

Rapid City Area  
Metropolitan Planning Organization

**2018 TRAFFIC VOLUME COUNTS  
REPORT**



*In cooperation with:*

City of Rapid City  
Engineering Services Division  
Public Works Department

**January 2019**

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## **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 2015 – 2018.

## **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 1-3 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 four 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 the Elk Vale Road interchange
- I-90, east of I-190

ROAD	LIMITS	2015 SEASONALLY ADJUSTED COUNT	2016 SEASONALLY ADJUSTED COUNT	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	% CHANGE 2017/2018
1ST ST	OMAHA TO MAIN	672	859	516	783	52%
2ND ST	MAIN TO OMAHA	1,156	681	790	781	-1%
3RD ST	MAIN TO OMAHA	2,026	2,092	2,153	2,127	-1%
5TH ST	CATRON TO PARKVIEW	9,277	10,211	11,063	10,804	-2%
5TH ST	PARKVIEW TO MINNESOTA	10,450	10,938	9,938	9,937	0%
5TH ST	MINNESOTA TO TEXAS	14,714	14,938	14,099	13,991	-1%
5TH ST	TEXAS TO 3RD	15,839	17,115	15,843	15,774	0%
5TH ST	3RD TO FAIRMONT	16,764	19,004	18,529	18,929	2%
5TH ST	FAIRMONT TO ST PATRICK	22,276	20,294	20,989	18,953	-10%
5TH ST	ST. PATRICK TO ST. CLOUD	22,884	22,237	19,646	22,198	13%
5TH ST	ST. CLOUD TO COLUMBUS	21,752	18,398	19,136	20,783	9%
5TH ST	COLUMBUS TO ST. JOSEPH	21,545	21,452	21,846	22,906	5%
5TH ST	ST JOSEPH TO MAIN	19,923	18,604	19,984	21,394	7%
5TH ST	MAIN TO OMAHA	18,049	17,432	18,365	19,907	8%
5TH ST	OMAHA TO NEW YORK	19,334	18,601	18,448	23,269	26%
5TH ST	NEW YORK TO NORTH	17,818	18,898	18,312	22,288	22%
32ND ST	JACKSON TO CANYON LAKE	4,598	7,835	4,084	3,209	-21%
44TH ST	RAIDER TO MAIN	4,005	4,159	3,643	3,410	-6%
225TH ST	N ELLSWORTH TO BRIGGS	3,726	3,248	3,106	3,476	12%
ANAMOSA ST	WEST BLVD N. TO HAINES	3,784	5,332	4,549	2,970	-35%
ANAMOSA ST	HAINES TO MAPLE	8,687	8,320	7,821	7,777	-1%
ANAMOSA (E) ST	MAPLE TO LACROSSE	11,010	10,001	9,010	9,669	7%
ANAMOSA (E) ST	LACROSSE TO E. NORTH	5,976	4,974	4,927	5,688	15%
CAMBELL ST	CATRON TO MINNESOTA	17,026	17,249	16,657	18,120	9%
CAMBELL ST	MINNESOTA TO FAIRMONT	19,284	19,458	16,608	20,654	24%
CAMBELL ST	FAIRMONT TO ST PATRICK	22,178	22,616	22,621	19,036	-16%
CAMBELL ST	ST PATRICK TO OMAHA	21,737	22,560	21,944	25,508	16%
CAMBELL (E) ST	OMAHA TO E. NORTH ST	24,175	24,541	24,747	29,165	18%
CANYON LAKE DR	JACKSON TO CLIFTON	9,892	6,846	6,353	5,941	-6%
CANYON LAKE DR	CLIFTON TO SOO SAN	9,828	6,758	6,226	7,894	27%
CANYON LAKE DR	SOO SAN TO SHERIDAN LAKE	15,163	12,396	10,712	11,092	4%
CANYON LAKE DR	SHERIDAN LAKE TO MTVIEW	13,861	12,672	11,687	10,770	-8%
CATHEDRAL DR	MT RUSHMORE TO TOWER	10,207	12,855	12,961	13,186	2%
CATHEDRAL DR	TOWER TO 5TH	10,207	13,121	13,102	14,195	8%
CATRON BLVD	SHERIDAN LAKE TO US-16	12,921	13,297	6,076	CONSTRUCTION	
CATRON BLVD	US-16 TO 5TH	16,593	15,309	16,478	16,721	1%
CATRON (E) BLVD	5TH TO SD-79	17,644	17,673	19,038	19,762	4%
COUNTRY RD	HAINES TO W NIKE	1,650	1,565	2,303	1,651	-28%
CREEK (N) DR	ANAMOSA TO EGLIN ST	3,479	4,514	4,805	3,709	-23%
DEADWOOD AVE	OMAHA TO CEMENT PLANT	16,914	18,238	18,569	18,490	0%
DEADWOOD AVE	CEMENT PLANT TO LIEN	16,449	17,540	17,523	18,228	4%
DEADWOOD AVE	LIEN TO N PLAZA	11,764	13,206	13,860	14,612	5%
DEADWOOD AVE	N PLAZA TO I-90	15,154	15,611	15,811	16,780	6%
DEADWOOD AVE	I-90 TO CITY LIMIT	3,567	3,499	3,713	2,728	-27%
DISK DR	HAINES TO MAPLE	5,860	5,914	6,080	6,571	8%

ROAD	LIMITS	2015 SEASONALLY ADJUSTED COUNT	2016 SEASONALLY ADJUSTED COUNT	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	% CHANGE 2017/2018
DISK (E) DR	MAPLE TO LACROSSE	7,345	6,802	7,285	8,249	13%
DYESS AVE	MALL TO SEGER	CONSTRUCTION	CONSTRUCTION	4,992	3,418	-32%
E NORTH ST	MILWAUKEE TO LACROSSE	12,712	12,727	13,426	16,621	24%
E NORTH ST	LACROSSE TO CABBELL	14,205	15,196	15,258	16,932	11%
E NORTH ST	CABBELL TO ANAMOSA	21,143	23,360	23,074	27,653	20%
E NORTH ST	ANAMOSA TO I-90	14,550	18,406	18,473	22,928	24%
EAST BLVD	KANSAS CITY TO ST JOSEPH	3,796	4,000	4,089	4,414	8%
EAST BLVD	ST JOSEPH TO MAIN	7,412	7,523	8,829	8,730	-1%
EAST BLVD	MAIN TO OMAHA	10,119	10,098	11,659	10,983	-6%
EAST BLVD	OMAHA TO E NORTH	12,443	12,546	13,390	14,025	5%
EGLIN ST	LACROSSE TO LUNA	6,919	6,478	7,192	6,799	-5%
EGLIN ST	LUNA TO E. NORTH	12,098	10,186	10,820	8,916	-18%
EGLIN ST	E.NORTH TO DYESS	5,434	5,356	6,581	6,593	0%
EGLIN ST	DYESS TO ELK VALE	5,086	4,394	5,428	5,655	4%
ELK VALE RD	SD-79 TO SD-44	18,426	19,411	20,136	19,781	-2%
ELK VALE RD	SD-44 TO I-90	19,211	21,179	21,855	20,453	-6%
ELK VALE RD	I-90 TO SEGER	7,149	4,509	3,490	3,548	2%
FAIRMONT BLVD	5TH TO WISCONSIN	9,643	9,559	9,717	9,461	-3%
FAIRMONT (E) BLVD	WISCONSIN TO ELM	9,586	9,294	9,471	8,888	-6%
FAIRMONT(E) BLVD	ELM TO CABBELL	7,976	8,715	8,737	7,760	-11%
HAINES AVE	NORTH TO ANAMOSA	21,550	20,435	19,671	21,769	11%
HAINES AVE	ANAMOSA TO I-90	19,899	20,358	19,750	20,444	4%
HAINES AVE	I-90 TO DISK	21,239	24,230	22,508	23,898	6%
HAINES AVE	DISK TO MALL	16,848	16,726	17,731	17,125	-3%
HAINES AVE	MALL TO COUNTRY	12,780	12,657	14,389	12,748	-11%
HAINES AVE	COUNTRY TO COBALT	5,696	5,835	6,035	6,009	0%
HAINES AVE	COBALT TO CITY LIMIT	2,474	2,444	2,533	2,422	-4%
HILLSVIEW DR	AUDUBON TO RAIDER	3,123	3,227	2,776	3,514	27%
I-190	OMAHA TO SILVER	24,970	CONSTRUCTION	CONSTRUCTION	23,060	
I-190	SILVER TO I-90	22,886	CONSTRUCTION	CONSTRUCTION	20,657	
I-90	I-190 TO HAINES	38,599	36,571	38,615	32,445	-16%
I-90	ELK VALE TO EAST CITY LIMIT	27,190	25,380	28,257	26,201	-7%
JACKSON BLVD	CITY LIMIT TO CHAPEL LN	CONSTRUCTION	5,883	5,081	5,500	8%
JACKSON BLVD	CHAPEL LN TO CANYON LAKE	CONSTRUCTION	8,248	8,166	9,004	10%
JACKSON BLVD	CANYON LAKE TO 32ND	CONSTRUCTION	11,037	10,867	12,813	18%
JACKSON BLVD	32ND TO SHERIDAN LAKE	11,049	13,387	12,168	16,993	40%
JACKSON BLVD	SHERIDAN LK TO MT VIEW (S)	20,379	20,026	19,670	23,215	18%
JACKSON BLVD	MT VIEW (N) TO MAIN (W)	17,591	17,386	16,429	18,440	12%
LACROSSE (N) ST	OMAHA TO E NORTH	9,737	10,320	9,819	10,778	10%
LACROSSE (N) ST	E NORTH TO ANAMOSA	18,337	18,702	17,885	19,434	9%
LACROSSE (N) ST	ANAMOSA TO I-90	20,438	19,799	17,817	17,178	-4%
LACROSSE (N) ST	I-90 TO DISK	12,976	13,101	10,210	13,604	33%
LACROSSE (N) ST	DISK TO MALL	6,313	7,528	CONSTRUCTION	6,743	
LIBERTY BLVD	N ELLSWORTH TO I-90	4,637	5,158	6,211	7,084	14%
MAIN (W) ST	BERRY PINE TO 44TH	2,120	2,045	2,080	1,395	-33%

ROAD	LIMITS	2015 SEASONALLY ADJUSTED COUNT	2016 SEASONALLY ADJUSTED COUNT	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	% CHANGE 2017/2018
MAIN (W) ST	44TH TO SOO SAN	5,244	4,824	4,897	7,588	55%
MAIN (W) ST	SOO SAN TO STURGIS	10,856	12,100	10,171	10,382	2%
MAIN (W) ST	STURGIS TO SHERIDAN LAKE	16,418	16,362	17,348	17,926	3%
MAIN (W) ST	SHERIDAN LAKE TO MTVIEW	20,341	19,111	20,249	20,724	2%
MAIN (W) ST	MTVIEW TO JACKSON	21,766	20,922	21,268	21,792	2%
MAIN (W) ST	JACKSON TO CROSS	33,638	32,542	39,187	39,104	0%
MAIN (W) ST	CROSS TO WEST STREET	32,934	32,483	31,656	34,788	10%
MAIN ST	WEST BLVD TO MT RUSHMORE	13,615	12,883	13,127	14,087	7%
MAIN ST	MT RUSHMORE TO 5TH	11,404	10,619	11,220	11,291	1%
MAIN ST	5TH TO EAST BLVD	8,264	7,731	8,458	9,916	17%
MAIN ST	EAST BLVD TO STEELE	9,086	8,544	7,537	8,070	7%
MALL DR	HAINES TO MAPLE	3,797	4,922	4,421	6,907	56%
MALL DR	MAPLE TO LACROSSE	4,055	4,704	4,702	6,111	30%
MALL DR	LACROSSE TO E. NORTH	3,676	4,152	4,412	4,736	7%
MALL (E) DR	E NORTH TO DYESS	6,761	6,408	9,626	7,309	-24%
MALL (E) DR	DYESS TO ELK VALE	4,871	4,740	5,770	6,058	5%
MAPLE (N) AVE	DISK (W) TO DISK (E)	2,261	2,174	2,514	4,245	69%
MINNESOTA (E) ST	5TH TO ELM	6,414	5,935	6,729	6,520	-3%
MINNESOTA (E) ST	ELM TO CAMBELL	5,532	5,913	5,646	5,311	-6%
MOUNTAINVIEW RD	JACKSON TO CANYON LAKE	9,355	9,212	8,642	9,781	13%
MOUNTAINVIEW RD	CANYON LAKE TO MAIN	19,551	16,255	16,175	17,279	7%
MOUNTAINVIEW RD	MAIN TO OMAHA	20,245	17,866	15,878	18,609	17%
MT RUSHMORE RD	CATHEDRAL TO ST PATRICK	15,764	17,357	16,616	21,429	29%
MT RUSHMORE RD	ST PATRICK TO ST JOSEPH	17,842	15,810	15,093	21,569	43%
MT RUSHMORE RD	ST JOSEPH TO MAIN	15,466	13,417	12,879	18,252	42%
MT RUSHMORE RD	MAIN TO OMAHA	12,544	11,869	11,498	14,056	22%
MT RUSHMORE RD	OMAHA TO NORTH	8,078	8,072	7,549	5,016	-34%
N ELLSWORTH RD	US-14/16 TO LIBERTY	6,486	5,965	6,181	7,455	21%
NEMO RD	WESTBERRY TRAIL TO BERRY PINE	3,961	3,742	3,885	3,935	1%
OMAHA (W) ST	DEADWOOD TO MTVIEW	23,890	23,691	21,064	22,555	7%
OMAHA (W) ST	MTVIEW TO WEST BLVD	27,801	29,970	27,025	24,074	-11%
OMAHA ST	WEST BLVD TO MT RUSHMORE	29,788	31,813	30,564	31,872	4%
OMAHA ST	MT RUSHMORE TO 5TH	27,676	29,177	28,464	29,865	5%
OMAHA ST	5TH TO EAST BLVD	24,583	25,035	26,246	27,537	5%
OMAHA ST	EAST BLVD TO LACROSSE	20,017	20,216	20,666	21,687	5%
OMAHA (E) ST	LACROSSE TO CAMBELL	19,361	14,734	19,185	20,151	5%
RADAR HILL RD	MULE DEER TO US-14/16	4,618	4,957	4,949	5,027	2%
SD-44 (E)	CAMBELL TO ST PATRICK	16,757	16,952	17,171	16,076	-6%
SD-44 (E)	ST PATRICK TO TWILIGHT	23,384	24,805	24,598	25,277	3%
SD-44 (E)	TWILIGHT TO JOLLY	16,477	17,556	19,570	19,998	2%
SD-44 (E)	JOLLY TO RESERVOIR	14,817	15,728	15,014	16,649	11%
SD-44 (E)	RESERVOIR TO AIRPORT	6,867	7,196	7,328	7,440	2%
SD-79	CITY LIMIT TO ELK VALE	12,803	14,618	14,184	14,302	1%
SEGER DR	LACROSSE TO DYESS	CONSTRUCTION	CONSTRUCTION	CONSTRUCTION	2,260	

ROAD	LIMITS	2015 SEASONALLY ADJUSTED COUNT	2016 SEASONALLY ADJUSTED COUNT	2017 SEASONALLY ADJUSTED COUNT	2018 SEASONALLY ADJUSTED COUNT	% CHANGE 2017/2018
SHERIDAN LAKE RD	DUNSMORE TO S WILDWOOD	8,064	8,861	8,603	7,951	-8%
SHERIDAN LAKE RD	S WILDWOOD TO CATRON	8,872	8,417	8,450	8,435	0%
SHERIDAN LAKE RD	CATRON TO CORRAL	16,106	16,551	16,235	15,770	-3%
SHERIDAN LAKE RD	CORRAL TO FLORMANN	16,399	15,127	15,126	15,094	0%
SHERIDAN LAKE RD	FLORMANN TO JACKSON	17,230	15,249	16,149	16,028	-1%
SHERIDAN LAKE RD	JACKSON TO CANYON LAKE	9,662	9,189	9,212	10,145	10%
SHERIDAN LAKE RD	CANYON LAKE TO W MAIN	10,182	9,100	8,201	11,129	36%
SOO SAN DR	CANYON LAKE TO RANGE	6,879	8,183	5,920	4,700	-21%
SOUTH CANYON RD	BERRY PINE TO 44TH	6,814	6,426	6,312	6,229	-1%
SOUTH CANYON RD	W MAIN TO 44TH	1,144	1,096	964	2,075	115%
ST JOSEPH (W) ST	WEST ST TO WEST BLVD	16,542	16,223	15,411	18,727	22%
ST JOSEPH ST	WEST BLVD TO MT RUSHMORE	13,115	12,043	12,876	13,431	4%
ST JOSEPH ST	MT RUSHMORE TO 5TH	11,497	9,629	11,778	11,411	-3%
ST JOSEPH ST	5TH TO EAST BLVD	8,984	7,951	8,895	CONSTRUCTION	
ST JOSEPH ST	EAST BLVD TO STEELE	9,239	7,862	7,285	8,251	13%
ST JOSEPH (E ) ST	STEELE TO ST PATRICK	14,567	12,808	11,279	12,382	10%
ST JOSEPH (E) ST	ST PATRICK TO CAMBELL	7,854	7,372	6,667	6,674	0%
ST PATRICK ST	WEST BLVD TO MT RUSHMORE	3,502	5,991	3,203	3,191	0%
ST PATRICK ST	MT RUSHMORE TO 5TH	8,496	7,996	5,835	6,165	6%
ST PATRICK ST	5TH TO ELM	11,424	10,986	9,848	10,368	5%
ST PATRICK (E) ST	ELM TO ST JOSEPH	14,434	14,485	12,607	11,141	-12%
ST PATRICK (E) ST	ST JOSEPH TO CAMBELL	12,583	14,313	13,138	14,281	9%
ST PATRICK (E) ST	CAMBELL TO CREEK	15,635	15,292	14,290	14,751	3%
ST PATRICK (E) ST	CREEK TO SD-44	10,967	9,502	9,610	12,313	28%
STURGIS RD	MAIN TO W CHICAGO	10,875	12,642	11,432	CONSTRUCTION	
STURGIS RD	W CHICAGO TO ST MARTINS	8,869	10,860	10,992	8,086	-26%
TWILIGHT DR	SD-44 TO JOLLY LN	6,572	6,159	5,843	8,508	46%
TWILIGHT DR	JOLLY LN TO RESERVOIR	8,526	7,724	7,561	4,158	-45%
US-14/16	I-90 TO WESTGATE	14,444	14,227	14,644	14,941	2%
US-14/16	S ELLSWORTH TO OAK	1,863	1,853	1,929	2,102	9%
US-16	CITY LIMIT TO CATRON	20,405	19,181	19,565	16,699	-15%
US-16	CATRON TO CATHEDRAL	9,900	11,213	12,171	13,393	10%
W CHICAGO ST	44TH TO STURGIS	12,125	11,934	11,512	9,050	-21%
W CHICAGO ST	STURGIS TO DEADWOOD	18,458	15,880	17,069	CONSTRUCTION	
WEST BLVD	FLORMANN TO ST PATRICK	1,304	1,951	1,976	1,922	-3%
WEST BLVD	ST PATRICK TO ST CLOUD	6,489	10,942	6,582	5,162	-22%
WEST BLVD	ST CLOUD TO ST JOSEPH	8,886	11,701	8,500	6,079	-28%
WEST BLVD	ST. JOSEPH TO MAIN	12,411	14,907	14,385	12,827	-11%
WEST BLVD	MAIN ST TO OMAHA ST	14,838	14,590	13,509	14,408	7%
WEST GATE RD	US-14/16 TO BLUEBIRD	3588	3,372	3,709	3,797	2%