

Rapid City Area  
Metropolitan Planning Organization

**2016 TRAFFIC VOLUME COUNTS  
REPORT**



*In cooperation with:*

City of Rapid City  
Engineering Services Division  
Public Works Department

**January 2017**

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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 2014 – 2016.

## ***DATA & METHODOLOGY***

The Traffic Volume Counts Report presents the most recent three 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 three 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 24 hour 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 \* percentage of truck traffic.***

## ***COMPARISON OF ANNUAL VOLUMES***

The count summary includes the percent change between successive year's counts. A weighted average percent change is also calculated taking into consideration all of the 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 single volume provides a "snapshot" of traffic that traveled that roadway on that specific day. Trend analyses should most accurately be limited to using permanent count station data.

## ***PERMANENT COUNT STATIONS***

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

- 5th Street, north of St. Cloud Street
- Anamosa Street, east of Haines Avenue
- West Main Street, east of Jackson Boulevard
- I-90, east of the Elk Vale Road interchange
- I-90, east of I-190

ROAD	LIMITS	2014 SEASONALLY ADJUSTED COUNT	2015 SEASONALLY ADJUSTED COUNT	% CHANGE 2014/2015	2016 SEASONALLY ADJUSTED COUNT	% CHANGE 2015/2016
1ST ST	OMAHA TO MAIN	660	672	2%	859	28%
2ND ST	MAIN TO OMAHA	1,145	1,156	1%	681	-41%
3RD ST	MAIN TO OMAHA	2,061	2,026	-2%	2,092	3%
5TH ST	CATRON TO PARKIEW	9,514	9,277	-2%	10,211	10%
5TH ST	PARKVIEW TO MINNESOTA	9,839	10,450	6%	10,938	5%
5TH ST	MINNESOTA TO TEXAS	13,755	14,714	7%	14,938	2%
5TH ST	TEXAS TO 3RD	16,835	15,839	-6%	17,115	8%
5TH ST	3RD TO FAIRMONT	17,690	16,764	-5%	19,004	13%
5TH ST	FAIRMONT TO ST PATRICK	18,377	22,276	21%	20,294	-9%
5TH ST	ST. PATRICK TO ST. CLOUD	18,506	22,884	24%	22,237	-3%
5TH ST	ST. CLOUD TO COLUMBUS	18,354	21,752	19%	18,398	-15%
5TH ST	COLUMBUS TO ST. JOSEPH	20,871	21,545	3%	21,452	0%
5TH ST	ST JOSEPH TO MAIN	20,938	19,923	-5%	18,604	-7%
5TH ST	MAIN TO OMAHA	20,211	18,049	-11%	17,432	-3%
5TH ST	OMAHA TO NEW YORK	18,003	19,334	7%	18,601	-4%
5TH ST	NEW YORK TO NORTH	16,881	17,818	6%	18,898	6%
32ND ST	JACKSON TO CANYON LAKE	5,184	4,598	-11%	7,835	70%
44TH ST	RAIDER TO MAIN	3,746	4,005	7%	4,159	4%
225TH ST	N ELLSWORTH TO BRIGGS	3,795	3,726	-2%	3,248	-13%
ANAMOSA ST	WEST BLVD N. TO HAINES	3,901	3,784	-3%	5,332	41%
ANAMOSA ST	HAINES TO MAPLE	8,224	8,687	6%	8,320	-4%
ANAMOSA (E) ST	MAPLE TO LACROSSE	10,394	11,010	6%	10,001	-9%
ANAMOSA (E) ST	LACROSSE TO E. NORTH	5,468	5,976	9%	4,974	-17%
CAMBELL ST	CATRON TO MINNESOTA	15,041	17,026	13%	17,249	1%
CAMBELL ST	MINNESOTA TO FAIRMONT	17,324	19,284	11%	19,458	1%
CAMBELL ST	FAIRMONT TO ST PATRICK	21,303	22,178	4%	22,616	2%
CAMBELL ST	ST PATRICK TO OMAHA	21,230	21,737	2%	22,560	4%
CAMBELL (E) ST	OMAHA TO E. NORTH ST	23,278	24,175	4%	24,541	2%
CANYON LAKE DR	JACKSON TO CLIFTON	8,865	9,892	12%	6,846	-31%
CANYON LAKE DR	CLIFTON TO SOO SAN	8,813	9,828	12%	6,758	-31%
CANYON LAKE DR	SOO SAN TO SHERIDAN LAKE	14,282	15,163	6%	12,396	-18%
CANYON LAKE DR	SHERIDAN LAKE TO MTVIEW	12,756	13,861	9%	12,672	-9%
CATHEDRAL DR	MT RUSHMORE TO TOWER	14,218	10,207	-28%	12,855	26%
CATHEDRAL DR	TOWER TO 5TH	15,079	10,207	-32%	13,121	29%
CATRON BLVD	SHERIDAN LAKE TO US-16	13,378	12,921	-3%	13,297	3%
CATRON BLVD	US-16 TO 5TH	14,722	16,593	13%	15,309	-8%
CATRON (E) BLVD	5TH TO SD-79	16,425	17,644	7%	17,673	0%
COUNTRY RD	HAINES TO W NIKE	1,646	1,650	0%	1,565	-5%
CREEK (N) DR	ANAMOSA TO EGLIN ST	3,777	3,479	-8%	4,514	30%
DEADWOOD AVE	OMAHA TO LIEN	17,609	16,914	-4%	18,238	8%
DEADWOOD AVE	CEMENT PLANT TO LIEN	16,292	16,449	1%	17,540	7%
DEADWOOD AVE	LIEN TO N PLAZA	13,374	11,764	-12%	13,206	12%
DEADWOOD AVE	N PLAZA TO I-90	15,582	15,154	-3%	15,611	3%
DEADWOOD AVE	I-90 TO CITY LIMIT	3,504	3,567	2%	3,499	-2%
DISK DR	HAINES TO MAPLE	4,969	5,860	18%	5,914	1%

ROAD	LIMITS	2014 SEASONALLY ADJUSTED COUNT	2015 SEASONALLY ADJUSTED COUNT	% CHANGE 2014/2015	2016 SEASONALLY ADJUSTED COUNT	% CHANGE 2015/2016
DISK (E) DR	MAPLE TO LACROSSE	6,273	7,345	17%	6,802	-7%
DYESS AVE	MALL TO SEGER	3,859	CONSTRUCTION		CONSTRUCTION	
E NORTH ST	MILWAUKEE TO LACROSSE	11,877	12,712	7%	12,727	0%
E NORTH ST	LACROSSE TO CAMBELL	13,383	14,205	6%	15,196	7%
E NORTH ST	CAMBELL TO ANAMOSA	20,103	21,143	5%	23,360	10%
E NORTH ST	ANAMOSA TO I-90	14,757	14,550	-1%	18,406	27%
EAST BLVD	KANSAS CITY TO ST JOSEPH	3,508	3,796	8%	4,000	5%
EAST BLVD	ST JOSEPH TO MAIN	7,694	7,412	-4%	7,523	1%
EAST BLVD	MAIN TO OMAHA	10,522	10,119	-4%	10,098	0%
EAST BLVD	OMAHA TO E NORTH	12,310	12,443	1%	12,546	1%
EGLIN ST	LACROSSE TO LUNA	6,070	6,919	14%	6,478	-6%
EGLIN ST	LUNA TO E. NORTH	11,443	12,098	6%	10,186	-16%
EGLIN ST	E. NORTH TO DYESS	6,047	5,434	-10%	5,356	-1%
EGLIN ST	DYESS TO ELK VALE	4,186	5,086	21%	4,394	-14%
ELK VALE RD	SD-79 TO SD-44	16,868	18,426	9%	19,411	5%
ELK VALE RD	SD-44 TO I-90	18,808	19,211	2%	21,179	10%
ELK VALE RD	I-90 TO SEGER	6,825	7,149	5%	4,509	-37%
FAIRMONT BLVD	5TH TO WISCONSIN	9,524	9,643	1%	9,559	-1%
FAIRMONT (E) BLVD	WISCONSIN TO ELM	9,316	9,586	3%	9,294	-3%
FAIRMONT(E) BLVD	ELM TO CAMBELL	7,646	7,976	4%	8,715	9%
HAINES AVE	NORTH TO ANAMOSA	21,195	21,550	2%	20,435	-5%
HAINES AVE	ANAMOSA TO I-90	19,308	19,899	3%	20,358	2%
HAINES AVE	I-90 TO DISK	22,445	21,239	-5%	24,230	14%
HAINES AVE	DISK TO MALL	15,784	16,848	7%	16,726	-1%
HAINES AVE	MALL TO COUNTRY	12,917	12,780	-1%	12,657	-1%
HAINES AVE	COUNTRY TO COBALT	6,947	5,696	-18%	5,835	2%
HAINES AVE	COBALT TO CITY LIMIT	2,476	2,474	0%	2,444	-1%
HILLSVIEW DR	ST PATRICK TO RAIDER	3,127	3,123	0%	3,227	3%
I-190	OMAHA TO SILVER	25,755	24,970	-3%	CONSTRUCTION	
I-190	SILVER TO I-90	23,163	22,886	-1%	CONSTRUCTION	
I-90	I-190 TO HAINES	34,857	38,599	11%	36,571	-5%
I-90	ELK VALE TO EAST CITY LIMIT	25,474	27,190		25,380	-7%
JACKSON BLVD	CITY LIMIT TO CHAPEL LN	5,874	CONSTRUCTION		5,883	
JACKSON BLVD	CHAPEL LN TO CANYON LAKE	9,100	CONSTRUCTION		8,248	
JACKSON BLVD	CANYON LAKE TO 32ND	9,550	CONSTRUCTION		11,037	
JACKSON BLVD	32ND TO SHERIDAN LAKE	10,154	11,049	9%	13,387	21%
JACKSON BLVD	SHERIDAN LK TO MT VIEW (S)	16,681	20,379	22%	20,026	-2%
JACKSON BLVD	MT VIEW (N) TO MAIN (W)	14,837	17,591	19%	17,386	-1%
LACROSSE (N) ST	OMAHA TO E NORTH	8,498	9,737	15%	10,320	6%
LACROSSE (N) ST	E NORTH TO ANAMOSA	17,128	18,337	7%	18,702	2%
LACROSSE (N) ST	ANAMOSA TO I-90	17,915	20,438	14%	19,799	-3%
LACROSSE (N) ST	I-90 TO DISK	11,305	12,976	15%	13,101	1%
LACROSSE (N) ST	DISK TO MALL	5,898	6,313	7%	7,528	19%
LIBERTY BLVD	N ELLSWORTH TO I-90	4,646	4,637	0%	5,158	11%
MAIN (W) ST	BERRY PINE TO 44TH	2,222	2,120	-5%	2,045	-4%

ROAD	LIMITS	2014 SEASONALLY ADJUSTED COUNT	2015 SEASONALLY ADJUSTED COUNT	% CHANGE 2014/2015	2016 SEASONALLY ADJUSTED COUNT	% CHANGE 2015/2016
MAIN (W) ST	44TH TO SOO SAN	5,115	5,244	3%	4,824	-8%
MAIN (W) ST	SOO SAN TO STURGIS	11,225	10,856	-3%	12,100	11%
MAIN (W) ST	STURGIS TO SHERIDAN LAKE	16,339	16,418	0%	16,362	0%
MAIN (W) ST	SHERIDAN LAKE TO MTVIEW	20,328	20,341	0%	19,111	-6%
MAIN (W) ST	MTVIEW TO JACKSON	21,054	21,766	3%	20,922	-4%
MAIN (W) ST	JACKSON TO CROSS	36,947	33,638	-9%	32,542	-3%
MAIN (W) ST	CROSS TO WEST STREET	32,798	32,934	0%	32,483	-1%
MAIN ST	WEST BLVD TO MT RUSHMORE	14,669	13,615	-7%	12,883	-5%
MAIN ST	MT RUSHMORE TO 5TH	11,087	11,404	3%	10,619	-7%
MAIN ST	5TH TO EAST BLVD	8,233	8,264	0%	7,731	-6%
MAIN ST	EAST BLVD TO STEELE	7,718	9,086	18%	8,544	-6%
MALL DR	HAINES TO MAPLE	3,650	3,797	4%	4,922	30%
MALL DR	MAPLE TO LACROSSE	3,703	4,055	9%	4,704	16%
MALL DR	LACROSSE TO E. NORTH	3,048	3,676	21%	4,152	13%
MALL (E) DR	E NORTH TO DYESS	6,215	6,761	9%	6,408	-5%
MALL (E) DR	DYESS TO ELK VALE	4,662	4,871	4%	4,740	-3%
MAPLE (N) AVE	DISK (W) TO DISK (E)	2,477	2,261	-9%	2,174	-4%
MINNESOTA (E) ST	5TH TO ELM	5,465	6,414	17%	5,935	-7%
MINNESOTA (E) ST	ELM TO CABELL	5,110	5,532	8%	5,913	7%
MOUNTAINVIEW RD	JACKSON TO CANYON LAKE	8,549	9,355	9%	9,212	-2%
MOUNTAINVIEW RD	CANYON LAKE TO MAIN	17,002	19,551	15%	16,255	-17%
MOUNTAINVIEW RD	MAIN TO OMAHA	18,851	20,245	7%	17,866	-12%
MT RUSHMORE RD	CATHEDRAL TO ST PATRICK	23,760	15,764	-34%	17,357	10%
MT RUSHMORE RD	ST PATRICK TO ST JOSEPH	23,464	17,842	-24%	15,810	-11%
MT RUSHMORE RD	ST JOSEPH TO MAIN	18,217	15,466	-15%	13,417	-13%
MT RUSHMORE RD	MAIN TO OMAHA	14,931	12,544	-16%	11,869	-5%
MT RUSHMORE RD	OMAHA TO NORTH	6,889	8,078	17%	8,072	0%
N ELLSWORTH RD	US-14/16 TO LIBERTY	6,546	6,486	-1%	5,965	-8%
NEMO RD	WESTBERRY TRAILS TO BERRY PINE	3,731	3,961	6%	3,742	-6%
OMAHA (W) ST	DEADWOOD TO MTVIEW	23,453	23,890	2%	23,691	-1%
OMAHA (W) ST	MTVIEW TO WEST BLVD	33,072	27,801	-16%	29,970	8%
OMAHA ST	WEST BLVD TO MT RUSHMORE	30,366	29,788	-2%	31,813	7%
OMAHA ST	MT RUSHMORE TO 5TH	29,174	27,676	-5%	29,177	5%
OMAHA ST	5TH TO EAST BLVD	25,792	24,583	-5%	25,035	2%
OMAHA ST	EAST BLVD TO LACROSSE	21,846	20,017	-8%	20,216	1%
OMAHA (E) ST	LACROSSE TO CABELL	19,977	19,361	-3%	14,734	-24%
RADAR HILL RD	MULE DEER TO US-14/16	4,604	4,618	0%	4,957	7%
SD-44 (E)	CABELL TO ST PATRICK	17,211	16,757	-3%	16,952	1%
SD-44 (E)	ST PATRICK TO TWILIGHT	22,819	23,384	2%	24,805	6%
SD-44 (E)	TWILIGHT TO JOLLY	17,528	16,477	-6%	17,556	7%
SD-44 (E)	JOLLY TO RESERVOIR	14,139	14,817	5%	15,728	6%
SD-44 (E)	RESERVOIR TO AIRPORT	6,931	6,867	-1%	7,196	5%
SD-79	CITY LIMIT TO ELK VALE	13,938	12,803	-8%	14,618	14%
SEGER DR	LACROSSE TO DYESS	2,465	CONSTRUCTION		CONSTRUCTION	

ROAD	LIMITS	2014 SEASONALLY ADJUSTED COUNT	2015 SEASONALLY ADJUSTED COUNT	% CHANGE 2014/2015	2016 SEASONALLY ADJUSTED COUNT	% CHANGE 2015/2016
SHERIDAN LAKE RD	DUNSMORE TO S WILDWOOD	7,362	8,064	10%	8,861	10%
SHERIDAN LAKE RD	S WILDWOOD TO CATRON	8,161	8,872	9%	8,417	-5%
SHERIDAN LAKE RD	CATRON TO CORRAL	14,047	16,106	15%	16,551	3%
SHERIDAN LAKE RD	CORRAL TO FLORMANN	13,076	16,399	25%	15,127	-8%
SHERIDAN LAKE RD	FLORMANN TO JACKSON	14,147	17,230	22%	15,249	-11%
SHERIDAN LAKE RD	JACKSON TO CANYON LAKE	10,575	9,662	-9%	9,189	-5%
SHERIDAN LAKE RD	CANYON LAKE TO W MAIN	9,285	10,182	10%	9,100	-11%
SOO SAN DR	CANYON LAKE TO RANGE	6,303	6,879	9%	8,183	19%
SOUTH CANYON RD	BERRY PINE TO 44TH	6,651	6,814	2%	6,426	-6%
SOUTH CANYON RD	W MAIN TO 44TH	1,128	1,144	1%	1,096	-4%
ST JOSEPH (W) ST	WEST ST TO WEST BLVD	16,566	16,542	0%	16,223	-2%
ST JOSEPH ST	WEST BLVD TO MT RUSHMORE	13,741	13,115	-5%	12,043	-8%
ST JOSEPH ST	MT RUSHMORE TO 5TH	11,519	11,497	0%	9,629	-16%
ST JOSEPH ST	5TH TO EAST BLVD	9,832	8,984	-9%	7,951	-11%
ST JOSEPH ST	EAST BLVD TO STEELE	7,897	9,239	17%	7,862	-15%
ST JOSEPH (E) ST	STEELE TO ST PATRICK	12,081	14,567	21%	12,808	-12%
ST JOSEPH (E) ST	ST PATRICK TO CAMBELL	6,666	7,854	18%	7,372	-6%
ST PATRICK ST	WEST BLVD TO MT RUSHMORE	2,959	3,502	18%	5,991	71%
ST PATRICK ST	MT RUSHMORE TO 5TH	7,099	8,496	20%	7,996	-6%
ST PATRICK ST	5TH TO ELM	11,694	11,424	-2%	10,986	-4%
ST PATRICK (E) ST	ELM TO ST JOSEPH	13,767	14,434	5%	14,485	0%
ST PATRICK (E) ST	ST JOSEPH TO CAMBELL	14,431	12,583	-13%	14,313	14%
ST PATRICK (E) ST	CAMBELL TO CREEK	15,742	15,635	-1%	15,292	-2%
ST PATRICK (E) ST	CREEK TO SD-44	9,518	10,967	15%	9,502	-13%
STURGIS RD	MAIN TO W CHICAGO	11,318	10,875	-4%	12,642	16%
STURGIS RD	W CHICAGO TO ST MARTINS	9,547	8,869	-7%	10,860	22%
TWILIGHT DR	SD-44 TO JOLLY LN	6,729	6,572	-2%	6,159	-6%
TWILIGHT DR	JOLLY LN TO RESERVOIR	6,734	8,526	27%	7,724	-9%
US-14/16	I-90 TO WESTGATE	14,208	14,444	2%	14,227	-2%
US-14/16	S ELLSWORTH TO OAK	1,864	1,863	0%	1,853	-1%
US-16	CITY LIMIT TO CATRON	16,685	20,405	22%	19,181	-6%
US-16	CATRON TO CATHEDRAL	13,370	9,900	-26%	11,213	13%
W CHICAGO ST	44TH TO STURGIS	11,458	12,125	6%	11,934	-2%
W CHICAGO ST	STURGIS TO DEADWOOD	16,126	18,458	14%	15,880	-14%
WEST BLVD	FLORMANN TO ST PATRICK	1,350	1,304	-3%	1,951	50%
WEST BLVD	ST PATRICK TO ST CLOUD	5,762	6,489	13%	10,942	69%
WEST BLVD	ST CLOUD TO ST JOSEPH	8,194	8,886	8%	11,701	32%
WEST BLVD	ST. JOSEPH TO MAIN	12,673	12,411	-2%	14,907	20%
WEST BLVD	MAIN ST TO OMAHA ST	14,614	14,838	2%	14,590	-2%
WEST GATE RD	US-14/16 TO BLUEBIRD	3,530	3588	2%	3,372	-6%