

Minnesota Department of Transportation

Blue Earth Safety Rest Area I-90 Westbound 2001 User Survey

Prepared with Assistance from SRF Consulting Group, Inc.

BLUE EARTH SAFETY REST AREA INTERSTATE 90 WESTBOUND 2001 USER SURVEY

Prepared for

Minnesota Department of Transportation

Prepared with Assistance from

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EXECUTIVE SUMMARY

Survey Purpose

To identify use volume, preferred site functions, elements, and aesthetics at the Blue Earth westbound Class I Safety Rest Area site development in Mn/DOT District 7. The time frame is of a vacation month, non-holiday weekend that contains the thirtieth highest annual hour of service as the peak traffic volume. Twelve sites were surveyed.

Data Collection Process

Both Automated (hard) and Manual (soft) data was collected. The Automated data is the hard information statistics of traffic counting. The Manual data is soft information of interviews, anecdotes and questionnaire responses by motorists. Additional hard Manual data was collected on vehicle classification, state of origin, and both time-in and time-out of facility use.

The Automated data was collected by mechanical tube count data collection systems that both classified vehicle types and counted with time stamp, the sums of mainline and Safety Rest Area access traffic to determine motorist use of Safety Rest Area's as a percentage of mainline traffic volumes for twelve sites.

The manual data was taken at two successive Safety Rest Area sites where detail vehicle information including: federal classification, state of origin, vehicle time-in, and vehicle time-out was observed and manually recorded for each motorist. Additionally, driver responses were solicited with a survey questionnaire that was collected at egress from the Safety Rest Area.

Site Observation

This Safety Rest Area had manual data collected from Thursday, August 09 thru Monday, August 13, 2001 from 9:00 AM thru 5:00 PM daily in addition to automated data from tube counters.

Driver responses were solicited with a survey questionnaire that was administered on the deceleration ramp access and collected on the acceleration lane egress from the Safety Rest Area. The questionnaire was hand introduced by one of several observers to every motorist at the access to the site. At this point the observer hand recorded: the vehicle classification, state of origin, and the time the vehicle entered. On the ramps leaving the rest area, observers retrieved the questionnaire and marked the time of the vehicle leaving. The digital clocks used for posting time were synchronized to within 15 seconds of each other. Additionally a single observer classified all mainline traffic on a digital keypad. There were six observers on each site with a total of twelve observers for the survey duration on both sites.

Highlighted Information from Data Analysis section

The percentage of mainline motorists using rest areas is very high from a low average of 12.5% to more than 20%. The average length of stay is more than 18 minutes. Nearly 70% of all users are from out of state. More than 78% identify their reason for travel as Personal and Pleasure Travel; 76% are using overnight accommodations away from home.

The average trip is nearly 1400 miles with an average of 405 miles traveled per day, broken into 1-3 hours between stops.

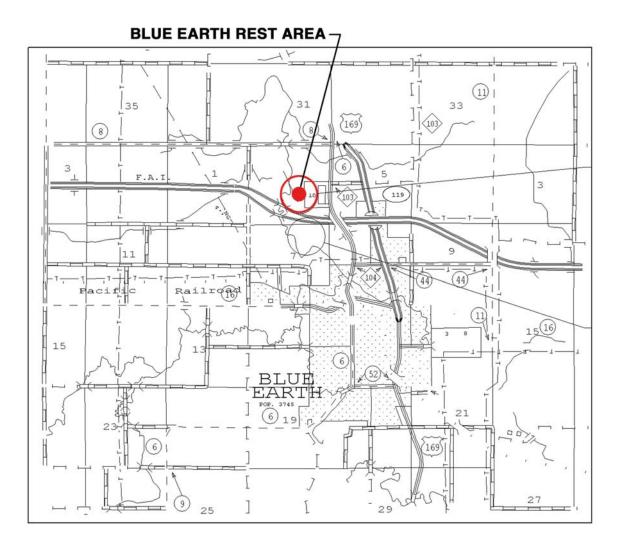
Safety Rest Areas are preferred over Private Commercial facilities by a factor greater than 5:1. Less than 9% of all motorists prefer Commercial Facilities, and only 31% prefer combined Safety Rest Areas and Commercial Facilities.

More than eleven "main reasons for stopping" at this Safety Rest Area were identified by all motorists. More than fifteen facilities within a Safety Rest Area were identified as "being used" by the vehicle occupants.

The majority of commercial drivers have a hard time finding overnight parking spaces.

There is a high level of user satisfaction with the services and facilities provided at Safety Rest Areas, and 90% of all drivers say that they feel safe in Minnesota Safety Rest Areas during both daytime and nighttime hours. More than 95% of all motorists responded to the survey questionnaire.

Location of the Blue Earth Safety Rest Area.



The Blue Earth Safety Rest Area is located on I-90 in Faribault County.

The driver of each vehicle was given one copy of the following survey. (The $8\frac{1}{2}$ " X 14" survey has been reduced to fit this page.)

	Day of the week: Thu. Fri. Sat. Sun. Mon. Time in: Lic. State: MN (specify other)			
	/ehicle type: 1 2 3 10 11 12 13 20 30 31 40 Time-out:			
rav	ir Motorist: The Minnesota Department of Transportation, (Mn/DOT), is attempting to determine how Safety Rest Areas and rel Information Centers along highways are utilized and what facilities should be provided to satisfy your needs. Only you can be upon the information we need to plan future facilities. Please answer the following questions:			
1.	Number of people in your vehicle? senior adults (over 59) adults (16-59) children (under 16) Male Female			
2.	When traveling how long do you prefer to travel between stops? (Check one) 1 hour 1-2 hours 2-21/2 hours 21/2-3 hours 3-4 hours 4 or more hours			
3.	What is your reason for traveling today? (Write letter here): A. business travel C. pleasure travel (vacation, recreation, etc.) B. commercial driver (truck, bus, etc.) D. other personal travel (other than pleasure travel)			
4.	How far will you travel today? (total miles)			
5.	How far will you travel during this trip? (total trip miles)			
	Please select your main reason(s) for stopping at this rest area. (check all that apply) restrooms (a) rest/relax (d) eat/picnic (g) vending (j) travel information (b) water (e) switch drivers (h) check load/vehicle (k) sleep (c) telephone (f) other (please specify) (j)			
7.	Which of the following facilities were used by your party? (check all that apply) restroom (a)			
В.	What additional facilities would like to see at rest areas?			
9.	Was the information displayed in the bulletin board useful? \square Yes \square No \square No Opinion			
٥.	What types of information would you like available at rest areas?			
	When traveling, which type of facility do you prefer to use? (pick only one, write letter here): A. safety rest area B. public park C. private/commercial facilities (restaurant/gas station/convenience store) D. combined safety rest areas & private/commercial facilities			
	If commercial development were permitted in Minnesota's safety rest areas, which of the following business types would you prefer? (check all that apply) none (a)			
	The Minnesota Department of Transportation is considering updating rest area services along interstate 90. What would make this facility more useful to you or your group on this trip? (Mark all you prefer) more displays (a) more parking (d) more rest rooms (b) travel information (e) more telephones (f) other (please specify) (j)			
	What type of overnight accommodations are you using on this trip? (check all that apply) state park camping (a) state park cabin (c) private campground (e) private campground (g) resort/cabin (b) hotel/motel (d) family/friend (f) private campground (h)			
	Not At Safe All (circle one) Extremely			
	How safe do you feel using Minnesota rest areas on Interstate highways? 1 2 3 4 5 6 7			
	How safe do you feel using Minnesota rest areas on Interstate highways after dark? 1 2 3 4 5 6 7			
	Do you feel State Highway Patrol offices and stations in rest areas improves motorist safety? Yes No Please explain why			
8.	Commercial Truck Operators If you are a Commercial Truck driver, are you able to find off road parking locations in Minnesota when you need them for stopping and resting? Daytime 6am - 10 pm			
9.	How many times per month do you use safety rest areas nationwide: (pick only one for each question)			
	daytime: short stops (less than 20 minutes)			
	nighttime: short stops (less than 20 minutes)			

SUMMARY OF COLLECTED DATA

Date of Survey: Thursday, August 9, 2001 through Monday, August 13, 2001

Time of Survey: 9:00 a.m. to 5:00 p.m.

Weather On-Site: Partly Cloudy to Sunny

Total I-90 Mainline Vehicles Traveling Westbound: 14,104

I-90 Mainline Vehicles Traveling Westbound Passing Safety Rest Area Without

Entering: 12,359

Vehicles Traveling Westbound Entering Safety Rest Area: 1,745

Percent of I-90 Mainline Vehicles Stopping at Safety Rest Area: 12.37%

Percent of Vehicles Stopping at Safety Rest Area that are from Out-Of-State: 69.59%

Percent of Vehicles Stopping at Safety Rest Area that are from In-State: 30.41%

Age Distribution of People Using the Safety Rest Area:

	TOTAL		
Age	No.	Percent	
Senior Adults	985	24.07%	
Adults	2,268	55.41%	
Children	840	20.52%	
Total	4,093	100.00%	

Average Number of People per Vehicle: 2.35

Average Length of Stay in Safety Rest Area

All Vehicles	18.11 minutes
Standard Vehicles	16.66 minutes
Oversize & Commercial Vehicles	23.80 minutes

Number of Vehicles 9:00 am to 5:00 pm

Date	Day	Vehicles Entering Rest Area	Vehicles Not Entering Rest Area	One Way Traffic Totals	Average Percent Stopping at Rest Area
August 9th	Thursday	229	1,945	2,174	10.53%
August 10th	Friday	377	2,706	3,083	12.23%
August 11th	Saturday	392	2,761	3,153	12.43%
August 12th	Sunday	424	2,898	3,322	12.76%
August 13th	Monday	323	2,049	2,372	13.62%
Total (surveys	returned)	1,745	12,359	14,104	12.37%

Hourly Volume of Vehicles Entering Safety Rest Area

Time	Thursday	Friday	Saturday	Sunday	Monday	Total	Percent
9:00 – 10:00	9	27	55	39	40	170	9.74%
10:00 - 11:00	40	57	49	50	54	250	14.33%
11:00 - 12:00	38	48	57	56	52	251	14.38%
12:00 – 1:00	31	49	67	38	31	216	12.38%
1:00 - 2:00	26	44	36	55	33	194	11.12%
2:00 - 3:00	23	58	40	59	42	222	12.72%
3:00 - 4:00	40	42	54	59	39	234	13.41%
4:00 - 5:00	22	52	34	68	32	208	11.92%
Total	229	377	392	424	323	1,745	100.00%

Based on user survey data, not traffic tube data.

Type of Vehicle Entering Safety Rest Area

	Vehicle Total	Average Length of Stay	Number of People	(A)	(B)
Standard Vehicles					
Cars	733	15.92	1,597	42.62%	12.51%
Pick-Up or Van	579	17.10	1,675	33.66%	11.15%
Other – Motorcycle	48	22.67	69	2.79%	16.00%
Oversize Vehicles					
Pick-Up – Van w/ Recreational Trailer	89	20.84	262	5.17%	23.30%
Recreational Vehicles	58	23.47	139	3.37%	19.40%
Pick-Up – Van w/ Other Trailer	28	15.93	60	1.63%	6.51%
Car w/ Recreational Trailer	4	37.50	12	0.23%	44.44%
Car w/ Other Trailer	3	38.33	15	0.17%	8.33%
Commercial Vehicles					
Semi-Tractor Trailer Trucks	157	26.96	180	9.13%	11.35%
Commercial Trucks	19	16.37	26	1.11%	9.79%
Buses	2	50.50	5	0.12%	12.50%
Total	1,720	18.11	4,040	100.00%	

⁽A) Percentage of total number of vehicles using the safety rest area.

Note: Total does not equal 1,745 due to recording error for 25 vehicles.

⁽B) Percentage of vehicles that stopped in the safety rest area, out of the total number of mainline vehicles of the same type both entering and passing the safety rest area.

SURVEY QUESTIONS

Question 1: Number of people in your vehicle (by gender and age)?

	MALE		MALE FEMALE		TOTAL	
Age	No.	Percent	No.	Percent	No.	Percent
Senior Adults	549	13.41%	436	10.65%	985	24.07%
Adults	1,193	29.15%	1,075	26.26%	2,268	55.41%
Children	459	11.21%	381	9.31%	840	20.52%
Total	2,201	53.77%	1,892	46.23%	4,093	100.00%

Average Number of People per Vehicle: 2.35

Percent Responding: 96.22%

Question 2: When traveling how long do you prefer to travel between stops?

	NO.	PERCENT
1 Hour	73	4.18%
1-2 Hours	377	21.60%
2-21/2 Hours	323	18.51%
21/2-3 Hours	529	30.32%
3-4 Hours	223	12.78%
4 or More Hours	27	7.28%

Percent Responding: 94.67%

Question 3: What is your reason for traveling today?

	NO.	PERCENT
Business Travel	128	7.34%
Commercial Driver	139	7.97%
Pleasure Travel	1,071	61.38%
Other Personal Travel	288	16.50%

Percent Responding: 93.18%

Question 4: How far will you travel today?

Average	405 miles
Median	400 miles

Percent Responding: 96.22%

Question 5: How far will you travel during this trip?

Average	1,399 miles
Median	800 miles

Percent Responding: 95.93%

Question 6: Please select your main reason(s) for stopping at this rest area. (Check all that apply)

	NO.	PERCENT
Restrooms	1,476	84.58%
Travel Information	120	6.88%
Sleep	65	3.72%
Rest/Relax	579	33.18%
Water	234	13.41%
Telephone	119	6.82%
Eat/Picnic	175	10.03%
Switch Drivers	209	11.98%
Vending	100	5.73%
Check Load/Vehicle	109	6.25%
Other	87	4.99%

Percent Responding: 95.99%

Question 7: Which of the following facilities were used by your party? (Check all that apply)

	NO.	PERCENT
Restrooms	1,566	89.74%
Picnic Table	278	15.93%
Picnic Shelters	29	1.66%
Telephone	159	9.11%
Outside Water Faucet	175	10.03%
Map Displays	281	16.10%
Travel Information Display	147	8.42%
Bulletin Board Displays	58	3.32%
Pet Exercise Area	86	4.93%
Interpretive Sign	15	0.86%
Vending	185	10.60%
Trash/Recycle Receptacle	345	19.77%
Walking Paths	152	8.71%
Play Equipment	137	7.85%
Other	34	1.95%

Percent Responding: 95.99%

Question 8: What additional facilities would you like to see at rest areas?

- More vending machines coffee, candy
- ATM machine
- Restaurant
- Maps
- Truck parking
- Showers
- T.V. tuned to local weather conditions
- Grocery Store with gas pumps

Percent Responding: 20.23%

Question 9: Was the information displayed in the bulletin board useful?

	NO.	PERCENT
Yes	762	43.67%
No	37	2.12%
No Opinion	701	40.17%

Percent Responding: 85.96%

Question 10: What types of information would you like available at rest areas?

- Area attractions
- Current construction zones
- Mileage Charts (distance between destinations)
- Camping areas
- Historic sites
- Hotel/motel
- Current weather conditions

Percent Responding: 20.23%

Question 11: When traveling, which type of facility do you prefer to use? (Pick only one)

	NO.	PERCENT
Safety Rest Area	794	45.50%
Public Park	32	1.83%
Private/Commercial Facilities	153	8.77%
Combined Safety Rest Areas & Private/Commercial Facilities	571	32.72%

Percent Responding: 88.83%

Question 12: If commercial development were permitted in Minnesota's safety rest areas, which of the following business types would you prefer? (Check all that apply)

	NO.	PERCENT
None	346	19.83%
Vending Machines	475	27.22%
Restaurant (Fast Food/Takeout)	741	42.46%
Restaurant (Sit Down)	264	15.13%
Gas and Vehicle Service	634	36.33%
Other	36	2.06%

Percent Responding: 95.99%

Question 13: The Minnesota Department of Transportation is considering updating existing services at this location. What would make this facility more useful to you or your group on this trip? (Mark all you prefer)

	NO.	PERCENT
More Displays	77	4.41%
More Rest Rooms	239	13.70%
Internet Access	222	12.72%
More Parking	259	14.84%
Travel Information	408	23.38%
More Telephone	82	4.70%
More Information on Area Attractions	363	20.80%
More Vending	340	19.48%
Computer Ports	120	6.88%
Other	111	6.36%

Percent Responding: 95.99%

Question 14: What type of overnight accommodations are you using on this trip? (Check all that apply)

	NO.	PERCENT
State Park Camping	165	9.46%
Resort/Cabin	73	4.18%
State Park Cabin	22	1.26%
Hotel/Motel	818	46.88%
Private Campground	182	10.43%
Family/Friend	416	23.84%

Percent Responding: 95.99%

Question 15: How safe do you feel using Minnesota rest areas on Interstate highways?

Percent Responding: 92.09%

Question 16: How safe do you feel using Minnesota rest areas on Interstate highways after dark?

Mean	4.78

Percent Responding: 84.76%

Question 17: Do you feel State Highway Patrol offices and stations in rest areas improves motorist safety?

	NO.	PERCENT
YES	1,396	80.00%
NO	97	5.56%

Percent Responding: 85.56%

Question 18: If you are a Commercial Truck driver, are you able to find off road parking locations in Minnesota when you need them for stopping and resting?

	NO.	PERCENT
Daytime (6am-10pm)		
Yes	132	77.19%
No	39	22.81%
Nighttime (10pm-6am)		
Yes	65	38.01%
No	106	61.99%

Percent Responding: 100.00%

Question 19: How many times per month do you use safety rest areas nationwide: (Pick only one for each question)

	NO.	PERCENT
DAYTIME		
Short Stops (<20 minutes)		
1-5	48	28.07%
6-10	30	17.54%
10-30	51	29.82%
More than 30	28	16.37%
Rest Periods (>20 minutes)		
1-5	41	23.98%
6-10	31	18.13%
10-30	16	9.36%
More than 30	17	9.94%
NIGHTTIME		
Short Stops (<20 minutes)		
1-5	39	22.81%
6-10	31	18.13%
10-30	27	15.79%
More than 30	14	8.19%
Rest Periods (>20 minutes)		
1-5	33	19.30%
6-10	44	25.73%
10-30	24	14.04%
More than 30	24	14.04%

Percent Responding: 91.81%

APPENDIX

Blue Earth Safety Rest Area (Eastbound and Westbound)

- Percentage of Mainline Traffic Stopping at the Facility By Vehicle Class
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
 - o 9:00 a.m. 5:00 p.m.
 - o 11:00 a.m. − 2 p.m.
- Percentage of Mainline Traffic for All Vehicle Classes
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
 - o 9:00 a.m. 5:00 p.m.
 - o 11:00 a.m. − 2 p.m.

Des Moines River Safety Rest Area (Westbound)

- Percentage of Mainline Traffic Stopping at the Facility By Vehicle Class
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. 7:00 a.m.
 - o 9:00 a.m. − 5:00 p.m.
 - o 11:00 a.m. − 2 p.m.
- Percentage of Mainline Traffic for All Vehicle Classes
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
 - o 9:00 a.m. − 5:00 p.m.
 - o 11:00 a.m. − 2 p.m.

Adrian Safety Rest Area (Eastbound & Westbound)

- Percentage of Mainline Traffic Stopping at the Facility By Vehicle Class
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
- Percentage of Mainline Traffic for All Vehicle Classes
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.

Beaver Creek Traveler Information Center

- Percentage of Mainline Traffic Stopping at the Facility By Vehicle Class
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
- Percentage of Mainline Traffic for All Vehicle Classes
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.

Clear Lake Safety Rest Area (Eastbound)

- Percentage of Mainline Traffic Stopping at the Facility By Vehicle Class
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
- Percentage of Mainline Traffic for All Vehicle Classes
 - \circ 7:00 a.m. -5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.

South Dakota Weigh Station & Welcome Center

- Percentage of Mainline Traffic Stopping at the Facility By Vehicle Class
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
- Percentage of Mainline Traffic for All Vehicle Classes
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.

Watonwan Safety Rest Area (Eastbound & Westbound)

- Percentage of Mainline Traffic Stopping at the Facility By Vehicle Class
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
- Percentage of Mainline Traffic for All Vehicle Classes
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.

Worthington Traveler Information Center

- Percentage of Mainline Traffic Stopping at the Facility By Vehicle Class
 - o 7:00 a.m. − 5:00 p.m.
 - o 5:00 p.m. − 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.
- Percentage of Mainline Traffic for All Vehicle Classes
 - o 7:00 a.m. 5:00 p.m.
 - o 5:00 p.m. 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.

Worthington Truck Scale

- Percentage of Mainline Traffic for All Vehicle Classes
 - o 7:00 a.m. 5:00 p.m.
 - o 5:00 p.m. 11:00 p.m.
 - o 11:00 p.m. − 7:00 a.m.

2001 District 7 Safety Rest Area Usage Survey Blue Earth Rest Area

Percent of Mainline Traffic Stopping at Rest Area (Westbound)

Time	TOTAL	1	2	3	10	11	12	13	20	30	31	40
9:00 a.m 5:00 p.m.	12.2%	12.5%	44.4%	8.3%	11.1%	23.3%	6.5%	9.8%	11.4%	19.4%	12.5%	16.0%
11:00 a.m2:00 p.m.	16.1%	16.7%	20.0%	21.4%	15.1%	30.9%	10.6%	10.4%	12.6%	27.3%	28.6%	17.1%

Source: Mn/DOT User Surveys from Thursday, August 9, 2001 to Monday, August 13, 2001.

Percentage of Mainline Traffic for All Vehicle Classes (Westbound)

Time	1	2	3	10	11	12	13	20	30	31	40
9:00 a.m 5:00 p.m.	41.5%	0.1%	0.3%	36.8%	2.7%	3.0%	1.4%	9.8%	2.1%	0.1%	2.1%
11:00 a.m2:00 p.m.	40.8%	0.1%	0.3%	36.6%	3.0%	3.3%	1.4%	10.1%	2.2%	0.1%	2.0%

Source: Mn/DOT User Surveys from Thursday, August 9, 2001 to Monday, August 13, 2001.

2001 District 7 Safety Rest Area Usage Survey Des Moines River Rest Area

Percent of Mainline Traffic Stopping at Rest Area

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	8.2%	11.0%	8.8%	7.1%	4.8%	7.4%	9.3%	0.0%	7.7%	8.7%	3.3%	14.3%	0.0%	33.3%
5:00 p.m 11:00 p.m.	5.8%	10.7%	6.3%	4.7%	2.6%	6.0%	0.0%	#DIV/0!	4.7%	7.3%	0.0%	10.0%	0.0%	#DIV/0!
11:00 p.m 7:00 a.m.	8.9%	15.7%	8.9%	9.1%	4.8%	6.8%	0.0%	100.0%	5.5%	11.6%	0.0%	0.0%	0.0%	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.

Percentage of Mainline Traffic for All Vehicle Classes

Time	BII	E CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	2.6	% 55.0%	25.7%	2.7%	4.0%	0.3%	0.0%	4.4%	5.1%	0.2%	0.0%	0.0%	0.0%
5:00 p.m 11:00 p.m.	1.9	% 57.3%	25.0%	3.0%	3.8%	0.3%	0.0%	3.5%	5.1%	0.1%	0.1%	0.0%	0.0%
11:00 p.m 7:00 a.m.	2.8	% 45.4%	23.4%	4.2%	4.1%	0.6%	0.0%	7.3%	11.4%	0.1%	0.4%	0.2%	0.1%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.

Percent of Mainline Traffic Stopping at Rest Area

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
9:00 a.m 5:00 p.m.	8.3%	10.2%	8.9%	7.2%	4.9%	8.1%	10.5%	0.0%	7.9%	8.2%	4.3%	0.0%	0.0%	50.0%
11:00 a.m2:00 p.m.	9.1%	7.8%	10.0%	7.9%	6.7%	8.4%	10.0%	0.0%	8.7%	7.9%	0.0%	0.0%	0.0%	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.

Percentage of Mainline Traffic for All Vehicle Classes

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
9:00 a.m 5:00 p.m.	2.5%	56.0%	25.8%	2.4%	3.9%	0.2%	0.0%	4.3%	4.6%	0.2%	0.0%	0.0%	0.0%
11:00 a.m2:00 p.m.	2.6%	56.0%	24.9%	2.6%	3.9%	0.2%	0.1%	4.7%	4.8%	0.2%	0.1%	0.0%	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.

2001 District 7 Safety Rest Area Usage Survey Adrian Rest Area

Percent of Mainline Traffic Stopping at Rest Area (Westbound)

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	8.4%	8.3%	6.8%	11.4%	11.1%	7.5%	4.0%	0.0%	6.6%	33.7%	28.6%	23.1%	0.0%	#DIV/0!
5:00 p.m 11:00 p.m.	6.6%	9.3%	5.0%	9.1%	11.8%	5.4%	25.0%	#DIV/0!	3.2%	33.0%	#DIV/0!	0.0%	0.0%	#DIV/0!
11:00 p.m 7:00 a.m.	8.6%	11.9%	6.4%	11.1%	11.1%	4.2%	33.3%	#DIV/0!	3.2%	30.2%	50.0%	11.8%	37.5%	#DIV/0!

Source: Mn/DOT Tube Counts from Friday, August 10, 2001 to Monday, August 13, 2001.

Percentage of Mainline Traffic for All Vehicle Classes (Westbound)

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	2.1%	66.4%	19.2%	1.7%	3.5%	0.2%	0.0%	4.6%	2.2%	0.0%	0.1%	0.0%	0.0%
5:00 p.m 11:00 p.m.	1.7%	69.4%	16.9%	1.5%	3.2%	0.2%	0.0%	4.1%	2.9%	0.0%	0.1%	0.0%	0.0%
11:00 p.m 7:00 a.m.	1.8%	62.8%	16.0%	2.9%	3.5%	0.1%	0.0%	6.8%	4.8%	0.2%	0.7%	0.3%	0.0%

Source: Mn/DOT Tube Counts from Friday, August 10, 2001 to Monday, August 13, 2001.

Percent of Mainline Traffic Stopping at Rest Area (Eastbound)

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	5.9%	7.6%	4.5%	7.6%	7.6%	4.8%	20.0%	0.0%	4.7%	15.6%	10.0%	0.0%	14.3%	0.0%
5:00 p.m 11:00 p.m.	5.4%	9.4%	3.7%	6.4%	6.3%	5.6%	18.8%	#DIV/0!	4.7%	9.3%	0.0%	0.0%	14.3%	0.0%
11:00 p.m 7:00 a.m.	7.9%	28.3%	6.3%	7.0%	7.9%	4.3%	50.0%	#DIV/0!	6.1%	18.1%	20.0%	6.3%	0.0%	#DIV/0!

Source: Mn/DOT Tube Counts from Friday, August 10, 2001 to Monday, August 13, 2001.

Percentage of Mainline Traffic for All Vehicle Classes (Eastbound)

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	15.5%	52.3%	19.1%	1.8%	3.3%	0.1%	0.0%	5.9%	1.8%	0.0%	0.0%	0.0%	0.0%
5:00 p.m 11:00 p.m.	14.3%	50.8%	21.4%	2.0%	2.9%	0.2%	0.0%	6.5%	1.7%	0.0%	0.1%	0.1%	0.0%
11:00 p.m 7:00 a.m.	4.7%	52.2%	21.9%	3.9%	4.7%	0.3%	0.0%	10.5%	3.2%	0.2%	0.5%	0.0%	0.0%

Source: Mn/DOT Tube Counts from Friday, August 10, 2001 to Monday, August 13, 2001.

2001 District 7 Safety Rest Area Usage Survey Beaver Creek Traveler Information Center

Percent of Mainline Traffic Stopping at Rest Area

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	10.6%	9.3%	9.2%	5.0%	20.2%	6.5%	37.8%	50.0%	15.1%	57.7%	55.6%	#DIV/0!	50.0%	#DIV/0!
5:00 p.m 11:00 p.m.	5.8%	8.3%	6.5%	3.7%	6.6%	4.3%	0.0%	#DIV/0!	3.9%	51.9%	0.0%	100.0%	#DIV/0!	0.0%
11:00 p.m 7:00 a.m.	7.6%	14.0%	10.0%	3.7%	7.1%	1.9%	14.3%	#DIV/0!	2.4%	44.4%	0.0%	50.0%	#DIV/0!	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 at 1:30 p.m. to Friday, August 10, 2001 at 1:30 p.m.

Percentage of Mainline Traffic for All Vehicle Classes

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	17.1%	31.5%	29.3%	4.1%	8.7%	0.6%	0.0%	4.5%	3.8%	0.2%	0.0%	0.1%	0.0%
5:00 p.m 11:00 p.m.	16.2%	28.2%	34.4%	3.7%	9.9%	1.1%	0.0%	5.4%	1.0%	0.0%	0.0%	0.0%	0.1%
11:00 p.m 7:00 a.m.	11.7%	22.7%	34.1%	8.8%	13.0%	1.8%	0.0%	5.2%	2.3%	0.1%	0.3%	0.0%	0.1%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 at 1:30 p.m. to Friday, August 10, 2001 at 1:30 p.m.

2001 District 7 Safety Rest Area Usage Survey Clear Lake Rest Area

Percent of Mainline Traffic Stopping at Rest Area (Eastbound)

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	9.3%	10.3%	7.9%	10.7%	12.5%	9.0%	5.3%	0.0%	7.6%	14.9%	20.0%	9.1%	0.0%	13.3%
5:00 p.m 11:00 p.m.	7.1%	10.3%	5.5%	8.7%	6.7%	5.3%	10.5%	#DIV/0!	4.4%	14.7%	11.1%	0.0%	25.0%	0.0%
11:00 p.m 7:00 a.m.	10.3%	17.6%	7.6%	13.1%	16.4%	7.6%	0.0%	#DIV/0!	6.4%	20.3%	0.0%	0.0%	0.0%	#DIV/0!

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.

Percentage of Mainline Traffic for All Vehicle Classes (Eastbound)

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	14.6%	54.6%	17.4%	1.2%	2.9%	0.2%	0.0%	6.0%	4.3%	0.1%	0.1%	0.0%	0.1%
5:00 p.m 11:00 p.m.	13.2%	50.4%	19.8%	1.1%	2.7%	0.2%	0.0%	7.4%	4.5%	0.1%	0.1%	0.0%	0.0%
11:00 p.m 7:00 a.m.	3.3%	48.5%	23.3%	2.3%	3.8%	0.3%	0.0%	9.5%	8.3%	0.2%	0.3%	0.1%	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.

2001 District 7 Safety Rest Area Usage Survey South Dakota Weigh Station and Welcome Center

Percent of Mainline Traffic Stopping at Rest Area

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	17.8%	21.5%	11.7%	12.4%	35.8%	17.3%	66.0%	#DIV/0!	13.9%	74.9%	75.0%	47.6%	50.0%	50.0%
5:00 p.m 11:00 p.m.	14.9%	7.3%	7.5%	8.3%	34.3%	13.6%	60.0%	#DIV/0!	12.4%	76.6%	72.7%	40.0%	50.0%	100.0%
11:00 p.m 7:00 a.m.	11.1%	14.7%	6.2%	5.8%	14.3%	8.2%	37.5%	100.0%	6.6%	63.6%	66.7%	14.3%	33.3%	50.0%

Source: Mn/DOT Tube Counts from Friday, August 10, 2001 to Monday, August 13, 2001.

Percentage of Mainline Traffic for All Vehicle Classes

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	1.8%	55.0%	24.4%	2.6%	3.6%	0.3%	0.0%	4.9%	7.0%	0.2%	0.1%	0.0%	0.0%
5:00 p.m 11:00 p.m.	1.2%	55.8%	22.5%	3.1%	3.6%	0.2%	0.0%	4.9%	8.2%	0.1%	0.1%	0.1%	0.0%
11:00 p.m 7:00 a.m.	1.1%	53.9%	22.9%	3.0%	3.2%	0.3%	0.0%	6.9%	7.3%	0.1%	0.9%	0.2%	0.1%

Source: Mn/DOT Tube Counts from Friday, August 10, 2001 to Monday, August 13, 2001.

2001 District 7 Safety Rest Area Usage Survey <u>Watonwan Rest Area</u>

Percent of Mainline Traffic Stopping at Rest Area (Westbound)

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	3.6%	18.1%	2.7%	3.0%	0.8%	1.8%	8.0%	0.0%	1.0%	0.4%	0.0%	8.3%	25.0%	0.0%
5:00 p.m 11:00 p.m.	3.1%	24.4%	1.8%	2.5%	1.3%	1.7%	10.0%	0.0%	1.6%	0.0%	0.0%	0.0%	100.0%	0.0%
11:00 p.m 7:00 a.m.	3.3%	17.1%	2.5%	2.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Sunday, August 12, 2001.

Percentage of Mainline Traffic for All Vehicle Classes (Westbound)

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	6.3%	61.0%	21.4%	2.0%	3.3%	0.2%	0.0%	3.5%	2.0%	0.1%	0.1%	0.0%	0.0%
5:00 p.m 11:00 p.m.	5.0%	63.0%	21.9%	1.5%	3.2%	0.2%	0.0%	3.5%	1.5%	0.1%	0.2%	0.0%	0.0%
11:00 p.m 7:00 a.m.	10.7%	44.7%	18.3%	4.8%	4.2%	0.3%	0.1%	9.1%	5.3%	0.1%	2.1%	0.2%	0.1%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Sunday, August 12, 2001.

Percent of Mainline Traffic Stopping at Rest Area (Eastbound)

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	20.1%	9.6%	21.9%	34.0%	18.2%	19.4%	63.2%	#DIV/0!	11.3%	47.7%	0.0%	33.3%	#DIV/0!	#DIV/0!
5:00 p.m 11:00 p.m.	14.6%	8.0%	15.6%	26.6%	10.0%	15.8%	72.7%	#DIV/0!	2.3%	37.5%	33.3%	#DIV/0!	#DIV/0!	#DIV/0!
11:00 p.m 7:00 a.m.	20.5%	11.1%	28.6%	19.6%	12.0%	21.4%	33.3%	#DIV/0!	18.4%	41.4%	50.0%	60.0%	0.0%	#DIV/0!

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Sunday, August 12, 2001.

Percentage of Mainline Traffic for All Vehicle Classes (Eastbound)

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	28.4%	51.4%	11.0%	1.6%	2.5%	0.7%	0.0%	2.3%	1.6%	0.1%	0.1%	0.0%	0.0%
5:00 p.m 11:00 p.m.	29.4%	50.5%	10.3%	2.6%	2.5%	0.7%	0.0%	2.8%	1.0%	0.2%	0.0%	0.0%	0.0%
11:00 p.m 7:00 a.m.	35.6%	24.2%	11.4%	6.2%	3.5%	0.7%	0.0%	9.4%	7.2%	0.5%	1.2%	0.2%	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Sunday, August 12, 2001.

2001 District 7 Safety Rest Area Usage Survey Worthington Traveler Information Center

Percent of Mainline Traffic Stopping at Rest Area

Time	TOTAL	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	8.5%	4.2%	9.0%	9.3%	3.4%	9.3%	0.0%	0.0%	8.2%	6.1%	2.3%	0.0%	25.0%	0.0%
5:00 p.m 11:00 p.m.	6.9%	4.1%	8.0%	5.9%	2.2%	8.8%	0.0%	#DIV/0!	0.0%	4.2%	0.0%	#DIV/0!	#DIV/0!	50.0%
11:00 p.m 7:00 a.m.	5.7%	4.2%	6.6%	8.1%	6.3%	4.2%	0.0%	#DIV/0!	0.0%	4.8%	0.0%	0.0%	#DIV/0!	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.

Percentage of Mainline Traffic for All Vehicle Classes

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	3.2%	65.0%	16.4%	0.8%	2.6%	1.1%	0.0%	3.0%	7.1%	0.6%	0.0%	0.1%	0.1%
5:00 p.m 11:00 p.m.	4.4%	64.6%	14.0%	1.6%	2.0%	1.2%	0.0%	2.1%	9.3%	0.6%	0.0%	0.0%	0.1%
11:00 p.m 7:00 a.m.	5.1%	51.8%	14.4%	1.7%	2.6%	1.7%	0.0%	5.7%	15.4%	1.0%	0.5%	0.0%	0.1%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.

2001 District 7 Safety Rest Area Usage Survey <u>Worthington Truck Scale</u>

Percentage of Mainline Traffic for All Vehicle Classes

Time	BIKE	CARS	2A-L	BUS	2A-S	3A-S	4A-S	<5-D	5A-D	>6-D	<6-M	6A-M	>6-M
7:00 a.m 5:00 p.m.	13.8%	47.9%	24.1%	1.9%	3.2%	0.1%	0.0%	5.8%	2.9%	0.0%	0.1%	0.0%	0.1%
5:00 p.m 11:00 p.m.	12.6%	45.5%	25.6%	2.4%	3.1%	0.1%	0.0%	7.0%	3.4%	0.1%	0.1%	0.0%	0.0%
11:00 p.m 7:00 a.m.	4.1%	42.9%	26.9%	5.0%	5.5%	0.3%	0.0%	11.7%	3.4%	0.0%	0.3%	0.0%	0.0%

Source: Mn/DOT Tube Counts from Thursday, August 9, 2001 to Monday, August 13, 2001.