Rapid City Area Metropolitan Planning Organization

2024 TRAFFIC VOLUME COUNTS REPORT



In cooperation with:

City of Rapid City Engineering Services Division Public Works Department

April 2025

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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 <u>Traffic Volume Counts Report</u> 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 2021 – 2024.

DATA & METHODOLOGY

The <u>Traffic Volume Counts Report</u> 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 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 * 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 two SDDOT permanent count stations are included in this report:

- Anamosa Street between Haines and Maple
- I-90 between I-190 and Haines

		2021 SEASONALLY ADJUSTED	2022 SEASONALLY ADJUSTED	2023 SEASONALLY ADJUSTED	2024 SEASONALLY ADJUSTED	% CHANGE 2023/2024
ROAD	LIMITS	COUNT	COUNT	COUNT	COUNT	
1ST ST	OMAHA TO MAIN	544	517	552	594	8%
2ND ST	MAIN TO OMAHA	1,089	1,164	1,157	999	-14%
3RD ST	MAIN TO OMAHA	2,081	2,183	3,131	2,108	-33%
5TH ST	CATRON TO PARKIEW	11,715	10,760	11,447	12,132	6%
5TH ST	PARKVIEW TO MINNESOTA	12,113	12,191	12,872	13,229	3%
5TH ST	MINNESOTA TO TEXAS	14,018	14,329	15,514	15,414	-1%
5TH ST	TEXAS TO 3RD	16,146	16,324	16,979	18,276	8%
5TH ST	3RD TO FAIRMONT	18,010	18,905	19,526	20,817	7%
5TH ST	FAIRMONT TO ST PATRICK	16,757	18,393	18,882	20,199	7%
5TH ST	ST. PATRICK TO ST. CLOUD	19,315	19,211	22,244	23,516	6%
5TH ST	ST. CLOUD TO COLUMBUS	17,584	20,902	21,292	22,292	5%
5TH ST	COLUMBUS TO ST. JOSEPH	20,840	20,015	20,561	19,799	-4%
5TH ST	ST JOSEPH TO MAIN	18,573	18,723	19,107	18,453	-3%
5TH ST	ΜΑΙΝ ΤΟ ΟΜΑΗΑ	17,725	17,425	18,306	16,244	-11%
5TH ST	OMAHA TO NEW YORK	18,381	18,982	18,959	20,774	10%
5TH ST	NEW YORK TO NORTH	17,863	18,274	18,059	19,524	8%
32ND ST	JACKSON TO CANYON LAKE	2,823	3,350	2,793	2,400	-14%
44TH ST	RAIDER TO MAIN	2,282	2,688	2,241	2,125	-5%
225TH ST	N ELLSWORTH TO BRIGGS	3,227	3,360	3,719	3,226	-13%
ANAMOSA ST	WEST BLVD N. TO HAINES	2,889	3,063	2,936	1,921	-35%
ANAMOSA ST	HAINES TO MAPLE	9,430	9,217	9,259	8,241	-11%
ANAMOSA (E) ST	MAPLE TO LACROSSE	12,101	11,776	10,645	10,009	-6%
ANAMOSA (E) ST	LACROSSE TO E. NORTH	6,237	6,662	5,864	6,997	19%
CAMBELL ST	CATRON TO MINNESOTA	18,798	19,236	18,714	18,389	-2%
CAMBELL ST	MINNESOTA TO FAIRMONT	21,355	20,483	21,142	21,239	0%
CAMBELL ST	FAIRMONT TO ST PATRICK	19,572	19,775	18,310	18,523	1%
CAMBELL ST	ST PATRICK TO OMAHA	23,317	23,479	23,571	23,395	-1%
CAMBELL (E) ST	OMAHA TO E. NORTH ST	26,588	26,976	26,401	26,517	0%
CANYON LAKE DR	JACKSON TO CLIFTON	5,731	5,759	5,255	6,309	20%
CANYON LAKE DR	CLIFTON TO SOO SAN	7,982	7,813	7,599	7,963	5%
CANYON LAKE DR	SOO SAN TO SHERIDAN LAKE	9,183	9,862	9,627	9,986	4%
CANYON LAKE DR	SHERIDAN LAKE TO MTVIEW	10,200	10,186	10,358	10,596	2%
CATHEDRAL DR	MT RUSHMORE TO TOWER	12,783	13,604	14,641	14,435	-1%
CATHEDRAL DR	TOWER TO 5TH	13,400	14,226	15,432	15,322	-1%
CATRON BLVD	SHERIDAN LAKE TO US-16	16,463	16,437	17,046	16,731	-2%
CATRON BLVD	US-16 TO 5TH	20,200	17,703	15,655	16,979	8%
CATRON (E) BLVD	5TH TO SD-79	21,159	22,187	19,368	21,043	9%
COUNTRY RD	HAINES TO W NIKE	1,467	1,502	1,409	1,317	-6%
CREEK (N) DR	ANAMOSA TO EGLIN ST	3,316	3,243	2,949	3,333	13%
DEADWOOD AVE	OMAHA TO CEMENT PLANT	CONSTRUCTION	14,049	16,206	15,604	-4%
DEADWOOD AVE	CEMENT PLANT TO LIEN	11,894	13,838	15,268	14,818	-3%
DEADWOOD AVE	LIEN TO N PLAZA	10,689	11,853	12,718	12,789	1%
DEADWOOD AVE	N PLAZA TO I-90	13,772	14,468	15,115	14,635	-3%
DEADWOOD AVE	I-90 TO CITY LIMIT	1,710	CONSTRUCTION	2,321	2,527	9%
DISK DR	HAINES TO MAPLE	7,746	5,194	5,818	4,978	-14%

		2021 SEASONALLY ADJUSTED	2022 SEASONALLY ADJUSTED	2023 SEASONALLY ADJUSTED	2024 SEASONALLY ADJUSTED	% CHANGE 2023/2024
ROAD	LIMITS	COUNT	COUNT	COUNT	COUNT	
DISK (E) DR	MAPLE TO LACROSSE	7,448	5,417	5,966	5,162	-13%
DYESS AVE	MALL TO SEGER	3,847	4,097	3,673	3,699	1%
E NORTH ST	MILWAUKEE TO LACROSSE	13,694	14,040	16,308	14,474	-11%
E NORTH ST	LACROSSE TO CAMBELL	15,231	15,201	16,298	15,185	-7%
E NORTH ST	CAMBELL TO ANAMOSA	24,370	25,829	26,669	24,764	-7%
E NORTH ST	ANAMOSA TO I-90	23,340	24,287	22,290	23,163	4%
EAST BLVD	KANSAS CITY TO ST JOSEPH	3,626	4,314	3,938	4,161	6%
EAST BLVD	ST JOSEPH TO MAIN	6,837	7,765	7,488	7,674	2%
EAST BLVD	ΜΑΙΝ ΤΟ ΟΜΑΗΑ	8,948	11,025	9,525	10,677	12%
EAST BLVD	OMAHA TO E NORTH	12,382	12,678	14,777	13,064	-12%
EGLIN ST	LACROSSE TO LUNA	8,513	7,861	7,711	8,400	9%
EGLIN ST	LUNA TO E. NORTH	13,421	13,148	12,955	11,694	-10%
EGLIN ST	E.NORTH TO DYESS	7,287	7,514	7,395	6,658	-10%
EGLIN ST	DYESS TO ELK VALE	6,409	7,344	6,508	5,827	-10%
ELK VALE RD	SD-79 TO SD-44	22,087	20,327	18,714	19,404	4%
ELK VALE RD	SD-44 TO I-90	21,648	21,726	20,836	20,689	-1%
ELK VALE RD	I-90 TO SEGER	4,695	5,266	5,754	5,070	-12%
FAIRMONT BLVD	5TH TO WISCONSIN	8,477	8,953	9,557	9,563	0%
FAIRMONT (E) BLVD	WISCONSIN TO ELM	8,425	8,910	9,371	8,803	-6%
FAIRMONT(E) BLVD	ELM TO CAMBELL	7,273	7,708	7,685	7,594	-1%
HAINES AVE	NORTH TO ANAMOSA	18,625	19,049	16,711	21,068	26%
HAINES AVE	ANAMOSA TO I-90	21,099	20,576	19,911	20,902	5%
HAINES AVE	I-90 TO DISK	27,038	24,957	24,071	22,964	-5%
HAINES AVE	DISK TO MALL	19,098	19,022	19,139	18,882	-1%
HAINES AVE	MALL TO COUNTRY	13,706	13,865	13,129	12,999	-1%
HAINES AVE	COUNTRY TO COBALT	6,499	6,685	6,172	6,415	4%
HAINES AVE	COBALT TO CITY LIMIT	2,602	2,666	2,494	2,490	0%
HILLSVIEW DR	AUDUBON TO RAIDER	1,922	2,301	1,839	1,830	0%
I-190	OMAHA TO SILVER	28,005	24,606	26,119	CONSTRUCTION	N/A
I-190	SILVER TO I-90	26,218	23,355	25,218	CONSTRUCTION	N/A
I-90	I-190 TO HAINES	39,187	37,362	36,920	38,787	5%
I-90	ELK VALE TO EAST CITY LIMIT	31,000	34,268	35,300	32,687	-7%
JACKSON BLVD	CITY LIMIT TO CHAPEL LN	6,120	5,728	6,671	6,060	-9%
JACKSON BLVD	CHAPEL LN TO CANYON LAKE	10,618	8,984	9,794	9,854	1%
JACKSON BLVD	CANYON LAKE TO 32ND	13,140	12,164	13,439	13,502	0%
JACKSON BLVD	32ND TO SHERIDAN LAKE	16,266	15,863	16,829	16,795	0%
JACKSON BLVD	SHERIDAN LK TO MT VIEW (S)	21,901	20,751	23,129	23,758	3%
JACKSON BLVD	MT VIEW (N) TO MAIN (W)	17,226	17,464	17,529	17,805	2%
LACROSSE (N) ST	OMAHA TO E NORTH	11,312	9,356	8,361	8,962	7%
LACROSSE (N) ST	E NORTH TO ANAMOSA	19,919	17,278	16,038	17,644	10%
LACROSSE (N) ST	ANAMOSA TO I-90	18,475	14,289	13,754	15,630	14%
LACROSSE (N) ST	I-90 TO DISK	15,369	CONSTRUCTION	10,591	10,310	-3%
LACROSSE (N) ST	DISK TO MALL	8,761	5,675	5,263	5,410	3%
LIBERTY BLVD	N ELLSWORTH TO I-90	8,409	9,432	10,445	11,743	12%
MAIN (W) ST	BERRY PINE TO 44TH	1,257	1,250	1,212	1,211	0%

2045		2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	2023 SEASONALLY ADJUSTED COUNT	2024 SEASONALLY ADJUSTED COUNT	% CHANGE 2023/2024
ROAD						10/
MAIN (W) ST	44TH TO SOO SAN	5,107	5,650	5,429	5,395	-1%
MAIN (W) ST	SOO SAN TO STURGIS	9,907	9,928	9,125	9,142	0%
MAIN (W) ST	STURGIS TO SHERIDAN LAKE	18,550	18,892	19,548	14,411	-26%
MAIN (W) ST	SHERIDAN LAKE TO MTVIEW	20,754	20,822	20,213	19,054	-6%
MAIN (W) ST	MT VIEW TO JACKSON	20,610	22,680	22,073	21,164	-4%
MAIN (W) ST	JACKSON TO CROSS	35,940	36,810	37,376	37,044	-1%
MAIN (W) ST	CROSS TO WEST STREET	36,213	33,389	32,610	32,841	1%
MAIN ST	WEST BLVD TO MT RUSHMORE	14,559	13,734	13,125	12,943	-1%
MAIN ST	MT RUSHMORE TO 5TH	11,401	10,489	10,421	10,162	-2%
MAIN ST	5TH TO EAST BLVD	9,864	9,257	9,253	8,974	-3%
MAIN ST	EAST BLVD TO STEELE	6,385	5,459	6,493	6,109	-6%
MALL DR	HAINES TO MAPLE	8,103	5,463	6,884	5,851	-15%
MALL DR	MAPLE TO LACROSSE	7,622	4,690	5,805	4,939	-15%
MALL DR	LACROSSE TO E. NORTH	6,538	4,964	5,466	4,948	-9%
MALL (E) DR	E NORTH TO DYESS	8,921	7,122	7,756	8,351	8%
MALL (E) DR	DYESS TO ELK VALE	8,180	5,442	6,945	7,254	4%
MAPLE (N) AVE	DISK (W) TO DISK (E)	4,245	2,454	3,108	2,156	-31%
MINNESOTA (E) ST	5TH TO ELM	6,159	6,238	5,606	5,717	2%
MINNESOTA (E) ST	ELM TO CAMBELL	5,256	5,527	5,277	5,418	3%
MOUNTAINVIEW RD	JACKSON TO CANYON LAKE	9,033	8,423	8,894	8,899	0%
MOUNTAINVIEW RD	CANYON LAKE TO MAIN	15,827	15,523	17,282	17,179	-1%
MOUNTAINVIEW RD	MAIN TO OMAHA	15,604	13,945	17,289	17,860	3%
MT RUSHMORE RD	CATHEDRAL TO ST PATRICK	24,974	24,000	26,132	25,070	-4%
MT RUSHMORE RD	ST PATRICK TO ST JOSEPH	25,914	22,660	25,297	24,498	-3%
MT RUSHMORE RD	ST JOSEPH TO MAIN	23,005	19,012	19,074	19,600	3%
MT RUSHMORE RD	MAIN TO OMAHA	15,367	14,773	14,474	14,818	2%
MT RUSHMORE RD	OMAHA TO NORTH	3,259	3,649	4,523	4,690	4%
N ELLSWORTH RD	US-14/16 TO LIBERTY	6,747	8,743	8,457	7,766	-8%
NEMO RD	WESTBERRY TRL TO BERRY PINE	3,896	3,867	4,728	4,219	-11%
OMAHA (W) ST	DEADWOOD TO MTVIEW	CONSTRUCTION	18,695	20,500	21,692	6%
OMAHA (W) ST	MTVIEW TO WEST BLVD	24,262	22,087	24,693	25,101	2%
OMAHA ST	WEST BLVD TO MT RUSHMORE	27,400	27,251	27,710	28,441	3%
OMAHA ST	MT RUSHMORE TO 5TH	26,760	26,254	25,912	26,780	3%
OMAHA ST	5TH TO EAST BLVD	25,139	24,659	24,496	24,971	2%
OMAHA ST	EAST BLVD TO LACROSSE	20,568	18,160	18,394	18,788	2%
OMAHA (E) ST	LACROSSE TO CAMBELL	19,051	CONSTRUCTION	18,390	20,976	14%
RADAR HILL RD	MULE DEER TO US-14/16	5,127	5,329	5,552	5,486	-1%
SD-44 (E)	CAMBELL TO ST PATRICK	16,642	15,551	16,449	16,014	-3%
SD-44 (E)	ST PATRICK TO TWILIGHT	24,404	24,838	26,363	24,390	-7%
SD-44 (E)	TWILIGHT TO JOLLY	20,371	21,244	21,620	20,917	-3%
SD-44 (E)	JOLLY TO RESERVOIR	16,594	17,304	17,363	16,772	-3%
SD-44 (E)	RESERVOIR TO AIRPORT	7,297	8,132	8,490	7,764	-9%
SD-79	CITY LIMIT TO ELK VALE	15,083	15,099	14,528	14,665	1%
SEGER DR	LACROSSE TO DYESS	2,307	1,880	1,840	1,407	-24%

		2021 SEASONALLY ADJUSTED	2022 SEASONALLY ADJUSTED	2023 SEASONALLY ADJUSTED	2024 SEASONALLY ADJUSTED	% CHANGE 2023/2024
ROAD	LIMITS	COUNT	COUNT	COUNT	COUNT	
SHERIDAN LAKE RD	DUNSMORE TO S WILDWOOD	8,266	7,553	9,432	9,582	2%
SHERIDAN LAKE RD	S WILDWOOD TO CATRON	8,539	8,868	9,066	8,510	-6%
SHERIDAN LAKE RD	CATRON TO CORRAL	17,216	17,361	17,808	CONSTRUCTION	N/A
SHERIDAN LAKE RD	CORRAL TO FLORMANN	15,352	16,342	14,728	14,761	0%
SHERIDAN LAKE RD	FLORMANN TO JACKSON	15,894	16,011	15,548	16,450	6%
SHERIDAN LAKE RD	JACKSON TO CANYON LAKE	9,629	10,281	8,342	8,802	6%
SHERIDAN LAKE RD	CANYON LAKE TO W MAIN	9,390	9,758	8,090	7,762	-4%
SOO SAN DR	CANYON LAKE TO RANGE	4,726	5,788	5,458	5,974	9%
SOUTH CANYON RD	BERRY PINE TO 44TH	6,268	6,341	7,290	6,153	-16%
SOUTH CANYON RD	W MAIN TO 44TH	1,009	882	914	828	-9%
ST JOSEPH (W) ST	WEST ST TO WEST BLVD	CONSTRUCTION	18,864	16,791	16,152	-4%
ST JOSEPH ST	WEST BLVD TO MT RUSHMORE	13,149	13,588	12,879	12,362	-4%
ST JOSEPH ST	MT RUSHMORE TO 5TH	9,748	9,812	9,310	9,914	6%
ST JOSEPH ST	5TH TO EAST BLVD	8,713	7,902	7,609	7,477	-2%
ST JOSEPH ST	EAST BLVD TO STEELE	7,227	5,743	6,652	6,242	-6%
ST JOSEPH (E) ST	STEELE TO ST PATRICK	11,999	11,270	12,657	11,357	-10%
ST JOSEPH (E) ST	ST PATRICK TO CAMBELL	5,397	5,761	6,527	6,598	1%
ST PATRICK ST	WEST BLVD TO MT RUSHMORE	2,913	2,613	1,660	2,249	36%
ST PATRICK ST	MT RUSHMORE TO 5TH	6,494	6,242	CONSTRUCTION	5,524	N/A
ST PATRICK ST	5TH TO ELM	10,327	10,294	8,442	9,069	7%
ST PATRICK (E) ST	ELM TO ST JOSEPH	9,772	11,592	10,653	10,594	-1%
ST PATRICK (E) ST	ST JOSEPH TO CAMBELL	15,121	14,260	14,319	14,736	3%
ST PATRICK (E) ST	CAMBELL TO CREEK	15,570	15,054	15,514	14,429	-7%
ST PATRICK (E) ST	CREEK TO SD-44	8,240	10,006	10,438	9,069	-13%
STURGIS RD	MAIN TO W CHICAGO	12,357	12,293	11,610	13,767	19%
STURGIS RD	W CHICAGO TO ST MARTINS	10,547	10,433	9,290	9,593	3%
TWILIGHT DR	SD-44 TO JOLLY LN	8,317	7,399	7,388	6,831	-8%
TWILIGHT DR	JOLLY LN TO RESERVOIR	3,978	3,606	3,432	3,222	-6%
US-14/16	I-90 TO WESTGATE	14,265	14,291	14,389	13,152	-9%
US-14/16	S ELLSWORTH TO OAK	2,168	2,070	1,730	1,852	7%
US-16	CITY LIMIT TO CATRON	19,046	20,819	16,002	12,762	-20%
US-16	CATRON TO CATHEDRAL	16,446	15,592	15,219	16,366	8%
W CHICAGO ST	44TH TO STURGIS	10,479	10,597	10,276	10,467	2%
W CHICAGO ST	STURGIS TO DEADWOOD	9,755	11,554	12,355	12,717	3%
WEST BLVD	FLORMANN TO ST PATRICK	1,761	1,657	1,815	1,767	-3%
WEST BLVD	ST PATRICK TO ST CLOUD	3,923	3,759	3,234	3,673	14%
WEST BLVD	ST CLOUD TO ST JOSEPH	4,934	4,665	4,242	4,634	9%
WEST BLVD	ST. JOSEPH TO MAIN	16,252	13,758	12,927	12,265	-5%
WEST BLVD	MAIN ST TO OMAHA ST	16,820	16,660	15,587	14,684	-6%
WEST GATE RD	US-14/16 TO BLUEBIRD	3,677	3,917	3,840	4,249	11%

