

REST AREA SIGN ANALYSIS

5-25-2018

Background:

Following is a summary of an analysis conducted using a subset of data collected from a survey designed/executed by an external consultant about rest area signs. The request was to analyze three items:

- The proportion who saw the signs
- The proportion who felt signs affected their decision on whether or not to stop
- The proportion who found signs to be helpful
- And key differences in these measures by one another, by route, district, number of signs in advance and the type of amenities listed.

The sample size for this analysis was comprised of n=947 respondents. Differences noted were tested at the 95% confidence level.

Highlights:

- About one-third (33%) of these respondents indicated they saw the signs that described the services offered before exiting to the Rest Area and another three-in-ten (29%) were not sure if they had seen the signs or not.
- Among these respondents (who recalled seeing the signs or were not sure):
 - Overall, just over one-quarter (27%) felt the signs affected their decision on whether or not to stop:
 - 35% of those who definitely remembered seeing the signs before exiting.
 - And, 16% of those who were initially not sure if they had seen the signs or not.
 - Overall, around six-in-ten (61%) felt the signs were helpful:
 - 76% of those who definitely remembered seeing the signs before exiting felt.
 - And, 40% of those who were initially not sure if they had seen the signs or not.
- The percentage who saw the signs (definitely) did not vary significantly by route:
 - Somewhat more of those on I-35 than on I-94 felt the signs affected their decision on whether or not to stop, however.
 - There was no significant difference in the proportion who found the signs helpful by route.
- At the district level:
 - None of the districts had a significantly higher proportion seeing the signs, compared to any other district.
 - However, those in the Metro district had a lower proportion seeing the signs than those in Greater MN (26% vs. 34% (for D1, D3, D4 and D6 combined)).
 - The percentage who felt the signs affected their decision on whether or not to stop was higher for D6 when compared to D3 and D4.
 - None of the differences in the district percentages who found the signs helpful are large enough to be significant.
- Those who saw more than one sign in advance and signs that listed extra amenities were somewhat more likely to think the signs were helpful, but had no higher recall of the signs or were no more likely to say the signs affected their decision on whether or not to stop.

More detail follows on these items. Other analyses or summaries may exist covering the additional survey input covered in this survey.

Below are the sample sizes per rest area, district and route.

- **Red**=below 30 (very small (potentially “unstable”))
- **Green**=30-50 (small (wide error range))

Rest Area	Total (n=947)
Albert Lea (NB)	48
Big Spunk Lake (EB)	57
Burgen Lake (WB)	22
Culkin (NB)	134
Enfield (EB)	57
Forest Lake (SB)	57
Fuller Lake (WB)	54
General Andrews (SB)	33
Goose Creek (NB)	36
Hansel Lake	80
Heath Creek (NB)	54
Kettle River (NB)	76
Lake Latoka (EB)	56
Middle Spunk Lake (WB)	40
New Market (SB)	46
St. Croix (WB)	36
Straight River (NB)	14
Straight River (SB)	34
Thompson Hill (SB)	13

District	Total (n=947)
D1	256
D3	208
D4	158
Metro District	129
D6	196

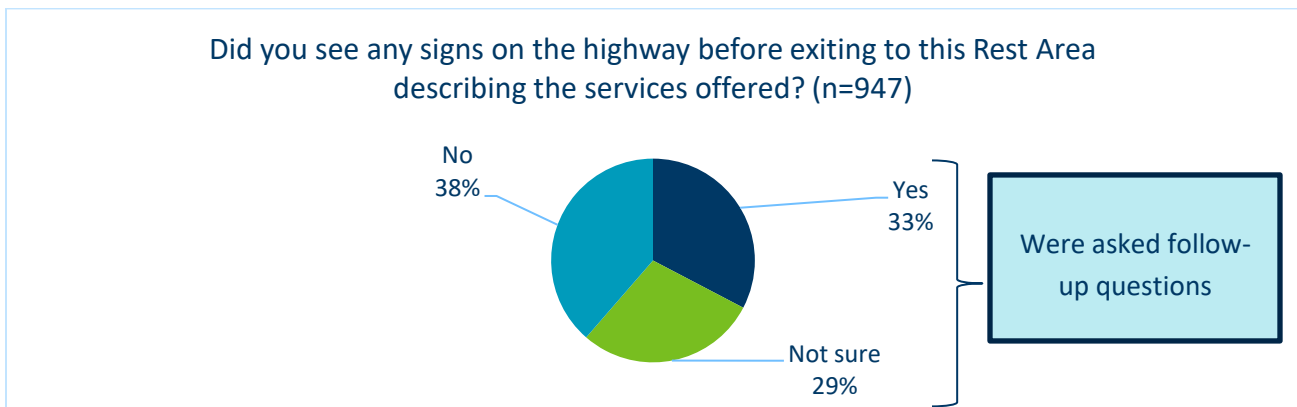
Route	Total (n=947)
I35	545
I94	402

Number in Advance	Total (n=947)
One	352
Two	662

Type of Amenities	Total (n=947)
Typical	285
Unusual	662

Saw signs:

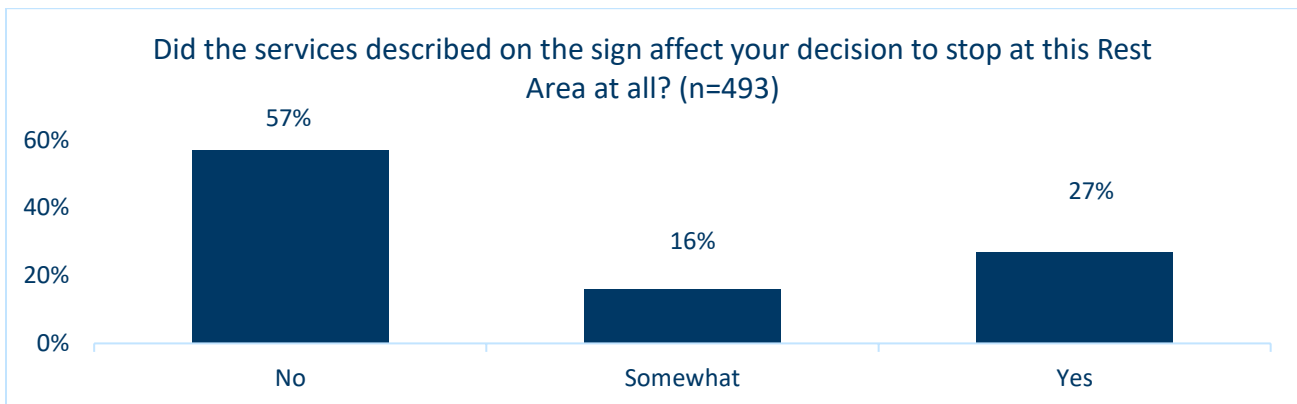
About one-third (33%) of these respondents indicated they saw the signs.



Signs affected decision:

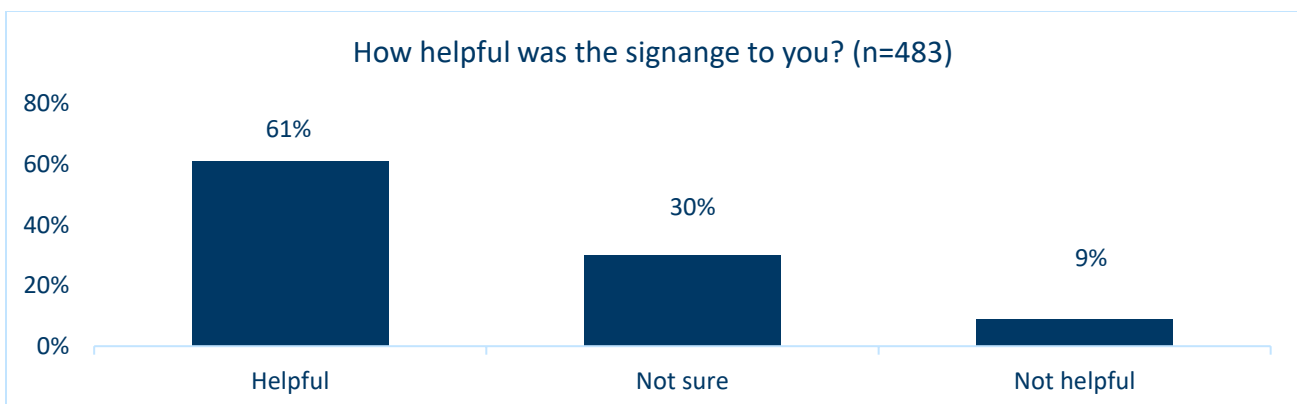
Did the services described on the sign affect your decision to stop at this Rest Area at all?

- Just over one-quarter (27%) felt the signs affected their decision (and another 16% were not sure (may or may not have)).



Signs helpful:

- Around six-in-ten (61%) felt the signs were helpful (and another 30% were not sure (may or may not have)).



- 35% of those who remembered seeing the signs before exiting describing the services offered felt they affected their decision to stop at that Rest Area, along with 16% of those who were initially not sure if they had seen the signs or not.

		<i>Did you see any signs on the highway before exiting to this Rest Area describing the services offered</i>	
		Not sure (n=200)	Yes (n=293)
<i>Did the services described on the sign affect your decision to stop at this Rest Area at all?</i>	No	69%	48%
	Somewhat	16%	17%
	Yes	16%	35%*

*% Yes (signs affected decision to stop) is significantly higher for those who said they saw the signs compared to those who were not sure (tested at the 95% confidence level)

- 76% of those who remembered seeing the signs before exiting describing the services offered felt these signs were helpful, along with 40% of those who were initially not sure if they had seen the signs or not.

		<i>Did you see any signs on the highway before exiting to this Rest Area describing the services offered</i>	
		Not sure (n=196)	Yes (n=287)
<i>How helpful was the signage to you?</i>	Helpful	40%	76%*
	Not helpful	10%	8%
	Not sure	50%	16%

*% Helpful (signs were helpful) is significantly higher for those who said they saw the signs compared to those who were not sure (tested at the 95% confidence level)

Differences by Route.

- The percentage who saw the signs (definitely) did not vary significantly by route, but somewhat more of those on I-35 felt the signs affected their decision on whether or not to stop (but there was no significant difference in the proportion who found the signs helpful).

	Route	
	I35	I94
Saw signs?	n=545	n=402
Yes	34%	31%
Not sure	23%	36%*
No	43%*	33%
Affected decision?	n=266	n=227
No	52%	63%*
Somewhat	18%	15%
Yes	31%*	22%
Signs helpful?	n=263	n=220
Helpful	65%	57%
Not helpful	10%	8%
Not sure	25%	35%*

*these percentages are significantly higher for this route than the other route (e.g., More of those on I-35 did not see the signs and more on I-94 were not sure if they saw them, but the proportion who said they saw the signs is similar).

Differences by District.

- Below are percentages for each district.
 - None of the differences between districts for the percentage who saw the signs are large enough to be significantly different one-to-one.
 - However, those in the Metro district had a lower proportion seeing the signs than those in Greater MN (26% vs. 34% (for D1, D3, D4 and D6 combined)).
 - The percentage who felt the signs affected their decision was higher for D6 when compared to D3 and D4, individually.
 - None of the differences in the district percentages who found the signs helpful are large enough to be significant.

	District				
	D1	D3	D4	Metro	D6
Saw signs?	n=256	n=208	n=158	n=129	n=196
Yes	34%	35%	31%	26%*	35%
Not sure	25%	32%	36%	33%	20%
No	41%	33%	33%	41%	45%
Affected decision?	n=126	n=125	n=96	n=51	n=95
No	50%	65%	61%	63%	47%
Somewhat	19%	13%	17%	14%	18%
Yes	31%	22%	22%	24%	35%
Signs Helpful?	n=124	n=124	n=90	n=51	n=94
Helpful	66%	56%	58%	55%	68%
Not helpful	6%	7%	8%	18%	12%
Not sure	28%	36%	34%	27%	20%

Differences by Number of Signs. The number of signs in advance of each rest area varied based on the number of amenities offered. In addition, the number of signs was often limited by conflicts with other highways signs or interchanges.

- The percentage who saw the signs (definitely) did not vary significantly based upon the number of signs in advance of the rest area, and the number of signs they saw in advance did not substantially affect their decision on whether or not to stop. But, somewhat more of those who saw two signs in advance found the signs helpful.

	Number of signs in advance of the rest area	
	One	Two
Saw signs?	n=352	n=595
Yes	32%	33%
Not sure	31%	27%
No	37%	40%
Affected decision?	n=194	n=299
No	61%	54%
Somewhat	16%	16%
Yes	23%	29%
Signs helpful?	n=188	n=295
Helpful	55%	65%*
Not helpful	11%	7%
Not sure	34%	27%

*These percentage is significantly higher for this segment who saw 2 signs in advance than for those who saw only one sign in advance. Differences in the other proportions are not large enough to be significant at these sample sizes.

Differences by Type of Sign (Typical or Unusual). There were some variations in the type of amenities listed on signs. For instance, most travelers expect picnic facilities and vended snacks and beverages at rest areas, but motorists are less likely to see the following offerings:

- Playground
- Family restroom
- Dog run/dog area
- Maps
- Security camera
- Visitor information

Some of the signs had this extra “extra/usual” amenity information and some did not.

- The percentage who saw the signs (definitely) did not vary significantly based upon the type of amenities listed, and the types of amenities listed not substantially affect their decision on whether or not to stop. But, somewhat more of those who saw signs with the extra amenities listed found the signs helpful.

	Type of Amenities Listed on the Signs	
	Typical	Extra/Unusual amenity info
Saw signs?	n=285	n=662
Yes	32%	33%
Not sure	31%	28%
No	38%	39%
Affected decision?	n=153	n=340
No	60%	55%
Somewhat	18%	16%
Yes	22%	29%
Signs helpful?	n=147	n=336
Helpful	53%	65%*
Not helpful	13%	7%
Not sure	34%	28%

*This percentage is significantly higher for the segment who saw the “extra/unusual amenity information” compared to those who did not (in the “typical” segment). Differences in the other proportions are not large enough to be significant at these sample sizes.

APPENDIX. % who saw the signs by rest area but use caution when comparing since many of the sample sizes are quite small. The % who saw the signs ranged from a low of 13% for Goose Creek to a high of 40% for Thompson Hill and Straight River. But these comparisons are not statistically significant because the sample sizes for these cells are very small (n=13 and 14). The sample sizes for “Affect” and “Helpful” are even smaller (and less stable) and are not shown as a result.

	Albert Lea (NB)	Big Spunk Lake (EB)	Burgen Lake (WB)	Culkin (NB)	Enfield (EB)	Forest Lake (SB)
Saw Signs?	n=48	n=57	n=22	n=134	n=57	n=57
No	40%	65%	53%	48%	69%	63%
Not sure	32%	18%	12%	14%	11%	10%
Yes	28%	18%	35%	38%	19%	27%

	Fuller Lake (WB)	General Andrews (SB)	Goose Creek (NB)	Hansel Lake	Heath Creek (NB)	Kettle River (NB)
Saw Signs?	n=54	n=33	n=36	n=80	n=54	n=76
No	67%	44%	67%	62%	50%	59%
Not sure	8%	22%	20%	19%	4%	26%
Yes	25%	33%	13%	19%	46%	15%

	Lake Latoka (EB)	Middle Spunk Lake (WB)	New Market (SB)	St. Croix (WB)	Straight River (NB)	Straight River (SB)	Thompson Hill (SB)
Saw Signs?	n=56	n=40	n=46	n=36	n=14	n=34	n=13
No	66%	53%	50%	50%	50%	50%	40%
Not sure	16%	16%	25%	17%	10%	13%	20%
Yes	19%	32%	25%	33%	40%	38%	40%