

DEPARTMENT Mn/DOT-Environmental Services
Room 715

Office Memorandum

TO : F. C. Marshall
Technical Services Division

DATE: 10-27-80

FROM : James S. Reiersen
Site Development Section

PHONE: 296-5773

SUBJECT: I90 Rest Area Usage Survey
Highforest Rest Area E.B.
Blue Earth Rest Area E.B.

A five day rest area usage survey was conducted at the two above mentioned rest areas on I90. These two rest area facilities are 85 miles apart, and the survey was designed to provide information concerning user patterns, types of traffic and percent of vehicles stopping at each rest area. In this way, actual usage data can support the determination for another rest area within the 85 mile interval. It should be noted that the proposed E.B. Hayward rest area facility lies within this 85 mile travel interval between the Blue Earth and Highforest rest areas.

Based on the usage survey results, it is apparent that an additional safety rest area is warranted as originally identified in the Comprehensive Interstate Safety Rest Area program. The survey results reveal the following.

1. The percent of vehicles stopping at each rest area during the five days averaged:

Blue Earth E.B.	16.9%
Highforest E.B.	12.8%

This can be compared to the 12.0% figure used in the 20 year design calculations. If the proposed Hayward facility were eliminated from the I90 E.B. system, the Blue Earth and Highforest rest areas would be subjected to severe user impacts and require upgrading and possible expansion in the near future.

2. Of the vehicles entering each rest area approximately 75% were from out of state.
3. Total usage, traffic volumes and percent stopping were not affected by last years fuel crisis.
4. Average time in rest areas and persons per vehicle have not changed.

Also included are some of the numerous comments received during the survey period. One comment often received at the Highforest rest area was the long drive, 85 miles, from the Blue Earth rest area to the Highforest rest area. Again, these comments reinforce the need for an intermediate rest area facility near Hayward.

Motorists were also asked if the gas shortage affected their summer vacation plans, 437 said yes and 1,017 said no. It would seem that people will adjust to the gas situation, providing time, money and resources required for vacations, tourism, recreation and family travel.

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Office Memorandum

DEPARTMENT Mn/DOT-Environmental Services
Room 715

TO : Jim Reiersen
Site and Development Unit

DATE: 9-23-80

FROM : Robert Doerr
Sr. Highway Technician

PHONE: 296-7588

SUBJECT: Highforest Rest Area Usage Study, I90 Eastbound

This rest area usage study was done to provide information on current use patterns. This information will be used in spacing rest areas and providing the proper numbers of facilities.

The information is obtained by giving each vehicle entering the rest area a questionnaire which is answered during their stay in the area. The questionnaire is then collected as the vehicle leaves the area. The study is performed for 5 consecutive days Thursday-Monday 8 hours per day.

The mainline traffic is counted and classified according to type of vehicle during the same time period. This allows us to derive averages for stopping and length of stay for each type of vehicle using the rest area.

The following information was collected:

SUMMARY

Date: July 31st - August 4th, 1980

Hours: 9 A.M. to 5 P.M.

Weather: Warm and partly cloudy, except for showers Monday morning

Total vehicles on mainline Eastbound 9,383

Vehicles entering rest area 9 A.M. to 5 P.M. 1,200

Percent of vehicles stopping 9 A.M. to 5 P.M. 12.8%

Total people using rest area 9 A.M. to 5 P.M. 3,149

Average persons per vehicle 2.6

Average time in rest area 15.6 min.

PURPOSE FOR ENTERING AREA

Use rest rooms	60.7%
Just to Rest	11.2%
Eat/Picnic	10.0%
Water	6.6%
Other	5.5%
Telephone	2.1%
Use Refuse Containers	1.9%
Use Travel Information Board	1.6%
Dispose of Sewage	0.4%

PERCENT OF PEOPLE USING

Rest Rooms	77.6%
Drinking Water	43.3%

PERCENT OF VEHICLES USING

Refuse Containers	25.2%
Picnic Tables	13.8%
Travel Information	8.4%
Picnic Shelter	6.5%
Telephone	5.3%
Other	5.1%
Electricity	0.5%

NUMBER OF VEHICLES THAT STOPPED 9 A.M. to 5 P.M.

Date	Day	Vehicles Entering	Out of State	Vehicles on Mainline	Percent Stopping
July 31	Thur.	246	200	1,675	14.6
Aug. 1	Fri.	239	193	1,956	12.2
Aug. 2	Sat.	252	198	1,921	13.1
Aug. 3	Sun.	216	165	2,007	10.8
Aug. 4	Mon.	247	175	1,824	13.5
		<u>1200</u>	<u>931</u>	<u>9,383</u>	<u>12.8</u>

TIME VEHICLES ENTERED AREA

	Thur.	Fri.	Sat.	Sun.	Mon.
9-10	17	27	21	23	24
10-11	31	32	27	30	32
11-12	35	22	53	20	25
12-1	36	31	51	38	39
1-2	31	31	20	33	41
2-3	36	35	33	24	34
3-4	28	37	26	19	25
4-5	<u>32</u>	<u>24</u>	<u>21</u>	<u>29</u>	<u>27</u>
	246	239	252	216	247

AVERAGE INFORMATION FOR EACH TYPE VEHICLE THAT ENTERED AREA

Type Vehicle	Average Length of Stay	Average No. People	A	B
Car	13.8 min.	2.6	62.3	11.9
Car with camper trailer	19.3 min.	3.8	3.8	24.6
Car with house trailer	23.3 min.	1.7	1.8	17.6
Car with boat trailer	13.0 min.	2.8	0.3	9.3
Car with other trailer	7.4 min.	3.8	0.7	16.3
Single unit truck	16.5 min.	2.9	10.8	13.8
Truck with camper	19.4 min.	2.9	1.3	15.8
Truck with trailer	10.9 min.	3.1	0.8	11.1
Truck (commercial)	10.7 min.	1.2	1.3	8.9
Semi	16.2 min.	1.3	7.4	9.7
Motorhome	27.5 min.	3.1	5.2	25.9
Bus	25.5 min.	22.5	0.2	8.0
Other	<u>21.3 min.</u>	<u>1.6</u>	<u>4.3</u>	<u>20.7</u>
	15.6 min.	2.6	100%	12.8

A refers to percentage of total number of vehicles using rest area

B refers to percentage of this vehicle that stopped in rest area, out of total number of vehicles that passed this rest area.

Vehicles with Pets 5.4%
65 vehicles containing 92 pets

Vehicles stopping at other rest areas 56%

Vehicles spending there vacation in Minnesota 27%

Vehicles who's plans had been affected by the gas shortage 30%

Vehicles on Vacation that were camping 13.5%

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Office Memorandum

TO : Jim Reiersen
Site and Development Unit

DATE: 9-23-80

FROM : Robert Doerr
Sr. Highway Technician

PHONE: 296-7588

SUBJECT: Blue Earth Rest Area Usage Study, I90 East Bound

This rest area usage study was done to provide information on current use patterns. This information will be used in spacing rest areas and providing the proper numbers of facilities.

The information is obtained by giving each vehicle entering the rest area a questionnaire which is answered during their stay in the area. The questionnaire is then collected as the vehicle leaves the area. The study is performed for 5 consecutive days Thursday - Monday 8 hours per day.

The mainline traffic is counted and classified according to type of vehicle during the same time period. This allows us to derive averages for stopping and length of stay for each type of vehicle using the rest area.

The following information was collected:

SUMMARY

Date: July 31st - August 4th, 1980
 Hours: 9 a.m. to 5 p.m.
 Weather: Warm and partly cloudy, except for showers monday morning
 Total vehicles on mainline East Bound 6,582
 Vehicles entering rest area 9 a.m. to 5 p.m. 1,112
 Percent of vehicles stopping 9 a.m. to 5 p.m. 16.9%
 Total people using rest area 9 a.m. to 5 p.m. 2,808
 Average persons per vehicle 2.5
 Average time in rest area 19.3 min.

PURPOSE FOR ENTERING AREA

Use rest rooms	53.8%
Just to Rest	14.3%
Eat/Picnic	9.3%
Water	8.4%
Other	5.6%
Use Travel Information Board	2.8%
Telephone	2.6%
Use Refuse Containers	2.6%
Dispose of Sewage	0.6%

PERCENT OF PEOPLE USING

Rest Rooms	83.2%
Drinking Water	52.2%

PERCENT OF VEHICLES USING

Refuse Containers	28.4%
Picnic Tables	16.1%
Picnic Shelter	11.3%
Other	10.2%
Travel Information	9.1%
Telephone	4.8%
Electric Outlet	0.5%

NUMBER OF VEHICLES THAT STOPPED 9 A.M. to 5 P.M.

Date	Day	Vehicles Entering	Out of State	Vehicles on Mainline	Percent Stopping
July 31	Thur.	221	165	1247	17.7
Aug. 1	Fri.	239	184	1446	16.5
Aug. 2	Sat.	230	187	1232	18.7
Aug. 3	Sun.	227	153	1393	16.3
Aug. 4	Mon.	195	146	1264	15.4
		1112	835	6582	16.9

TIME VEHICLES ENTERED AREA

	Thur.	Fri.	Sat.	Sun.	Mon.
9-10	16	21	17	19	15
10-11	27	38	36	23	21
11-12	23	38	38	30	39
12-1	33	41	33	29	43
1-2	37	27	28	33	14
2-3	32	29	33	38	21

(cont.)

	Thur.	Fri.	Sat.	Sun.	Mon.
3-4	35	27	23	28	21
4-5	<u>18</u>	<u>18</u>	<u>22</u>	<u>27</u>	<u>21</u>
	221	239	230	227	195

AVERAGE INFORMATION FOR EACH TYPE VEHICLE THAT ENTERED AREA

Type Vehicle	Average Length of Stay	Average No. of People	A	B
Car	17.2 min.	2.5	61.1	17.2
Car with camper Trailer	22.1 min.	3.6	3.1	28.7
Car with house Trailer	30.5 min.	3.6	1.1	30.0
Car with boat Trailer	14.5 min.	4.0	0.2	10.5
Car with other Trailer	26.0 min.	2.9	0.6	23.3
Single unit truck	22.1 min.	2.8	11.8	16.6
Truck with camper	23.3 min.	2.9	2.9	25.6
Truck with trailer	27.2 min.	3.6	2.5	15.4
Truck (commercial)	15.6 min.	1.4	1.8	13.2
Semi	24.3 min.	1.4	6.5	10.0
Motorhome	22.1 min.	2.7	2.2	13.0
Bus	16.0 min.	15.0	0.1	10.0
Other	<u>22.1 min.</u>	<u>1.6</u>	<u>6.1</u>	<u>25.3</u>
	19.3 min.	2.5	100	16.9

A refers to percentage of total number of vehicles using rest area.

B refers to percentage of this vehicle that stopped in rest area, out of total number of vehicles that passed this rest area.

Vehicles with Pets	7.0%
78 vehicles containing 96 pets	
Vehicles stopping at other rest areas	55%
Vehicles spending there vacation in Minnesota	32%
Vehicles who's plans had been affected by gas shortage	20%
Vehicles on vacation that were camping	16%

COMMENTS:

We received over 600 comments at each rest area. The majority of the people mentioned how clean, well kept, good looking and well designed the rest areas are in Minnesota. One major comment at Highforest, over 35 times, was the long distance between Blue Earth and the next rest area.

Selected other comments are:

We were very pleased with the nature conservancy at Blue Earth
Should have vending machines (several comments)
Close it up and install gas pumps
Need more shade trees (several comments)
Would be nice to have D.O.T. maps available
Where are the dump stations (several comments)
Minnesota has the best rest areas in the U.S. (Several comments)
First Class!
Should have paper towels, soap, faucets that stay on and how about a coke machine
Get off Bumpy road
Rest areas to far apart.
Keep up the good work and show off the state
Good use of taxpayers money
Nicely landscaped
Why not build rest areas in the median
Wasted tax money
Received Map (thank you)
We could use more rest areas like this on state roads
No beer whats the story
Money well spent
Need one every 30-40 miles
Not enough parking
Travel information very helpful
I stop because there is an attendant so I don't have to be frightened to stop
Need table to change baby
Bikers have more fun than people
I am very fond of rest areas especially when riding a cycle
Like to see wildlife (Several comments)
Excellent rest stop Felt Safe!
Playground great idea
Like to see the passive solar here
Should have a U.S. Mail Box
Would like electric outlets to plug in air conditioner during lunch
Very nice, If Montana only knew
Built with both children and adults in mind
Be back next year to see wildlife
Employee's very courteous
One of the best ways to spend tax dollars

GAS COMMENTS:

We asked 2,321 vehicles if they were on vacation, and if they were did the current gas shortage affect your vacation travels. They answered yes 437 times no 1,017 times and made approximately 200 comments. The comments were mostly that there is no shortage and gas is to expensive other comments are:

My bike uses so little gas it isn't worth talking about

No stations open at night

Less travel

We use diesel

Money Wise

Shorter trips, Stay longer at Stops

Gas was expensive in National Parks

Not going as Far

Bought a compact car. (29 mpg)

No premium Motorcycles need it

Cut my income by 30%

Stayed closer to home

More is spent on gas less on recreation & Food

We camp at KOA's to save money for gas

Not using motorhome this trip

Need a small business loan to go 100 mi.

Diesel Rabbit 45 mpg on trip helps much

Used Motorcycle

I get 60 miles to gallon

We eat less

Traveling only in Minnesota

There is no shortage

More conscious of driving habits

Driving still cheaper than flying

I drive truck, it's very bad

BLUE EARTH REST AREA USAGE SURVEY I-90 E B

DEAR MOTORIST:

THE MINNESOTA DEPARTMENT OF TRANSPORTATION IS DETERMINING WHAT SHOULD BE THE SPACING OF THE REST AREAS ALONG THE HIGHWAY AND WHAT FACILITIES THEY SHOULD PROVIDE TO SATISFY YOUR NEEDS. ONLY YOU CAN SUPPLY INFORMATION WE NEED TO PLAN REST AREA FACILITIES. PLEASE ANSWER THE FOLLOWING QUESTIONS.

DAY OF WEEK _____ VEHICLE TYPE _____ NUMBER OF PEOPLE IN
DATE _____ TIME IN _____ VEHICLE _____
LICENSING STATE _____ TIME OUT _____
WHERE IS YOUR HOME (CITY OR COUNTY)? _____ (STATE) _____

REST AREA USE

- 1. WHAT WAS YOUR CHIEF PURPOSE FOR DRIVING INTO THIS REST AREA? (check only one)
1. ___ Use rest room 2. ___ Dispose of sewage 3. ___ Water
4. ___ Just to rest 5. ___ Use Travel Information Board 6. ___ Telephone
7. ___ Eat/Picnic 8. ___ Dispose of refuse 9. ___ Other (please specify)
2. HOW MANY PEOPLE IN YOUR PARTY USED THE FOLLOWING?
Rest room facilities ___ Drinking water supply ___
3. WHICH OF THE FOLLOWING FACILITIES WERE USED BY YOUR PARTY?
1. ___ Picnic table 2. ___ Travel information 3. ___ Electrical outlet
4. ___ Picnic shelter 5. ___ Trash receptacle 6. ___ Telephone
7. ___ Other (Please specify) ___ 8. ___ None of these
4. DO YOU HAVE ANY PETS TRAVELING WITH YOU? ___ NUMBER ___
5. DID YOU STOP AT ANY OTHER REST AREAS THIS TRIP? YES ___ NO ___ WHERE _____

IF YOU ARE CURRENTLY ON VACATION OR PARTICIPATING IN RELATED RECREATIONAL OR SOCIAL ACTIVITIES, PLEASE COMPLETE THE FOLLOWING QUESTIONS.

- 1. Will you or did you spend your vacation or related time in Minnesota? Yes ___ No ___
2. If you answered "yes" to the previous question, what City or Lake did you or will you stay near? (City or Lake) _____
3. Has the current gas shortage affected your vacation travels? Yes ___ No ___
Comment _____
4. How long are you planning on staying in Minnesota? _____ Days
5. Will you be camping or using campground facilities? Yes ___ No ___

REST AREA COMMENTS _____

PLEASE RETURN TO PEOPLE AT REST AREA EXIT

THANK YOU