

MOTORISTS' ATTITUDES AND BEHAVIOR CONCERNING CALIFORNIA'S ROADSIDE REST AREAS

John M. Tyler and Carolyn Barr DeVere, Opinion Research Corporation,
San Francisco

This paper reports the results of a research program conducted to assist in evaluating the highway travel and stopping patterns of California drivers. The findings of the study deal, in large part, with long-trip motorists, defined as those who have taken at least 1 trip of 100 miles or more away from home in the previous year. Eighty-six percent of all California motorists have taken at least 1 such trip. The demographic profile of the California long-trip motorist closely parallels the profile of California highway users in general. The median stopping interval for long-trip motorists is every 73 miles and 75 minutes; the mean stopping interval is 81 miles and 85 minutes. The roadside rest area user tends to stop more often than the average long-trip motorist. The median stopping interval for all rest area users is every 58 miles and 68 minutes, and the mean is every 61 miles and 73 minutes. Sixty-four percent of all California highway users have stopped at a roadside rest area at 1 time or another; long-trip motorists are more likely to stop at such an area than short-trip motorists. Roadside rest area users have taken considerably more long driving trips (14) than the average California motorist (7) within the past 12 months. Other findings of the study concern motorists' attitudes and opinions concerning roadside rest areas, reasons for using them, comparison of the rest areas with the "ideal" stopping opportunity, and related issues.

•THE MAJOR objective of this study was defining the highway travel and stopping patterns of California drivers. The data collected provided the basis for an evaluation of the roadside rest program in terms of its present services and those that it ideally should have. Answers to 3 fundamental questions were sought.

1. Are the existing stop facilities on the California highways frequent enough?
2. What types of facilities are needed and how should they be equipped?
3. Can existing facilities meet the needs of motorists?

RESEARCH DESIGN AND METHODOLOGY

Research Process

Extensive briefings were held by Opinion Research Corporation and executives from interested state agencies, the California Highway Commission, and the Safety Roadside Rest and Highway Planting Committee to ensure that the study encompassed all areas of specific interests. At the same time, the research team reviewed all available information pertaining to roadside rest areas. Draft questionnaires were developed and were pretested under actual field conditions. When questionnaires had been reviewed and approved by the Roadside Rest and Highway Planting Committee, field work began. All interviewing was conducted between August 18 and September 8, 1972.

Phase I

Personal interviews with 1,552 people in a probability sample of Californians 18 years of age and older who use the state's highways were conducted to determine the frequency with which Californians make long driving trips (100 miles or more); the purpose of long driving trips; the average distances of such long trips and length of time involved; the actual stopping patterns followed by travelers on long trips; stopping opportunities that may be preferred to those currently available; and the reasons for differences between actual stopping patterns and desired stopping opportunities, if such differences exist.

Phase II

Personal interviews with 1,025 individuals in a representative sample of roadside rest area users were conducted at 5 California rest areas. The 5 rest areas chosen were representative of typical locales in the state. The primary objective of this phase was to observe in detail the behavior and attitudes of travelers at roadside rest areas.

Phase III

Personal interviews with 525 individuals in a representative sample of California nonresident travelers were conducted at 4 heavily traveled border-crossing points, 1 at each of the common boundaries with Oregon, Nevada, Arizona, and Mexico.

The objectives of this phase were to measure the use of California roadside rest areas among nonresident travelers in California and determine why other nonresident highway travelers did not use California roadside rest areas. Additional objectives of the study were to determine use patterns of California roadside rest areas in terms of frequency of stops and length of time spent; the degree to which trips are planned with roadside rest areas in mind; the degree to which specific facilities (rest rooms, telephones, and the like) available at roadside rest areas are actually used; the degree to which travelers use roadside rest facilities as a rest opportunity; and the extent to which roadside rest facilities are used for atypical reasons like overnight stops.

RESULTS

Profile and Traveling Patterns of California Motorists

Eighty-six percent of California motorists have taken long driving trips in the past year. In this report, long driving trips are trips where the motorist traveled 100 miles or more away from home. The demographic profile of California long-trip motorists closely parallels the profile of California highway users in general. California motorists most likely not to have taken long trips are those from the lowest income categories, the less well-educated, and those 55 years of age and older. California highway users take an average of 7 long driving trips a year. The mean number of long driving trips taken by all California motorists is 6.8 trips per year. This average figure is inflated by those motorists who take many more long trips than the typical motorist. This is reflected in the median figure of 3 long trips per year for all California highway users. The mean more closely relates to volume of use of the state's highways and other facilities. The median can be thought of as more closely representing what a typical California highway user is doing. Roadside rest area users and nonresident motorists take considerably more long driving trips per year than the average California motorist. On the average, nonresidents take about 16 such trips, roadside rest area users 14, and the California motorist 7.

Passenger cars are used by most motorists. But roadside rest area users and nonresident travelers are considerably less likely to travel in passenger cars than are California motorists. They are more likely to travel in recreational vehicles or to tow boats and other types of trailers.

Five roadside rest area users in 10 travel with children between 6 and 17 years of age. This is substantially larger than the proportions of California long-trip motorists and nonresident travelers who travel with children in these age categories. More than 1 California long-trip motorist in 10 travels with a dog or other pet. But, roadside rest

area users are more likely to travel with a dog or other pet than either California motorists or nonresident travelers. Nonresident travelers are the least likely to travel with a dog or other pet.

Table 1 gives the travel statistics for a typical day for California long-trip motorists, roadside rest area users, and nonresident motorists.

Current Stopping Places

Table 2 gives the places where California motorists currently make brief stops. California motorists are more likely to stop at gas stations or restaurants than at any other kind of stop, although many do stop at various other places. California long-trip motorists spend widely differing amounts of time for different types of brief stops. Stops of more than 3½ hours in length were not considered brief stops and have been eliminated from the figures to present a more accurate average. On the average, more than an hour is spent at pay amusement areas and national, state, and local parks. More than a half hour, but less than an hour, is spent at restaurants, historical landmarks, and vista points. On the average, 20 minutes or less is spent at grocery stores, drug stores, gas stations, and the shoulders of the road.

Reasons for Brief Stops at Other Than Roadside Rest Areas

The major reasons for stopping at gas stations are to buy gas and oil and to use the rest rooms. The 2 most frequent reasons for stopping at restaurants and drive-ins are to buy a meal and to use the rest rooms. The most frequent reason for stopping at national, state, or local parks is to enjoy the scenery or to view specific attractions. The key reason for stopping at historical landmarks or vista points is to look at the scenery. The major reason for stopping at pay amusement or entertainment areas is to enjoy their specific attractions.

Motorists stopping by the side of the road do so to relax, look at the scenery, and switch drivers. Those California motorists who have never used the state's roadside rest areas may be more likely than those who have used them to make shoulder of the road stops to eat food brought with them, change a tire, repair the vehicle, and the like.

Desired Additional Stopping Places

Two in 10 California long-trip motorists would like to make stops that they do not or cannot actually make. Long-trip motorists are much more likely than short-trip motorists to feel that there are times when they would like to make stops but do not or cannot make them. The need for additional stopping places is mentioned most frequently by motorists who tow trailers, travel in recreational vehicles, or are roadside rest area users. The reasons given for wanting to stop are given in Table 3.

Reasons for not stopping when a stop is desired relate to the lack of a stopping opportunity for 4 long-trip motorists in 10. About 2 in 10 do not stop because they are in a hurry, have already stopped too many times, or do not want to take the time. About the same proportion do not stop because they find no turnoff or safe place off the highway. One in 10 does not stop because someone else in the vehicle does not want to stop.

Ideal Stopping Place

Table 4 gives the characteristics of the ideal stopping place according to California long-trip motorists. More than 6 California long-trip motorists in 10 describe the ideal stopping opportunity as having clean rest rooms.

Fifteen percent of all California long-trip motorists spontaneously mention that the state's roadside rest areas already are ideal stopping places. Roadside rest area users describe the ideal stopping place somewhat differently than do motorists who have never used these areas. Roadside rest area users are significantly more likely to mention clean rest rooms, shade and shade trees, water fountains, picnic areas, a scenic location, a parking area, and safe access and exit. California motorists who have never used a state roadside rest area are significantly more likely to mention that the ideal stopping place would have a restaurant or a gas station.

Table 1. Travel statistics for a typical day.

Item	Mean	Median
Miles covered		
California long-trip motorists, 1,337	307	256
Roadside rest area sample, 1,025	381	354
Outbound nonresident sample, 525	446	406
Driving hours: minutes		
California long-trip motorists	5:34	4:25
Roadside rest area sample	7:39	6:54
Outbound nonresident sample	8:30	7:44
Number of stops		
California long-trip motorists	3.5	3
Roadside rest area sample	5.6	5
Outbound nonresident sample	5.2	5
Miles between stops		
California long-trip motorists	81	73
Roadside rest area sample	61	58
Outbound nonresident sample	80	73
Hours: minutes		
California long-trip motorists	1:25	1:13
Roadside rest area sample	1:13	1:8
Outbound nonresident sample	1:29	1:23

Table 2. Stopping places currently used.

Stopping Place	California Long-Trip Motorists ^a (percent)
Gas stations	90
Restaurants, drive-ins	72
Grocery or drug stores	33
Shoulder of the road	25
National, state, and local parks	23
Historical landmarks or vista points	20
Pay amusement areas	11

^aBased on a sample of 1,337.

Table 3. Reasons for additional stopping places.

Reason	California Long-Trip Motorists ^a (percent)
Relax	35
Look at scenery	25
Use the rest rooms	18
Get something to eat	9
Get something to drink	7
In case something was wrong with car	4
Sleep for night	4
Cool off	4
Get gas	2
Change drivers	2
Other	11

^aBased on a sample of 288, those who desired more stops.

Table 4. Characteristics of ideal stopping places.

Characteristic	California Long-Trip Motorists ^a (percent)
Clean rest rooms and facilities	65
Shade trees	47
Drinking water	39
Picnic facilities	37
Grass, lawns, flowers, streams	24
Scenic	19
Restaurant	15
State roadside rest areas are ideal	15
Gas station, place to have car serviced	14
Food and drink stand	14
Clean	11
Parking area	9
Safe access and exit	10
Phones	8
Quiet and restful	8
Place to cook	5

^aBased on a sample of 1,337.

Table 5. Motorists' perceptions of California roadside rest areas.

Perception	California Highway Users		
	Total ^a (percent)	Long-Trip Motorists ^b (percent)	Short-Trip Motorists ^c (percent)
State roadside rest areas are a useful and necessary part of the state highway system.	74	77	61
State roadside rest areas make an important contribution to safety on California highways.	73	76	57
We do not have enough roadside rest areas in California.	47	50	32
A state roadside rest area would not be a safe place to stop after dark.	28	27	36
I would not stop at a state roadside rest area if I were traveling alone.	19	19	25
I sometimes plan in advance to stop at particular state roadside rest areas.	18	19	15
Turnoffs for state roadside rest areas are hard to spot in time to take them.	12	12	13
Before today, I didn't know where any California roadside rest areas were.	11	8	30
We have enough roadside rest areas in California.	10	11	4
State roadside rest areas are unnecessary because there are gas stations, restaurants, and other places to stop.	7	7	8
I wouldn't care for the people who stop at state roadside rest areas.	3	2	4

^aBased on a sample of 1,552.

^bBased on a sample of 1,337.

^cBased on a sample of 215.

Perceptions of the California State Roadside Rest Areas

The percentages given in Table 5 are of California motorists who agree with the 11 statements about California roadside rest areas.

Roadside rest areas are perceived differently by those California motorists who have used them and by those who have not. Roadside rest area users are more enthusiastic and are considerably more likely to believe that they are useful and necessary, that they make an important contribution to safety on the highways, and that there are not enough of them. Those who have never used state roadside rest areas are more likely to say that they would not be safe places to stop after dark, that they would not stop at them if they were traveling alone, that they do not know where any are located, or that they are unnecessary because of other commercial places to stop.

Men are more likely to believe that California needs more roadside rest areas. Women are more likely to have some fears about their personal safety at roadside rest areas.

Use of California Roadside Rest Areas

More than 6 California motorists in 10 have used California roadside rest areas. Six in 10 of nonresident travelers also have stopped at a California roadside rest area at 1 time or another. Three California long-trip motorists in 10 use at least 1 rest area on a long trip. The proportion of use rises to nearly 4 in 10 among nonresident travelers on a given trip. From the interviews with motorists at roadside rest areas, it is apparent that the state's roadside rest areas are serving the entire range of California motorists. But roadside rest area users are somewhat more likely to be from 25 to 54 years of age, be better educated, and have higher incomes than motorists in general. Roadside rest areas also have a slightly higher proportion of white people, although virtually every racial and ethnic group was represented in the special sample of travelers interviewed at 5 rest areas.

More than 7 out of 10 vehicles observed in the special users sample were registered in California. Even so, the sample of 1,025 included vehicles from 36 states.

Although 85 percent of California long-trip motorists travel in passenger cars, only 63 percent of the vehicles in roadside rest areas are passenger cars. A substantial proportion of recreational and other special vehicles are among those using roadside rest areas. In addition, roadside rest area users are more likely to tow trailers than are long-trip motorists in general. Because these special vehicles require more space and because motorists in these vehicles spend a much longer time in the rest areas than do motorists in passenger cars or trucks, the roadside rest area load factor accounted for by special vehicles is substantial.

Motivations for Use or Nonuse of Roadside Rest Areas

Table 6 gives California motorists' reasons for stopping at rest areas rather than at other kinds of places. A substantial proportion of the reasons why motorists do not use roadside rest areas on any given trip relates to self-induced pressures to complete the trip quickly. This is even true among California long-trip motorists. Of those in this group who have not used roadside rest areas, 2 in 10 say that their trip is too short to stop; 2 in 10 say there is no need to stop; about 2 in 10 say they try to drive straight through; 1 in 10 says he or she is in too much of a hurry to stop. Between 1 and 2 in 10 long-trip motorists do not use roadside rest areas because they only stop at gas stations or they only stop for something to eat. Fewer than 1 in 10 long-trip motorists have never seen a state roadside rest area.

Use of Specific Roadside Rest Area Facilities

Table 7 gives the uses made of roadside rest areas by the 3 groups. The most frequent are to use the rest room, relax and take a break from driving, and get a drink of water.

Table 6. Reasons for using California roadside rest areas.

Reason	California Highway Users ^a (percent)	Reason	California Highway Users ^a (percent)
Relax	50	Children can play	5
Use rest room	36	Not crowded	5
Not commercial	26	Handy	4
Easy access	23	Shady	4
Nice scenery	12	Change drivers	4
Get a drink of water	12	Facilities for pets	3
Clean	12	Nap or sleep	3
Quiet	12	Quick	1
Convenient location	9	Other	9
Safe	8	Don't know, no answer	4
Make car repairs	5		

^aBased on a sample of 994, those who have stopped at a roadside rest area.

Table 7. Use of specific roadside rest area facilities.

Use	California Highway Users ^a (percent)	Roadside Rest Area Sample ^b (percent)	Outbound Nonresident Sample ^c (percent)
Used the rest rooms	80	91	81
Relaxed	72	71	68
Got a drink of water	65	55	53
Looked at scenery	46	27	39
Disposed of trash	40	32	36
Had something to eat	38	40	23
Went for a walk	35	23	25
Read map or asked directions	21	22	30
Cleaned windshield, checked tires	20	14	18
Switched drivers	19	13	20
Walked pet	11	11	6
Changed tire or repaired vehicle	5	5	8
Slept overnight	4	5	10
Took a nap	3	6	11
Used the telephone	2	3	7
Disposed of sewage (recreational vehicle)	2	1	4

^aBased on a sample of 372.

^bBased on a sample of 1,025.

^cBased on a sample of 202.

Table 8. Average length of time spent in roadside rest areas.

Sample and Type of Vehicle	All Stops			Stops of Less Than 3 1/2 Hours		
	Number	Mean (min)	Median (min)	Number	Mean (min)	Median (min)
Roadside rest area sample	1,025	55	21	969	29	19
Passenger car without trailer	566	35	18	553	26	18
Passenger car with trailer	78	66	29	75	35	28
Campers, vans, motor homes	251	93	32	220	34	29
Trucks	53	35	17	52	31	17

Table 9. Facilities or conveniences not in the rest area that would make it a more convenient and comfortable place to stop.

Facility or Convenience	California Highway Users ^a (percent)	Roadside Rest Area Sample ^b (percent)	Outbound Nonresident Sample ^c (percent)
Everything is satisfactory	34	41	46
More shade, windbreaks	21	12	7
Specific rest room facilities such as showers, electrical outlets, and the like	7	11	13
Vending machines and snack machines	7	6	5
Cleaner rest rooms	6	4	6
More drinking fountains	5	4	2
Emergency telephone	5	2	1
More grass, flowers, water	4	7	1
Refreshment stand	4	2	3
More picnic facilities	4	1	1
More and larger rest rooms	3	4	3

^aBased on a sample of 372.

^bBased on a sample of 1,025.

^cBased on a sample of 202.

Actual Length of Time Spent in Roadside Rest Areas

As given in Table 8, the average length of time for all stops by vehicles using roadside rest areas is 55 minutes and for brief stops ($3\frac{1}{2}$ hours or less) is only 29 minutes. The difference is largely accounted for by the fact that a number of motorists use California roadside rest areas for overnight stops. Two in 10 of the motorists interviewed in the special sample of roadside rest area users stayed overnight at 1 or more of the California roadside rest areas. Among the special sample of outbound non-California residents, an almost identical proportion (21 percent) also used the California roadside rest areas for overnight stops.

Suggested Changes for Roadside Rest Areas

When asked to name facilities or conveniences that are not available now, but that would make the rest areas more convenient and comfortable places to stop, more than 3 in 10 California motorists who have used the state rest areas can think of nothing that needs to be added. Table 9 gives the principal changes motorists suggest for the California roadside rest areas.

Future Planning for the Roadside Rest Area Program

In understanding California motorists' behavior and attitudes toward the state roadside rest program, one should keep the following key points in mind:

1. Eight in 10 use the bathroom facilities;
2. Seven in 10 take the opportunity to relax;
3. More than 6 in 10 get a drink of water; and
4. More than 4 in 10 enjoy the scenery and the view.

Key reasons why motorists prefer to use state roadside rest areas, instead of other kinds of places where they might stop, include:

1. The opportunity to take a break from driving and relax;
2. The existence of rest room facilities;
3. There is no charge for using rest areas; and
4. They can bring their own food to eat at the picnic facilities.

The California motorists' description of the ideal stopping opportunity includes clean rest rooms, shade and shade trees, water fountains, picnic facilities, and landscaping and scenic features.

All data indicate that clean, well-maintained rest rooms are important to the acceptability of roadside rest areas to California motorists. In addition, California motorists attach much importance to the presence of shade, windbreaks, drinking fountains, picnic facilities, and so forth. Ideally, all rest area facilities should be blended into an overall design that has a relaxing, restful atmosphere.