

Rapid City Area
Metropolitan Planning Organization

**2023 TRAFFIC VOLUME COUNTS
REPORT**



In cooperation with:

City of Rapid City
Engineering Services Division
Public Works Department

April 2024

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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 2020 – 2023.

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 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 two SDDOT permanent count stations are included in this report:

- Anamosa Street, east of Haines Avenue
- I-90, east of I-190

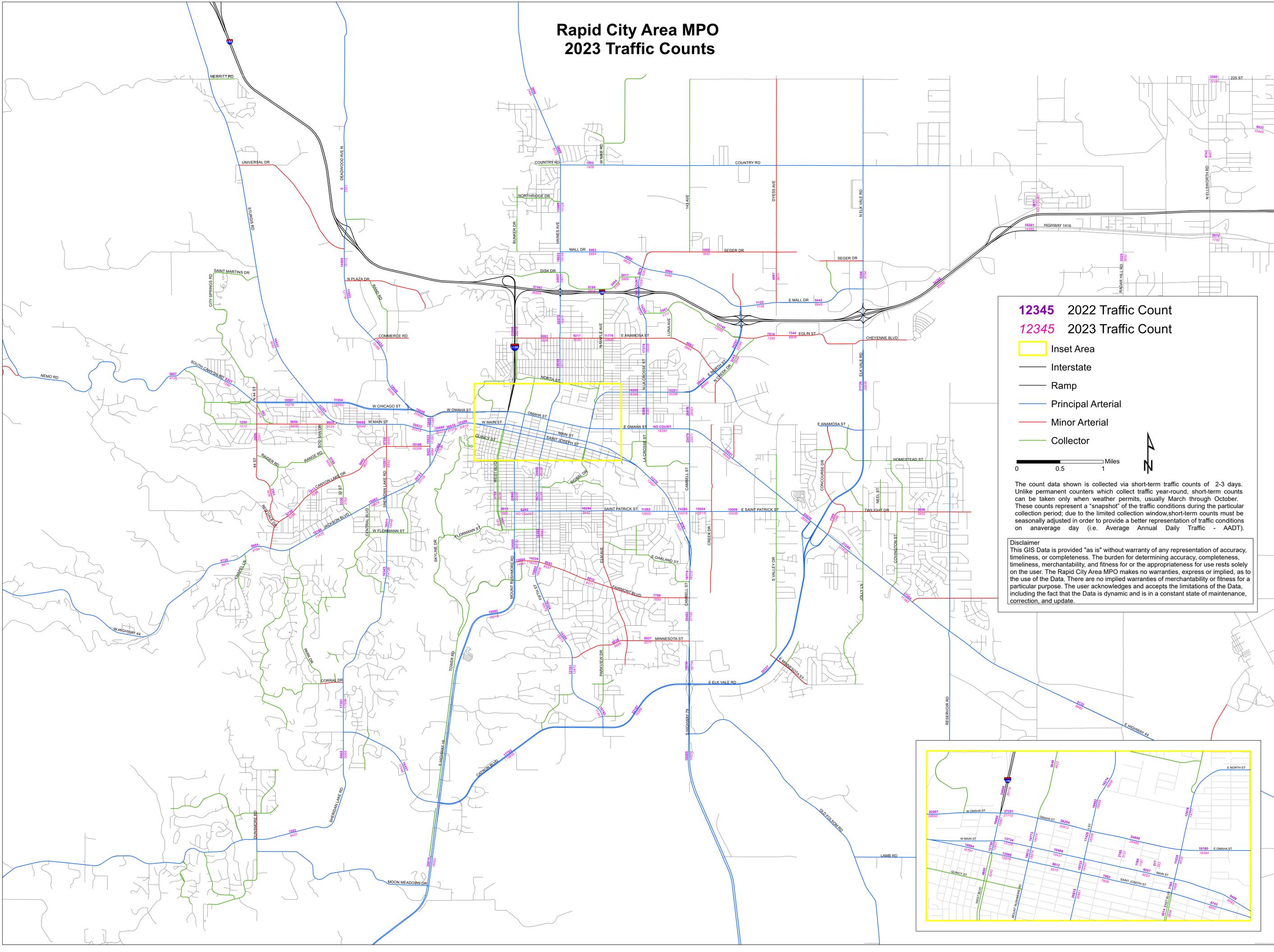
ROAD	LIMITS	2020 SEASONALLY ADJUSTED COUNT	2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	2023 SEASONALLY ADJUSTED COUNT	% CHANGE 2022/2023
1ST ST	OMAHA TO MAIN	951	544	517	552	7%
2ND ST	MAIN TO OMAHA	1,303	1,089	1,164	1,157	-1%
3RD ST	MAIN TO OMAHA	1,897	2,081	2,183	3,131	43%
5TH ST	CATRON TO PARKIEW	12,215	11,715	10,760	11,447	6%
5TH ST	PARKVIEW TO MINNESOTA	12,575	12,113	12,191	12,872	6%
5TH ST	MINNESOTA TO TEXAS	14,908	14,018	14,329	15,514	8%
5TH ST	TEXAS TO 3RD	17,044	16,146	16,324	16,979	4%
5TH ST	3RD TO FAIRMONT	17,959	18,010	18,905	19,526	3%
5TH ST	FAIRMONT TO ST PATRICK	16,887	16,757	18,393	18,882	3%
5TH ST	ST. PATRICK TO ST. CLOUD	20,268	19,315	19,211	22,244	16%
5TH ST	ST. CLOUD TO COLUMBUS	16,088	17,584	20,902	21,292	2%
5TH ST	COLUMBUS TO ST. JOSEPH	19,682	20,840	20,015	20,561	3%
5TH ST	ST JOSEPH TO MAIN	16,557	18,573	18,723	19,107	2%
5TH ST	MAIN TO OMAHA	16,054	17,725	17,425	18,306	5%
5TH ST	OMAHA TO NEW YORK	21,344	18,381	18,982	18,959	0%
5TH ST	NEW YORK TO NORTH	19,070	17,863	18,274	18,059	-1%
32ND ST	JACKSON TO CANYON LAKE	2,930	2,823	3,350	2,793	-17%
44TH ST	RAIDER TO MAIN	2,005	2,282	2,688	2,241	-17%
225TH ST	N ELLSWORTH TO BRIGGS	2,985	3,227	3,360	3,719	11%
ANAMOSA ST	WEST BLVD N. TO HAINES	3,052	2,889	3,063	2,936	-4%
ANAMOSA ST	HAINES TO MAPLE	9,377	9,430	9,217	9,259	0%
ANAMOSA (E) ST	MAPLE TO LACROSSE	10,372	12,101	11,776	10,645	-10%
ANAMOSA (E) ST	LACROSSE TO E. NORTH	6,013	6,237	6,662	5,864	-12%
CAMBELL ST	CATRON TO MINNESOTA	19,311	18,798	19,236	18,714	-3%
CAMBELL ST	MINNESOTA TO FAIRMONT	21,840	21,355	20,483	21,142	3%
CAMBELL ST	FAIRMONT TO ST PATRICK	21,231	19,572	19,775	18,310	-7%
CAMBELL ST	ST PATRICK TO OMAHA	21,310	23,317	23,479	23,571	0%
CAMBELL (E) ST	OMAHA TO E. NORTH ST	30,350	26,588	26,976	26,401	-2%
CANYON LAKE DR	JACKSON TO CLIFTON	5,890	5,731	5,759	5,255	-9%
CANYON LAKE DR	CLIFTON TO SOO SAN	8,030	7,982	7,813	7,599	-3%
CANYON LAKE DR	SOO SAN TO SHERIDAN LAKE	9,564	9,183	9,862	9,627	-2%
CANYON LAKE DR	SHERIDAN LAKE TO MTVIEW	10,110	10,200	10,186	10,358	2%
CATHEDRAL DR	MT RUSHMORE TO TOWER	13,559	12,783	13,604	14,641	8%
CATHEDRAL DR	TOWER TO 5TH	14,645	13,400	14,226	15,432	8%
CATRON BLVD	SHERIDAN LAKE TO US-16	13,421	16,463	16,437	17,046	4%
CATRON BLVD	US-16 TO 5TH	18,293	20,200	17,703	15,655	-12%
CATRON (E) BLVD	5TH TO SD-79	21,511	21,159	22,187	19,368	-13%
COUNTRY RD	HAINES TO W NIKE	1,512	1,467	1,502	1,409	-6%
CREEK (N) DR	ANAMOSA TO EGLIN ST	4,327	3,316	3,243	2,949	-9%
DEADWOOD AVE	OMAHA TO CEMENT PLANT	CONSTRUCTION	CONSTRUCTION	14,049	16,206	15%
DEADWOOD AVE	CEMENT PLANT TO LIEN	14,871	11,894	13,838	15,268	10%
DEADWOOD AVE	LIEN TO N PLAZA	11,825	10,689	11,853	12,718	7%
DEADWOOD AVE	N PLAZA TO I-90	14,018	13,772	14,468	15,115	4%
DEADWOOD AVE	I-90 TO CITY LIMIT	2,161	1,710	CONSTRUCTION	2,321	N/A
DISK DR	HAINES TO MAPLE	3,591	7,746	5,194	5,818	12%

ROAD	LIMITS	2020 SEASONALLY ADJUSTED COUNT	2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	2023 SEASONALLY ADJUSTED COUNT	% CHANGE 2022/2023
DISK (E) DR	MAPLE TO LACROSSE	4,957	7,448	5,417	5,966	10%
DYESS AVE	MALL TO SEGER	4,177	3,847	4,097	3,673	-10%
E NORTH ST	MILWAUKEE TO LACROSSE	9,874	13,694	14,040	16,308	16%
E NORTH ST	LACROSSE TO CAMBELL	12,999	15,231	15,201	16,298	7%
E NORTH ST	CAMBELL TO ANAMOSA	23,585	24,370	25,829	26,669	3%
E NORTH ST	ANAMOSA TO I-90	20,573	23,340	24,287	22,290	-8%
EAST BLVD	KANSAS CITY TO ST JOSEPH	CONSTRUCTION	3,626	4,314	3,938	-9%
EAST BLVD	ST JOSEPH TO MAIN	CONSTRUCTION	6,837	7,765	7,488	-4%
EAST BLVD	MAIN TO OMAHA	CONSTRUCTION	8,948	11,025	9,525	-14%
EAST BLVD	OMAHA TO E NORTH	CONSTRUCTION	12,382	12,678	14,777	17%
EGLIN ST	LACROSSE TO LUNA	7,867	8,513	7,861	7,711	-2%
EGLIN ST	LUNA TO E. NORTH	11,648	13,421	13,148	12,955	-1%
EGLIN ST	E.NORTH TO DYESS	7,268	7,287	7,514	7,395	-2%
EGLIN ST	DYESS TO ELK VALE	5,513	6,409	7,344	6,508	-11%
ELK VALE RD	SD-79 TO SD-44	21,377	22,087	20,327	18,714	-8%
ELK VALE RD	SD-44 TO I-90	19,939	21,648	21,726	20,836	-4%
ELK VALE RD	I-90 TO SEGER	4,508	4,695	5,266	5,754	9%
FAIRMONT BLVD	5TH TO WISCONSIN	12,872	8,477	8,953	9,557	7%
FAIRMONT (E) BLVD	WISCONSIN TO ELM	9,455	8,425	8,910	9,371	5%
FAIRMONT(E) BLVD	ELM TO CAMBELL	8,302	7,273	7,708	7,685	0%
HAINES AVE	NORTH TO ANAMOSA	21,170	18,625	19,049	16,711	-12%
HAINES AVE	ANAMOSA TO I-90	17,245	21,099	20,576	19,911	-3%
HAINES AVE	I-90 TO DISK	20,561	27,038	24,957	24,071	-4%
HAINES AVE	DISK TO MALL	18,666	19,098	19,022	19,139	1%
HAINES AVE	MALL TO COUNTRY	13,768	13,706	13,865	13,129	-5%
HAINES AVE	COUNTRY TO COBALT	5,843	6,499	6,685	6,172	-8%
HAINES AVE	COBALT TO CITY LIMIT	2,417	2,602	2,666	2,494	-6%
HILLSVIEW DR	AUDUBON TO RAIDER	1,824	1,922	2,301	1,839	-20%
I-190	OMAHA TO SILVER	22,815	28,005	24,606	26,119	6%
I-190	SILVER TO I-90	21,836	26,218	23,355	25,218	8%
I-90	I-190 TO HAINES	32,124	39,187	37,362	36,920	-1%
I-90	ELK VALE TO EAST CITY LIMIT	26,643	31,000	34,268	35,300	3%
JACKSON BLVD	CITY LIMIT TO CHAPEL LN	6,135	6,120	5,728	6,671	16%
JACKSON BLVD	CHAPEL LN TO CANYON LAKE	9,365	10,618	8,984	9,794	9%
JACKSON BLVD	CANYON LAKE TO 32ND	12,728	13,140	12,164	13,439	10%
JACKSON BLVD	32ND TO SHERIDAN LAKE	15,653	16,266	15,863	16,829	6%
JACKSON BLVD	SHERIDAN LK TO MT VIEW (S)	21,099	21,901	20,751	23,129	11%
JACKSON BLVD	MT VIEW (N) TO MAIN (W)	16,539	17,226	17,464	17,529	0%
LACROSSE (N) ST	OMAHA TO E NORTH	13,243	11,312	9,356	8,361	-11%
LACROSSE (N) ST	E NORTH TO ANAMOSA	16,586	19,919	17,278	16,038	-7%
LACROSSE (N) ST	ANAMOSA TO I-90	16,787	18,475	14,289	13,754	-4%
LACROSSE (N) ST	I-90 TO DISK	10,852	15,369	CONSTRUCTION	10,591	N/A
LACROSSE (N) ST	DISK TO MALL	6,637	8,761	5,675	5,263	-7%
LIBERTY BLVD	N ELLSWORTH TO I-90	7,427	8,409	9,432	10,445	11%
MAIN (W) ST	BERRY PINE TO 44TH	1,185	1,257	1,250	1,212	-3%

ROAD	LIMITS	2020 SEASONALLY ADJUSTED COUNT	2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	2023 SEASONALLY ADJUSTED COUNT	% CHANGE 2022/23
MAIN (W) ST	44TH TO SOO SAN	4,461	5,107	5,650	5,429	-4%
MAIN (W) ST	SOO SAN TO STURGIS	8,498	9,907	9,928	9,125	-8%
MAIN (W) ST	STURGIS TO SHERIDAN LAKE	15,575	18,550	18,892	19,548	3%
MAIN (W) ST	SHERIDAN LAKE TO MTVIEW	21,765	20,754	20,822	20,213	-3%
MAIN (W) ST	MT VIEW TO JACKSON	19,654	20,610	22,680	22,073	-3%
MAIN (W) ST	JACKSON TO CROSS	35,372	35,940	36,810	37,376	2%
MAIN (W) ST	CROSS TO WEST STREET	33,021	36,213	33,389	32,610	-2%
MAIN ST	WEST BLVD TO MT RUSHMORE	13,330	14,559	13,734	13,125	-4%
MAIN ST	MT RUSHMORE TO 5TH	9,154	11,401	10,489	10,421	-1%
MAIN ST	5TH TO EAST BLVD	7,835	9,864	9,257	9,253	0%
MAIN ST	EAST BLVD TO STEELE	5,550	6,385	5,459	6,493	19%
MALL DR	HAINES TO MAPLE	5,363	8,103	5,463	6,884	26%
MALL DR	MAPLE TO LACROSSE	4,749	7,622	4,690	5,805	24%
MALL DR	LACROSSE TO E. NORTH	4,057	6,538	4,964	5,466	10%
MALL (E) DR	E NORTH TO DYESS	8,289	8,921	7,122	7,756	9%
MALL (E) DR	DYESS TO ELK VALE	6,914	8,180	5,442	6,945	28%
MAPLE (N) AVE	DISK (W) TO DISK (E)	2,231	4,245	2,454	3,108	27%
MINNESOTA (E) ST	5TH TO ELM	6,552	6,159	6,238	5,606	-10%
MINNESOTA (E) ST	ELM TO CAMBELL	5,947	5,256	5,527	5,277	-5%
MOUNTAINVIEW RD	JACKSON TO CANYON LAKE	8,265	9,033	8,423	8,894	6%
MOUNTAINVIEW RD	CANYON LAKE TO MAIN	15,156	15,827	15,523	17,282	11%
MOUNTAINVIEW RD	MAIN TO OMAHA	15,982	15,604	13,945	17,289	24%
MT RUSHMORE RD	CATHEDRAL TO ST PATRICK	23,478	24,974	24,000	26,132	9%
MT RUSHMORE RD	ST PATRICK TO ST JOSEPH	23,576	25,914	22,660	25,297	12%
MT RUSHMORE RD	ST JOSEPH TO MAIN	18,225	23,005	19,012	19,074	0%
MT RUSHMORE RD	MAIN TO OMAHA	14,044	15,367	14,773	14,474	-2%
MT RUSHMORE RD	OMAHA TO NORTH	3,908	3,259	3,649	4,523	24%
N ELLSWORTH RD	US-14/16 TO LIBERTY	6,482	6,747	8,743	8,457	-3%
NEMO RD	WESTBERRY TRL TO BERRY PINE	4,130	3,896	3,867	4,728	22%
OMAHA (W) ST	DEADWOOD TO MTVIEW	19,262	CONSTRUCTION	18,695	20,500	10%
OMAHA (W) ST	MTVIEW TO WEST BLVD	CONSTRUCTION	24,262	22,087	24,693	12%
OMAHA ST	WEST BLVD TO MT RUSHMORE	24,406	27,400	27,251	27,710	2%
OMAHA ST	MT RUSHMORE TO 5TH	23,877	26,760	26,254	25,912	-1%
OMAHA ST	5TH TO EAST BLVD	19,938	25,139	24,659	24,496	-1%
OMAHA ST	EAST BLVD TO LACROSSE	18,226	20,568	18,160	18,394	1%
OMAHA (E) ST	LACROSSE TO CAMBELL	15,822	19,051	CONSTRUCTION	18,390	N/A
RADAR HILL RD	MULE DEER TO US-14/16	4,922	5,127	5,329	5,552	4%
SD-44 (E)	CAMBELL TO ST PATRICK	14,778	16,642	15,551	16,449	6%
SD-44 (E)	ST PATRICK TO TWILIGHT	23,248	24,404	24,838	26,363	6%
SD-44 (E)	TWILIGHT TO JOLLY	18,937	20,371	21,244	21,620	2%
SD-44 (E)	JOLLY TO RESERVOIR	15,487	16,594	17,304	17,363	0%
SD-44 (E)	RESERVOIR TO AIRPORT	6,505	7,297	8,132	8,490	4%
SD-79	CITY LIMIT TO ELK VALE	16,214	15,083	15,099	14,528	-4%
SEGER DR	LACROSSE TO DYESS	2,738	2,307	1,880	1,840	-2%

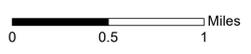
ROAD	LIMITS	2020 SEASONALLY ADJUSTED COUNT	2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	2023 SEASONALLY ADJUSTED COUNT	% CHANGE 2022/2023
SHERIDAN LAKE RD	DUNSMORE TO S WILDWOOD	7,266	8,266	7,553	9,432	25%
SHERIDAN LAKE RD	S WILDWOOD TO CATRON	7,480	8,539	8,868	9,066	2%
SHERIDAN LAKE RD	CATRON TO CORRAL	14,482	17,216	17,361	17,808	3%
SHERIDAN LAKE RD	CORRAL TO FLORMANN	14,087	15,352	16,342	14,728	-10%
SHERIDAN LAKE RD	FLORMANN TO JACKSON	14,080	15,894	16,011	15,548	-3%
SHERIDAN LAKE RD	JACKSON TO CANYON LAKE	8,581	9,629	10,281	8,342	-19%
SHERIDAN LAKE RD	CANYON LAKE TO W MAIN	8,265	9,390	9,758	8,090	-17%
SOO SAN DR	CANYON LAKE TO RANGE	4,281	4,726	5,788	5,458	-6%
SOUTH CANYON RD	BERRY PINE TO 44TH	3,342	6,268	6,341	7,290	15%
SOUTH CANYON RD	W MAIN TO 44TH	789	1,009	882	914	4%
ST JOSEPH (W) ST	WEST ST TO WEST BLVD	16,242	CONSTRUCTION	18,864	16,791	-11%
ST JOSEPH ST	WEST BLVD TO MT RUSHMORE	13,184	13,149	13,588	12,879	-5%
ST JOSEPH ST	MT RUSHMORE TO 5TH	10,118	9,748	9,812	9,310	-5%
ST JOSEPH ST	5TH TO EAST BLVD	8,043	8,713	7,902	7,609	-4%
ST JOSEPH ST	EAST BLVD TO STEELE	6,592	7,227	5,743	6,652	16%
ST JOSEPH (E) ST	STEELE TO ST PATRICK	11,029	11,999	11,270	12,657	12%
ST JOSEPH (E) ST	ST PATRICK TO CAMBELL	5,811	5,397	5,761	6,527	13%
ST PATRICK ST	WEST BLVD TO MT RUSHMORE	3,233	2,913	2,613	1,660	-36%
ST PATRICK ST	MT RUSHMORE TO 5TH	6,374	6,494	6,242	CONSTRUCTION	N/A
ST PATRICK ST	5TH TO ELM	11,441	10,327	10,294	8,442	-18%
ST PATRICK (E) ST	ELM TO ST JOSEPH	12,402	9,772	11,592	10,653	-8%
ST PATRICK (E) ST	ST JOSEPH TO CAMBELL	15,924	15,121	14,260	14,319	0%
ST PATRICK (E) ST	CAMBELL TO CREEK	14,526	15,570	15,054	15,514	3%
ST PATRICK (E) ST	CREEK TO SD-44	11,147	8,240	10,006	10,438	4%
STURGIS RD	MAIN TO W CHICAGO	10,466	12,357	12,293	11,610	-6%
STURGIS RD	W CHICAGO TO ST MARTINS	7,920	10,547	10,433	9,290	-11%
TWILIGHT DR	SD-44 TO JOLLY LN	7,569	8,317	7,399	7,388	0%
TWILIGHT DR	JOLLY LN TO RESERVOIR	3,635	3,978	3,606	3,432	-5%
US-14/16	I-90 TO WESTGATE	14,090	14,265	14,291	14,389	1%
US-14/16	S ELLSWORTH TO OAK	2,313	2,168	2,070	1,730	-16%
US-16	CITY LIMIT TO CATRON	15,239	19,046	20,819	16,002	-23%
US-16	CATRON TO CATHEDRAL	14,348	16,446	15,592	15,219	-2%
W CHICAGO ST	44TH TO STURGIS	9,208	10,479	10,597	10,276	-3%
W CHICAGO ST	STURGIS TO DEADWOOD	10,683	9,755	11,554	12,355	7%
WEST BLVD	FLORMANN TO ST PATRICK	1,428	1,761	1,657	1,815	10%
WEST BLVD	ST PATRICK TO ST CLOUD	4,816	3,923	3,759	3,234	-14%
WEST BLVD	ST CLOUD TO ST JOSEPH	4,743	4,934	4,665	4,242	-9%
WEST BLVD	ST. JOSEPH TO MAIN	14,389	16,252	13,758	12,927	-6%
WEST BLVD	MAIN ST TO OMAHA ST	17,318	16,820	16,660	15,587	-6%
WEST GATE RD	US-14/16 TO BLUEBIRD	3,584	3,677	3,917	3,840	-2%

Rapid City Area MPO 2023 Traffic Counts



12345 2022 Traffic Count
12345 2023 Traffic Count

- Inset Area
- Interstate
- Ramp
- Principal Arterial
- Minor Arterial
- Collector



The count data shown is collected via short-term traffic counts of 2-3 days. Unlike permanent counters which collect traffic year-round, short-term counts can be taken only when weather permits, usually March through October. These counts represent a "snapshot" of the traffic conditions during the particular collection period; due to the limited collection window, short-term counts must be seasonally adjusted in order to provide a better representation of traffic conditions on an average day (i.e. Average Annual Daily Traffic - AADT).

Disclaimer
 This GIS Data is provided "as is" without warranty of any representation of accuracy, timeliness, or completeness. The burden for determining accuracy, completeness, timeliness, merchantability, and fitness for or the appropriateness for use rests solely on the user. The Rapid City Area MPO makes no warranties, express or implied, as to the use of the Data. There are no implied warranties of merchantability or fitness for a particular purpose. The user acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction, and update.

