

Rapid City Area
Metropolitan Planning Organization

**2022 TRAFFIC VOLUME COUNTS
REPORT**



In cooperation with:

City of Rapid City
Engineering Services Division
Public Works Department

April 2023

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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 2019 – 2022.

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

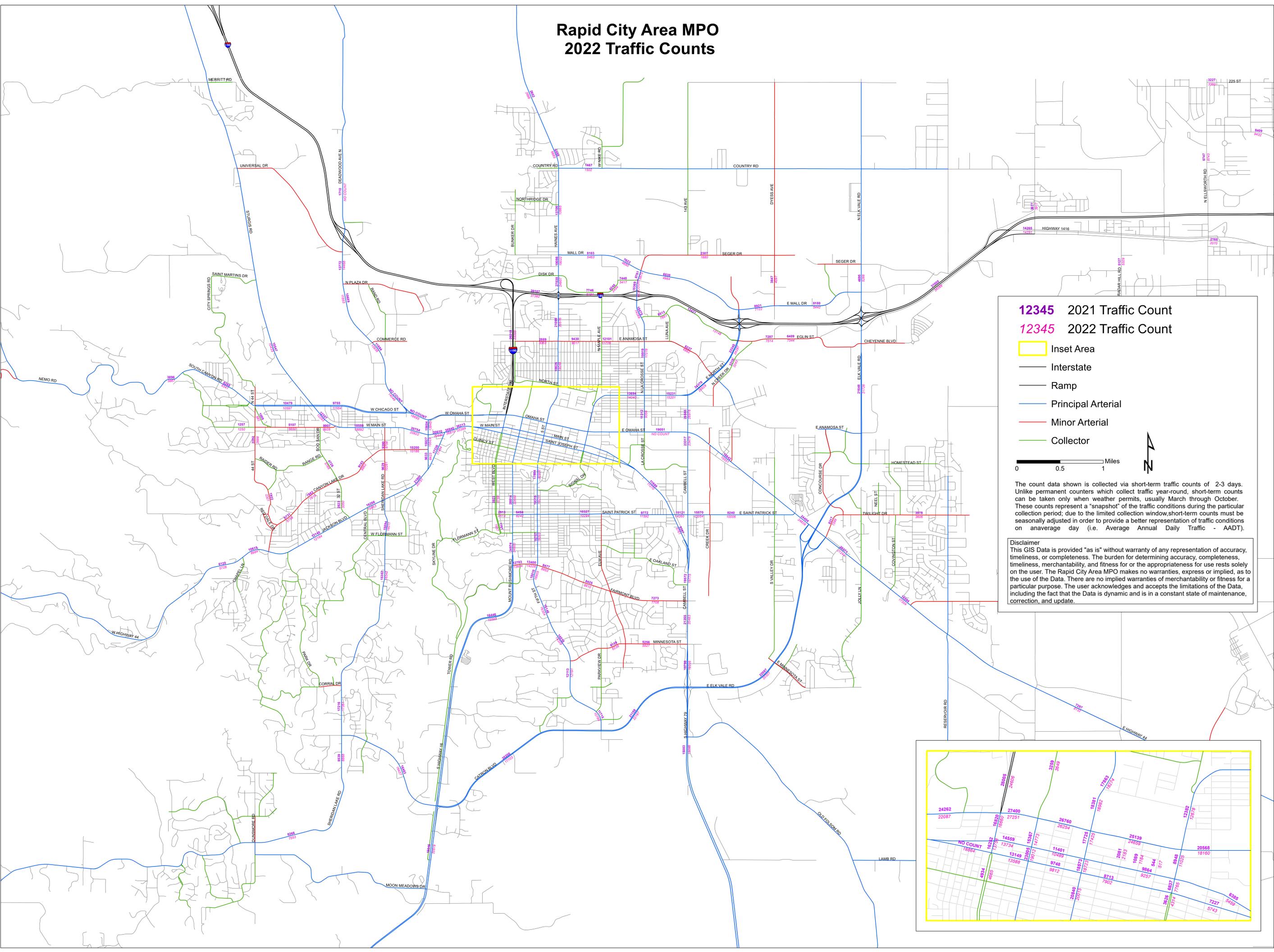
ROAD	LIMITS	2019 SEASONALLY ADJUSTED COUNT	2020 SEASONALLY ADJUSTED COUNT	2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	% CHANGE 2021/2022
1ST ST	OMAHA TO MAIN	645	951	544	517	-5%
2ND ST	MAIN TO OMAHA	1,125	1,303	1,089	1,164	7%
3RD ST	MAIN TO OMAHA	2,092	1,897	2,081	2,183	5%
5TH ST	CATRON TO PARKIEW	11,539	12,215	11,715	10,760	-8%
5TH ST	PARKVIEW TO MINNESOTA	12,366	12,575	12,113	12,191	1%
5TH ST	MINNESOTA TO TEXAS	15,098	14,908	14,018	14,329	2%
5TH ST	TEXAS TO 3RD	17,531	17,044	16,146	16,324	1%
5TH ST	3RD TO FAIRMONT	18,020	17,959	18,010	18,905	5%
5TH ST	FAIRMONT TO ST PATRICK	18,065	16,887	16,757	18,393	10%
5TH ST	ST. PATRICK TO ST. CLOUD	20,141	20,268	19,315	19,211	-1%
5TH ST	ST. CLOUD TO COLUMBUS	17,766	16,088	17,584	20,902	19%
5TH ST	COLUMBUS TO ST. JOSEPH	20,822	19,682	20,840	20,015	-4%
5TH ST	ST JOSEPH TO MAIN	19,955	16,557	18,573	18,723	1%
5TH ST	MAIN TO OMAHA	18,927	16,054	17,725	17,425	-2%
5TH ST	OMAHA TO NEW YORK	20,430	21,344	18,381	18,982	3%
5TH ST	NEW YORK TO NORTH	18,632	19,070	17,863	18,274	2%
32ND ST	JACKSON TO CANYON LAKE	3,259	2,930	2,823	3,350	19%
44TH ST	RAIDER TO MAIN	3,853	2,005	2,282	2,688	18%
225TH ST	N ELLSWORTH TO BRIGGS	3,459	2,985	3,227	3,360	4%
ANAMOSA ST	WEST BLVD N. TO HAINES	2,820	3,052	2,889	3,063	6%
ANAMOSA ST	HAINES TO MAPLE	7,538	9,377	9,430	9,217	-2%
ANAMOSA (E) ST	MAPLE TO LACROSSE	9,591	10,372	12,101	11,776	-3%
ANAMOSA (E) ST	LACROSSE TO E. NORTH	5,928	6,013	6,237	6,662	7%
CAMBELL ST	CATRON TO MINNESOTA	18,826	19,311	18,798	19,236	2%
CAMBELL ST	MINNESOTA TO FAIRMONT	21,308	21,840	21,355	20,483	-4%
CAMBELL ST	FAIRMONT TO ST PATRICK	20,157	21,231	19,572	19,775	1%
CAMBELL ST	ST PATRICK TO OMAHA	24,249	21,310	23,317	23,479	1%
CAMBELL (E) ST	OMAHA TO E. NORTH ST	27,883	30,350	26,588	26,976	1%
CANYON LAKE DR	JACKSON TO CLIFTON	5,726	5,890	5,731	5,759	0%
CANYON LAKE DR	CLIFTON TO SOO SAN	9,125	8,030	7,982	7,813	-2%
CANYON LAKE DR	SOO SAN TO SHERIDAN LAKE	10,775	9,564	9,183	9,862	7%
CANYON LAKE DR	SHERIDAN LAKE TO MTVIEW	11,086	10,110	10,200	10,186	0%
CATHEDRAL DR	MT RUSHMORE TO TOWER	13,296	13,559	12,783	13,604	6%
CATHEDRAL DR	TOWER TO 5TH	14,074	14,645	13,400	14,226	6%
CATRON BLVD	SHERIDAN LAKE TO US-16	14,080	13,421	16,463	16,437	0%
CATRON BLVD	US-16 TO 5TH	17,351	18,293	20,200	17,703	-12%
CATRON (E) BLVD	5TH TO SD-79	20,506	21,511	21,159	22,187	5%
COUNTRY RD	HAINES TO W NIKE	1,402	1,512	1,467	1,502	2%
CREEK (N) DR	ANAMOSA TO EGLIN ST	3,861	4,327	3,316	3,243	-2%
DEADWOOD AVE	OMAHA TO CEMENT PLANT	17,481	CONSTRUCTION	CONSTRUCTION	14,049	N/A
DEADWOOD AVE	CEMENT PLANT TO LIEN	16,944	14,871	11,894	13,838	16%
DEADWOOD AVE	LIEN TO N PLAZA	13,520	11,825	10,689	11,853	11%
DEADWOOD AVE	N PLAZA TO I-90	16,188	14,018	13,772	14,468	5%
DEADWOOD AVE	I-90 TO CITY LIMIT	2,235	2,161	1,710	CONSTRUCTION	N/A
DISK DR	HAINES TO MAPLE	4,664	3,591	7,746	5,194	-33%

ROAD	LIMITS	2019 SEASONALLY ADJUSTED COUNT	2020 SEASONALLY ADJUSTED COUNT	2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	% CHANGE 2021/2022
DISK (E) DR	MAPLE TO LACROSSE	5,771	4,957	7,448	5,417	-27%
DYESS AVE	MALL TO SEGER	3,805	4,177	3,847	4,097	6%
E NORTH ST	MILWAUKEE TO LACROSSE	11,585	9,874	13,694	14,040	3%
E NORTH ST	LACROSSE TO CAMBELL	15,050	12,999	15,231	15,201	0%
E NORTH ST	CAMBELL TO ANAMOSA	24,904	23,585	24,370	25,829	6%
E NORTH ST	ANAMOSA TO I-90	21,891	20,573	23,340	24,287	4%
EAST BLVD	KANSAS CITY TO ST JOSEPH	4,605	CONSTRUCTION	3,626	4,314	19%
EAST BLVD	ST JOSEPH TO MAIN	7,906	CONSTRUCTION	6,837	7,765	14%
EAST BLVD	MAIN TO OMAHA	10,474	CONSTRUCTION	8,948	11,025	23%
EAST BLVD	OMAHA TO E NORTH	CONSTRUCTION	CONSTRUCTION	12,382	12,678	2%
EGLIN ST	LACROSSE TO LUNA	8,029	7,867	8,513	7,861	-8%
EGLIN ST	LUNA TO E. NORTH	10,708	11,648	13,421	13,148	-2%
EGLIN ST	E.NORTH TO DYESS	6,660	7,268	7,287	7,514	3%
EGLIN ST	DYESS TO ELK VALE	5,671	5,513	6,409	7,344	15%
ELK VALE RD	SD-79 TO SD-44	18,781	21,377	22,087	20,327	-8%
ELK VALE RD	SD-44 TO I-90	22,331	19,939	21,648	21,726	0%
ELK VALE RD	I-90 TO SEGER	3,418	4,508	4,695	5,266	12%
FAIRMONT BLVD	5TH TO WISCONSIN	10,125	12,872	8,477	8,953	6%
FAIRMONT (E) BLVD	WISCONSIN TO ELM	8,470	9,455	8,425	8,910	6%
FAIRMONT(E) BLVD	ELM TO CAMBELL	7,649	8,302	7,273	7,708	6%
HAINES AVE	NORTH TO ANAMOSA	19,083	21,170	18,625	19,049	2%
HAINES AVE	ANAMOSA TO I-90	17,921	17,245	21,099	20,576	-2%
HAINES AVE	I-90 TO DISK	CONSTRUCTION	20,561	27,038	24,957	-8%
HAINES AVE	DISK TO MALL	CONSTRUCTION	18,666	19,098	19,022	0%
HAINES AVE	MALL TO COUNTRY	10,359	13,768	13,706	13,865	1%
HAINES AVE	COUNTRY TO COBALT	5,911	5,843	6,499	6,685	3%
HAINES AVE	COBALT TO CITY LIMIT	2,534	2,417	2,602	2,666	2%
HILLSVIEW DR	AUDUBON TO RAIDER	3,645	1,824	1,922	2,301	20%
I-190	OMAHA TO SILVER	25,696	22,815	28,005	24,606	-12%
I-190	SILVER TO I-90	24,488	21,836	26,218	23,355	-11%
I-90	I-190 TO HAINES	38,835	32,124	39,187	37,362	-5%
I-90	ELK VALE TO EAST CITY LIMIT	30,002	26,643	31,000	34,268	11%
JACKSON BLVD	CITY LIMIT TO CHAPEL LN	6,317	6,135	6,120	5,728	-6%
JACKSON BLVD	CHAPEL LN TO CANYON LAKE	10,171	9,365	10,618	8,984	-15%
JACKSON BLVD	CANYON LAKE TO 32ND	13,854	12,728	13,140	12,164	-7%
JACKSON BLVD	32ND TO SHERIDAN LAKE	17,439	15,653	16,266	15,863	-2%
JACKSON BLVD	SHERIDAN LK TO MT VIEW (S)	22,626	21,099	21,901	20,751	-5%
JACKSON BLVD	MT VIEW (N) TO MAIN (W)	17,975	16,539	17,226	17,464	1%
LACROSSE (N) ST	OMAHA TO E NORTH	11,913	13,243	11,312	9,356	-17%
LACROSSE (N) ST	E NORTH TO ANAMOSA	19,686	16,586	19,919	17,278	-13%
LACROSSE (N) ST	ANAMOSA TO I-90	17,020	16,787	18,475	14,289	-23%
LACROSSE (N) ST	I-90 TO DISK	12,624	10,852	15,369	CONSTRUCTION	N/A
LACROSSE (N) ST	DISK TO MALL	7,422	6,637	8,761	5,675	-35%
LIBERTY BLVD	N ELLSWORTH TO I-90	8,018	7,427	8,409	9,432	12%
MAIN (W) ST	BERRY PINE TO 44TH	1,320	1,185	1,257	1,250	-1%

ROAD	LIMITS	2019 SEASONALLY ADJUSTED COUNT	2020 SEASONALLY ADJUSTED COUNT	2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	% CHANGE 2021/22
MAIN (W) ST	44TH TO SOO SAN	6,820	4,461	5,107	5,650	11%
MAIN (W) ST	SOO SAN TO STURGIS	10,863	8,498	9,907	9,928	0%
MAIN (W) ST	STURGIS TO SHERIDAN LAKE	18,987	15,575	18,550	18,892	2%
MAIN (W) ST	SHERIDAN LAKE TO MTVIEW	21,753	21,765	20,754	20,822	0%
MAIN (W) ST	MT VIEW TO JACKSON	21,091	19,654	20,610	22,680	10%
MAIN (W) ST	JACKSON TO CROSS	40,654	35,372	35,940	36,810	2%
MAIN (W) ST	CROSS TO WEST STREET	33,717	33,021	36,213	33,389	-8%
MAIN ST	WEST BLVD TO MT RUSHMORE	11,409	13,330	14,559	13,734	-6%
MAIN ST	MT RUSHMORE TO 5TH	CONSTRUCTION	9,154	11,401	10,489	-8%
MAIN ST	5TH TO EAST BLVD	7,109	7,835	9,864	9,257	-6%
MAIN ST	EAST BLVD TO STEELE	7,587	5,550	6,385	5,459	-14%
MALL DR	HAINES TO MAPLE	5,658	5,363	8,103	5,463	-33%
MALL DR	MAPLE TO LACROSSE	4,889	4,749	7,622	4,690	-38%
MALL DR	LACROSSE TO E. NORTH	4,231	4,057	6,538	4,964	-24%
MALL (E) DR	E NORTH TO DYESS	7,769	8,289	8,921	7,122	-20%
MALL (E) DR	DYESS TO ELK VALE	6,379	6,914	8,180	5,442	-33%
MAPLE (N) AVE	DISK (W) TO DISK (E)	2,463	2,231	4,245	2,454	-42%
MINNESOTA (E) ST	5TH TO ELM	5,821	6,552	6,159	6,238	1%
MINNESOTA (E) ST	ELM TO CAMBELL	5,075	5,947	5,256	5,527	5%
MOUNTAINVIEW RD	JACKSON TO CANYON LAKE	9,157	8,265	9,033	8,423	-7%
MOUNTAINVIEW RD	CANYON LAKE TO MAIN	16,371	15,156	15,827	15,523	-2%
MOUNTAINVIEW RD	MAIN TO OMAHA	18,645	15,982	15,604	13,945	-11%
MT RUSHMORE RD	CATHEDRAL TO ST PATRICK	24,235	23,478	24,974	24,000	-4%
MT RUSHMORE RD	ST PATRICK TO ST JOSEPH	24,349	23,576	25,914	22,660	-13%
MT RUSHMORE RD	ST JOSEPH TO MAIN	18,981	18,225	23,005	19,012	-17%
MT RUSHMORE RD	MAIN TO OMAHA	14,446	14,044	15,367	14,773	-4%
MT RUSHMORE RD	OMAHA TO NORTH	4,410	3,908	3,259	3,649	12%
N ELLSWORTH RD	US-14/16 TO LIBERTY	8,172	6,482	6,747	8,743	30%
NEMO RD	WESTBERRY TRL TO BERRY PINE	3,789	4,130	3,896	3,867	-1%
OMAHA (W) ST	DEADWOOD TO MTVIEW	24,318	19,262	CONSTRUCTION	18,695	N/A
OMAHA (W) ST	MTVIEW TO WEST BLVD	26,843	CONSTRUCTION	24,262	22,087	-9%
OMAHA ST	WEST BLVD TO MT RUSHMORE	30,146	24,406	27,400	27,251	-1%
OMAHA ST	MT RUSHMORE TO 5TH	28,629	23,877	26,760	26,254	-2%
OMAHA ST	5TH TO EAST BLVD	26,743	19,938	25,139	24,659	-2%
OMAHA ST	EAST BLVD TO LACROSSE	24,185	18,226	20,568	18,160	-12%
OMAHA (E) ST	LACROSSE TO CAMBELL	19,604	15,822	19,051	CONSTRUCTION	N/A
RADAR HILL RD	MULE DEER TO US-14/16	5,122	4,922	5,127	5,329	4%
SD-44 (E)	CAMBELL TO ST PATRICK	15,154	14,778	16,642	15,551	-7%
SD-44 (E)	ST PATRICK TO TWILIGHT	27,480	23,248	24,404	24,838	2%
SD-44 (E)	TWILIGHT TO JOLLY	22,058	18,937	20,371	21,244	4%
SD-44 (E)	JOLLY TO RESERVOIR	18,442	15,487	16,594	17,304	4%
SD-44 (E)	RESERVOIR TO AIRPORT	7,639	6,505	7,297	8,132	11%
SD-79	CITY LIMIT TO ELK VALE	13,443	16,214	15,083	15,099	0%
SEGER DR	LACROSSE TO DYESS	2,238	2,738	2,307	1,880	-18%

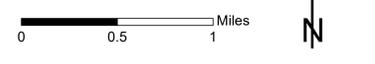
ROAD	LIMITS	2019 SEASONALLY ADJUSTED COUNT	2020 SEASONALLY ADJUSTED COUNT	2021 SEASONALLY ADJUSTED COUNT	2022 SEASONALLY ADJUSTED COUNT	% CHANGE 2021/2022
SHERIDAN LAKE RD	DUNSMORE TO S WILDWOOD	8,299	7,266	8,266	7,553	-9%
SHERIDAN LAKE RD	S WILDWOOD TO CATRON	8,838	7,480	8,539	8,868	4%
SHERIDAN LAKE RD	CATRON TO CORRAL	16,051	14,482	17,216	17,361	1%
SHERIDAN LAKE RD	CORRAL TO FLORMANN	16,343	14,087	15,352	16,342	6%
SHERIDAN LAKE RD	FLORMANN TO JACKSON	16,947	14,080	15,894	16,011	1%
SHERIDAN LAKE RD	JACKSON TO CANYON LAKE	9,956	8,581	9,629	10,281	7%
SHERIDAN LAKE RD	CANYON LAKE TO W MAIN	9,248	8,265	9,390	9,758	4%
SOO SAN DR	CANYON LAKE TO RANGE	5,733	4,281	4,726	5,788	22%
SOUTH CANYON RD	BERRY PINE TO 44TH	6,262	3,342	6,268	6,341	1%
SOUTH CANYON RD	W MAIN TO 44TH	1,250	789	1,009	882	-13%
ST JOSEPH (W) ST	WEST ST TO WEST BLVD	17,929	16,242	CONSTRUCTION	18,864	N/A
ST JOSEPH ST	WEST BLVD TO MT RUSHMORE	14,088	13,184	13,149	13,588	3%
ST JOSEPH ST	MT RUSHMORE TO 5TH	11,202	10,118	9,748	9,812	1%
ST JOSEPH ST	5TH TO EAST BLVD	9,425	8,043	8,713	7,902	-9%
ST JOSEPH ST	EAST BLVD TO STEELE	8,092	6,592	7,227	5,743	-21%
ST JOSEPH (E) ST	STEELE TO ST PATRICK	13,636	11,029	11,999	11,270	-6%
ST JOSEPH (E) ST	ST PATRICK TO CAMBELL	6,668	5,811	5,397	5,761	7%
ST PATRICK ST	WEST BLVD TO MT RUSHMORE	2,983	3,233	2,913	2,613	-10%
ST PATRICK ST	MT RUSHMORE TO 5TH	6,474	6,374	6,494	6,242	-4%
ST PATRICK ST	5TH TO ELM	9,422	11,441	10,327	10,294	0%
ST PATRICK (E) ST	ELM TO ST JOSEPH	12,444	12,402	9,772	11,592	19%
ST PATRICK (E) ST	ST JOSEPH TO CAMBELL	13,914	15,924	15,121	14,260	-6%
ST PATRICK (E) ST	CAMBELL TO CREEK	16,100	14,526	15,570	15,054	-3%
ST PATRICK (E) ST	CREEK TO SD-44	11,127	11,147	8,240	10,006	21%
STURGIS RD	MAIN TO W CHICAGO	11,190	10,466	12,357	12,293	-1%
STURGIS RD	W CHICAGO TO ST MARTINS	9,048	7,920	10,547	10,433	-1%
TWILIGHT DR	SD-44 TO JOLLY LN	8,275	7,569	8,317	7,399	-11%
TWILIGHT DR	JOLLY LN TO RESERVOIR	4,058	3,635	3,978	3,606	-9%
US-14/16	I-90 TO WESTGATE	14,748	14,090	14,265	14,291	0%
US-14/16	S ELLSWORTH TO OAK	2,542	2,313	2,168	2,070	-5%
US-16	CITY LIMIT TO CATRON	17,423	15,239	19,046	20,819	9%
US-16	CATRON TO CATHEDRAL	15,450	14,348	16,446	15,592	-5%
W CHICAGO ST	44TH TO STURGIS	11,227	9,208	10,479	10,597	1%
W CHICAGO ST	STURGIS TO DEADWOOD	13,420	10,683	9,755	11,554	18%
WEST BLVD	FLORMANN TO ST PATRICK	1,935	1,428	1,761	1,657	-6%
WEST BLVD	ST PATRICK TO ST CLOUD	4,876	4,816	3,923	3,759	-4%
WEST BLVD	ST CLOUD TO ST JOSEPH	6,240	4,743	4,934	4,665	-5%
WEST BLVD	ST. JOSEPH TO MAIN	14,555	14,389	16,252	13,758	-15%
WEST BLVD	MAIN ST TO OMAHA ST	16,239	17,318	16,820	16,660	-1%
WEST GATE RD	US-14/16 TO BLUEBIRD	3,715	3,584	3,677	3,917	7%

Rapid City Area MPO 2022 Traffic Counts



12345 2021 Traffic Count
12345 2022 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.

