



*Minnesota Department  
of Transportation*

*Des Moines River  
Safety Rest Area  
I-90 Westbound  
2001 User Survey*

*Prepared with Assistance from SRF Consulting Group, Inc.*

**DES MOINES RIVER  
SAFETY REST AREA  
INTERSTATE 90 WESTBOUND  
2001 USER SURVEY**

Prepared for

**Minnesota Department of Transportation**

Prepared with Assistance from

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## APPENDIX – TRAFFIC VOLUME DATA

## EXECUTIVE SUMMARY

### Survey Purpose

To identify use volume, preferred site functions, elements, and aesthetics at the Des Moines River 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.

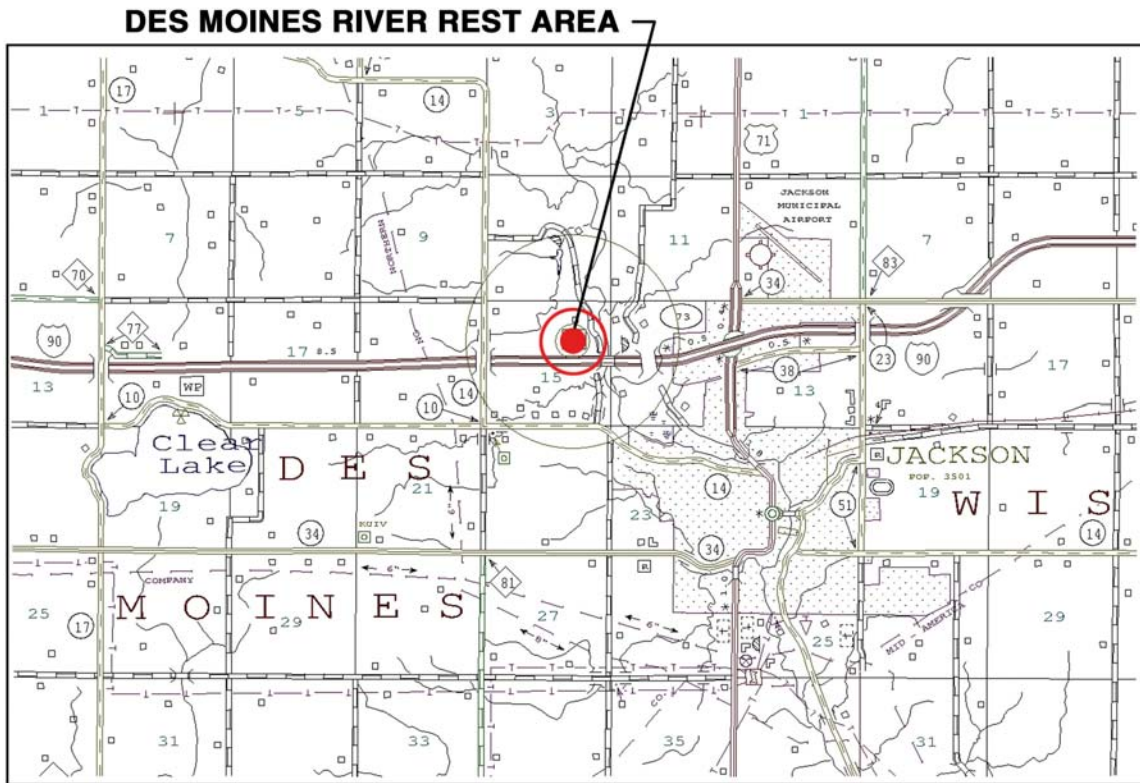
Safety Rest Areas are preferred over Private Commercial facilities by a factor greater than 5:1. Less than 9% of all motorists prefer Commercial Facilities, and only 31% prefer combined Safety Rest Areas and Commercial Facilities.

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 Des Moines River Safety Rest Area.



The Des Moines River Safety Rest Area is located on I-90 in Jackson County.

The driver of each vehicle was given one copy of the following survey. (The 8½” X 14” survey has been reduced to fit this page.)



**DES MOINES RIVER WEST BOUND SAFETY REST AREA**  
**USER SURVEY, AUGUST 9 - 13, 2001**

Day of the week: Thu. Fri. Sat. Sun. Mon. Time in: \_\_\_\_\_ Lic. State: MN \_\_\_\_\_ (specify other)  
 Vehicle type: 1 2 3 10 11 12 13 20 30 31 40 Time-out: \_\_\_\_\_

**Dear Motorist:** The Minnesota Department of Transportation, (Mn/DOT), is attempting to determine how Safety Rest Areas and Travel Information Centers along highways are utilized and what facilities should be provided to satisfy your needs. Only you can supply the information we need to plan future facilities. Please answer the following questions:

- Number of people in your vehicle? senior adults (over 59) adults (16-59) children (under 16)  
 Male \_\_\_\_\_  
 Female \_\_\_\_\_
- When traveling how long do you prefer to travel between stops? (Check one)  
 \_\_\_ 1 hour \_\_\_ 1-2 hours \_\_\_ 2-2 1/2 hours \_\_\_ 2 1/2-3 hours \_\_\_ 3-4 hours \_\_\_ 4 or more hours
- 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)
- How far will you travel today? \_\_\_\_\_ (total miles)
- 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) \_\_\_\_\_ (i)
- Which of the following facilities were used by your party? (check all that apply)  
 restroom (a)  map displays (f)  vending (k)  
 picnic table (b)  travel information display (g)  trash/recycle receptacle (l)  
 picnic shelters (c)  bulletin board displays (h)  walking paths (m)  
 telephone (d)  pet exercise area (i)  play equipment (n)  
 outside water faucet (e)  interpretive sign (j)  other (please specify) (o) \_\_\_\_\_
- What additional facilities would like to see at rest areas? \_\_\_\_\_
- Was the information displayed in the bulletin board useful?  Yes  No  No Opinion
- 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 C. private/commercial facilities (restaurant/gas station/convenience store)  
 B. public park 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)  restaurant (fast food/takeout) (c)  gas and vehicle service (e)  
 vending machines (b)  restaurant (sit down) (d)  other \_\_\_\_\_ (f)
- 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)  
 more displays (a)  more parking (d)  more information on area attractions (g)  
 more rest rooms (b)  travel information (e)  more vending area (h)  
 internet access (c)  more telephones (f)  computer ports (i)  
 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)

Safe	How safe do you feel using Minnesota rest areas on Interstate highways?						
	1	2	3	4	5	6	7
16. How safe do you feel using Minnesota rest areas on Interstate highways after dark?	1	2	3	4	5	6	7

**Commercial Truck Operators**

17. 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  Yes  No  
 Nighttime 10pm - 6am  Yes  No

18. How many times per month do you use safety rest areas nationwide: (pick only one for each question)

		1-5	6-10	10-30	more than 30
daytime:	short stops (less than 20 minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	rest periods (greater than 20 minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
nighttime:	short stops (less than 20 minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	rest periods (greater than 20 minutes)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Additional Comments: Please return survey to the staff at the exit ramp. **Thank You.**  
 (Please use other side for additional comments)

## 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:* Mixture of Light Rain, Sun and Clouds

*Total I-90 Mainline Vehicles Traveling Westbound:* 12,477

*I-90 Mainline Vehicles Traveling Westbound Passing Safety Rest Area Without Entering:* 11,406

*Vehicles Traveling Westbound Entering Safety Rest Area:* 1,232

*Percent of I-90 Mainline Vehicles Stopping at Safety Rest Area:* 9.87%

*Percent of Vehicles Stopping at Safety Rest Area that are from Out-Of-State:* 72.81%

*Percent of Vehicles Stopping at Safety Rest Area that are from In-State:* 27.19%

### Age Distribution of People Using the Safety Rest Area

Age	TOTAL	
	No.	Percent
Senior Adults	670	21.92%
Adults	1,693	55.38%
Children	694	22.70%
<b>Total</b>	<b>3,057</b>	<b>100.00%</b>

*Average Number of People per Vehicle:* 2.48

### Average Length of Stay in Safety Rest Area

All Vehicles	18.18 minutes
Standard Vehicles	16.46 minutes
Oversize & Commercial Vehicles	25.97 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	173	1,834	2,007	8.62%
August 10th	Friday	266	2,516	2,782	9.56%
August 11th	Saturday	308	2,282	2,590	11.89%
August 12th	Sunday	279	2,510	2,789	10.00%
August 13th	Monday	206	2,264	2,309	8.92%
<b>Total (surveys returned)</b>		<b>1,232</b>	<b>11,406</b>	<b>12,477</b>	<b>9.87%</b>

**Hourly Volume of Vehicles Entering Safety Rest Area**

Time	Thursday	Friday	Saturday	Sunday	Monday	Total	Percent
<b>9:00 – 10:00</b>	0	27	37	23	20	107	8.87%
<b>10:00 – 11:00</b>	12	30	41	21	21	124	10.28%
<b>11:00 – 12:00</b>	29	45	50	37	33	194	16.09%
<b>12:00 – 1:00</b>	24	35	45	45	32	181	15.01%
<b>1:00 – 2:00</b>	24	35	34	32	34	159	13.18%
<b>2:00 – 3:00</b>	32	30	30	30	25	147	12.19%
<b>3:00 – 4:00</b>	30	37	33	46	19	165	13.68%
<b>4:00 – 5:00</b>	20	22	32	38	16	128	10.61%
<b>Total</b>	<b>171</b>	<b>261</b>	<b>302</b>	<b>272</b>	<b>200</b>	<b>1,206</b>	<b>100.00%</b>

Based on user survey data, not traffic tube data.

**Type of Vehicle Entering Safety Rest Area**

	<b>Vehicle Total</b>	<b>Average Length of Stay</b>	<b>Number of People</b>	<b>(A)</b>	<b>(B)</b>
<b>Standard Vehicles</b>					
<b>Cars</b>	585	16.01	1,360	48.31%	10.66%
<b>Pick-Up or Van</b>	366	16.98	1,121	30.22%	8.57%
<b>Other – Motorcycle</b>	30	19.03	38	2.48%	8.80%
<b>Oversize Vehicles</b>					
<b>Pick-Up – Van w/ Recreational Trailer</b>	45	24.18	123	3.72%	11.66%
<b>Recreational Vehicles</b>	53	28.86	133	4.38%	19.49%
<b>Pick-Up – Van w/ Other Trailer</b>	22	27.67	45	1.82%	8.37%
<b>Car w/ Recreational Trailer</b>	13	16.77	32	1.07%	43.33%
<b>Car w/ Other Trailer</b>	6	16.17	11	0.50%	33.33%
<b>Commercial Vehicles</b>					
<b>Semi-Tractor Trailer Trucks</b>	76	28.59	88	6.28%	6.60%
<b>Commercial Trucks</b>	13	16.15	13	1.07%	7.22%
<b>Buses</b>	2	34.00	45	0.17%	11.11%
<b>Total</b>	<b>1,211</b>	<b>18.18</b>	<b>3,009</b>	<b>100.00%</b>	

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

(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.

Note: Total does not equal 1,232 due to recording error for 21 vehicles.

## SURVEY QUESTIONS

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

Age	MALE		FEMALE		TOTAL	
	No.	Percent	No.	Percent	No.	Percent
Senior Adults	380	11.87%	314	9.76%	694	22.70%
Adults	868	28.50%	825	27.25%	1,693	55.38%
Children	338	11.35%	332	11.28%	670	21.92%
<b>Total</b>	<b>1,586</b>	<b>51.72%</b>	<b>1,471</b>	<b>48.28%</b>	<b>3,057</b>	<b>100.00%</b>

*Average Number of People per Vehicle: 2.48*

*Percent Responding: 95.29%*

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

	NO.	PERCENT
<b>1 Hour</b>	33	2.68%
<b>1-2 Hours</b>	216	17.53%
<b>2-2 1/2 Hours</b>	334	27.11%
<b>2 1/2-3 Hours</b>	226	18.34%
<b>3-4 Hours</b>	190	15.42%
<b>4 or More Hours</b>	80	6.49%

*Percent Responding: 87.58%*

**Question 3: What is your reason for traveling today?**

	NO.	PERCENT
<b>Business Travel</b>	89	7.22%
<b>Commercial Driver</b>	63	5.11%
<b>Pleasure Travel</b>	719	58.36%
<b>Other Personal Travel</b>	193	15.67%

*Percent Responding: 86.36%*

**Question 4: How far will you travel today?**

<b>Average</b>	396 miles
<b>Median</b>	400 miles

*Percent Responding:* 94.89%

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

<b>Average</b>	1,431 miles
<b>Median</b>	880 miles

*Percent Responding:* 95.29%

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

	<b>NO.</b>	<b>PERCENT</b>
<b>Restrooms</b>	967	78.49%
<b>Travel Information</b>	42	3.41%
<b>Sleep</b>	28	2.27%
<b>Rest/Relax</b>	376	30.52%
<b>Water</b>	113	9.17%
<b>Telephone</b>	42	3.41%
<b>Eat/Picnic</b>	129	10.47%
<b>Switch Drivers</b>	159	12.91%
<b>Vending</b>	68	5.52%
<b>Check Load/Vehicle</b>	65	5.28%
<b>Other</b>	89	7.22%

*Percent Responding:* 88.72%

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

	<b>NO.</b>	<b>PERCENT</b>
<b>Restrooms</b>	1,018	82.63%
<b>Picnic Table</b>	129	10.47%
<b>Picnic Shelters</b>	29	2.35%
<b>Telephone</b>	53	4.30%
<b>Outside Water Faucet</b>	99	8.04%
<b>Map Displays</b>	199	16.15%
<b>Travel Information Display</b>	93	7.55%
<b>Bulletin Board Displays</b>	57	4.63%
<b>Pet Exercise Area</b>	65	5.28%
<b>Interpretive Sign</b>	5	0.41%
<b>Vending</b>	127	10.31%
<b>Trash/Recycle Receptacle</b>	268	21.75%
<b>Walking Paths</b>	117	9.50%
<b>Play Equipment</b>	55	4.46%
<b>Other</b>	35	2.84%

*Percent Responding: 88.72%*

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

- Coffee
- Food
- Gas
- Maps
- Vending Machines
- Playground
- Travel Info
- Current Weather Info

*Percent Responding: 28.73%*

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

	<b>NO.</b>	<b>PERCENT</b>
<b>Yes</b>	492	39.94%
<b>No</b>	32	2.60%
<b>No Opinion</b>	464	37.66%

*Percent Responding:* 80.20%

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

- Area Attractions
- Current Road Conditions (Construction Zones)
- Mileage Map/Chart
- Hotel/Motel
- Misc. Maps
- Current Weather Conditions

*Percent Responding:* 28.73%

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

	<b>NO.</b>	<b>PERCENT</b>
<b>Safety Rest Area</b>	520	42.21%
<b>Public Park</b>	22	1.79%
<b>Private/Commercial Facilities</b>	111	9.01%
<b>Combined Safety Rest Areas &amp; Private/Commercial Facilities</b>	364	29.55%

*Percent Responding:* 82.55%

**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)**

	<b>NO.</b>	<b>PERCENT</b>
<b>None</b>	288	23.38%
<b>Vending Machines</b>	279	22.65%
<b>Restaurant (Fast Food/Takeout)</b>	394	31.98%
<b>Restaurant (Sit Down)</b>	142	11.53%
<b>Gas and Vehicle Service</b>	398	32.31%
<b>Other</b>	37	3.00%

*Percent Responding: 88.72%*

**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)**

	<b>NO.</b>	<b>PERCENT</b>
<b>More Displays</b>	48	3.90%
<b>More Rest Rooms</b>	115	9.33%
<b>Internet Access</b>	120	9.74%
<b>More Parking</b>	89	7.22%
<b>Travel Information</b>	193	15.67%
<b>More Telephone</b>	56	4.55%
<b>More Information on Area Attractions</b>	217	17.61%
<b>More Vending</b>	238	19.32%
<b>Computer Ports</b>	79	6.41%
<b>Other</b>	112	9.09%

*Percent Responding: 88.72%*

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

	NO.	PERCENT
State Park Camping	122	9.90%
Resort/Cabin	42	3.41%
State Park Cabin	21	1.71%
Hotel/Motel	550	44.64%
Private Campground	135	10.96%
Family/Friend	252	20.46%

*Percent Responding: 88.72%*

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

Mean	4.40
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*Percent Responding: 83.66%*

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

Mean	4.73
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*Percent Responding: 77.96%*

**Question 17: 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
<b>Daytime (6am-10pm)</b>		
Yes	66	85.71%
No	11	14.29%
<b>Nighttime (10pm-6am)</b>		
Yes	33	42.86%
No	44	57.14%

*Percent Responding: 100.00%*



**Question 18: How many times per month do you use safety rest areas nationwide:  
(Pick only one for each question)**

	<b>NO.</b>	<b>PERCENT</b>
<b>Daytime</b>		
<b>Short Stops (&lt;20 minutes)</b>		
1-5	16	20.78%
6-10	9	11.69%
10-30	24	31.17%
More than 30	20	25.97%
<b>Rest Periods (&gt;20 minutes)</b>		
1-5	16	20.78%
6-10	14	18.18%
10-30	17	22.08%
More than 30	7	9.09%
<b>Nighttime</b>		
<b>Short Stops (&lt;20 minutes)</b>		
1-5	19	24.68%
6-10	12	15.58%
10-30	15	19.48%
More than 30	7	9.09%
<b>Rest Periods (&gt;20 minutes)</b>		
1-5	11	14.29%
6-10	14	18.18%
10-30	26	33.77%
More than 30	11	14.29%

*Percent Responding: 89.61%*

## APPENDICES

### Des Moines River Safety Rest Area (Westbound)

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

### Blue Earth Safety Rest Area (Eastbound and Westbound)

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

**Adrian Safety Rest Area (Eastbound & Westbound)**

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

**Beaver Creek Traveler Information Center**

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

**Worthington Traveler Information Center**

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

**Worthington Truck Scale**

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

**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		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.		2.6%	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.m. - 2:00 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.m. - 2:00 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**  
**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.m. -2:00 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.m. -2:00 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  
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  
Watowan 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.	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  
Worthington Truck Scale**

**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.