

DEPARTMENT Mn/DOT - Site & Development Unit
Trans. Annex - Ext. 5773

Office Memorandum

TO : Len Eilts
Office of Design Services

DATE: April 7, 1977

FROM : Jim Reiersen *J. Reiersen*
Site and Development

SUBJECT: Usage Survey Results
High Forest Rest Area, I-90

Attached are the results of a usage survey taken at the above rest area during the summer of 1976. The figures generally indicate that the rest area usage at the high forest facility is average and that design criteria being developed for Interstate Rest Areas is valid. The survey reflects the fact that facility usage peaks on a daily basis between the hours of 10:00 A.M. and 4:00 P.M.

These types of usage surveys are a very good barometer as to the on-going user activities, as well as identifying and defining basic design considerations.

Attachment:
Usage Survey

cc:
R. Braun
F. Marshall
L. Korth
R. Larson
L. Foote
R. Doerr ✓

Office Memorandum

DEPARTMENT MN/DOT
AnnexTO : Jim Reiersen
Senior Landscape Architect

DATE: February 23, 1977

FROM : Robert B. Doerr
Intermediate Highway TechnicianPHONE: 5781

SUBJECT: High Forest Rest Area Usage Study I-94

Date - July 15-19, 1976

Hours - 9 a.m. to 5 p.m. all vehicles interviewed

5 p.m. to 9 a.m. visual count of vehicles and people

Vehicles on main line E.B. 9 a.m. to 5 p.m.	8457
Vehicles entering rest area 24 hours per day 5 p.m.-9 a.m.	706
9 a.m. to 5 p.m.	1082
Percent of Vehicles stopping during 9 a.m. to 5 p.m.	12.8%
Average person per vehicle 24 hours 5 p.m. to 9 a.m.	2.3
9 a.m. to 5 p.m.	2.6
Average time in rest area 17.5 min./vehicle - 9 a.m.-5 p.m.	
Average water use 168.33 gal./day	
per person 4.6 gal/person	
5 day total 20,200 gallons	

Purpose for Entering 9 a.m. to 5 p.m.

Use rest rooms	64.3 %
Eat	12.8
Just to rest	6.7
Other	5.3
Water	3.1
Telephone	1.6
Travel Info	.6
Use Trash Receptacles	.3
Dispose of Sewage	.3

Percent of Persons Using - 9 a.m. - 5 p.m.

Rest Rooms	88 %
Drinking water	50

Percent of Vehicles Using 9 a.m. - 5 p.m.

Trash Receptacles	33 %
Picnic Tables	16
Travel Information	11.5
Telephone	3
Electric Outlets	.5

Jim Reierson
 Page 2
 February 24, 1977

	Vehicles That entered	Vehicles on Road
<u>Vehicles Entering - 24 hours</u>		
Passenger car no trailer	62.3	60.8
Passenger car with trailer	6.6	9.5
Single unit truck with camper	2.1	7.9
Single unit truck without camper	10.8	6
Semi trucks	8.7	10.5
Bus recreational	5.2	3.5
Bus commercial	.2	.1
Other vehicles	4.3	2.5

Day	Vehicles Entering	Vehicles on Mainline E.B. 9 a.m. - 5 p.m.	% Stopping
Thursday	246 206	1675 1638	12.6 14.6
Friday	239 220	1956 1869	11.8 12.2
Saturday	252 224	1921 1719	13.0 13.1
Sunday	216 204	2007 1657	12.3 10.8
Monday	247 228	1824 1574	14.5 13.5
Totals	1200 1082	9393 8457	12.8 12.8

	Time of Vehicles Entering				
	Thurs.	Fri.	Sat.	Sun.	Mon.
1-2 a.m.	4	7	8	6	2
2-3	5	3	5	5	7
3-4	5	5	3	3	4
4-5	4	5	5	1	1
5-6	5	3	6	2	6
6-7	14	11	1	2	9
7-8	14	13	15	5	9
8-9	15	21	13	7	8
9-10	16	14	21	6	20
10-11	24	31	22	33	29
11-12	21	34	30	21	28
12-1 p.m.	39	31	34	30	44
1-2	30	33	40	32	33
2-3	27	31	31	25	31
3-4	35	22	26	31	30
4-5	14	24	20	26	13
5-6	24	28	13	17	22
6-7	16	23	17	14	7
7-8	9	15	6	21	12
8-9	5	16	6	8	4
9-10	14	13	7	11	11
10-11	6	6	9	6	5
11-12	10	11	9	11	1
12-1	10	7	5	1	3
	366	407	352	324	339

Total 1788

Jim Reiersen
Page 3
February 24, 1977

	<u>Water Use (gal.)</u>				
	Thurs.	Fri.	Sat.	Sun.	Mon.
1-9 a.m.	600	600	400	200	400
9a.m.-5 p.m.	2000	2400	2700	1700	2200
5p.m.-1 a.m.	<u>1500</u>	<u>1700</u>	<u>1400</u>	<u>1200</u>	<u>1200</u>
Sub Tot.	4100	4700	4500	3100	3800
Tot.	20200 gallons				

Average Time in Rest Area

To eat	36.0 minutes
To rest	18.7
Other	13.6
To use rest rooms	13.2
To get water	13.0
Use Telephone	12.8
Dispose of waste	7.6