

Rapid City Area
Metropolitan Planning Organization

**2015 TRAFFIC VOLUME COUNTS
REPORT**



In cooperation with:

City of Rapid City
Engineering Services Division
Public Works Department

January 2016

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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 2013 – 2015.

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 **$1.0 - 0.5 * \text{percentage of truck traffic}$** .

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	2013 SEASONALLY ADJUSTED COUNT	2014 SEASONALLY ADJUSTED COUNT	% CHANGE 2013/2014	2015 SEASONALLY ADJUSTED COUNT	% CHANGE 2014/2015
1ST ST	OMAHA TO MAIN	713	660	-8%	672	2%
2ND ST	MAIN TO OMAHA	968	1,145	18%	1,156	1%
3RD ST	MAIN TO OMAHA	2,109	2,061	-2%	2,026	-2%
5TH ST	CATRON TO PARKVIEW	7,732	9,514	23%	9,277	-2%
5TH ST	PARKVIEW TO MINNESOTA	9,173	9,839	7%	10,450	6%
5TH ST	MINNESOTA TO TEXAS	12,692	13,755	8%	14,714	7%
5TH ST	TEXAS TO 3RD	19,636	16,835	-14%	15,839	-6%
5TH ST	3RD TO FAIRMONT	19,548	17,690	-10%	16,764	-5%
5TH ST	FAIRMONT TO ST PATRICK	18,209	18,377	1%	22,276	21%
5TH ST	ST. PATRICK TO ST. CLOUD	17,264	18,506	7%	22,884	24%
5TH ST	ST. CLOUD TO COLUMBUS	17,074	18,354	7%	21,752	19%
5TH ST	COLUMBUS TO ST. JOSEPH	20,762	20,871	1%	21,545	3%
5TH ST	ST JOSEPH TO MAIN	16,598	20,938	26%	19,923	-5%
5TH ST	MAIN TO OMAHA	17,085	20,211	18%	18,049	-11%
5TH ST	OMAHA TO NEW YORK	17,905	18,003	1%	19,334	7%
5TH ST	NEW YORK TO NORTH	17,014	16,881	-1%	17,818	6%
32ND ST	JACKSON TO CANYON LAKE	6,196	5,184	-16%	4,598	-11%
44TH ST	RAIDER TO MAIN	4,168	3,746	-10%	4,005	7%
225TH ST	N ELLSWORTH TO BRIGGS	1,684	3,795	125%	3,726	-2%
ANAMOSA ST	WEST BLVD N. TO HAINES	5,424	3,901	-28%	3,784	-3%
ANAMOSA ST	HAINES TO MAPLE	7,488	8,224	10%	8,687	6%
ANAMOSA (E) ST	MAPLE TO LACROSSE	10,047	10,394	3%	11,010	6%
ANAMOSA (E) ST	LACROSSE TO E. NORTH	4,096	5,468	34%	5,976	9%
CAMBELL ST	CATRON TO MINNESOTA	12,447	15,041	21%	17,026	13%
CAMBELL ST	MINNESOTA TO FAIRMONT	17,372	17,324	0%	19,284	11%
CAMBELL ST	FAIRMONT TO ST PATRICK	17,190	21,303	24%	22,178	4%
CAMBELL ST	ST PATRICK TO OMAHA	20,576	21,230	3%	21,737	2%
CAMBELL (E) ST	OMAHA TO E. NORTH ST	22,411	23,278	4%	24,175	4%
CANYON LAKE DR	JACKSON TO CLIFTON	8,511	8,865	4%	9,892	12%
CANYON LAKE DR	CLIFTON TO SOO SAN	8,633	8,813	2%	9,828	12%
CANYON LAKE DR	SOO SAN TO SHERIDAN LAKE	14,977	14,282	-5%	15,163	6%
CANYON LAKE DR	SHERIDAN LAKE TO MTVIEW	16,368	12,756	-22%	13,861	9%
CATHEDRAL DR	MT RUSHMORE TO TOWER	14,171	14,218	0%	10,207	-28%
CATHEDRAL DR	TOWER TO 5TH	15,650	15,079	-4%	10,207	-32%
CATRON BLVD	SHERIDAN LAKE TO US-16	11,904	13,378	12%	12,921	-3%
CATRON BLVD	US-16 TO 5TH	14,343	14,722	3%	16,593	13%
CATRON (E) BLVD	5TH TO SD-79	15,614	16,425	5%	17,644	7%
COUNTRY RD	HAINES TO W NIKE	1,508	1,646	9%	1,650	0%
CREEK (N) DR	ANAMOSA TO EGLIN ST	4,180	3,777	-10%	3,479	-8%
DEADWOOD AVE	OMAHA TO LIEN	17,474	17,609	1%	16,914	-4%
DEADWOOD AVE	CEMENT PLANT TO LIEN	16,783	16,292	-3%	16,449	1%
DEADWOOD AVE	LIEN TO N PLAZA	12,705	13,374	5%	11,764	-12%
DEADWOOD AVE	N PLAZA TO I-90	15,317	15,582	2%	15,154	-3%
DEADWOOD AVE	I-90 TO CITY LIMIT	3,092	3,504	13%	3,567	2%
DISK DR	HAINES TO MAPLE	6,453	4,969	-23%	5,860	18%

ROAD	LIMITS	2013 SEASONALLY ADJUSTED COUNT	2014 SEASONALLY ADJUSTED COUNT	% CHANGE 2013/2014	2015 SEASONALLY ADJUSTED COUNT	% CHANGE 2014/2015
DISK (E) DR	MAPLE TO LACROSSE	7,193	6,273	-13%	7,345	17%
DYESS AVE	MALL TO SEGER	3,414	3,859	13%	CONSTRUCTION	
E NORTH ST	MILWAUKEE TO LACROSSE	13,838	11,877	-14%	12,712	7%
E NORTH ST	LACROSSE TO CAMBELL	14,537	13,383	-8%	14,205	6%
E NORTH ST	CAMBELL TO ANAMOSA	20,011	20,103	0%	21,143	5%
E NORTH ST	ANAMOSA TO I-90	16,183	14,757	-9%	14,550	-1%
EAST BLVD	KANSAS CITY TO ST JOSEPH	3,550	3,508	-1%	3,796	8%
EAST BLVD	ST JOSEPH TO MAIN	7,332	7,694	5%	7,412	-4%
EAST BLVD	MAIN TO OMAHA	9,800	10,522	7%	10,119	-4%
EAST BLVD	OMAHA TO E NORTH	13,124	12,310	-6%	12,443	1%
EGLIN ST	LACROSSE TO LUNA	7,772	6,070	-22%	6,919	14%
EGLIN ST	LUNA TO E. NORTH	11,801	11,443	-3%	12,098	6%
EGLIN ST	E. NORTH TO DYESS	5,716	6,047	6%	5,434	-10%
EGLIN ST	DYESS TO ELK VALE	4,345	4,186	-4%	5,086	21%
ELK VALE RD	SD-79 TO SD-44	15,758	16,868	7%	18,426	9%
ELK VALE RD	SD-44 TO I-90	17,465	18,808	8%	19,211	2%
ELK VALE RD	I-90 TO SEGER	5,557	6,825	23%	7,149	5%
FAIRMONT BLVD	5TH TO WISCONSIN	12,734	9,524	-25%	9,643	1%
FAIRMONT (E) BLVD	WISCONSIN TO ELM	9,732	9,316	-4%	9,586	3%
FAIRMONT(E) BLVD	ELM TO CAMBELL	7,978	7,646	-4%	7,976	4%
HAINES AVE	NORTH TO ANAMOSA	19,140	21,195	11%	21,550	2%
HAINES AVE	ANAMOSA TO I-90	18,981	19,308	2%	19,899	3%
HAINES AVE	I-90 TO DISK	22,767	22,445	-1%	21,239	-5%
HAINES AVE	DISK TO MALL	17,159	15,784	-8%	16,848	7%
HAINES AVE	MALL TO COUNTRY	13,285	12,917	-3%	12,780	-1%
HAINES AVE	COUNTRY TO COBALT	5,745	6,947	21%	5,696	-18%
HAINES AVE	COBALT TO CITY LIMIT	2,548	2,476	-3%	2,474	0%
HILLSVIEW DR	ST PATRICK TO RAIDER	3,685	3,127	-15%	3,123	0%
I-190	OMAHA TO SILVER	24,075	25,755	7%	24,970	-3%
I-190	SILVER TO I-90	20,693	23,163	12%	22,886	-1%
I-90	I-190 TO HAINES	32,256	34,857	8%	38,599	11%
I-90	ELK VALE TO EAST CITY LIMIT	22,782	25,474	12%	27,190	
JACKSON BLVD	CITY LIMIT TO CHAPEL LN	4,829	5,874	22%	CONSTRUCTION	
JACKSON BLVD	CHAPEL LN TO CANYON LAKE	8,289	9,100	10%	CONSTRUCTION	
JACKSON BLVD	CANYON LAKE TO 32ND	8,741	9,550	9%	CONSTRUCTION	
JACKSON BLVD	32ND TO SHERIDAN LAKE	CONSTRUCTION	10,154		11,049	9%
JACKSON BLVD	SHERIDAN LK TO MT VIEW (S)	CONSTRUCTION	16,681		20,379	22%
JACKSON BLVD	MT VIEW (N) TO MAIN (W)	CONSTRUCTION	14,837		17,591	19%
LACROSSE (N) ST	OMAHA TO E NORTH	10,112	8,498	-16%	9,737	15%
LACROSSE (N) ST	E NORTH TO ANAMOSA	18,994	17,128	-10%	18,337	7%
LACROSSE (N) ST	ANAMOSA TO I-90	19,507	17,915	-8%	20,438	14%
LACROSSE (N) ST	I-90 TO DISK	11,869	11,305	-5%	12,976	15%
LACROSSE (N) ST	DISK TO MALL	6,145	5,898	-4%	6,313	7%
LIBERTY BLVD	N ELLSWORTH TO I-90	2,867	4,646	62%	4,637	0%

ROAD	LIMITS	2013 SEASONALLY ADJUSTED COUNT	2014 SEASONALLY ADJUSTED COUNT	% CHANGE 2013/2014	2015 SEASONALLY ADJUSTED COUNT	% CHANGE 2014/2015
MAIN (W) ST	BERRY PINE TO 44TH	2,422	2,222	-8%	2,120	-5%
MAIN (W) ST	44TH TO SOO SAN	5,157	5,115	-1%	5,244	3%
MAIN (W) ST	SOO SAN TO STURGIS	12,036	11,225	-7%	10,856	-3%
MAIN (W) ST	STURGIS TO SHERIDAN LAKE	16,690	16,339	-2%	16,418	0%
MAIN (W) ST	SHERIDAN LAKE TO MTVIEW	22,995	20,328	-12%	20,341	0%
MAIN (W) ST	MTVIEW TO JACKSON	24,464	21,054	-14%	21,766	3%
MAIN (W) ST	JACKSON TO CROSS	33,306	36,947	11%	33,638	-9%
MAIN (W) ST	CROSS TO WEST STREET	32,584	32,798	1%	32,934	0%
MAIN ST	WEST BLVD TO MT RUSHMORE	14,279	14,669	3%	13,615	-7%
MAIN ST	MT RUSHMORE TO 5TH	11,272	11,087	-2%	11,404	3%
MAIN ST	5TH TO EAST BLVD	8,738	8,233	-6%	8,264	0%
MAIN ST	EAST BLVD TO STEELE	8,050	7,718	-4%	9,086	18%
MALL DR	HAINES TO MAPLE	3,438	3,650	6%	3,797	4%
MALL DR	MAPLE TO LACROSSE	3,571	3,703	4%	4,055	9%
MALL DR	LACROSSE TO E. NORTH	3,038	3,048	0%	3,676	21%
MALL (E) DR	E NORTH TO DYESS	6,222	6,215	0%	6,761	9%
MALL (E) DR	DYESS TO ELK VALE	4,956	4,662	-6%	4,871	4%
MAPLE (N) AVE	DISK (W) TO DISK (E)	2,695	2,477	-8%	2,261	-9%
MINNESOTA (E) ST	5TH TO ELM	5,405	5,465	1%	6,414	17%
MINNESOTA (E) ST	ELM TO CABELL	6,255	5,110	-18%	5,532	8%
MOUNTAINVIEW RD	JACKSON TO CANYON LAKE	7,293	8,549	17%	9,355	9%
MOUNTAINVIEW RD	CANYON LAKE TO MAIN	16,668	17,002	2%	19,551	15%
MOUNTAINVIEW RD	MAIN TO OMAHA	19,389	18,851	-3%	20,245	7%
MT RUSHMORE RD	CATHEDRAL TO ST PATRICK	22,913	23,760	4%	15,764	-34%
MT RUSHMORE RD	ST PATRICK TO ST JOSEPH	23,505	23,464	0%	17,842	-24%
MT RUSHMORE RD	ST JOSEPH TO MAIN	17,790	18,217	2%	15,466	-15%
MT RUSHMORE RD	MAIN TO OMAHA	13,629	14,931	10%	12,544	-16%
MT RUSHMORE RD	OMAHA TO NORTH	6,885	6,889	0%	8,078	17%
N ELLSWORTH RD	US-14/16 TO LIBERTY	6,866	6,546	-5%	6,486	-1%
NEMO RD	WESTBERRY TRAILS TO BERRY PINE	4,046	3,731	-8%	3,961	6%
OMAHA (W) ST	DEADWOOD TO MTVIEW	23,494	23,453	0%	23,890	2%
OMAHA (W) ST	MTVIEW TO WEST BLVD	29,340	33,072	13%	27,801	-16%
OMAHA ST	WEST BLVD TO MT RUSHMORE	30,524	30,366	-1%	29,788	-2%
OMAHA ST	MT RUSHMORE TO 5TH	31,146	29,174	-6%	27,676	-5%
OMAHA ST	5TH TO EAST BLVD	27,444	25,792	-6%	24,583	-5%
OMAHA ST	EAST BLVD TO LACROSSE	22,765	21,846	-4%	20,017	-8%
OMAHA (E) ST	LACROSSE TO CABELL	20,580	19,977	-3%	19,361	-3%
RADAR HILL RD	MULE DEER TO US-14/16	3,686	4,604	25%	4,618	0%
SD-44 (E)	CABELL TO ST PATRICK	15,961	17,211	8%	16,757	-3%
SD-44 (E)	ST PATRICK TO TWILIGHT	23,006	22,819	-1%	23,384	2%
SD-44 (E)	TWILIGHT TO JOLLY	17,337	17,528	1%	16,477	-6%
SD-44 (E)	JOLLY TO RESERVOIR	14,961	14,139	-5%	14,817	5%
SD-44 (E)	RESERVOIR TO AIRPORT	6,986	6,931	-1%	6,867	-1%

ROAD	LIMITS	2013 SEASONALLY ADJUSTED COUNT	2014 SEASONALLY ADJUSTED COUNT	% CHANGE 2013/2014	2015 SEASONALLY ADJUSTED COUNT	% CHANGE 2014/2015
SD-79	CITY LIMIT TO ELK VALE	11,438	13,938	22%	12,803	-8%
SEGER DR	LACROSSE TO DYESS	2,545	2,465	-3%	CONSTRUCTION	
SHERIDAN LAKE RD	DUNSMORE TO S WILDWOOD	8,632	7,362	-15%	8,064	10%
SHERIDAN LAKE RD	S WILDWOOD TO CATRON	8,581	8,161	-5%	8,872	9%
SHERIDAN LAKE RD	CATRON TO CORRAL	15,105	14,047	-7%	16,106	15%
SHERIDAN LAKE RD	CORRAL TO FLORMANN	13,894	13,076	-6%	16,399	25%
SHERIDAN LAKE RD	FLORMANN TO JACKSON	15,663	14,147	-10%	17,230	22%
SHERIDAN LAKE RD	JACKSON TO CANYON LAKE	11,574	10,575	-9%	9,662	-9%
SHERIDAN LAKE RD	CANYON LAKE TO W MAIN	11,763	9,285	-21%	10,182	10%
SOO SAN DR	CANYON LAKE TO RANGE	6,312	6,303	0%	6,879	9%
SOUTH CANYON RD	BERRY PINE TO 44TH	7,049	6,651	-6%	6,814	2%
SOUTH CANYON RD	W MAIN TO 44TH	1,300	1,128	-13%	1,144	1%
ST JOSEPH (W) ST	WEST ST TO WEST BLVD	16,427	16,566	1%	16,542	0%
ST JOSEPH ST	WEST BLVD TO MT RUSHMORE	12,962	13,741	6%	13,115	-5%
ST JOSEPH ST	MT RUSHMORE TO 5TH	10,226	11,519	13%	11,497	0%
ST JOSEPH ST	5TH TO EAST BLVD	9,129	9,832	8%	8,984	-9%
ST JOSEPH ST	EAST BLVD TO STEELE	6,982	7,897	13%	9,239	17%
ST JOSEPH (E) ST	STEELE TO ST PATRICK	11,257	12,081	7%	14,567	21%
ST JOSEPH (E) ST	ST PATRICK TO CAMBELL	6,295	6,666	6%	7,854	18%
ST PATRICK ST	WEST BLVD TO MT RUSHMORE	1,799	2,959	64%	3,502	18%
ST PATRICK ST	MT RUSHMORE TO 5TH	7,468	7,099	-5%	8,496	20%
ST PATRICK ST	5TH TO ELM	11,526	11,694	1%	11,424	-2%
ST PATRICK (E) ST	ELM TO ST JOSEPH	13,892	13,767	-1%	14,434	5%
ST PATRICK (E) ST	ST JOSEPH TO CAMBELL	14,780	14,431	-2%	12,583	-13%
ST PATRICK (E) ST	CAMBELL TO CREEK	15,559	15,742	1%	15,635	-1%
ST PATRICK (E) ST	CREEK TO SD-44	9,566	9,518	-1%	10,967	15%
STURGIS RD	MAIN TO W CHICAGO	11,646	11,318	-3%	10,875	-4%
STURGIS RD	W CHICAGO TO ST MARTINS	10,746	9,547	-11%	8,869	-7%
TWILIGHT DR	SD-44 TO JOLLY LN	7,918	6,729	-15%	6,572	-2%
TWILIGHT DR	JOLLY LN TO RESERVOIR	7,619	6,734	-12%	8,526	27%
US-14/16	I-90 TO WESTGATE	14,524	14,208	-2%	14,444	2%
US-14/16	S ELLSWORTH TO OAK	2,139	1,864	-13%	1,863	0%
US-16	CITY LIMIT TO CATRON	14,879	16,685	12%	20,405	22%
US-16	CATRON TO CATHEDRAL	12,352	13,370	8%	9,900	-26%
W CHICAGO ST	44TH TO STURGIS	11,247	11,458	2%	12,125	6%
W CHICAGO ST	STURGIS TO DEADWOOD	16,404	16,126	-2%	18,458	14%
WEST BLVD	FLORMANN TO ST PATRICK	1,554	1,350	-13%	1,304	-3%
WEST BLVD	ST PATRICK TO ST CLOUD	5,971	5,762	-3%	6,489	13%
WEST BLVD	ST CLOUD TO ST JOSEPH	9,090	8,194	-10%	8,886	8%
WEST BLVD	ST. JOSEPH TO MAIN	12,004	12,673	6%	12,411	-2%
WEST BLVD	MAIN ST TO OMAHA ST	13,762	14,614	6%	14,838	2%
WEST GATE RD	US-14/16 TO BLUEBIRD	3,508	3,530	1%	3588	2%