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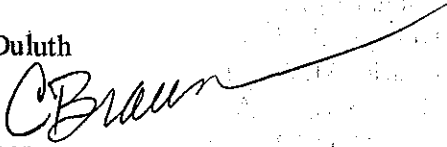
Office of Technical Support
395 John Ireland Boulevard
St. Paul, Minnesota 55155

Phone: (651) 296-1648

Fax: (651) 282-6022

September 29, 1999

To: Michael L. Robinson
District Engineer, D-1 Duluth

From: Carol R. Braun 
Safety Rest Area Manager
Office of Technical Support, Site Development Unit, MS 686

Subject: 1996 Safety Rest Area Usage Survey Summary Report For
Kettle River Safety Rest Area, I-35, M.P. 198 and
General Andrews Safety Rest Area, I-35, M.P. 208

Enclosed are copies of the 1996 Rest Area Usage Survey Reports for the Kettle River and General Andrews safety rest areas. This is the first distribution of these reports. Data contained in these reports was used to project 20 year capacity needs for the recently constructed rest area buildings at these sites. Although preparation of the reports was long overdue, the information in these reports has been and will continue to be useful in projecting parking capacity and service needs for future investment planning and proposed additional rehabilitation of these sites.

The objective of the motorist survey is to document percent of vehicles stopping at the rest area and to collect user data during an average summer travel weekend. This data is used to verify design criteria used in the planning, location and design of rest areas statewide, in addition usage data is evaluated for site specific facility rehabilitation and redesign. To provide information on motorist use of rest area in this corridor, both of the above noted rest area surveys were conducted simultaneously. The five day user surveys were conducted from August 8 to August 12, 1996. The methods for conducting the surveys, copies of the survey forms and analysis of data collected is included in the enclosed reports.

The Office of Technical Support, 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 statewide design criteria. If you have any questions or comments concerning the methodology or results of the surveys or would like additional copies of the reports, please contact me.

Attachments

Michael L. Robinson
September 29, 1999
Page 2

cc: Commissioner E. Tinklenberg, MS 100
D. Weiszhaar, MS 110
P. Hughes, MS 120
D. Ekern, MS 120
J. Swanson, MS 140
R. Halvorson, MS 140
R. Kauzlaric, ADE, D-1
M. Tardy, AME, D-1A
J. Bray, PAC, D-1A
R. Dwyer, D-1A
C. Erickson, D-1A
G. Peterson, D-1A
J. Kujala, D-1B
D. Gerdes, MS 675
T. Quinn, MS 686
J. Reiersen, MS 686
Site Development Unit Staff
D. Haskett, DTED, Office of Tourism
D. Knutson, Green View, Inc.
C. Hamilton, Services for the Blind
P. Jensen, MS 715
D. Morisette, MS 690
L. Brady, Market Research, MS 150
Mn/DOT Library
SDU File

(Attachment sent to cc List)

***Minnesota Department
of Transportation***

***Kettle River Safety Rest Area
I-35 Northbound
1996 User Survey***

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



*Minnesota Department
of Transportation*

*Kettle River Safety Rest Area
I-35 Northbound
1996 User Survey*

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

September, 1999

**State of Minnesota
Department of Transportation
Office of Technical Support - Site Development Unit
Transportation Building, Mail Stop 686
395 John Ireland Boulevard
St. Paul, Minnesota 55155**

Kettle River Safety Rest Area - 1996 Usage Survey

The Minnesota Department of Transportation (Mn/DOT), Office of Technical Support - Site Development Unit, conducted a rest area user survey at the Kettle River Safety Rest Area, serving north bound travelers on I-35, located 5 miles north of Sandstone, Minnesota, from August 8 through 12, 1996.

The objective of rest area user surveys is to collect user data during an average summer travel weekend and to verify or modify statewide design criteria developed for safety rest area planning, location and design. Pertinent information collected includes percent of vehicles stopping, traffic classification, number of persons per vehicle, and motorist use of facilities.

During the survey period, Mn/DOT staff collected information about every vehicle entering the rest area. As each vehicle approached, the information boxed at the top of each user survey (day of week, licensing state, vehicle type and time-in) was recorded. Each vehicle was stopped on the entrance ramp before entering the parking areas and building. The driver of each vehicle was handed a user survey form and asked to fill it out during their visit at the rest area facility (see copy of user survey, page 5). The surveys were collected by Mn/DOT staff waiting on the exit ramp, who then recorded the time-out.

During the five day survey period from 9:00 am to 6:00 pm 3,287 vehicles and 8,050 people used the rest area facilities. Of all the northbound I-35 traffic passing the site, during the survey hours, 10% stopped and used the rest area. However, 13.3% of all recreational vehicles passing the rest area stopped. A higher than average percent of all vans and trucks with recreational trailers (11.9%) and commercial trucks (11.5%) passing the rest area also stopped. The general planning calculated design value for percent of traffic stopping at interstate rest areas in a rural highway section is 12%. Kettle River Rest Area is located 45 miles north of the Goose Creek Safety Rest Area and 28 miles south of the Culkin Rest Area.

The average length of stay for all vehicle types¹ was 14.6 minutes, however the oversized and commercial vehicle stayed an average of 16.7 minutes at the rest area. Motorists in standard size vehicles and commercial vehicle drivers averaged 1.5 hours since their last stop. The average length of time motorists expected to travel to their next stop was 1.3 hours. The averages for the driving times identified by respondents correspond closely with starting points in the metro area and stopping points in the Duluth vicinity.

Users of the rest area were made up mostly of people who were either starting (91.5%) or ending (89.7%) their trip today in the state of Minnesota. Overall, Midwest locations dominated trip starting and trip ending points. Approximately 20% responded that they were on a multi-day trip and of those 35 - 50% began or will end there trip in another state. A total of 15.6% of the vehicles entering the site were licensed out-of-state. Approximately 80% of all standard and oversized vehicles were traveling for pleasure or vacation.

When asked to "Select your main reason(s) for stopping at this rest area" over 90% of the respondents stated it was to use the restrooms. Motorist safety needs were the second highest reason for stopping (38.5%). Safety needs include: rest/relax 27.5%, switch drivers 8.5%, check vehicle 8.6% and sleep 1.5% (Due to multiple responses to this question, totals equal more than 100%. See question #9 for breakdown).

The percent of oversized and commercial vehicles stopping at the rest area for safety needs was substantially higher than for standard sized vehicles, 49.2%. In addition, the second single highest reason for commercial drivers to stop at this rest area was to check their vehicle 38.5%. Twenty-seven percent of all commercial vehicle drivers used the public telephone.

Motorists in standard and oversized vehicles used the restrooms, waste and recycling receptacles, vending machines and map displays most. Information displayed in the rest area bulletin boards was identified as useful by 62% of the motorists.

The State of Minnesota's safety rest areas remain popular with travelers. At this rest area, 62.2% of all motorists prefer to use safety rest areas compared to 3.1% who prefer private commercial facilities. Although Minnesota does not have any combined safety rest areas/private commercial facilities, 32% of the motorists indicated a preference to use such facilities if available.

If private/commercial development were permitted in Minnesota's safety rest areas 27% of the respondents prefer no private development and over 44% prefer vending machines. Commercial Vehicle users were more likely than users of other vehicle types to prefer restaurants (both fast food/take out & sit down) if private/commercial development were

¹ Standard vehicle: car, pick-up, van, motorcycle
Oversized vehicle: car, pick-up or van with trailer, recreational vehicle
Commercial vehicle: semi-tractor trailer truck, commercial truck, bus

permitted at Minnesota's safety rest areas.

When asked, "If you were fatigued, needed to change drivers or experiencing potential mechanical problems, where would you have stopped?", 53% of all respondents included rest areas as their preferred safety stop. The second highest location respondents identified for stopping was the next town (17%). Commercial Vehicle drivers were more likely to stop at a commercial facility than were drivers of other vehicle types.

Three types of highway operation activities were explored. Responses across all vehicle types were quite similar to the three highway operations. Each of: Road Signs and Traffic Signals, Rest Areas, and Emergency Road Condition Information were ranked as "very important".

The majority of motorists feel safe using Minnesota's interstate rest areas. Less than 1% stated they do not feel safe while nearly 97% stated they feel safe. Motorists feel less safe using Minnesota rest areas after dark with only 72.5% feeling safe and 13.5% stating they do not feel safe after dark.

The data collected from this user survey is stored in 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.

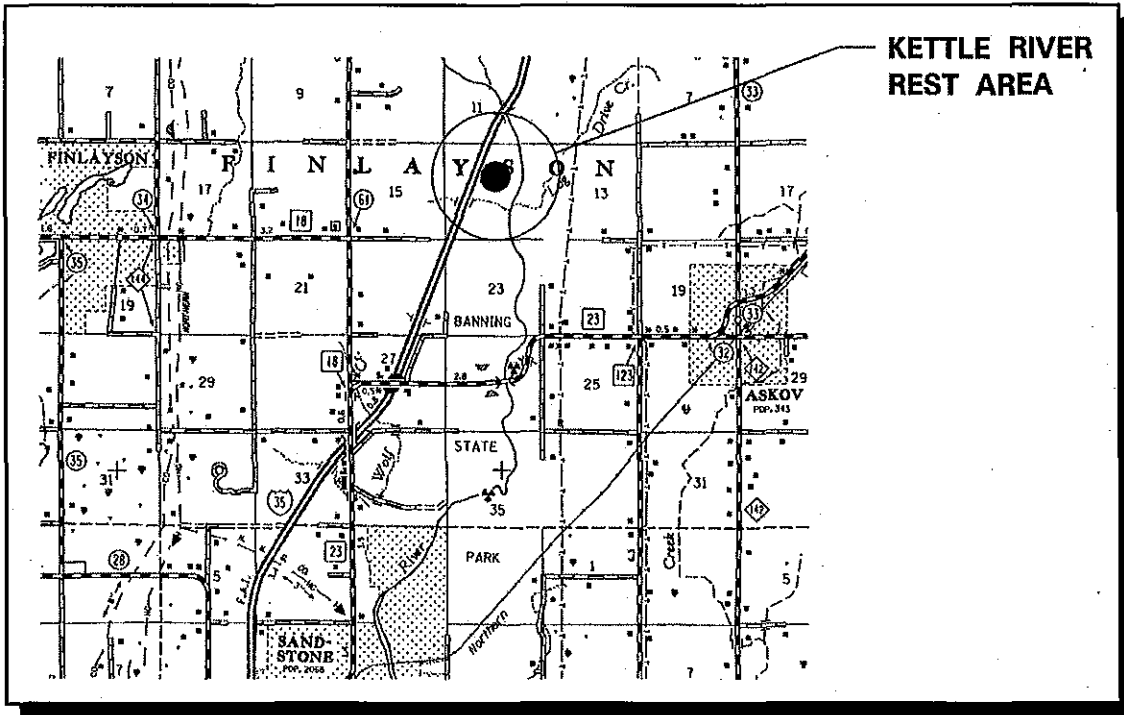
For more information about this survey, please call the Mn/DOT Site Development Unit.



Carol R. Braun, R.L.A.
Site Development Unit
Mn/DOT, Safety Rest Area Program Manager
(651) 296-1648
e-mail: carol.braun@dot.state.mn.us


This document is available in alternative formats to individuals with disabilities by calling (651)296-1648 or through the Minnesota Relay Service at 1-800-627-3529.

Location of the Kettle River Safety Rest Area.



The Kettle River Safety Rest Area is located in Pine County approximately 5 miles north of Sandstone. The facility is located in a pine forest one half mile south of the Kettle River. The surrounding land is part of Banning State Park. This rest area is approximately 115 miles north of St. Paul, and 55 miles south of Duluth.

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.)



KETTLE RIVER SAFETY REST AREA - I35
USER SURVEY, AUGUST 8 - 12, 1996

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:

1. Number of people in your vehicle? senior adults (over 59) adults (16-59) children (under 16)

Male			
Female			

2. How long have you traveled since your last stop? _____
(minutes or miles)
3. When do you think your next stop will be? _____
(minutes or miles)
4. 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)
5. Where did your trip start today? _____
(city/state)
6. If this is a multi-day trip, where did your overall trip begin? _____
(city/state)
7. Where will your trip end today? _____
(city/state)
8. If this is a multi-day trip, where will your overall trip end? _____
(city/state)
9. Please select your main reason(s) for stopping at this rest area. (check all that apply)

<input type="checkbox"/> restrooms (a)	<input type="checkbox"/> rest/relax (d)	<input type="checkbox"/> telephone (g)	<input type="checkbox"/> vending (j)
<input type="checkbox"/> eat/picnic (b)	<input type="checkbox"/> water (e)	<input type="checkbox"/> switch drivers (h)	<input type="checkbox"/> other (please specify) _____ (k)
<input type="checkbox"/> sleep (c)	<input type="checkbox"/> check vehicle (f)	<input type="checkbox"/> travel information (i)	

10. Which of the following facilities were used by your party? (check all that apply)

<input type="checkbox"/> restroom (a)	<input type="checkbox"/> map displays (d)	<input type="checkbox"/> vending (g)
<input type="checkbox"/> picnic table (b)	<input type="checkbox"/> trash receptacles (e)	<input type="checkbox"/> other (please specify) _____ (h)
<input type="checkbox"/> telephone (c)	<input type="checkbox"/> recycle receptacles (f)	

11. 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
 B. public park D. combined safety rest areas & private/commercial facilities
12. Which of the following private commercial business types would you prefer at Minnesota's rest areas? (check all that apply)

<input type="checkbox"/> none (a)	<input type="checkbox"/> restaurant (fast food/takeout) (c)	<input type="checkbox"/> gas and vehicle service (e)	<input type="checkbox"/> vending machines (b)
<input type="checkbox"/> restaurant (sit down) (d)	<input type="checkbox"/> other _____ (f)		

13. If you were fatigued, needed to change drivers or experiencing potential mechanical problems, where would you stop? (pick only one, write letter here): _____
 A. Interchange C. commercial facility E. continue driving G. next town
 B. highway shoulder D. rest area F. other (please specify) _____
14. Please rate, using a range of 1 to 10, the importance of each of the following highway operation activities.
 1 = not important to you at all 5 = medium importance 10 = extremely important

_____ Road surface (i.e., pavement construction, snow and ice removal, smooth pavement)
_____ Roadside (i.e., landscaping, mowing, trash removal, eliminating weeds)
_____ Motorist Services (i.e., road signs, rest areas, emergency road condition information)

15. Please rate, using a range of 1 to 10, the importance of each of the following motorist services.
 1 = not important to you at all 5 = medium importance 10 = extremely important

_____ Road signs/traffic signals	_____ rest areas	_____ emergency road condition information
----------------------------------	------------------	--

16. Do you usually feel safe using Minnesota rest areas on Interstate highways? Yes No No Opinion
17. Do you feel safe using Minnesota rest areas after dark? Yes No No Opinion
18. Was the information displayed on the rest area bulletin board useful? Yes No No Opinion
19. What, if any, additional information would you like available at the rest area? _____

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: August 8 through 12, 1996

Time of survey: 9:00 a.m. to 6:00 p.m.

Weather on site: Party cloudy to sunny

Total I-35 mainline vehicles traveling North bound: 32,730

I-35 mainline vehicles traveling North bound passing safety rest area without entering: 29,443

Vehicles traveling North bound entering safety rest area: 3,287

Percent of I-35 mainline vehicles stopping at safety rest area: 10.04%

Percent of out-of-state vehicles stopping at safety rest area: 15.64%

Percent of in-state vehicles stopping at safety rest area: 84.36%

Age distribution of people using the safety rest area:

<u>Age</u>	<u>Male</u>	<u>Percent</u>	<u>Female</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Over 60	795	9.88%	613	7.61%	1,408	17.49%
16 to 59	2,744	34.09	2,238	27.80	4,982	61.89
Under 16	<u>953</u>	<u>11.84</u>	<u>707</u>	<u>8.78</u>	<u>1,660</u>	<u>20.62</u>
	4,492	55.81%	3,558	44.19%	8,050	100.00%

Average number of people per vehicle: 2.60

Average length of stay in safety rest area:
 14.64 minutes (All Vehicles)
 14.33 minutes (Standard Vehicles)
 16.65 minutes (Oversize & Commercial Vehicles)

Number of vehicles 9:00 am to 6:00 pm

<u>Date</u>	<u>Day</u>	<u>Vehicles Entering Rest Area</u>	<u>Vehicles Not Entering Rest Area</u>	<u>One Way Traffic Totals</u>	<u>Average Percent Stopping at Rest Area</u>
August 8	Thurs.	368	3,935	4,303	8.55%
August 9	Fri.	941	9,299	10,240	9.19
August 10	Sat.	849	7,125	7,974	10.65
August 11	Sun.	662	5,069	5,731	11.55
August 12	Mon.	<u>467</u>	<u>4,015</u>	<u>4,482</u>	<u>10.42</u>
Total (surveys returned)		3,287	29,443	32,730	10.04%

Kettle River Safety Rest Area

Hourly volume of vehicles entering Safety Rest Area

<u>Time</u>	<u>Thursday</u>	<u>Friday</u>	<u>Saturday</u>	<u>Sunday</u>	<u>Monday</u>	<u>Total</u>	<u>Percent</u>
9:00 - 10:00	--	80	146	68	49	343	10.45%
10:00 - 11:00	--	110	144	91	83	428	13.04
11:00 - 12:00	63	139	154	90	103	549	16.73
12:00 - 1:00	61	93	89	84	65	392	11.95
1:00 - 2:00	53	101	88	90	56	388	11.83
2:00 - 3:00	50	121	76	70	32	349	10.64
3:00 - 4:00	55	113	59	73	29	329	10.03
4:00 - 5:00	40	87	51	55	33	266	8.11
5:00 - 6:00	<u>45</u>	<u>93</u>	<u>42</u>	<u>41</u>	<u>16</u>	<u>237</u>	<u>7.22</u>
Totals	367	937	849	662	466	3,281	100.00%

Note: Total does not equal 3,287 for 'Vehicles Entering Safety Rest Area' due to recording errors on 'Time In' for 6 vehicles.

Type of vehicle entering Safety Rest Area

	<u>Vehicle Total</u>	<u>Average Length of Stay -- In Minutes</u>	<u>Number of People</u>	<u>(A)</u>	<u>(B)</u>
Standard Vehicles					
Cars	1,605	13.86	3,506	49.45%	9.20%
Pick-up or van	1,140	14.65	3,083	35.12	11.04
Other - Motorcycle	49	<u>22.10</u>	65	1.51	12.60
Standard (average)		(14.33)			
Oversize Vehicles					
Pick-up - van w/ rec. trailer	182	14.33	535	5.61	11.87
Recreational vehicles	65	21.54	237	2.00	13.32
Pick-up - van w/ other trailer	37	15.56	96	1.14	9.46
Car w/ recreational trailer	24	14.00	59	0.74	5.96
Car w/ other trailer	5	11.00	9	0.15	5.49
Commercial Vehicles					
Semi-tractor trailer trucks	96	21.16	197	2.96	9.29
Commercial trucks	37	12.31	60	1.14	11.46
Buses	<u>6</u>	<u>10.83</u>	<u>45</u>	<u>0.18</u>	<u>9.23</u>
Oversize & Commercial (average)		(16.65)			
Total	3,246	14.64	7,892	100.00%	

(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 3,287 due to recording error for 41 vehicles.

Number of people does not equal 8,050 due to recording error for vehicle type.

SURVEY QUESTIONS

Note: The total number of responses for subgroups does not always match the total number of vehicles due to omissions in recording the vehicle type.

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

<u>Age</u>	<u>Total</u>		<u>Total</u>		All People Entering Safety Rest Area	
	<u>Male</u>	<u>Percent</u>	<u>Female</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Over 60	795	9.88%	613	7.61%	1,408	17.49%
16 to 59	2,744	34.09	2,238	27.80	4,982	61.89
Under 16	<u>953</u>	<u>11.84</u>	<u>707</u>	<u>8.78</u>	<u>1,660</u>	<u>20.62</u>
Total	4,492	55.81%	3,558	44.19%	8,050	100.00%

Average number of people per vehicle: 2.60
 % Responding: 94.31%

Question 2: How long have you traveled since your last stop?

	<u>All Vehicles</u>	<u>Standard Vehicles</u>	<u>Oversize Vehicles</u>	<u>Commercial Vehicles</u>
Miles				
Average	84.99	84.78	82.37	101.70
Median	88.83	90.04	80.83	101.67
% Responding:	29.42%	29.24%	33.55%	23.74%
Minutes				
Average	88.74	88.09	93.21	91.84
Median	90.42	90.39	90.57	90.61
% Responding:	59.63%	59.59%	60.06%	59.71%

Question 3: When do you think your next stop will be?

	<u>All Vehicles</u>	<u>Standard Vehicles</u>	<u>Oversize Vehicles</u>	<u>Commercial Vehicles</u>
Miles				
Average	68.10	67.66	74.36	58.00
Median	60.61	60.60	60.64	60.50
% Responding:	27.68%	27.99%	28.12%	22.30%
Minutes				
Average	79.64	77.95	97.54	71.28
Median	60.82	60.79	90.61	60.57
% Responding:	49.53%	49.39%	51.44%	48.20%

Question 4: What is your reason for traveling today?

	<u>All Vehicles</u>		<u>Standard Vehicles</u>		<u>Oversize Vehicles</u>		<u>Commercial Vehicles</u>	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Pleasure travel	2,363	78.51%	2,052	80.25%	268	90.54%	12	9.92%
Other personal travel	361	11.99	333	13.02	20	6.76	4	3.31
Business travel	187	6.21	157	6.14	5	1.69	24	19.83
Comm'l driver	<u>99</u>	<u>3.29</u>	<u>15</u>	<u>0.59</u>	<u>3</u>	<u>1.01</u>	<u>81</u>	<u>66.94</u>
Total	3,010	100.00%	2,557	100.00%	296	100.00%	121	100.00%
% Responding:		91.57%		91.52%		94.57%		87.05%

Question 5: Where did your trip start today?

	<u>All Vehicles</u>		
	<u>Total</u>	<u>Percent</u>	
Midwest U.S.	<u>2,931</u>	<u>99.69%</u>	
Minnesota	2,690	91.50	
Wisconsin	109	3.71	
Iowa	82	2.79	
South Dakota	19	0.64	
Illinois	9	0.30	
North Dakota	0	0.00	
Other	22	0.75	(Michigan, Missouri, Ohio, Nebraska, Kansas, Indiana)
West U.S.	5	0.17	
South U.S.	2	0.07	
Northeast U.S.	<u>0</u>	<u>0.00</u>	
Total U.S.	2,938	99.93%	
Other	<u>2</u>	<u>0.07</u>	
Total	2,940	100.00%	
% Responding:		89.44%	

Question 6: If this is a multi-day trip, where did your overall trip begin?

	<u>All Vehicles</u>		
	<u>Total</u>	<u>Percent</u>	
Midwest U.S.	466	79.25%	
Minnesota	295	50.17	
Iowa	44	7.48	
Wisconsin	36	6.12	
Illinois	18	3.06	
South Dakota	7	1.19	
North Dakota	3	0.51	
Other	63	10.72	(Michigan, Missouri, Ohio, Nebraska, Kansas, Indiana)
West U.S.	63	10.72	
South U.S.	27	4.59	
Northeast U.S.	<u>18</u>	<u>3.06</u>	
Total U.S.	574	97.62%	
Canada	12	2.04	
Other	<u>2</u>	<u>0.34</u>	
Total	588	100.00%	
% Responding:		17.89%	

Question 7: Where will your trip end today?

	<u>All Vehicles</u>		
	<u>Total</u>	<u>Percent</u>	
Midwest U.S.	2,659	97.90%	
Minnesota	2,435	89.65	
Wisconsin	173	6.37	
North Dakota	2	0.07	
Iowa	1	0.04	
South Dakota	1	0.04	
Illinois	0	0.00	
Other	47	1.73	(Michigan, Missouri, Ohio, Nebraska, Kansas, Indiana)
South U.S.	1	0.04	
Northeast U.S.	0	0.00	
West U.S.	<u>0</u>	<u>0.00</u>	
Total U.S.	2,660	97.94%	
Canada	49	1.80	
Other	<u>7</u>	<u>0.26</u>	
Total	2,716	100.00%	
% Responding:		82.63%	

Question 8: If this is a multi-day trip, where will your overall trip end?

<u>All Vehicles</u>		
	<u>Total</u>	<u>Percent</u>
Midwest U.S.	<u>568</u>	<u>85.29%</u>
Minnesota	439	65.92
Wisconsin	45	6.76
Iowa	25	3.75
South Dakota	7	1.05
Illinois	6	0.90
North Dakota	4	0.60
Other	42	6.31
		(Michigan, Missouri, Ohio, Nebraska, Kansas, Indiana)
West U.S.	28	4.20
South U.S.	21	3.15
Northeast U.S.	<u>13</u>	<u>1.95</u>
Total U.S.	630	94.59%
Canada	34	5.11
Other	<u>2</u>	<u>0.30</u>
Total	666	100.00%
% Responding:		20.26%

Question 9: Please select your main reason(s) for stopping at this rest area. (Check all that apply.)

	<u>All Vehicles</u>		<u>Standard Vehicles</u>		<u>Oversize Vehicles</u>		<u>Commercial Vehicles</u>	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
(Base:)	(3,011)		(2,558)		(295)		(122)	
Restrooms	2,704	89.80%	2,330	91.09%	248	84.07%	94	77.05%
<u>Motorist Safety</u>								
<u>Value/Use (Net)</u>	<u>(1,158)</u>	<u>(38.46%)</u>	<u>(939)</u>	<u>(36.71%)</u>	<u>(145)</u>	<u>(49.15%)</u>	<u>(60)</u>	<u>(49.18%)</u>
Rest/Relax	828	27.50	704	27.52	89	30.17	25	20.49
Check vehicle	260	8.64	139	5.43	71	24.07	47	38.52
Switch drivers	257	8.54	233	9.11	21	7.12	0	0.00
Sleep	46	1.53	35	1.37	1	0.34	10	8.20
Water	264	8.77	231	9.03	23	7.80	7	5.74
Vending	238	7.90	207	8.09	15	5.08	13	10.66
Eat/Picnic	199	6.61	164	6.41	28	9.49	5	4.10
Telephone	125	4.15	86	3.36	6	2.03	33	27.05
Travel information	74	2.46	64	2.50	8	2.71	1	0.82
Other	258	8.57	214	8.37	32	10.85	9	7.38
% Responding:		91.60%		91.55%		94.25%		87.77%

Note: Adds to more than 100% due to multiple mentions.

Question 10: Which of the following facilities were used by your party? (Check all that apply)

(Base:)	<u>All Vehicles</u> (2,912)		<u>Standard Vehicles</u> (2,489)		<u>Oversize Vehicles</u> (275)		<u>Commercial Vehicles</u> (112)	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Restroom	2,792	95.88%	2,401	96.46%	255	92.73%	101	90.18%
Trash receptacles	672	23.08	581	23.34	71	25.82	13	11.61
Vending	359	12.33	315	12.66	26	9.45	13	11.61
Map displays	357	12.26	304	12.21	42	15.27	8	7.14
Recycle receptacles	301	10.34	267	10.73	30	10.91	3	2.68
Picnic table	239	8.21	215	8.64	20	7.27	1	0.89
Telephone	149	5.12	110	4.42	9	3.27	30	26.79
Other	218	7.49	183	7.35	30	10.91	3	2.68
% Responding:	88.59%		89.08%		87.86%		80.58%	

Note: Adds to more than 100% due to multiple mentions.

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

	<u>All Vehicles</u>		<u>Standard Vehicles</u>		<u>Oversize Vehicles</u>		<u>Commercial Vehicles</u>	
	Total	Percent	Total	Percent	Total	Percent	Total	Percent
Safety rest area	1,832	62.19%	1,574	62.81%	193	67.72%	48	40.34%
Combined safety rest areas & private/Commercial facilities	941	31.94	792	31.61	76	26.67	55	46.22
Private/Commercial facilities	91	3.09	70	2.79	7	2.45	14	11.76
Public park	82	2.78	70	2.79	9	3.16	2	1.68
Total	2,946	100.00%	2,506	100.00%	285	100.00%	119	100.00%
% Responding:	89.63%		89.69%		91.05%		85.61%	

Question 12: Which of the following private commercial business types would you prefer at Minnesota's rest areas? (Check all that apply.)

(Base:)	<u>All Vehicles</u> (2,908)		<u>Standard Vehicles</u> (2,468)		<u>Oversize Vehicles</u> (287)		<u>Commercial Vehicles</u> (120)	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Vending machines	1,268	43.60%	1,096	44.41%	113	39.37%	47	39.17%
Gas & vehicle services	878	30.19	756	30.63	80	27.87	27	22.50
Restaurant (fast food/ take out)	825	28.37	688	27.88	79	27.53	47	39.17
None	775	26.65	667	27.03	80	27.87	18	15.00
Restaurant (sit down)	274	9.42	231	9.36	23	8.01	20	16.67
Other	79	2.72	63	2.55	12	4.18	4	3.33
% Responding:	88.47%		88.33%		91.69%		86.33%	

Note: Adds to more than 100% due to multiple mentions.

Question 13: If you were fatigued, needed to change drivers or experiencing potential mechanical problems, where would you stop? (pick one only...however, some checked all that applied)

(Base:)	<u>All Vehicles</u> (2,882)		<u>Standard Vehicles</u> (2,452)		<u>Oversize Vehicles</u> (281)		<u>Commercial Vehicles</u> (114)	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Rest area	1,534	53.23%	1,285	52.41%	165	58.72%	63	55.26%
Next town	493	17.11	430	17.54	43	15.30	13	11.40
Commercial facility	369	12.80	318	12.97	27	9.61	22	19.30
Safety Issues (Net)	(315)	(10.93)	(274)	(11.17)	(31)	(11.03)	(7)	(6.14)
Highway shoulder	168	5.83	145	5.91	15	5.34	5	4.39
Interchange	124	4.30	109	4.45	14	4.98	1	0.88
Continue driving	23	0.80	20	0.82	2	0.71	1	0.88
Other	180	6.25	152	6.20	16	5.69	10	8.77
% Responding:	87.68%		87.76%		89.78%		82.01%	

Note: Adds to more than 100% due to multiple mentions.

Question 14: Please rate, using a range of 1 to 10, the importance of each of the following highway operation activities (1 = not important to you at all, 5 = medium importance, 10 = extremely important)

<u>All Vehicles</u>	
Road Surface	
Mean	9.11
(Base)	(2,857)
% Responding:	86.92%
Motorist Services	
Mean	8.24
(Base)	(2,845)
% Responding:	86.55%
Roadside	
Mean	6.30
(Base)	(2,833)
% Responding:	86.19%

Terms Defined: Road Surface (i.e., pavement construction, snow and ice removal, smooth pavement)
 Motorist Services (i.e., road signs, rest areas, emergency road condition information)
 Roadside (i.e., landscaping, mowing, trash removal, eliminating weeds)

Question 15: Please rate, using a range of 1 to 10, the importance of the following motorist services (1 = not important to you at all, 5 = medium importance, 10 = extremely important)

<u>All Vehicles</u>	
Road Signs and Traffic Signals	
Mean	8.72
(Base)	(2,798)
% Responding:	85.12%
Rest Areas	
Mean	8.12
(Base)	(2,809)
% Responding:	85.46%
Emergency Road Condition Information	
Mean	7.58
(Base)	(2,764)
% Responding:	84.09%

Question 16: Do you usually feel safe using Minnesota rest areas on interstate highways?

	<u>All Vehicles</u>		<u>Standard Vehicles</u>		<u>Oversize Vehicles</u>		<u>Commercial Vehicles</u>	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Yes	2,826	96.72%	2,395	96.69%	281	97.23%	114	95.00%
No	27	0.92	23	0.93	2	0.69	2	1.67
No opinion	<u>69</u>	<u>2.36</u>	<u>59</u>	<u>2.38</u>	<u>6</u>	<u>2.08</u>	<u>4</u>	<u>3.33</u>
Total	2,922	100.00%	2,477	100.00%	289	100.00%	120	100.00%
% Responding:		88.90%		88.65%		92.33%		86.33%

Question 17: Do you feel safe using Minnesota rest areas after dark?

	<u>All Vehicles</u>		<u>Standard Vehicles</u>		<u>Oversize Vehicles</u>		<u>Commercial Vehicles</u>	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Yes	2,111	72.62%	1,757	71.28%	228	79.17%	100	83.33%
No	398	13.69	354	14.36	28	9.72	12	10.00
No opinion	<u>398</u>	<u>13.69</u>	<u>354</u>	<u>14.36</u>	<u>32</u>	<u>11.11</u>	<u>8</u>	<u>6.67</u>
Total	2,907	100.00%	2,465	100.00%	288	100.00%	120	100.00%
% Responding:		88.44%		88.22%		92.01%		86.33%

Question 18: Was the information displayed on the rest area bulletin board useful?

	<u>All Vehicles</u>		<u>Standard Vehicles</u>		<u>Oversize Vehicles</u>		<u>Commercial Vehicles</u>	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Yes	1,784	62.21%	1,507	61.86%	185	65.37%	68	60.18%
No	91	3.17	78	3.20	6	2.12	6	5.31
No opinion	<u>993</u>	<u>34.62</u>	<u>851</u>	<u>34.94</u>	<u>92</u>	<u>32.51</u>	<u>39</u>	<u>34.51</u>
Total	2,868	100.00%	2,436	100.00%	283	100.00%	113	100.00%
% Responding:		87.25%		87.19%		90.42%		81.29%



KETTLE RIVER SAFETY REST AREA - I35
USER SURVEY, AUGUST 8 - 12, 1996

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:

- 1. Number of people in your vehicle? senior adults (over 59) adults (16-59) children (under 16)
Male _____
Female _____
2. How long have you traveled since your last stop? _____ (minutes or miles)
3. When do you think your next stop will be? _____ (minutes or miles)
4. 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)
5. Where did your trip start today? _____ (city/state)
6. If this is a multi-day trip, where did your overall trip begin? _____ (city/state)
7. Where will your trip end today? _____ (city/state)
8. If this is a multi-day trip, where will your overall trip end? _____ (city/state)
9. Please select your main reason(s) for stopping at this rest area. (check all that apply)
restrooms (a) rest/relax (d) telephone (g) vending (j)
eat/picnic (b) water (e) switch drivers (h) other (please specify)
sleep (c) check vehicle (f) travel information (i)
10. Which of the following facilities were used by your party? (check all that apply)
restroom (a) map displays (d) vending (g)
picnic table (b) trash receptacles (e) other (please specify)
telephone (c) recycle receptacles (f)
11. 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
B. public park D. combined safety rest areas & private/commercial facilities
12. Which of the following private commercial business types would you prefer at Minnesota's rest areas? (check all that apply)
none (a) restaurant (fast food/takeout) (c) gas and vehicle service (e)
vending machines (b) restaurant (sit down) (d) other
13. If you were fatigued, needed to change drivers or experiencing potential mechanical problems, where would you stop? (pick only one, write letter here): _____
A. interchange C. commercial facility E. continue driving G. next town
B. highway shoulder D. rest area F. other (please specify)
14. Please rate, using a range of 1 to 10, the importance of each of the following highway operation activities.
1 = not important to you at all 5 = medium importance 10 = extremely important
Road surface (i.e., pavement construction, snow and ice removal, smooth pavement)
Roadside (i.e., landscaping, mowing, trash removal, eliminating weeds)
Motorist Services (i.e., road signs, rest areas, emergency road condition information)
15. Please rate, using a range of 1 to 10, the importance of each of the following motorist services.
1 = not important to you at all 5 = medium importance 10 = extremely important
Road signs/traffic signals rest areas emergency road condition information
16. Do you usually feel safe using Minnesota rest areas on Interstate highways? Yes No No Opinion
17. Do you feel safe using Minnesota rest areas after dark? Yes No No Opinion
18. Was the information displayed on the rest area bulletin board useful? Yes No No Opinion
19. What, if any, additional information would you like available at the rest area? _____

Additional Comments:

Please return survey to the staff at the exit ramp. Thank you. (Please use other side for additional comments)

Kettle River REST AREA USAGE SURVEY - THURSDAY, AUGUST 8, 1994

HOUR	CARS			PICK-UPS, VANS			Commer TRUCK S	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	
9** - 10	/	/	/	/	/	/	/	/	/	/	/	/
10 - 11	/	/	/	/	/	/	/	/	/	/	/	/
10-11 11-12	237	4	2	160	19	4	5	35	14	2	2	484
12-1	308	21	4	139	34	12	5	34	4	—	8	569
1-2	240	11	5	151	44	5	12	36	11	0	2	517
2-3	269	10	3	167	31	5	7	36	5	2	2	533
3-4	298	2	2	166	24	8	8	28	6	2	3	547
4-5	321	6	1	178	16	3	8	19	5	0	2	559
5-6**	296	4	—	145	21	9	11	30	6	0	4	526
TOTAL												3735

** CHECK THE WATER METERS @ 9:00a _____ AND @ 6:00p _____, RECORD ON MIKE'S SHEET!

Kettle River REST AREA USAGE SURVEY - FRIDAY, AUGUST 9, 1994

HOUR	CARS			PICK-UPS, VANS			Commer TRUCK S	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	
9** - 10	347	3	0	184	36	12	10	27	9	4	5	637
10 - 11	429	5	1	244	45	12	7	38	11	2	7	801
11 - 12	481	5	2	279	29	7	6	43	17	2	8	873
12 - 1	493	13	2	322	41	19	5	38	12	4	12	961
1 - 2	548	10	4	330	48	13	13	40	15	1	10	1032
2 - 3	712	2	3	393	61	16	16	36	24	0	20	1283
3 - 4	634	6	1	417	68	16	11	19	13	1	18	1198
4 - 5	627	11	12	416	43	15	17	24	11	0	14	1341
5 - 6**	638	3	4	398	57	15	15	17	21	0	15	1173
TOTAL												9299

** CHECK THE WATER METERS @ 9:00a 21031000 AND @ 6:00p 21035400 , RECORD ON MIKE'S SHEET!

Kettle River REST AREA USAGE SURVEY - SATURDAY, AUGUST 10, 1994

HOUR	CARS			PICK-UPS, VANS			Commer TRUCK S	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	
9** - 10	430	4	2	265	55	2	6	9	3	5	6	787
10 - 11	581	16	1	370	72	8	2	14	15	7	20	1106
11 - 12	673	26	1	365	99	8	6	12	19	0	17	1236
12 - 1	507	7	2	298	49	8	3	7	10	3	13	907
1 - 2	454	10	0	261	53	4	4	4	15	1	15	821
2 - 3	406	9	1	205	43	5	1	6	4	1	7	688
3 - 4	351	2	1	175	27	35	3	9	4	1	18	626
4 - 5	296	5	0	173	15	3	1	10	5	1	20	529
5 - 6**	254	2	1	134	10	8	0	4	3	0	9	425
TOTAL												7,125

** CHECK THE WATER METERS @ 9:00a 21038000 AND @ 6:00p _____, RECORD ON MIKE'S SHEET!

Kettle River REST AREA USAGE SURVEY - SUNDAY, AUGUST 11, 1994

HOUR	CARS			PICK-UPS, VANS			Commer TRUCK S	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	
9** - 10	193	2	4	123	16	5	2	7	10	0	3	365
10 - 11	328	5	0	206	25	4	7	5	13	1	7	601
11 - 12	344	20	17	188	22	17	4	4	12	1	10	639
12 - 1	292	5	2	163	35	13	8	9	10	0	1	538
1 - 2	360	6	1	170	29	11	1	17	21	5	12	633
2 - 3	310	3	0	169	25	9	1	6	1	4	1	529
3 - 4	344	3	1	237	26	5	1	8	15	1	4	643
4 - 5	372	3	0	194	15	3	0	4	11	0	11	613
5 - 6**	276	4	2	169	11	1	2	11	6	1	3	506
TOTAL												5,069

** CHECK THE WATER METERS @ 9:00a 21043700 AND @ 6:00p 21047317 RECORD ON MIKE'S SHEET!

Kettle River REST AREA USAGE SURVEY - MONDAY, AUGUST 12, 1994

HOUR	CARS			PICK-UPS, VANS			Commer TRUCK S	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	
9** - 10	207	1	0	138	9	2	15	22	6	0	1	401
10 - 11	285	3	1	151	19	4	7	44	12	4	3	539
11 - 12	255	1	1	167	19	10	12	45	6	0	2	508
12 - 1	273	3	0	133	9	7	6	39	8	0	5	483
1 - 2	247	1	1	151	7	7	5	30	10	0	3	462
2 - 3	224	3	0	162	11	7	12	27	4	1	7	460
3 - 4	217	2	1	112	13	0	14	27	6	1	1	394
4 - 5	233	5	0	126	11	1	9	35	7	1	5	433
5 - 6**	180	1	0	96	9	2	8	22	3	0	4	325
TOTAL												4,005

** CHECK THE WATER METERS @ 9:00a 21048400 AND @ 6:00p 21050700 RECORD ON MIKE'S SHEET!