EAST BLVD	ST JOSEPH TO MAIN	8,829	8,730	7,906	CONSTRUCTION	
EAST BLVD	MAIN TO OMAHA	11,659	10,983	10,474	CONSTRUCTION	
EAST BLVD	OMAHA TO E NORTH	13,390	14,025	CONSTRUCTION	CONSTRUCTION	
EGLIN ST	LACROSSE TO LUNA	7,192	6,799	8,029	7,867	-2%
EGLIN ST	LUNA TO E. NORTH	10,820	8,916	10,708	11,648	9%
EGLIN ST	E.NORTH TO DYESS	6,581	6,593	6,660	7,268	9%
EGLIN ST	DYESS TO ELK VALE	5,428	5,655	5,671	5,513	-3%
ELK VALE RD	SD-79 TO SD-44	20,136	19,781	18,781	21,377	14%
ELK VALE RD	SD-44 TO I-90	21,855	20,453	22,331	19,939	-11%
ELK VALE RD	I-90 TO SEGER	3,490	3,548	3,418	4,508	32%
FAIRMONT BLVD	5TH TO WISCONSIN	9,717	9,461	10,125	12,872	27%
FAIRMONT (E) BLVD	WISCONSIN TO ELM	9,471	8,888	8,470	9,455	12%
FAIRMONT(E) BLVD	ELM TO CAMBELL	8,737	7,760	7,649	8,302	9%
HAINES AVE	NORTH TO ANAMOSA	19,671	21,769	19,083	21,170	11%
HAINES AVE	ANAMOSA TO I-90	19,750	20,444	17,921	17,245	-4%
HAINES AVE	I-90 TO DISK	22,508	23,898	CONSTRUCTION	20,561	
HAINES AVE	DISK TO MALL	17,731	17,125	CONSTRUCTION	18,666	
HAINES AVE	MALL TO COUNTRY	14,389	12,748	10,359	13,768	33%
HAINES AVE	COUNTRY TO COBALT	6,035	6,009	5,911	5,843	-1%
HAINES AVE	COBALT TO CITY LIMIT	2,533	2,422	2,534	2,417	-5%
HILLSVIEW DR	AUDUBON TO RAIDER	2,776	3,514	3,645	1,824	-50%
I-190	OMAHA TO SILVER	CONSTRUCTION	23,060	25,696	22,815	-11%
I-190	SILVER TO I-90	CONSTRUCTION	20,657	24,488	21,836	-11%
I-90	I-190 TO HAINES	38,615	32,445	38,835	32,124	-17%
I-90	ELK VALE TO EAST CITY LIMIT	28,257	26,201	30,002	26,643	-11%
JACKSON BLVD	CITY LIMIT TO CHAPEL LN	5,081	5,500	6,317	6,135	-3%
JACKSON BLVD	CHAPEL LN TO CANYON LAKE	8,166	9,004	10,171	9,365	-8%
JACKSON BLVD	CANYON LAKE TO 32ND	10,867	12,813	13,854	12,728	-8%
JACKSON BLVD	32ND TO SHERIDAN LAKE	12,168	16,993	17,439	15,653	-10%
JACKSON BLVD	SHERIDAN LK TO MT VIEW (S)	19,670	23,215	22,626	21,099	-7%
JACKSON BLVD	MT VIEW (N) TO MAIN (W)	16,429	18,440	17,975	16,539	-8%
LACROSSE (N) ST	OMAHA TO E NORTH	9,819	10,778	11,913	13,243	11%
LACROSSE (N) ST	E NORTH TO ANAMOSA	17,885	19,434	19,686	16,586	-16%
LACROSSE (N) ST	ANAMOSA TO I-90	17,817	17,178	17,020	16,787	-1%
LACROSSE (N) ST	I-90 TO DISK	10,210	13,604	12,624	10,852	-14%
LACROSSE (N) ST	DISK TO MALL	CONSTRUCTION	6,743	7,422	6,637	-11%
LIBERTY BLVD	N ELLSWORTH TO I-90	6,211	7,084	8,018	7,427	-7%
MAIN (W) ST	BERRY PINE TO 44TH	1,395	1,320	1,320	1,185	-5%

ROAD	LIMITS	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	2019 SEASONALLY ADJUSTED COUNT	2020 SEASONALLY ADJUSTED COUNT	% CHANGE 2019/2020
MAIN (W) ST	44TH TO SOO SAN	4,897	7,588	6,820	4,461	-35%
MAIN (W) ST	SOO SAN TO STURGIS	10,171	10,382	10,863	8,498	-22%
MAIN (W) ST	STURGIS TO SHERIDAN LAKE	17,348	17,926	18,987	15,575	-18%
MAIN (W) ST	SHERIDAN LAKE TO MTVIEW	20,249	20,724	21,753	21,765	0%
MAIN (W) ST	MT VIEW TO JACKSON	21,268	21,792	21,091	19,654	-7%
MAIN (W) ST	JACKSON TO CROSS	39,187	39,104	40,654	35,372	-13%
MAIN (W) ST	CROSS TO WEST STREET	31,656	34,788	33,717	33,021	-2%
MAIN ST	WEST BLVD TO MT RUSHMORE	13,127	14,087	11,409	13,330	17%
MAIN ST	MT RUSHMORE TO 5TH	11,220	11,291	CONSTRUCTION	9,154	
MAIN ST	5TH TO EAST BLVD	8,458	9,916	7,109	7,835	10%
MAIN ST	EAST BLVD TO STEELE	7,537	8,070	7,587	5,550	-27%
MALL DR	HAINES TO MAPLE	4,421	6,907	5,658	5,363	-5%
MALL DR	MAPLE TO LACROSSE	4,702	6,111	4,889	4,749	-3%
MALL DR	LACROSSE TO E. NORTH	4,412	4,736	4,231	4,057	-4%
MALL (E) DR	E NORTH TO DYESS	9,626	7,309	7,769	8,289	7%
MALL (E) DR	DYESS TO ELK VALE	5,770	6,058	6,379	6,914	8%
MAPLE (N) AVE	DISK (W) TO DISK (E)	2,514	4,245	2,463	2,231	-9%
MINNESOTA (E) ST	5TH TO ELM	6,729	6,520	5,821	6,552	13%
MINNESOTA (E) ST	ELM TO CAMBELL	5,646	5,311	5,075	5,947	17%
MOUNTAINVIEW RD	JACKSON TO CANYON LAKE	8,642	9,781	9,157	8,265	-10%
MOUNTAINVIEW RD	CANYON LAKE TO MAIN	16,175	17,279	16,371	15,156	-7%
MOUNTAINVIEW RD	MAIN TO OMAHA	15,878	18,609	18,645	15,982	-14%
MT RUSHMORE RD	CATHEDRAL TO ST PATRICK	16,616	21,429	24,235	23,478	-3%
MT RUSHMORE RD	ST PATRICK TO ST JOSEPH	15,093	21,569	24,349	23,576	-3%
MT RUSHMORE RD	ST JOSEPH TO MAIN	12,879	18,252	18,981	18,225	-4%
MT RUSHMORE RD	MAIN TO OMAHA	11,498	14,056	14,446	14,044	-3%
MT RUSHMORE RD	OMAHA TO NORTH	7,549	5,016	4,410	3,908	-11%
N ELLSWORTH RD	US-14/16 TO LIBERTY	6,181	7,455	8,172	6,482	-21%
NEMO RD	WESTBERRY TRAIL TO BERRY PINE	3,885	3,935	3,789	4,130	9%
OMAHA (W) ST	DEADWOOD TO MTVIEW	21,064	22,555	24,318	19,262	-21%
OMAHA (W) ST	MTVIEW TO WEST BLVD	27,025	24,074	26,843	CONSTRUCTION	
OMAHA ST	WEST BLVD TO MT RUSHMORE	30,564	31,872	30,146	24,406	-19%
OMAHA ST	MT RUSHMORE TO 5TH	28,464	29,865	28,629	23,877	-17%
OMAHA ST	5TH TO EAST BLVD	26,246	27,537	26,743	19,938	-25%
OMAHA ST	EAST BLVD TO LACROSSE	20,666	21,687	24,185	18,226	-25%
OMAHA (E) ST	LACROSSE TO CAMBELL	19,185	20,151	19,604	15,822	-19%
RADAR HILL RD	MULE DEER TO US-14/16	4,949	5,027	5,122	4,922	-4%
SD-44 (E)	CAMBELL TO ST PATRICK	17,171	16,076	15,154	14,778	-2%
SD-44 (E)	ST PATRICK TO TWILIGHT	24,598	25,277	27,480	23,248	-15%
SD-44 (E)	TWILIGHT TO JOLLY	19,570	19,998	22,058	18,937	-14%
SD-44 (E)	JOLLY TO RESERVOIR	15,014	16,649	18,442	15,487	-16%
SD-44 (E)	RESERVOIR TO AIRPORT	7,328	7,440	7,639	6,505	-15%
SD-79	CITY LIMIT TO ELK VALE	14,184	14,302	13,443	16,214	21%
SEGER DR	LACROSSE TO DYESS	CONSTRUCTION	2,260	2,238	2,738	22%

ROAD	LIMITS	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	2019 SEASONALLY ADJUSTED COUNT	2020 SEASONALLY ADJUSTED COUNT	% CHANGE 2019/2020
SHERIDAN LAKE RD	DUNSMORE TO S WILDWOOD	8,603	7,951	8,299	7,266	-12%
SHERIDAN LAKE RD	S WILDWOOD TO CATRON	8,450	8,435	8,838	7,480	-15%
SHERIDAN LAKE RD	CATRON TO CORRAL	16,235	15,770	16,051	14,482	-10%
SHERIDAN LAKE RD	CORRAL TO FLORMANN	15,126	15,094	16,343	14,087	-14%
SHERIDAN LAKE RD	FLORMANN TO JACKSON	16,149	16,028	16,947	14,080	-17%
SHERIDAN LAKE RD	JACKSON TO CANYON LAKE	9,212	10,145	9,956	8,581	-14%
SHERIDAN LAKE RD	CANYON LAKE TO W MAIN	8,201	11,129	9,248	8,265	-11%
SOO SAN DR	CANYON LAKE TO RANGE	5,920	4,700	5,733	4,281	-25%
SOUTH CANYON RD	BERRY PINE TO 44TH	6,312	6,229	6,262	3,342	-47%
SOUTH CANYON RD	W MAIN TO 44TH	964	2,075	1,250	789	-37%
ST JOSEPH (W) ST	WEST ST TO WEST BLVD	15,411	18,727	17,929	16,242	-9%
ST JOSEPH ST	WEST BLVD TO MT RUSHMORE	12,876	13,431	14,088	13,184	-6%
ST JOSEPH ST	MT RUSHMORE TO 5TH	11,778	11,411	11,202	10,118	-10%
ST JOSEPH ST	5TH TO EAST BLVD	8,895	CONSTRUCTION	9,425	8,043	-15%
ST JOSEPH ST	EAST BLVD TO STEELE	7,285	8,251	8,092	6,592	-19%
ST JOSEPH (E) ST	STEELE TO ST PATRICK	11,279	12,382	13,636	11,029	-19%
ST JOSEPH (E) ST	ST PATRICK TO CAMBELL	6,667	6,674	6,668	5,811	-13%
ST PATRICK ST	WEST BLVD TO MT RUSHMORE	3,203	3,191	2,983	3,233	8%
ST PATRICK ST	MT RUSHMORE TO 5TH	5,835	6,165	6,474	6,374	-2%
ST PATRICK ST	5TH TO ELM	9,848	10,368	9,422	11,441	21%
ST PATRICK (E) ST	ELM TO ST JOSEPH	12,607	11,141	12,444	12,402	0%
ST PATRICK (E) ST	ST JOSEPH TO CAMBELL	13,138	14,281	13,914	15,924	14%
ST PATRICK (E) ST	CAMBELL TO CREEK	14,290	14,751	16,100	14,526	-10%
ST PATRICK (E) ST	CREEK TO SD-44	9,610	12,313	11,127	11,147	0%
STURGIS RD	MAIN TO W CHICAGO	11,432	CONSTRUCTION	11,190	10,466	-6%
STURGIS RD	W CHICAGO TO ST MARTINS	10,992	8,086	9,048	7,920	-12%
TWILIGHT DR	SD-44 TO JOLLY LN	5,843	8,508	8,275	7,569	-9%
TWILIGHT DR	JOLLY LN TO RESERVOIR	7,561	4,158	4,058	3,635	-10%
US-14/16	I-90 TO WESTGATE	14,644	14,941	14,748	14,090	-4%
US-14/16	S ELLSWORTH TO OAK	1,929	2,102	2,542	2,313	-9%
US-16	CITY LIMIT TO CATRON	19,565	16,699	17,423	15,239	-13%
US-16	CATRON TO CATHEDRAL	12,171	13,393	15,450	14,348	-7%
W CHICAGO ST	44TH TO STURGIS	11,512	9,050	11,227	9,208	-18%
W CHICAGO ST	STURGIS TO DEADWOOD	17,069	CONSTRUCTION	13,420	10,683	-20%
WEST BLVD	FLORMANN TO ST PATRICK	1,976	1,922	1,935	1,428	-26%
WEST BLVD	ST PATRICK TO ST CLOUD	6,582	5,162	4,876	4,816	-1%
WEST BLVD	ST CLOUD TO ST JOSEPH	8,500	6,079	6,240	4,743	-24%
WEST BLVD	ST. JOSEPH TO MAIN	14,385	12,827	14,555	14,389	-1%
WEST BLVD	MAIN ST TO OMAHA ST	13,509	14,408	16,239	17,318	7%
WEST GATE RD	US-14/16 TO BLUEBIRD	3,709	3,797	3,715	3,584	-4%