

OFFICE MEMORANDUM

DATE: March 23, 1994

TO: Transportation District Engineers and Administrative Staffs
Duluth and Mankato Districts

FROM: James Reiersen *KW for JSR*
Supervisor, Site Development Unit, St. Paul

*Paul
4/16*

PHONE: 612-296-5773

SUBJECT: 1993 Safety Rest Area User Surveys
Knife River Safety Rest Area, TH 61, 15 mi. NE of Duluth, District 1
~~Minnesota Valley Safety Rest Area, TH 169, 2 mi. NE of Le Sueur, District 7~~

Attached for your review and file are the results of the 1993 User Surveys conducted at the:

1. Knife River Safety Rest Area, Class II facility, August 5, through 9, 1993;
2. Minnesota Valley Safety Rest Area, Class I facility, August 19, though 23, 1993.

Trunk highway motorists were surveyed during nine hour periods for five days. The primary objectives of the surveys were to: identify safety rest area usage patterns on trunk highways; verify safety rest area design criteria developed for trunk highway planning, location and design; and collect pertinent information for the redesign and rehabilitation of other facilities, as part of the Safety Rest Area Rehabilitation Program.

A comprehensive summary is found on page 1 and 2 of each User Survey.

The Design Services Section, Site Development Unit, will continue to conduct user surveys at selected interstate and trunk highway safety rest areas, especially at new facilities and sites marked for rehabilitation, to measure overall user patterns and needs, and to verify and update design criteria. If you have any questions or comments concerning this survey and the enclosed results, please contact myself, or Karl Weissenborn (612-296-0295).

Attachments

cc: Commissioner J. Denn
E. Cohoon
D. Durgin
G. Ofstead
P. Hughes
J. Sandahl
B. McFarlin
A. Schenkelberg
M. Sobolewski
R. Cartford
H. Nemec
M. Herman
Site Development Unit

C. Hamilton, Services for the Blind
D. Haskett, Tourism
C. McCall, Info Stop
D. Knutson, Green View Inc.



Minnesota Department of Transportation

Minnesota Valley Safety Rest Area 1993 User Survey

*Prepared by Office of Technical Support,
Site Development Unit*



March 23, 1994

State of Minnesota
Department of Transportation
Office of Technical Support
Transportation Building, Room 616
395 John Ireland Boulevard
Saint Paul, Minnesota 55155

The Minnesota Department of Transportation (Mn/DOT), Office of Technical Support - Site Development Unit, conducted a Safety Rest Area User Survey at the Minnesota Valley Safety Rest Area, located approximately 2 miles northeast of Le Sueur, on Minnesota Trunk Highway 169, August 19 through 23, 1993.

The objective of user surveys is to accumulate user data to verify or modify safety rest area design criteria developed for highway planning, location, and design. Pertinent information collected includes percent of vehicles stopping, traffic classification, persons per vehicle, and use of facilities.

Each vehicle was stopped before reaching the parking stalls and building. The driver of each vehicle was handed one 8 1/2" X 14" paper user survey. The boxed information at the top of each user survey, (day of week, licensing state, vehicle type, and time-in), was recorded by the on-site staff as the vehicle approached. All survey participants were asked to fill out the thirteen question survey during their stay at the facility. Commercial vehicle operators were asked to fill out three additional questions. As the motorists exited the facility, the surveys were collected by the on-site staff who then recorded the time-out.

From 8:00a to 5:00p during the five day survey, 818 vehicles and 1,733 people used the facility. Of all the trunk highway 169 traffic passing, 2.1% stopped and used the facility. This percentage is lower than the average stopping percentage Mn/DOT uses for design calculations for trunk highway rest areas. The average length of stay for all vehicles was 16.04 minutes. Of all the traffic stopping at the site, 58% of the non-commercial and 68% of the commercial traffic was traveling north toward Minneapolis/St. Paul.

When asked what additional facilities they would like to see in safety rest areas, non-commercial motorists favored more vending machines. Maps/travel information, more site development, fast food, and playground equipment were also popular answers for non-

commercial motorists. More vending machines was the most popular response of commercial vehicle operators.

Safety rest areas remain to be very popular with the traveling public. At this site, 86% of non-commercial motorist prefer to use safety rest areas compared to 5% who prefer private commercial facilities. Of commercial vehicle operators, 82% prefer to use safety rest areas compared to 12% who prefer to use private commercial facilities.

When asked, "If private and commercial development were permitted at safety rest areas, which of the following business types would you prefer?", non-commercial motorists responded: 32% no private/commercial development; 19% vending machines; 18% fast food restaurant; 13% gas/service; and 9% sit down restaurant. Thirty-one percent of commercial operators favor no private/commercial development.

Public funding of safety rest areas continues to be viewed very favorably by motorists. Of non-commercial vehicle operators, 91% responded that safety rest area construction and operation are a good use of State and Federal tax money, while 1% responded they are not a good use of tax money, with 8% not responding to the question. For the same tax question, 90% of commercial vehicle operators responded favorably, 2% unfavorably, with 8% not responding.

The last three user survey questions were written specifically for commercial vehicle operators. Not surprisingly, the metro Twin Cities area was the origin or end destination for 35% and 46% of commercial vehicles, respectively. Use of this facility by some commercial operators appears to be very regular. Only 13% of the vehicles stopping were first time users, with 31% using the site 1 to 5 times per month, 15% using the site 6 to 10 times per month, and 8% using the site more than 10 times per month.

The Minnesota Valley Safety Rest Area was opened in the summer of 1992. The information collected in the 1993 survey aids in the evaluation of the present facility and offers insights into the public's perception of this facility.

The results of this user survey are stored as a computer data file which allows comparison of a wide range of information and permits further opportunity for sorting data and analyzing specific user information.

For more information about this survey, please call the Mn/DOT Site Development Unit.

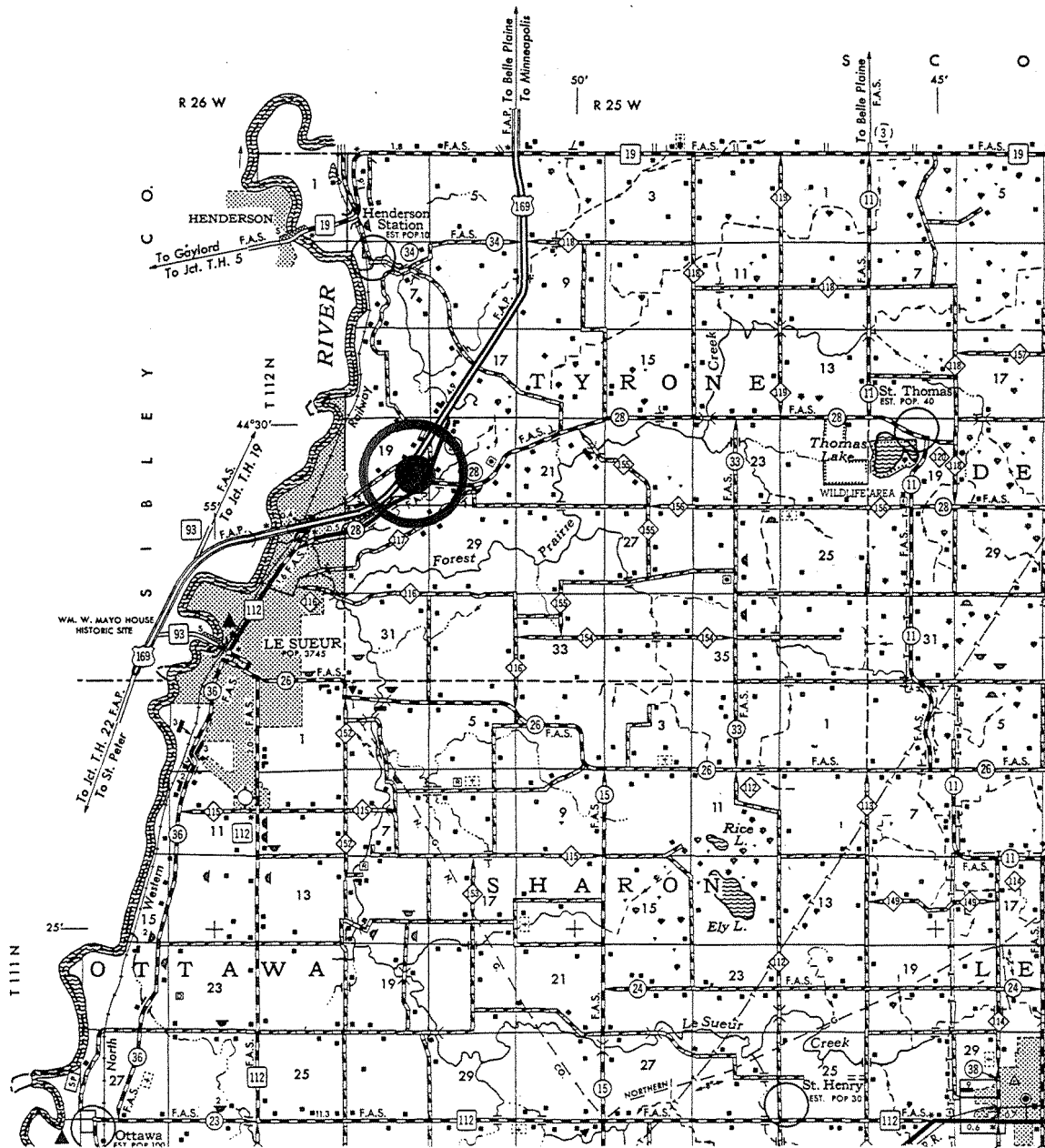


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Location of the Minnesota Valley Safety Rest Area.



The Minnesota Valley Safety Rest Area is located in Le Sueur County, approximately 2 miles northeast of the City of Le Sueur, on Minnesota Trunk Highway 169. There is one cross-over entry/exit point for the safety rest area facility from the multi-lane divided highway. The site overlooks the Minnesota River valley. Rolling glacial terrain with mixed farm fields and oak woodlands dominate the surrounding environment.

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



**MINNESOTA VALLEY SAFETY REST AREA
USER SURVEY, August 19 - 23, 1993**

Day of week: Thurs. Fri. Sat. Sun. Mon.	Vehicle Type: 1 2 3 10 11 12 13 20 30 31 40
Licensing State: MN _____ (specify other)	Time In: _____ Time Out: _____

Dear Motorist:

The Minnesota Department of Transportation is attempting to determine how Safety Rest Areas along interstate highways are utilized and what facilities should be provided to satisfy your needs. Only you can supply the information we need to plan future Safety Rest Area facilities. Please answer the following questions:

- Number of people in your vehicle? senior adults (over 60) _____ adults (16-59) _____ children (under 16) _____
- Reason for your travel? business: _____ vacation: _____ personal: _____
- How far do you generally travel between stops? miles _____ time: _____
- Please check your main reason for stopping. (pick one, write letter here) _____

A. rest room	D. rest/relax	G. switch driver	I. other _____ (please specify)
B. eat/picnic	E. water	H. travel information	
C. sleep	F. check load/equipment		
- Are you traveling . . . north towards Minneapolis/St. Paul, or, . . . south towards Mankato?
- How many people in your party used the following?
rest room facilities: _____ drinking water supply: _____ telephone: _____
- Which of the following facilities were used by your party?
 picnic table rest rooms telephone vending machines
 trash receptacle state map display recycle receptacle
 pet exercise area other _____

(please specify)
- What additional facilities would you like to see in safety rest areas _____
- When traveling, which facility do you prefer to use? (pick one, write letter here) _____

A. safety rest areas	B. private commercial facilities
----------------------	----------------------------------
- If private and commercial development were permitted at safety rest areas, which of the following business types would you prefer? (pick one, write letter here) _____

A. vending machines	C. restaurant (fast food/take out)	E. no private/commercial development
B. restaurant (sit down)	D. gas and vehicle services	
- If this facility were not available, where would you have stopped? (pick one, write letter here) _____

A. continue driving	C. highway shoulder	E. local park
B. commercial facility	D. next town	F. other _____ (please specify)
- What types of travel information would you like available at safety rest areas? (pick one, write letter here) _____

A. public recreation	D. road construction	G. "best route" selection guide
B. private recreation	E. weather conditions	H. other _____ (please specify)
C. mileage maps	F. private commercial facilities	
- Do you think safety rest area construction and operation are a good use of State and Federal tax money?
 yes No

COMMERCIAL TRUCK OPERATORS

- Where did your current trip originate? City _____ State _____ Zip Code _____
- Where will your current trip end? City _____ State _____ Zip Code _____
- How many times per month do you use this safety rest area? (pick one, write letter here) _____

A. less than once a month
B. 1 to 5 times/month
C. 6 to 10 times /month
D. more than 10 times/month
E. first time user

PLEASE RETURN SURVEY TO THE PEOPLE AT REST AREA EXIT RAMP. THANK YOU

SUMMARY OF COLLECTED DATA

Date/time of survey: August 19 through 23, 1993, 8:00a to 5:00p

Weather on site: mostly sunny to partly cloudy

Total TH 169 mainline vehicles: 39,051 (two-way)

TH 169 mainline vehicles passing safety rest area without entering: 39,051

Vehicles entering safety rest area: 818

Percent of TH 169 mainline vehicles stopping at safety rest area: 2.1%

Percent of out-of-state vehicles stopping the safety rest area: 24.48%

Percent in-state vehicles stopping safety rest area: 75.52%

Age distribution of people using the safety rest area:	18.58%	322	Senior adults (over 60)
	59.32%	1,028	Adults (16 to 59)
	<u>22.10%</u>	<u>383</u>	<u>Children (under 16)</u>
	100.00%	1,733	Total

Average number of people per vehicle: 2.12

Average length of stay in safety rest area: 16.04 minutes

Number of vehicles 8:00a to 5:00p

<u>Date</u>	<u>Day</u>	<u>Vehicles Entering Rest Area</u>	<u>Vehicles Not Entering Rest Area</u>	<u>Daily Traffic Totals</u>	<u>Ave. Pct. Stopping at Rest Area</u>
August 19	Thursday	153	7,318	7,471	2.0%
August 20	Friday	167	8,562	8,729	1.9%
August 21	Saturday	201	8,697	8,898	2.3%
August 22	Sunday	162	8,139	8,301	2.0%
<u>August 23</u>	<u>Monday</u>	<u>135</u>	<u>6,335</u>	<u>6,470</u>	<u>2.1%</u>
Totals (surveys returned)		818	39,051	39,869	2.1%

Time of vehicles entering Safety Rest Area

<u>Time</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>	<u>Sunday</u>	<u>Monday</u>
8:00 - 9:00	12	7	8	4	12
9:00 - 10:00	19	19	21	11	15
10:00 - 11:00	16	26	30	16	23
11:00 - 12:00	17	15	32	20	19
12:00 - 1:00	17	19	21	22	18
1:00 - 2:00	19	21	27	23	14
2:00 - 3:00	26	17	26	26	14
3:00 - 4:00	12	19	20	18	12
<u>4:00 - 5:00</u>	<u>14</u>	<u>23</u>	<u>16</u>	<u>22</u>	<u>7</u>
Totals	152	166	201	162	134

Note: Total is not equivalent to the 818 "Vehicles Entering Rest Area", as shown above, due to weather interruptions and/or human error in recording the "Time-in" entries.

Type of vehicle entering Safety Rest Area

	<u>Vehicle Total</u>	<u>Average Length of Stay*</u>	<u>Number of People</u>	<u>(A)</u>	<u>(B)</u>
Non-Commercial Vehicles					
Cars	451	12.60	926	56.02%	6.51%
Car w/ recreation trailer	0	0.00	0	0.00%	0.00%
Car w/ other trailer	0	0.00	0	0.00%	0.00%
Pick-up or van	210	14.67	526	26.09%	6.66%
Pick-up - van w/ rec. trailer	23	14.61	73	2.86%	11.98%
Pick-up - van w/ other trailer	5	14.60	7	0.62%	1.73%
Recreational vehicles	16	17.88	42	1.99%	7.27%
Other	7	14.57	9	0.87%	8.43%
Commercial Vehicles					
Commercial trucks	16	25.38	18	1.99%	8.38%
Semi-tractor trailer trucks	75	37.60	80	9.32%	4.33%
Buses	2	13.50	26	0.25%	4.55%
Not recorded (see <u>Note</u> this page)	13	19.69	26	1.61%	

* Minutes

(A) Percentage of total number of vehicles using 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.

SURVEY QUESTIONS

The responses to the following survey questions, (except Questions 1 and 7), are divided and classified into two categories:

Non-Commercial Vehicles: Representing all vehicles except commercial vehicles;

Commercial Vehicles: Representing commercial trucks, semi-tractor trailers, and buses.

Question 1: Number of people in your vehicle?

	All People Entering Safety <u>Rest Area</u>	<u>Percent</u>
Senior adults (over 60)	322	18.58
Adults (16 - 59)	1,028	59.32
<u>Children (under 16)</u>	<u>383</u>	<u>22.10</u>
Total	1,733	100.00

Question 2: Reason for your travel?

	Non-Commercial <u>Vehicles</u>	<u>Percent</u>	Commercial <u>Vehicles</u>	<u>Percent</u>
Personal	290	40.00	1	1.08
Vacation	256	35.31	1	1.08
Business	133	18.34	84	90.32
<u>No response</u>	<u>46</u>	<u>6.34</u>	<u>7</u>	<u>7.53</u>
Total	725	99.99	93	100.01

Question 3: How far do you generally travel between stops?

	<u>Non-Commercial Vehicles</u>	<u>Average Length of Stay Minutes</u>	<u>Commercial Vehicles</u>	<u>Average Length of Stay Minutes</u>
Less than 1 hour	7	18.71	0	0.00
1 to 2 hours	106	12.37	5	22.60
Over 2 hours	210	15.33	43	25.86
<u>No response</u>	<u>402</u>		<u>45</u>	
Total	725		93	

Question 4: Please check your main reason for stopping. (pick one, write letter here)

	<u>Non-Commercial Vehicles</u>	<u>Percent</u>	<u>Commercial Vehicles</u>	<u>Percent</u>
Rest rooms	556	76.69	55	59.14
Rest/relax	59	8.14	9	9.68
Eat/picnic	17	2.34	2	2.15
Switch drivers	8	1.10	0	0.00
Sleep	6	0.83	3	3.23
Travel information	4	0.55	2	2.15
Water	3	0.41	1	1.08
Check load/equipment	2	0.28	11	11.83
Other	28	3.86	4	4.30
<u>No response</u>	<u>42</u>	<u>5.79</u>	<u>6</u>	<u>6.45</u>
Total	725	99.99	93	100.01

Question 5: Are you traveling north towards Minneapolis/St. Paul, or South towards Mankato?

	<u>Non-Commercial Vehicles</u>	<u>Percent</u>	<u>Commercial Vehicles</u>	<u>Percent</u>
North - Minneapolis/St. Paul	418	57.66	63	67.74
South - Mankato	250	34.48	24	25.81
<u>No response</u>	<u>57</u>	<u>7.86</u>	<u>6</u>	<u>6.45</u>
Total	725	100.00	93	100.00

Question 6: How many people in your party used the following?

	<u>Non-Commercial Vehicles</u>	<u>Commercial Vehicles</u>
Rest room facilities	1,260	114
Drinking water	505	44
Telephone	48	24

Question 7: Which of the following facilities were used by you party?

	<u>Number of Responses</u>	<u>Percent</u>
Rest room only	694	84.84
Trash receptacles	178	21.76
Vending machines	109	13.33
State map displays	95	11.61
Telephone	87	10.64
Picnic tables	79	9.66
Recycle receptacles	67	8.19
Pet exercise area	30	3.67
Other	55	6.72

Question 8: What additional facilities would you like to see in Safety Rest Areas?

	<u>Non-Commercial Vehicles</u>
More vending machines	31
Maps and travel information	9
Site items: tables, benches, trails	9
Fast food	8
Playground equipment	7
Coffee machine	6
RV dump station	5
More phones/drive up locations	5
Paper towels	3
More security/policing	3
More/bigger rest room facilities: stalls, sinks, dryers, diaper	3
No additional facilities	2
Gas and service	2

	<u>Non-Commercial Vehicles</u>
Overnight camping/parking	2
Showers	1
	<u>Commercial Vehicles</u>
More vending machines	10
Coffee machine	3
More phones/drive up locations	3
Paper towels	1
More/larger truck parking areas	1

Question 9: When traveling, which facility do you prefer to use? (pick one, write letter here)

	<u>Non-Commercial Vehicles</u>	<u>Percent</u>	<u>Commercial Vehicles</u>	<u>Percent</u>
Safety rest area	625	86.21	76	81.72
Private commercial facility	36	4.97	11	11.83
<u>No response</u>	<u>64</u>	<u>8.83</u>	<u>6</u>	<u>6.45</u>
Total	725	100.01	93	100.00

Question 10: If private and commercial development were permitted at Safety Rest Areas, which of the following business types would you prefer? (pick one, write letter here)

	<u>Non-Commercial Vehicles</u>	<u>Percent</u>	<u>Commercial Vehicles</u>	<u>Percent</u>
No private/commercial development	231	31.86	29	31.18
Vending machines	139	19.17	24	25.81
Restaurant, fast food	132	18.21	21	22.58
Gas and service	95	13.10	1	1.08
Restaurant, sit down	63	8.69	12	12.90
<u>No response</u>	<u>65</u>	<u>8.97</u>	<u>6</u>	<u>6.45</u>
Total	725	100.00	93	100.00

Question 11: If this facility were not available, where would you have stopped? (pick one, write letter here)

	Non-Commercial		Commercial	
	<u>Vehicles</u>	<u>Percent</u>	<u>Vehicles</u>	<u>Percent</u>
Next town	283	39.03	35	37.63
Commercial facility	159	21.93	20	21.51
Continue driving	146	20.14	18	19.35
Local park	40	5.52	1	1.08
Highway shoulder	24	3.31	9	9.68
Other	19	2.62	1	1.08
<u>No response</u>	<u>54</u>	<u>7.45</u>	<u>9</u>	<u>9.68</u>
Total	725	100.00	93	100.01

Question 12: What types of travel information would you like available at Safety Rest Areas? (pick one, write letter here)

	Non-Commercial		Commercial	
	<u>Vehicles</u>	<u>Percent</u>	<u>Vehicles</u>	<u>Percent</u>
Mileage maps	188	25.93	20	21.51
Road construction	183	25.24	21	22.58
"Best route" selection guide	102	14.07	18	19.35
Weather conditions	66	9.10	13	13.98
Public recreation	66	9.10	1	1.08
Private recreation	8	1.10	1	1.08
Private commercial facilities	7	0.97	3	3.23
Other	11	1.52	1	1.08
<u>No response</u>	<u>94</u>	<u>12.97</u>	<u>15</u>	<u>16.13</u>
Total	725	100.00	93	100.02

Question 13: Do you think Safety Rest Area construction and operation are a good use of State and Federal tax money?

	Non-Commercial		Commercial	
	<u>Vehicles</u>	<u>Percent</u>	<u>Vehicles</u>	<u>Percent</u>
Yes	662	91.31	84	90.32
No	7	0.97	2	2.15
<u>No response</u>	<u>56</u>	<u>7.72</u>	<u>7</u>	<u>7.53</u>
Total	725	100.00	93	100.00

Question 14: Where did your current trip originate?

	<u>Commercial Vehicles</u>	<u>Percent</u>
Greater Minneapolis/St. Paul, MN	33	35.48
Mankato, MN	5	5.38
Eau Claire, WI	4	4.30
Fairmont, MN	4	4.30
Greater South Dakota	4	4.30
Greater Colorado	3	3.23
New Ulm, MN	2	2.15
Owatonna, MN	2	2.15
St. James, MN	2	2.15
Worthington, MN	2	2.15
Greater Iowa	2	2.15
All other cities/areas	19	20.43
<u>No response</u>	<u>11</u>	<u>11.83</u>
Total	93	100.00

Question 15: Where will your current trip end?

	<u>Commercial Vehicles</u>	<u>Percent</u>
Greater Minneapolis/St. Paul, MN	43	46.24
Eau Claire, WI	6	6.45
Greater South Dakota	6	6.45
Duluth, MN	3	3.23
Fairmont, MN	3	3.23
Mankato, MN	3	3.23
Worthington, MN	3	3.23
All other cities/areas	13	13.98
<u>No response</u>	<u>13</u>	<u>13.98</u>
Total	93	100.02

Question 16: How many times per month do you use this safety rest area? (pick one, write letter here)

	<u>Commercial Vehicles</u>	<u>Percent</u>
1 to 5 times per month	29	31.18
Less than once a month	18	19.35
6 to 10 times per month	14	15.05
First time user	12	12.90
More than 10 times per month	7	7.53
<u>No response</u>	<u>13</u>	<u>13.98</u>
Total	93	99.99



MINNESOTA VALLEY SAFETY REST AREA USER SURVEY, August 19 - 23, 1993

Day of week:	Thurs.	Fri.	Sat.	Sun.	Mon.	Vehicle Type:	1	2	3	10	11	12	13	20	30	31	40
Licensing State:	MN _____					Time In:		_____									
	(specify other)					Time Out:		_____									

Dear Motorist:

The Minnesota Department of Transportation is attempting to determine how Safety Rest Areas along interstate highways are utilized and what facilities should be provided to satisfy your needs. Only you can supply the information we need to plan future Safety Rest Area facilities. Please answer the following questions:

1. Number of people in your vehicle? senior adults (over 60) _____ adults (16-59) _____ children (under 16) _____
2. Reason for your travel? business: _____ vacation: _____ personal: _____
3. How far do you generally travel between stops? miles _____ time: _____
4. Please check your main reason for stopping. (pick one, write letter here) _____

A. rest room	D. rest/relax	G. switch driver	I. other _____
B. eat/picnic	E. water	H. travel information	(please specify)
C. sleep	F. check load/equipment		
5. Are you traveling . . . north towards Minneapolis/St. Paul, or, . . . south towards Mankato?
6. How many people in your party used the following?
rest room facilities: _____ drinking water supply: _____ telephone: _____
7. Which of the following facilities were used by your party?
 picnic table rest rooms telephone vending machines
 trash receptacle state map display recycle receptacle
 pet exercise area other _____

(please specify)
8. What additional facilities would you like to see in safety rest areas _____
9. When traveling, which facility do you prefer to use? (pick one, write letter here) _____
A. safety rest areas B. private commercial facilities
10. If private and commercial development were permitted at safety rest areas, which of the following business types would you prefer? (pick one, write letter here) _____
A. vending machines C. restaurant (fast food/take out) E. no private/commercial development
B. restaurant (sit down) D. gas and vehicle services
11. If this facility were not available, where would you have stopped? (pick one, write letter here) _____
A. continue driving C. highway shoulder E. local park
B. commercial facility D. next town F. other _____

(please specify)
12. What types of travel information would you like available at safety rest areas? (pick one, write letter here) _____
A. public recreation D. road construction G. "best route" selection guide
B. private recreation E. weather conditions H. other _____
C. mileage maps F. private commercial facilities (please specify)
13. Do you think safety rest area construction and operation are a good use of State and Federal tax money?
 yes No

COMMERCIAL TRUCK OPERATORS

14. Where did your current trip originate? City _____ State _____ Zip Code _____
15. Where will your current trip end? City _____ State _____ Zip Code _____
16. How many times per month do you use this safety rest area? (pick one, write letter here) _____
A. less that once a month
B. 1 to 5 times/month
C. 6 to 10 times /month
D. more that 10 times/month
E. first time user

PLEASE RETURN SURVEY TO THE PEOPLE AT REST AREA EXIT RAMP. THANK YOU

MINNESOTA VALLEY REST AREA USAGE SURVEY - THURSDAY, AUGUST 19, 1993

HOUR	CARS			PICK-UPS, VANS			Commer. TRUCKS	SEMI'S	RV'S	BUS	OTHER	TOTAL
	car only	w/rec. trailer	w/other trailer	p-up/van only	w/rec. trailer	w/other trailer		tractor trailers			(motorcycles)	
	1	2	3	10	11	12	13	20	30	31	40	
8-9	226	0	0	96	2	9	14	60	2	2	1	412
9-10	420	0	1	223	4	6	28 58	41 155	5	7	3	968
10-11	274	6	1	160	2	13	50 40	110	8	1	8	745
11-12	444	1	2	257	5	9	34	133	1	0	3	889
12-1	349	0	2	189	5	8	26	115	3	0	3	700
1-2	417	0	0	209	8	13	40	121	2	2	0	812
2-3	522	0	0	211	8	12	13	98	3	2	7	876
3-4	555	0	1	218	7	11	39	89	2	1	5	928
4-5	577	0	2	275	5	10	36	77	0	2	4	988
TOTAL	3954	7	9	1878	40	93	294	958	26	17	34	7318

MINNESOTA VALLEY REST AREA USAGE SURVEY - FRIDAY, AUGUST 20, 1993

HOUR	CARS			PICK-UPS, VANS			Commer. TRUCKS	SEMI'S	RV'S	BUS	OTHER	TOTAL
	car only	w/rec. trailer	w/other trailer	p-up/van only	w/rec. trailer	w/other trailer		tractor trailers			(motorcycles)	
	1	2	3	10	11	12	13	20	30	31	40	
8-9	292	1	4	154	2	5	28	93	1	3	0	583
9-10	437	1	3	198	3	9	43	66	5	3	2	770
10-11	452	2	1	201	9	8	30	110	6	1	4	830
11-12	549	3	0	250	13	8	40	118	11	1	4	997
12-1	523	1	5	225	10	7	46	132	4	0	6	959
1-2	567	6	7	274	6	10	34	103	3	1	2	1013
2-3	603	4	1	279	3	17	41	106	6	1	6	1077
3-4	667	2	0	289	9	10	32	69	9	0	6	1093
4-5	796	1	2	316	3	12	30	62	13	0	5	1240
TOTAL	4896	21	23	2186	58	86	330	859	58	10	35	8562

8:07 START - 30 CARS → IN TRUCKS → IN TRUCKS

MINNESOTA VALLEY REST AREA USAGE SURVEY - SATURDAY, AUGUST 21, 1993

22 4 40 4 491 134

HOUR	CARS			PICK-UPS, VANS			SEMI'S tractor trailers	RV'S	BUS	OTHER (motorcycles)	TOTAL	
	car only	w/rec. trailer	w/other trailer	p-up/van only	w/rec. trailer	w/other trailer						
	1	2	3	10	11	12	13	20	30	31	40	
8-9	500	2	3	198	5	13	12	13	3	1	5	755
9-10	670	2	1	281	6	13	10	22	5	1	4	1015
10-11	155	0	0	291	8	7	9	22	7	5	4	1114
11-12	715	1	0	260	12	8	11	31	3	0	6	1047
12-1	625	2	1	239	11	5	6	25	4	1	11	930
1-2	619	2	1	250	8	13	10	22	70	2	5	942
2-3	703	4	2	250	9	1	5	25	2	1	10	1012
3-4	634	0	1	229	16	9	7	20	7	4	1	928
4-5	627	0	2	260	7	12	11	19	5	2	9	954
TOTAL	5848	13	11	2264	82	81	81	199	46	17	55	8697

MINNESOTA VALLEY REST AREA USAGE SURVEY - SUNDAY, AUGUST 22, 1993

HOUR	CARS			PICK-UPS, VANS			Commer. TRUCKS	SEMI'S tractor trailers	RV'S	BUS	OTHER (motorcycles)	TOTAL
	car only	w/rec. trailer	w/other trailer	p-up/van only	w/rec. trailer	w/other trailer						
	1	2	3	10	11	12	13	20	30	31	40	
8-9	266	2	0	91	4	3	0	20	4	0	3	393
9-10	401	1	0	178	8	5	3	17	8	3	4	628
10-11	613	1	0	242	7	7	6	17	9	2	2	906
11-12	685	3	1	235	17	3	6*	10*	10	3	3	976
12-1	664	2	2	261	10	7	5	14	6	1	4	976
1-2	677	1	0	234	11	4	4	17	9	1	3	961
2-3	674	3	1	268	13	10	3	16	7	0	5	1000
3-4	717	1	2	292	15	10	4	21	9	0	3	1074
4-5	837	1	0	321	18	15	5	14	9	2	3	1225
TOTAL	5534	15	6	2122	103	64	36	140	71	12	30	8139

Bike

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MINNESOTA VALLEY REST AREA USAGE SURVEY - MONDAY, AUGUST 23, 1993

HOUR	CARS			PICK-UPS, VANS			SEMI'S	RV'S	BUS	OTHER (motorcycles)	TOTAL	
	car only	w/rec. trailer	w/other trailer	p-up/van only	w/rec. trailer	w/other trailer						Commer. TRUCKS
	1	2	3	10	11	12	13	20	30	31	40	
8-9	294	2	1	128	2	8	35	83	2	0	3	558
9-10	372	1	0	147	1	7	34	103	1	1	3	670
10-11	369	1	1	186	7	5	35	120	4	4	2	734
11-12	353	1	0	163	3	7	31	114	7	2	0	681
12-1	354	0	4	149	7	4	29	110	11	0	3	671
1-2	354	2	1	187	5	8	29	132	3	2	2	725
2-3	391	0	1	173	6	9	29	113	6	0	3	731
3-4	424	2	2	205	6	8	32	101	2	1	5	788
4-5	442	0	3	219	5	7	15	77	6	1	2	777
TOTAL	3353	9	13	1557	42	63	269	953	42	11	23	6335