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**Office of Technical Support**

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July 15, 1997

To: Charles Siggerud, Division Engineer  
Metro Division

From: Carol R. Braun  
Safety Rest Area Program Manager

Subject: **Annual Safety Rest Area Usage Survey - 1997**  
St. Croix T.I.C. and Safety Rest Area, I-94, westbound, CS 8280

The Site Development Unit has conducted annual rest area usage surveys since 1969, at selected locations, to continually review and evaluate rest area design criteria, and evaluate the level of services and facilities provided for the motorist. The St. Croix T.I.C. and Rest Area was selected for the 1997 usage survey. The survey is directed at gathering specific data on motorist use of this rest area and documenting motorist use of the facility and site elements. The resultant information provides specific usage data used to project facility capacity needs and design element selection for future rest area buildings, sewer and water systems, parking areas and site furnishings. In addition, site specific issues that will be investigated at this site this summer are: site security, personal and property; truck parking demand; travel and tourism issues; and parking lot capacity and design concerns.

The usage survey will occur over a five day period, Thursday through Monday:  
August 14 thru August 18, 1997, 9:00a to 5:00p

The safety rest area usage survey will require six people each day to classify mainline traffic and distribute and collect survey questionnaire forms. Through an inquiry to Metro maintenance staff we verified the site selection and that the Metro Division would provide two staff persons each of the five survey days. Carl Hoffstedt, Metro Division has identified two student workers that will be available to assist us with this survey. We are intending that Design Services would provide the remaining persons. Rescheduling, overtime, or comp-time may be required to meet Division staffing needs for this survey. In addition, 24 hour roadway automatic traffic recorders and traffic signing will be required at the site during the survey period. The Site Development Unit will coordinate traffic recorder and signing requests with the appropriate Division staff.

Thank you for Division assistance in conducting this customer survey. Don Obernolte of my staff will coordinate this survey. Please contact him at 282-9954 if you have any questions.

cc: D. Ekern, MS 120  
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**SUMMARY OF COLLECTED DATA**

**Date of Survey:** August 14 through 18, 1997

**Time of survey:** 9:00 am to 5:00 pm

**Weather on site:** Partly cloudy to sunny; light rain

**Total I-94 mainline vehicles traveling East bound:** 74,904

**I-94 mainline vehicles traveling East bound passing safety rest area without entering:** 70,862

**Vehicles traveling East bound entering safety rest area:** 4,042

**Percent of I-94 mainline vehicles stopping at safety rest area:** 5.39 %

**Percent of out-of-state vehicles stopping at safety rest area:** 26.45 %

**Percent of in-state vehicles stopping at safety rest area:** 73.55 %

**Age distribution of people using the safety rest area:**

	All People Entering <u>Safety Rest Area</u>	<u>Percent</u>
Senior Adults (over 60)	2,041	20.19 %
Adults (16-59)	6,244	61.76
<u>Children (under 16)</u>	<u>1,825</u>	<u>18.05</u>
<b>Total</b>	10,110	100.00 %

**Average number of people per vehicle:** 2.68

**Average length of stay in safety rest area:** 17.15 minutes (All Vehicles)  
 16.30 minutes (Standard Vehicles)  
 20.56 minutes (Oversized & Commercial Vehicles)

**Number of vehicles 9:00 am to 5:00 pm**

<u>Date</u>	<u>Day</u>	<u>Vehicles Entering Rest Area</u>	<u>Vehicles Not Entering Rest Area</u>	<u>Daily One way Traffic Totals</u>	<u>Average Percent Stopping at Rest Area</u>
August 14	Thurs.	675	12,771	13,446	5.02 %
August 15	Fri.	1,004	15,098	16,102	6.23 %
August 16	Sat.	836	14,204	15,040	5.55 %
August 17	Sun.	799	17,374	18,173	4.39 %
August 18	Mon.	<u>728</u>	<u>11,415</u>	<u>12,143</u>	<u>5.99 %</u>
Total (surveys returned)		4,042	70,862	74,904	5.39 %

**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	76	102	88	59	102	427	10.58 %
10:00 - 11:00	108	116	139	87	92	542	13.44
11:00 - 12:00	26	122	115	99	94	456	11.31
12:00 - 1:00	90	140	113	105	83	531	13.17
1:00 - 2:00	110	137	95	96	86	524	13.00
2:00 - 3:00	92	133	115	126	96	562	13.94
3:00 - 4:00	84	140	99	124	96	543	13.47
4:00 - 5:00	<u>88</u>	<u>108</u>	<u>72</u>	<u>101</u>	<u>78</u>	<u>447</u>	<u>11.09</u>
Totals	674	998	836	797	727	4,032	100.00 %

NOTE: Total does not equal 4,042 for 'Vehicles Entering Safety Rest Area' due to recording errors on 'Time In' for 10 vehicles.

**Type of vehicle entering Safety Rest Area**

	<u>Vehicle Total</u>	<u>Average Length of Stay -- In Minutes</u>	<u>Total Number of People</u>	<u>(A)</u>	<u>(B)</u>
<b><u>Standard Vehicles</u></b>					
Cars	1,903	16.54	4,325	48.25 %	4.59 %
Pick-up or van	1,219	15.87	3,754	30.91	4.73
Other - Motorcycle	<u>29</u>	<u>18.37</u>	52	0.74	8.03
Standard (sub total)	3,151	16.30			
<b><u>Oversize Vehicles</u></b>					
Pick-up - van w/ rec. trailer	88	25.36	218	2.23	11.21
Recreational vehicles	84	22.23	212	2.13	24.07
Pick-up - van w/ other	36	15.75	261	0.91	5.76
Car w/ recreational trailer	9	21.22	24	0.23	8.33
Car w/ other trailer	8	20.25	29	0.20	7.77
<b><u>Commercial Vehicles</u></b>					
Semi-tractor trailer trucks	507	20.14	823	12.85	10.19
Commercial trucks	50	17.22	126	1.27	4.77
Buses	<u>11</u>	<u>19.54</u>	<u>126</u>	<u>0.28</u>	<u>6.51</u>
Oversize & Commercial (sub total)	793	20.56			
Total	3,944	17.15	9,950	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: Vehicle total does not equal 4,042 due to recording error for 98 vehicle types. Number of people does not equal 10,110 due to recording error for vehicle type.

*Question 1: Number of people in your vehicle?*

	All People Entering Safety Rest Area	Percent
Senior Adults (over 60)	2,041	20.19 %
Adults (16-59)	6,244	61.76
<u>Children (under 16)</u>	<u>1,825</u>	<u>18.05</u>
<b>Total</b>	<b>10,110</b>	<b>100.00 %</b>

Average number of people per vehicle: 2.68  
 % Responding:

*Question 2: When traveling how far do you prefer to travel between stops? (Check one)*

	<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>
1 hour	107	2.90	95	3.23	4	1.86	8	1.53
1-2 hours	684	18.52	611	20.68	35	16.20	38	7.25
2-2 ½ hours	1,051	28.45	907	30.70	77	35.65	67	12.79
2 ½ - 3 hours	772	20.90	637	21.56	42	19.44	93	17.75
3-4 hours	669	18.11	470	15.91	28	12.96	171	32.63
4 or more hours	<u>411</u>	<u>11.13</u>	<u>234</u>	<u>7.92</u>	<u>30</u>	<u>13.89</u>	<u>147</u>	<u>28.05</u>
<b>Total</b>	<b>3,694</b>	<b>100.01</b>	<b>2,954</b>	<b>100.00</b>	<b>216</b>	<b>100.00</b>	<b>524</b>	<b>100.00</b>
% Responding	91.39 %		92.00 %		94.32 %		90.81 %	

*Question 3: What is your reason for traveling today? (Pick only one)*

	<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>
Vacation	506	13.69	426	14.42	33	15.28	47	8.94
Business	495	13.39	24	0.81	12	5.56	459	87.26
Commercial	2,051	55.49	1,889	63.95	153	70.83	9	1.71
Other	<u>644</u>	<u>17.43</u>	<u>615</u>	<u>20.82</u>	<u>18</u>	<u>8.33</u>	<u>11</u>	<u>2.09</u>
<b>Total</b>	<b>3,696</b>	<b>100.00</b>	<b>2,954</b>	<b>100.00</b>	<b>216</b>	<b>100.00</b>	<b>526</b>	<b>100.00</b>
% Responding	91.44 %		92.00 %		94.32 %		91.16 %	

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

	<u>All Vehicles</u>	<u>Standard Vehicles</u>	<u>Oversized Vehicles</u>	<u>Commercial Vehicles</u>
<b>Miles</b>				
Average	323.56	299.69	333.11	454.82
Median	300.00	275.00	300.00	480.00
% Responding	88.89 %	89.60 %	91.27 %	88.04 %

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

	<u>All Vehicles</u>	<u>Standard Vehicles</u>	<u>Oversized Vehicles</u>	<u>Commercial Vehicles</u>
<b>Miles</b>				
Average	1,050.99	951.76	1,960.64	1,242.88
Median	550.00	500.00	1,000.00	740.00
% Responding	87.68 %	88.51 %	89.52 %	86.31 %

*Question 6: 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>
Restroom	3,030	82.70	2,406	82.06	164	78.10	460	88.12
<u>Motorist Safety Value/Use</u>								
Rest/Relax	795	21.70	615	20.98	73	34.76	107	20.50
Check vehicle	368	10.04	129	4.40	48	22.86	191	36.59
Switch Drivers	289	7.89	254	8.66	21	10.00	14	2.68
Sleep	<u>113</u>	<u>3.08</u>	<u>47</u>	<u>1.60</u>	<u>7</u>	<u>3.33</u>	<u>59</u>	<u>11.30</u>
Sub Total	1,565	42.71	1,045	35.64	149	70.95	371	71.07
Travel information	1,392	37.99	1,236	42.16	86	40.95	70	13.41
Telephone	546	14.90	292	9.96	26	12.38	228	43.68
Vending	326	8.90	228	7.78	16	7.62	82	15.71
Water	282	7.70	227	7.74	15	7.14	40	7.66
Other	167	4.56	137	4.67	18	8.57	12	2.30
Eat/Picnic	148	4.04	108	3.68	21	10.00	19	3.64
% Responding:	90.65 %		91.31 %		91.70 %		90.47 %	

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

*Question 7: Which of the following facilities were used by your party? (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>
Restroom	3,281	91.04	2,637	91.15	175	85.37	469	92.69
Travel Information	1,271	35.27	1,142	39.47	84	40.98	45	8.89
Map Displays	1,094	30.36	956	33.05	71	34.63	67	13.24
Trash Receptacles	808	22.42	652	22.54	44	21.46	112	22.13
Telephone	616	17.09	340	11.75	26	12.68	250	49.41
Vending	527	14.62	400	13.83	21	10.24	106	20.95
Recycle Receptacles	226	6.27	191	6.60	20	9.76	15	2.96
Outside Water	188	5.22	159	5.50	7	3.41	22	4.35
Picnic Table	185	5.13	169	5.84	9	4.39	7	1.38
Bulletin Board	150	4.16	130	4.49	6	2.93	14	2.77
Other	76	2.11	63	2.18	5	2.44	8	1.58
Play Equipment	69	1.91	56	1.94	6	2.93	7	1.38
Picnic Shelters	54	1.50	48	1.66	2	0.98	4	0.79
Trails	50	1.39	42	1.45	2	0.98	6	1.19
Lighted commercial	24	0.67	19	0.66	2	0.98	3	0.59
% Responding	89.16 %		90.10 %		89.52 %		87.69 %	

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

*Question 8: 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>	
	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>	<u>Total</u>	<u>Percent</u>
Safety Rest Area	1,682	46.37	1,440	49.67	93	43.66	149	28.93
Combined Safety Rest Areas & Private Commercial facilities	1,456	40.14	1,103	38.05	102	47.89	251	48.74
Private/Comm'l facilities	438	12.08	311	10.73	16	7.51	111	21.55
Public Park	<u>51</u>	<u>1.41</u>	<u>45</u>	<u>1.55</u>	<u>2</u>	<u>0.94</u>	<u>4</u>	<u>0.78</u>
Total	3,627	100.00	2,899	100.00	213	100.00	515	100.00
% Responding	89.73 %		90.28 %		93.01 %		89.25 %	

*Question 9: Which of the following business types would you prefer at Minnesota's rest areas? (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>
Restaurant (fast food/take out)	1,422	40.58	1,122	35.85	73	36.14	227	45.77
Gas and vehicle services	1,366	38.98	1,224	43.62	76	37.62	66	13.31
Vending machines	1,230	35.10	1,006	35.85	56	27.72	168	33.87
No Private/Comm'l development	651	18.58	526	18.75	45	22.28	80	16.13
Restaurant (sit down)	603	17.21	447	15.93	32	15.84	124	25.00
Other	41	1.17	23	0.82	7	3.47	11	2.22
% Responding	86.69 %		87.39 %		88.21 %		85.96 %	

*Question 10: If you were fatigued, needed to change driver or experiencing potential mechanical problems, where would you stop? (Pick only one for each situation)*

**Fatigued**

	<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>
Interchange	178	5.69	132	5.34	8	4.24	38	8.09
Highway shoulder	144	4.61	128	5.18	6	3.17	10	2.13
Commercial Facility	490	15.66	342	13.85	25	13.23	123	26.23
Rest Area	2,076	66.37	1,656	67.04	141	74.60	279	59.49
Continue Driving	38	1.21	31	1.26	2	1.06	5	1.07
Next Town	<u>202</u>	<u>6.46</u>	<u>181</u>	<u>7.33</u>	<u>7</u>	<u>3.70</u>	<u>14</u>	<u>2.99</u>
Total	3,128	100.00	2,470	100.00	189	100.00	469	100.00
% Responding	77.37 %		76.92 %		82.53 %		81.28 %	

*Question 10: If you were fatigued, needed to change driver or experiencing potential mechanical problems, where would you stop? (Pick only one for each situation)*

**Change Drivers**

	<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>
Rest Area	1,671	56.34	1,370	56.08	96	60.00	205	56.47
Interchange	387	13.05	328	13.42	22	13.74	37	10.19
Highway shoulder	356	12.00	325	13.30	19	11.88	12	3.31
Commercial Facility	353	11.90	254	10.40	16	10.00	83	22.87
Next Town	149	5.02	128	5.24	5	3.13	16	4.41
Continue Driving	<u>50</u>	<u>1.69</u>	<u>38</u>	<u>1.56</u>	<u>2</u>	<u>1.25</u>	<u>10</u>	<u>2.75</u>
Total	2,966	100.00	2,443	100.00	160	100.00	363	100.00
% Responding	73.36 %		76.08 %		69.87 %		62.91 %	

*Question 10: If you were fatigued, needed to change driver or experiencing potential mechanical problems, where would you stop? (Pick only one for each situation)* **Mechanical Problem**

	<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>
Commercial Facility	861	28.76	595	25.00	61	34.46	205	46.91
Next Town	697	23.28	612	25.71	36	20.34	49	11.21
Highway shoulder	659	22.01	562	23.61	34	19.21	63	14.42
Interchange	437	14.59	344	14.46	25	14.13	68	15.56
Rest Area	309	10.32	239	10.04	20	11.30	50	11.44
Continue Driving	<u>31</u>	<u>1.04</u>	<u>28</u>	<u>1.18</u>	<u>1</u>	<u>0.56</u>	<u>2</u>	<u>0.46</u>
Total	2,994	100.00	2,380	100.00	177	100.00	437	100.00
% Responding	74.05 %		74.12 %		77.29 %		75.74 %	

*Question 10: If you were fatigued, needed to change driver or experiencing potential mechanical problems, where would you stop? (Pick only one for each situation)* **Need Exercise**

	<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>
Rest Area	2,300	82.29	1,861	83.34	141	83.43	298	75.83
Commercial Facility	194	6.94	132	5.91	11	6.51	51	12.98
Continue Driving	130	4.65	108	4.84	7	4.14	15	3.82
Next Town	99	3.54	79	3.54	2	1.18	18	4.58
Interchange	52	1.86	36	1.61	7	4.15	9	2.28
Highway shoulder	<u>20</u>	<u>0.72</u>	<u>17</u>	<u>0.76</u>	<u>1</u>	<u>0.59</u>	<u>2</u>	<u>0.51</u>
Total	2,795	100.00	2,233	100.00	169	100.00	393	100.00
% Responding	69.13 %		69.54 %		73.80 %		68.11 %	

*Question 11: During the past twelve months have you contacted the Minnesota Office of Tourism for "Explore Minnesota" travel planning information, other than at a Minnesota rest area?*

	<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	444	12.42	373	13.06	31	14.83	40	7.86
No	<u>3,131</u>	<u>87.58</u>	<u>2,484</u>	<u>86.94</u>	<u>178</u>	<u>85.17</u>	<u>469</u>	<u>92.14</u>
Total	3,575	100.00	2,857	100.00	209	100.00	509	100.00
% Responding	88.42 %		88.98 %		91.27 %		88.21 %	



*Question 12: If the travel information counter was very busy or if the counter was closed, how would you prefer to get tourism information? (Mark all you prefer)*

	<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>
Bulletin Board or Display	1,643	49.94	1,334	50.43	95	47.50	214	48.09
Conversation with others here	345	10.49	244	9.22	35	17.50	66	14.83
Phone call to a Minnesota Office of Tourism counselor	453	13.77	337	12.74	32	16.00	84	18.88
Self service brochure rack	2,094	63.65	1,729	65.37	123	61.50	242	54.38
Interactive computer Kiosk	594	18.05	497	18.79	34	17.00	63	14.16
Next gas station or convenience store	552	16.78	454	17.16	28	14.00	70	15.73
Other	72	2.19	50	1.89	6	3.00	16	3.60
% Responding	81.38 %		82.37 %		87.34 %		77.12 %	

*Question 13: How safe do you feel using Minnesota rest areas on Interstate highways? (Please rate)*

	<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>
Not Safe at All	76	2.13	55	1.92	3	1.49	18	3.47
Somewhat Unsafe	82	2.30	69	2.42	4	1.99	9	1.74
Neither Safe/Unsafe	328	9.18	267	9.36	13	6.47	48	9.27
Somewhat Safe	851	23.82	700	24.54	46	22.89	105	20.27
Extremely Safe	<u>2,235</u>	<u>62.57</u>	<u>1,762</u>	<u>61.76</u>	<u>135</u>	<u>67.16</u>	<u>338</u>	<u>65.25</u>
Total	3,572	100.00	2,853	100.00	201	100.00	518	100.00
% Responding	88.35 %		88.85 %		87.77 %		89.77 %	

*Question 14: How safe do you feel using Minnesota rest areas on Interstate highways 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>
Not Safe at All	277	8.12	238	8.79	11	5.61	28	5.49
Somewhat Unsafe	380	11.13	345	12.74	14	7.14	21	4.13
Neither Safe/Unsafe	697	20.42	581	21.45	39	19.90	77	15.13
Somewhat Safe	849	24.88	678	25.04	52	26.53	119	23.38
Extremely Safe	<u>1,210</u>	<u>35.45</u>	<u>866</u>	<u>31.98</u>	<u>80</u>	<u>40.82</u>	<u>264</u>	<u>51.87</u>
Total	3,413	100.00	2,708	100.00	196	100.00	509	100.00
% Responding	84.42 %		84.34 %		85.59 %		88.21 %	

*Question 15: If you are a Commercial Truck driver, are you able to find off road parking locations when you need them for resting and stopping?*

	<u>All Vehicles</u>		<u>Commercial Vehicles</u>		<u>Semi Vehicles</u>		<u>Bus 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	293	60.29	29	93.55	262	57.96	2	66.67
No	193	39.71	2	6.45	190	42.04	1	33.33
Total	486	100.00	31	100.00	452	100.00	3	100.00
% Responding	84.00 %		62.00 %		87.60 %		27.27 %	



# ST CROIX REST AREA USAGE SURVEY - THURSDAY, AUGUST 14, 1997

Daily Weather Condition: P. Cloud, Showers Temperature (approx. high) 78 degrees F

CLOCK 10 MIN. 5000

HOUR	CARS			PICK-UPS, VANS			Commer/ Truck	SEMI'S tractor trailer	RV'S	BUS	OTHER motorcycle	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	680	0	1	437	6	14	33	169	8	3	5	1356 ✓
10 - 11	694	8	7	438	13	13	45	177	8	1	3	1407 ✓
11 <sup>-11:30</sup>	<del>406</del> <sup>812</sup> 406	<sup>8</sup> 4	<sup>2</sup> 1	<sup>592</sup> 296	<sup>28</sup> 14	<sup>14</sup> 7	<sup>58</sup> 29	<sup>232</sup> 116	<sup>10</sup> 5	0	<sup>2</sup> 1	<del>1758</del> 879 ✓
12 - 1	<del>847</del> 847	0	0	470	9	15	43	166	7	2	3	1562 ✓
1 - 2	732	0	2	957	16	27	26	128	4	1	3	1896 ✓
2 - 3	916	1	1	579	17	15	37	121	8	2	1	1698 ✓
3 - 4	983	2	1	634	13	18	44	144	7	5	0	1851 ✓
4 - 5**	1085	0	0	618	6	19	54	122	7	1	6	1918 ✓
	<del>6749</del> ✓	<del>19</del> ✓	19 ✓	4725 ✓	108 ✓	<del>138</del> 135 ✓	340 ✓	<del>1259</del> ✓	59 ✓	<del>15</del> ✓	23 ✓	13446 ✓
TOTAL	6343	15	13 ✓	4429 ✓	94 ✓	128 ✓	311 ✓	1143 ✓	54 ✓	15 ✓	22 ✓	12567 ✓

\*\* CHECK THE WATER METERS @ 9:00a 10832.8 AND @ 5:00p 10,837.4 RECORD ON Dave Morissette's SHEET!

#1 754.24  
#2 411.5  
#1 = 411.1  
#2 = 411.0

# ST CROIX REST AREA USAGE SURVEY - FRIDAY, AUGUST 15, 1997

Daily Weather Condition: *CLEAR, HUMID*

*83*

HOUR	CARS			PICK-UPS, VANS			Commer/ Truck	SEMI'S tractor trailer	RV'S	BUS	OTHER motorcycle	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						
9** - 10	848	2	0	520	12	16	28	225	3	4	2	1660 <del>1676</del>
10 - 11	849	6	1	589	8	15	31	206	6	2	2	1715 ✓
11 - 12	831	0	3	561	7	29	38	182	9	3	11	1674 ✓
12 - 1	871	3	2	573	15	8	39	162	8	14	4	1699 ✓
1 - 2	1097	5	3	717	18	13	38	141	10	25	11	2078 ✓
2 - 3	1234	3	2	851	15	17	38	138	7	26	13	2344 ✓
3 - 4	1284	3	1	963	34	18	41	133	14	20	8	2519 ✓
4 - 5**	1316	2	3	863	21	14	32	127	9	13	12	2412 ✓
TOTAL	8330	24	15	5638	130	130	285	1314	66	107	63	<del>16117</del> 16101 ✓

\*\* CHECK THE WATER METERS @ <sup>8:30</sup> 9:00a 10,839.20 AND @ <sup>5:40</sup> 5:00p 10,844.80, RECORD ON Dave Morisette's SHEET! → 16102 ✓

#1 754.24  
#7 411.8  
#1 754.24  
#7 412.2

# ST CROIX REST AREA USAGE SURVEY - SATURDAY, AUGUST 16, 1997

Daily Weather Condition: CLEAR DRY 83

HOUR	CARS			PICK-UPS, VANS			Commer/ Truck	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 trailer			motorcycle	
	1	2	3	10	11	12	13	20	30	31	40	
9** - 10	759	0	0	509	17	17	8	93	0	1	7	1411
10 - 11	1130	3	3	617	17	25	15	100	6	2	9	1927
11 - 12	1186	1	5	670	28	12	24	112	13	2	8	2061
12 - 1	1116	4	4	616	26	21	22	83	11	0	16	1919
1 - 2	1174	2	1	657	23	20	18	83	8	3	13	2002
2 - 3	1135	4	3	658	26	15	7	78	11	2	32	1971
3 - 4	1148	2	4	603	22	12	7	75	10	3	19	1905
4 - 5**	1104	4	2	606	22	10	13	66	5	2	10	1844
TOTAL	8752	20	22	4936	181	132	114	690	64	15	114	15640

\*\* CHECK THE WATER METERS @ <sup>8:30</sup> 9:00a 10,847.2 AND @ <sup>5:30</sup> 5:00p 10,852.1, RECORD ON Dave Morissette's SHEET!

$754.24$   
 $\#1 = 412.2$   
 $\#2 = 411.1$

$754.24$   
 $\#1 = 412.4$   
 $\#2 = 411.2$

✓✓

# ST CROIX REST AREA USAGE SURVEY - SUNDAY, AUGUST 17, 1997

Daily Weather Condition: *overcast cloudy & cool (50° + 62°) pm 60 HI*

HOUR	CARS			PICK-UPS, VANS			Commer/ Truck	SEMI'S tractor trailer	RV'S	BUS	OTHER motorcycle	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						
9** - 10	605	1	0	350	14	5	7	46	2	3	2	1035 ✓
10 - 11	926	1	5	569	13	7	7	46	8	1	1	1584 ✓
11 - 12	1201	2	2	662	29	11	9	52	15	0	4 $\frac{2}{4}$	1986 ✓ <span style="float: right; font-size: small;">bike ped</span>
12 - 1	1344	3	5	805	40	15	9	68	18	1	11	2319 ✓
1 - 2	1461	9	5	838	50	13	10	63	16	1	10	2476
2 - 3	1649	3	5	951	47	16	13	71	16	0	9	2780 ✓
3 - 4	1727	5	9	966	55	23	6	60	16	6	19	2892 ✓
4 - 5**	1793	7	8	1032	47	28	15	85	21	5	60	3101 ✓
TOTAL	10706	31	39	6172	295	118	76	491	112	17	116	18,173

\*\* CHECK THE WATER METERS @ <sup>8:30</sup> 9:00a 10,853.7 AND @ <sup>5:30</sup> 5:00p 10,858.3, RECORD ON Dave Morisette's SHEET!

754.24  
#1 412.5  
#7 412.7

# ST CROIX REST AREA USAGE SURVEY - MONDAY, AUGUST 18, 1997

Daily Weather Condition: *Cloudy, 56°f START, 68°f HIGH*

HOUR	CARS			PICK-UPS, VANS			Commer/ Truck	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 trailer			motorcycle	
	1	2	3	10	11	12	13	20	30	31	40	
9** - 10	804	0	0	469	4	15	34	191	5	2	5	1529 ✓
10:30 - 11	<del>10:30</del> 419	<del>1</del> 2	<del>2</del> 1	<del>388</del> 294	<del>1</del> 2	<del>5</del> 5	<del>20</del> 20	<del>218</del> 109	<del>1</del> 1	<del>0</del> 0	<del>1</del> 1	854 ✓
11 - 12	756	1	2	450	5	15	32	158	7	3	3	1432 ✓
12 - 1	764	2	0	508	4	15	29	141	8	0	11	1482 ✓
1 - 2	816	2	1	461	14	12	23	152	7	1	4	1493 ✓
2 - 3	1001	1	3	546	13	17	31	132	7	3	5	1759 ✓
3 - 4	987	1	1	619	12	16	24	134	6	2	8	1812 ✓
4 - 5**	974	3	4	645	15	10	20	94	6	4	7	1782 ✓
	6940	14	14	4286	71	110	233	1222	48	15	45	12997 ✓
TOTAL	6521	12	12	3992	69	105	213	1113	47	15	44	12,143 ✓

\*\* CHECK THE WATER METERS @ 9:00a 10,860.8 AND @ 5:00p 10,864.5 RECORD ON Dave Morissette's SHEET!  
 754.24      754.41  
 #1 412.9





# Memo

Office of Technical Support  
Site Development Unit  
Design Services Section, Mail Stop 686  
395 John Ireland Blvd.  
St. Paul, Minnesota 55155-1899

Office Tel: (612)282-9954  
Fax: (612) 282-6022  
Donald E. Obernolte  
Registered Landscape Architect

August 20, 1997

To: Carol Braun  
State Wide Rest Area Manager

From: Don Obernolte  
Site Development Unit  
coordinator R.A.U.S. 1997

Subject: 1997 Rest Area Usage Survey  
St. Croix T.I.C.  
Final Large Counts

Dates of Survey: 8/14/97-8/18/97 (5 days)

Hours of Survey: 9:00am thru 5:00pm (40 hours)

- A) **Survey Forms Distributed 4,287**  
[R-8/14: 600, F-8/15: 1000, Sa-8/16: 800, Su-8/17: 1200, M-8/18: 700]  
(Forms Printed 5000, Forms Recycled 713)
- B) **Drive-thru vehicles 50**  
[R-8/14: 7, F-8/15: 9, Sa-8/16: 4, Su-8/17: 25, M-8/18: 5]
- C) **Rest Area Visiting Vehicles 4.337 (A+B)**
- D) **Main Line WB Classified Vehicles 74,025**
- E) **Total Vehicles 78,362 (C+D)**
- F) Staff Summary (on site)
  - C.O. - Technical Support 20 shifts @ 8 hours by 10 persons=160 hours
  - Metro District 11 shifts @ 8 hours by 6 persons=88 hours
  - Total 31 shifts by 16 persons for 248 on site staff hours
  - Rough Staff Cost 248 hours x \$20/hour = \$4960

It was my sincere pleasure to have a role in the survey this year. Lacking analysis, but with a certain impression, it was nice to confirm that department staff are very solid people, and that the traveling public does reflect favorably upon your good work over the years.

Best regards, and good fortune with future undertakings. Thank you for the opportunity to be of service and to learn about our programs. I look forward to seeing analysis and having conclusions from the survey data.

cc: D.Ekern, MS120 C. Hoffstedt, Metro W.E. J. Rohrbach, MS675  
H. Nemeck, MS686 J. Reiersen, MS686