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# Changes In Recreational Travel In Washington State

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#### CHAPTER ONE

## INTRODUCTION

## INTRODUCTION

Recreational travel accounts for a large part of the total travel in Washington State, as evidenced by the number of out-of-state vehicles on the road during a summer weekend, skiers traveling to recreation areas during the winter months, and campers and trailers heading to their favorite recreation spots throughout most of the year.

Recreational travel is a key factor in the development of transportation systems and facilities. However, the characteristics of recreational travel are difficult to quantify and define. Traffic counts, a direct measure made at key locations on weekends and holidays, give an indication of traffic volumes, but say little about other characteristics. The number of visits to State Parks and recreational vehicle sales provide additional evidence of recreational travel behavior, but say little about underlying characteristics. This study achieves a more comprehensive understanding of recreational travel by utilizing research methods that go beyond collecting these kinds of data.

## OBJECTIVES OF STUDY

The objectives of this study are:

- To identify the amounts and types of recreational travel affecting the transportation system of Washington, including the identification of institutional and other barriers that inhibit recreational travel.
- To provide a basis for estimating changes in recreational travel and their effects on the transportation system.
- To identify low-cost, energy-saving projects and strategies that can be implemented to mitigate problems and maintain (or expand) recreational travel.

## **DEFINITION OF RECREATIONAL TRAVEL**

Recreational travel can be defined in a broad context or made quite specific depending on the purpose for which the definition is required. A convenient way to define recreational travel, and the one adopted in this study, is to list relevant components of travel that will be analyzed. Thus, in this context, recreational travel will include trips:

- . Involving outdoor recreation activities
- To visit friends and relatives
- To visit second homes
- To spectator events
- Involving sightseeing or pleasure driving
- . Involving business combined with any one of the above

#### METHODOLOGY

Having established the primary study objectives of identifying the amounts and types of recreational travel and of providing a basis for estimating changes in recreational travel, the following travel variables were determined to warrant investigation.

- . Traveler perceptions concerning trip frequency, distance and duration in the past, present and future.
- Traveler attitudes concerning travel mode -- given future energy-price scenarios.
- Traveler attitudes concerning the buying and selling of automobiles and recreational vehicles given future energy-price scenarios.
- Trip characteristics including: trip purpose, travel mode, vehicle occupancy, traveler demographics, trip expenditures, types of accommodations, destinations, distance traveled, length of stay during trip, the frequency with which trips are made.

 The change in recreational travel that has occurred on the Washington State Highway System.

A synthesis and analysis of data from two types of surveys and other relevant sources is the underlying method of investigating these variables. A random telephone survey collected data from Washington residents and a roadside survey was used to collect data from out-of-state travelers. Other data sources such as traffic volumes, state park visits and new recreational vehicle registrations further augmented the recreational travel picture.

The presentation of the data analyzed in this study occurs in the following sequence. The historical trends of traffic volumes and state park visits were presented as an orientation to the effect that energy cost and availability has on recreational travel. The study then discusses travelers' past, present and future perceptions about trip frequency, distance and duration. This is followed by a discussion of the reasons that changes have been made in recreational travel. Finally, the impact of increasing energy prices on travel mode and travelers (what demographic groups are impacted) is discussed. The data from the two types of surveys are kept separate with only occasional use of side-by-side comparisons. The data most central to this report are presented in Chapter Two. Additional detailed data from the surveys are presented in the Appendices.

## HOUSEHOLD SURVEY OF WASHINGTON RESIDENTS

A random telephone survey of Washington residents was conducted twice -- in March 1981 and in August 1981. Each of these surveys of 1,200 households queried the respondents' perceptions and attitudes about trip-making with respect to energy costs as well as the specific characteristics of the latest long trip (five days or greater) and the latest short trip (less than five days) made during the six months preceding the survey. This sample size is large enough to give a precision level of 0.05.

The survey addressed the following characteristics of trips made by Washington residents.

- Destination
- Distance from home to destination
- . Travel mode
- Type of vehicle driven at destination
- . Miles traveled at destination
- Type of accommodation used
- Activities
- Number in party
- Expenditures

This was accomplished by directly asking the respondents about the characteristics of their latest trip. The approach of using the specific characteristics of the latest trip assumes that the latest trip prior to the survey is a typical trip for that six-month period and that when data from both the March and August surveys are examined together, inferences about trips taken throughout the year by Washington residents can be made. In assuming the last trip taken in the previous six months represents a typical trip, it is acknowledged that while for any one individual their last trip may not be typical, combined data for the entire sample does represent typical recreational travel behavior over the last six months.

In many of the topics discussed in this report, there were no significant differences in the results of the March and the August surveys. In these cases, the survey results are presented in a combined form. In other instances, particularly with trip characteristics, there were differences. In those cases, the results were kept separate. Most of these statistics can be found in Appendix A.

The questions in the telephone survey dealing with perceptions and attitudes about trip-making addressed three different time periods -- the past, the coming year, and the future. The approach is summarized below.

#### The Past

## People were asked to compare:

- the number of trips taken during the past year and the number made three or four years ago.
- the distance of trips taken during the past year and the distance traveled on trips three or four years ago.
- the duration of trips taken during the past year and duration of trips taken three or four years ago.

## The Present

The present was addressed by structuring the questions so that the perceptions of travelers concerning travel in the coming year - given current gasoline prices - could be compared to their behavior during the past year.

## People were asked to compare:

- the number of trips they planned to make in the coming year and the number made in the past year.
- the distances of trips planned for the coming year and the distances traveled in the past year.
- the duration of trips planned for the coming year and the duration of trips made in the past year.

#### The Future

Recreational behavior in the future was also investigated. In this time period, three gasoline price scenarios were used as the basis for the respondents' decision-making, whereas in the "past" time period, the behavior of the past year was

compared to the behavior of three or four years ago and in the "present" time period, the behavior anticipated with current gasoline prices was compared to the travel behavior of the previous year.

The following future price scenarios were analyzed:

- decisions at \$1.50 per gallon
- decisions at \$2.00 per gallon
- decisions at \$3.00 per gallon

Rather than asking each respondent to answer questions regarding their travel decisions under each pricing scenario, the sample was divided into three groups of 400 respondents which was a large enough sample size for a precision level of 0.05. Each group was asked their most likely behavior under only one of the above price scenarios. See the telephone survey specifications on page 1 of Appendix A.

The respondents were asked to compare:

- the number of trips they might make at the future price versus the number they had planned to take.
- the distances of trips that might be taken at a future price versus the distances of trips they had planned to take.
- the duration of trips that might be taken at a future price versus the duration of trips originally planned.

Several other questions that relate to the future changes in recreational travel due to increasing gasoline prices were also asked. Respondents were asked if they would use a different travel mode due to gasoline-price increases and if this were so, what was their alternate choice. The respondents were also asked if they would sell their present vehicles and if they were planning to sell, whether or not they would replace the vehicle with something more fuel-efficient. This question was asked for both automobiles and recreational vehicles. The respondents were finally asked what was the most important reason for a change in travel behavior.

The basic survey tabulations are presented in Appendix A. Also contained in Appendix A are the specifications developed for conducting the telephone survey.

## ROADSIDE SURVEY OF OUT-OF-STATE VEHICLES

The roadside survey was used to determine the following characteristics of out-ofstate travelers.

- Vehicle type
- · Vehicle occupancy
- Driver age
- Purpose of trip
- Amount spent on trip
- Distance traveled in Washington
- Number of days in Washington
- Accommodations used

The survey also determined attitudes and perceptions about trip-making:

- Probability of making trips to Washington at different gasoline prices.
- . The changes in the frequency that people make trips.
- Attitudes about recreational vehicles.
- Attitudes about automobile travel and willingness to switch to other modes.

The interviewers stopped the out-of-state vehicles as they were leaving the state at three major points:

SR 5 at Blaine - 1/2 mile south of Canadian Customs (date: October 1, 1980 to October 5, 1980)

SR 90 at the Idaho border - Exit 299 (date: October 8, 1980 to October 12, 1980)

SR 5 - Thirteen miles north of Vancouver at the rest area just south of the Ridgefield exit (dates: October 16, 1980 to October 19, 1980)

The volume of local out-of-state (example: Canadians eating lunch in Bellingham) traffic was perceived as a source of traffic which could bias the sample. To eliminate this source of bias from entering into the survey, only travelers on a recreational trip of at least one night in Washington were surveyed. The interviewers were instructed to let a vehicle pass through if the trip was purely business, a one-day shopping trip or a one-day sightseeing trip. The precision level of this survey was determined to be 0.05. The findings of the out-of-state roadside survey are presented in Appendix B, and Appendix C contains the records of vehicles sampled, vehicles selected, and the counts of vehicle types passing the interview point.

#### CHAPTER TWO

#### IMPACT OF ENERGY COSTS ON RECREATIONAL TRAVEL

#### HISTORICAL TRENDS

Following a period of decline in recreational traffic between 1973 and 1974, which was precipitated by the fuel crisis, recreational traffic increased again until 1978. Another fuel crisis in 1979 resulted in a sharp decline in recreational traffic. Even though gasoline prices continued to increase on into 1980, recreational traffic stabilized at the 1979 level (see Figure 2.1).

The 1979 fuel crisis also affected the average weekday (AWD) traffic. AWD traffic had been steadily increasing from 1974 to 1978, but when gasoline prices started to soar in 1979, AWD traffic leveled off to 1978 levels and remained there throughout 1980. The impact of the 1979 fuel crisis appeared less severe for AWD traffic than for recreational traffic. Since restricted fuel supplies and higher costs confined travel more to work-related trips and high priority purposes, recreational travel was apparently postponed altogether or limited more to short trips.

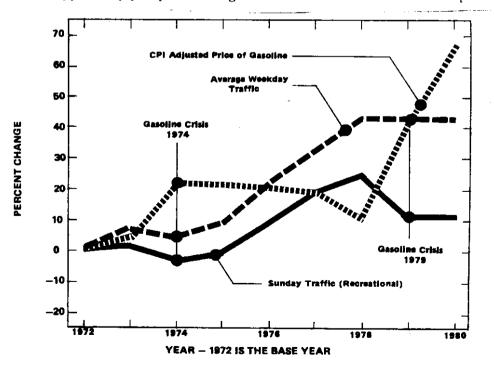
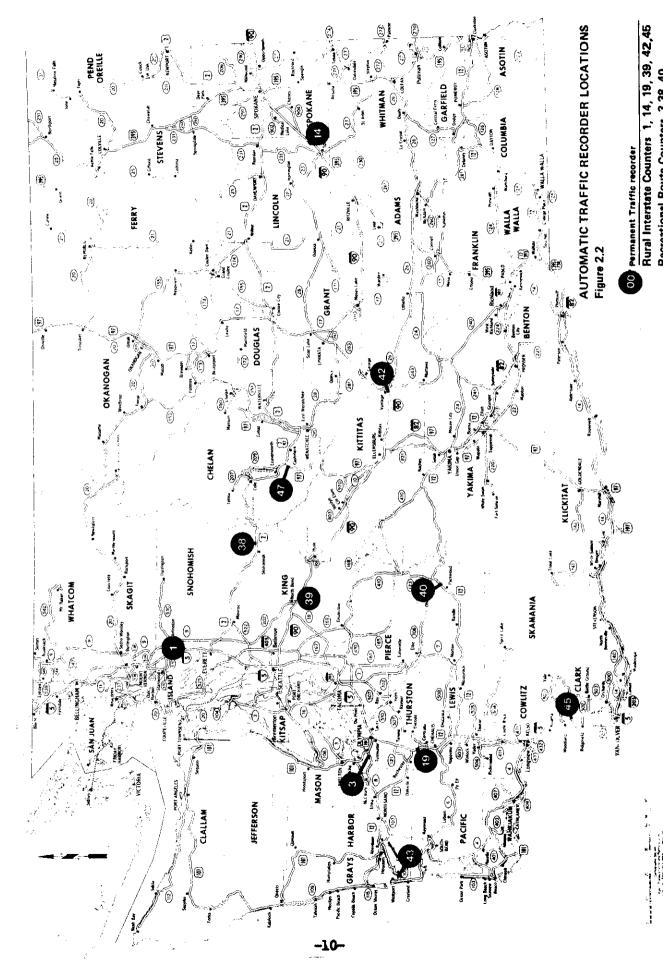


Figure 2.1 The Comparison of Average Weekday and Sunday Traffic Along Selected Recreational Routes



Recreational Route Counters 3,38, 40,

# TRAVEL BEHAVIOR ON RECREATIONAL ROUTES

To obtain a profile of travel per person, the yearly traffic volumes from permanent traffic recorders located on routes leading to recreational areas were divided by the size of the work force during that particular year. The reason for looking at the data in this manner is to identify the travel behavior characteristics per person which would otherwise be submerged by the growth taking place in the size of the work force statewide. The locations of traffic recorders along the recreational routes are shown in Figure 2.2.

The impact of the gasoline shortage during 1974 along with increasing prices resulted in 9 percent decreased travel on an individual basis compared to 1972. When the shortage was over in 1975, travel on an individual basis did not return to 1972 levels but remained 7 percent below that level. It was not until 1977 that this measure of travel reached the pre-gasoline crisis level. See Figure 2.3.

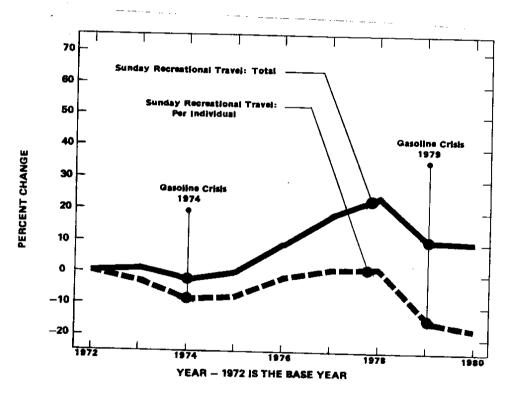


Figure 2.3 Sunday Traffic Volumes Along Selected Recreational Routes - Individual vs. Total

#### TRAVEL BEHAVIOR ON RURAL INTERSTATE

Sunday traffic per person during the summer months at the rural interstate locations shown in Figure 2.2 declined between 1972 and 1976 at a fairly steady rate (see Figure 2.4). This measure of traffic moved up in 1977 and 1978 but never regained the levels of 1972. The gasoline crisis of 1979 brought about drops in both average weekday traffic and Sunday traffic. During this gasoline crisis, Sunday traffic along the interstate was affected much more than the AWD traffic.

The absence of the pronounced 1973-1974 "dip" that was observed along the recreational routes is not apparent. This is due to the non-inclusion of data from the 1973-1974 winter -- the time of the most critical travel-inhibiting gasoline shortage.

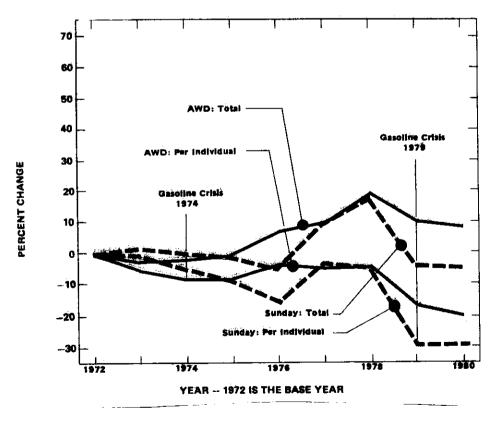


Figure 2.4 Traffic Volumes Along Rural Interstate - Selected Locations During June, July and August

## STATE PARK VISITS

Total visits to State Parks (adjusted for labor force size) reached a peak in 1977, two years prior to the 1979 fuel crisis. The rate of decline in total visits to State Parks remained quite steady from 1977 through 1980 (see Figure 2.5). The curve showing total visits to State Parks is similar to the curve showing Sunday traffic along recreational routes.

Trailer visits to State Parks followed a different pattern than the "total visit" curve. An unusual increase in trailer visits was noted during the 1974 fuel crisis year. Also, trailer visits during the years 1975 to 1977 decreased while total visits to State Parks were on the increase. During the fuel crisis of 1979, the number of trailer visits, as well as total visits to State Parks, decreased. Trailer visits appear to be more sensitive to gasoline availability (in 1979) and price (on into 1980) than total visits. The more rapid decrease in trailer visits as compared to total visits supports this. The large increase in trailer visits during 1974, a gasoline crisis year, is an exception and remains unexplained. Overall, it appears that fuel-price conscious travelers began to leave their trailers at home rather than tow them to recreational areas. Another possible explanation is that the fleet mix contains an increasingly higher proportion of fuel-efficient vehicles with low horsepower which make towing a trailer rather inconvenient. A final factor may be the shift in recreational travel preferences from fewer extended vacations to more frequent short vacations. In this case, for a short stay, the cost of towing a trailer could be greater than the savings achieved by foregoing more expensive accommodations.

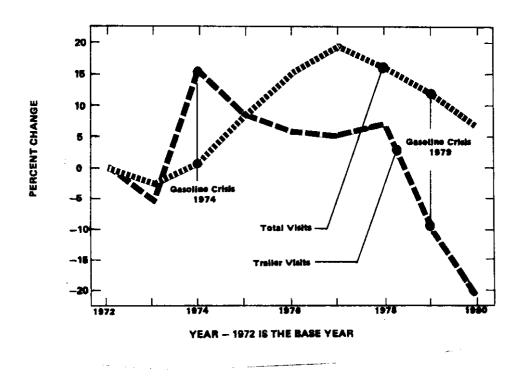


Figure 2.5 Comparison of Total and Trailer Visits to State Parks

#### CHANGES IN RECREATIONAL TRIP BEHAVIOR - WASHINGTON RESIDENTS

To identify changes in recreational behavior over time, the telephone surveys were designed to ascertain attitudes toward recreational travel behavior over three time periods: past, present and future. The following is a brief summary of the findings. Detailed data are presented later in the report.

#### PAST BEHAVIOR

Survey respondents were asked to compare their trip behavior during the past year to their trip behavior of three or four years ago. They were asked to compare trip frequency, distance and duration. Respondents generally took more trips in the past, and these trips also tended to cover the same distance although about one-third of the respondents indicated their past trips were farther from home. The duration of past trips was also about the same although about one-fourth indicated their past trips were for longer periods of time. Hence, in comparing trips taken

three to four years ago to trips taken in the past year, recreational trips were more frequent in past years.

## PRESENT BEHAVIOR

To obtain information regarding their present attitude and behavior, survey respondents were asked about trip frequency, distance and duration if gasoline prices were to remain unchanged. The majority of the respondents indicated their recreational travel behavior would remain the same as the past year. Hence, their overall recreational travel would be reflected as the same number of trips taken, with those trips covering about the same distance, and the trip lasting about the same length of time as in the past.

#### **FUTURE BEHAVIOR**

Future recreational travel behavior was investigated using various gasoline prices: \$1.50 per gallon, \$2.00 per gallon, and \$3.00 per gallon. The sample population was divided into three groups and was asked to respond to questions regarding trip frequency, distance and duration. However, each group was given only one gasoline price to which to respond. The findings indicate that as gasoline prices increase, more of the respondents will take fewer trips. Moreover, these trips will tend to last as many days as trips in the past, but will be taken closer to home.

#### PRICE SENSITIVITY

A rough method of determining the relative price-sensitivity of travel frequency, distance and duration to changes in gasoline price is to compare the percentage responding "fewer," "closer to home" and "shorter periods" at the proposed gasoline price levels of \$1.50, \$2.00 and \$3.00.

For frequency, the percentage responding "fewer" ranged from 51 percent at \$1.50 to 75 percent at \$3.00 -- a difference of 24 percent. For distance, the percentage responding "closer to home" ranged from 42 percent at \$1.50 to 59 percent at \$3.00 -- a difference of 17 percent. For duration, the percentage responding "shorter periods" ranged from 19 percent at \$1.50 to 29 percent at \$3.00 -- a

difference of 10 percent. These data are displayed in Figure 2.7, Figure 2.9, and Figure 2.11.

Hence, frequency appeared to be most price-sensitive since it had the largest percentage point spread of 24 percent. Frequency was followed by the next most price-sensitive variable, distance. It had a percentage point spread of 17 percent. Duration was least price-sensitive with a percentage point spread of 10 percent.

#### FREQUENCY OF RECREATIONAL BEHAVIOR

Of those surveyed, 48 percent indicated that they took more trips three or four years ago than in the past year (last half of 1980 and first half of 1981). Moreover, the effect of rising gasoline prices during this period has reduced the frequency of recreational travel such that even if gasoline prices did stabilize, only 9 percent of travelers would take more trips (see Figure 2.6). Rising gasoline prices would continue to reduce the frequency of recreational trips (see Figure 2.7). Frequency of recreational trips was shown to be the most price-sensitive to increases in gasoline prices of the variables investigated.

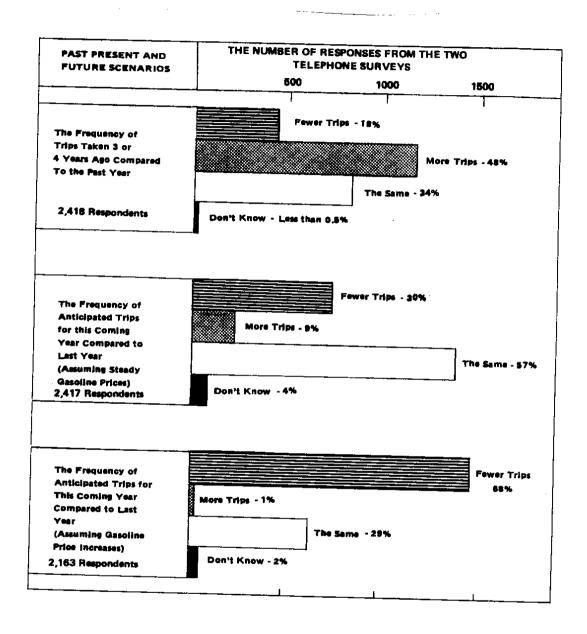


Figure 2.6 Shifts in Frequency of Trips

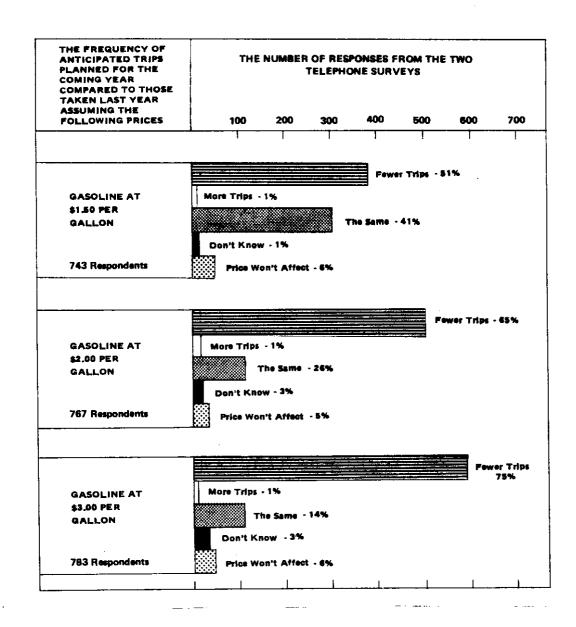


Figure 2.7 Frequency of Trips - Increasing Gasoline Price Scenario

## RECREATIONAL TRIPS DISTANCE

Distance is a recreational travel characteristic that showed some resistance to the impact of gasoline prices. However, two segments of the sample population demonstrated the price-sensitivity of recreational travel distances to fuel costs. One segment (17 percent) indicated that their trips this past year were taken closer to home than those of three or four years ago. This segment increased to 24 percent when the respondents were presented with the situation of comparing the distance (from home) of trips planned for the coming year with the distance (from home) of trips made during the past year. In the increasing gas price scenario, 54 percent responded that with higher gasoline prices their trips would be closer to home compared to the trips taken during the past year (see Figure 2.8).

The second segment showing price-sensitivity indicated that three or four years ago recreational trips extended farther from home than those taken during the past year (38 percent). When asked if their trips would be farther from home this coming year than the past year, this group fell to 12 percent. Under the increasing gas price scenario, the group taking trips farther from home fell to 2 percent.

The price-sensitivity of the distance traveled from home is not as acute as the frequency of travelers' trips. This is evident from the significant showing of those who indicated their recreational trip distances have remained the same in the past year as during the period three to four years prior. Also, under the higher gas price scenario, 41 percent of the respondents indicated that higher gas prices would not affect the distance of their recreational trips (see Figure 2.9).

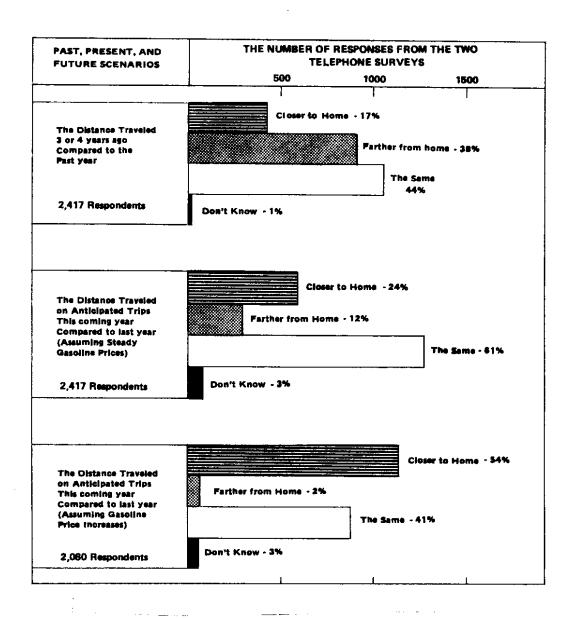


Figure 2.8 Shifts in Distance of Trips

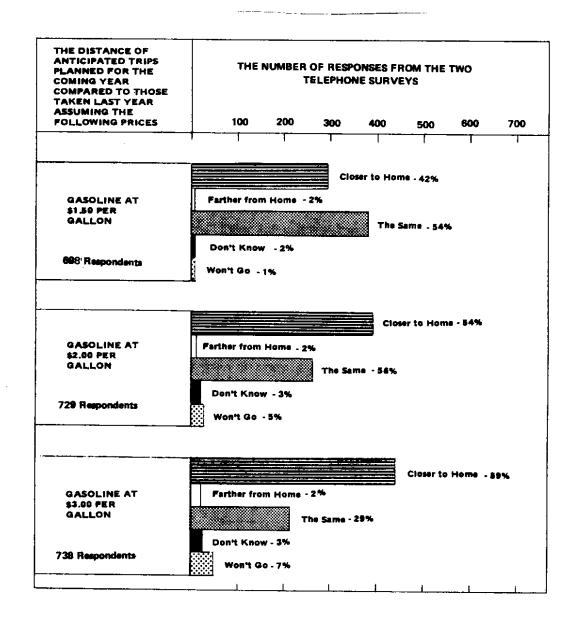


Figure 2.9 Distance of Trips - Increasing Gasoline Price Scenario

## **DURATION OF RECREATIONAL TRIPS**

Duration of trip is the least sensitive to increases in gasoline prices of the three variables investigated. For each time period (past, present and future), the overwhelming majority of the respondents (56 percent, 67 percent and 63 percent) indicated that the duration of their recreational trip would not be affected by higher fuel costs. Apparently, travelers who have reduced the frequency of recreational trips taken due to higher fuel costs find that the marginal cost of staying at their destination once they have arrived is not as great as the increased marginal cost of transportation. Hence, once transportation costs have been incurred, the marginal cost per day for the trip becomes lower with increased trip duration. Figure 2.10 presents the shifts over time in trip duration. Figure 2.11 shows the respondents' attitudes about trip duration when they are faced with an increasing gasoline-price scenario.

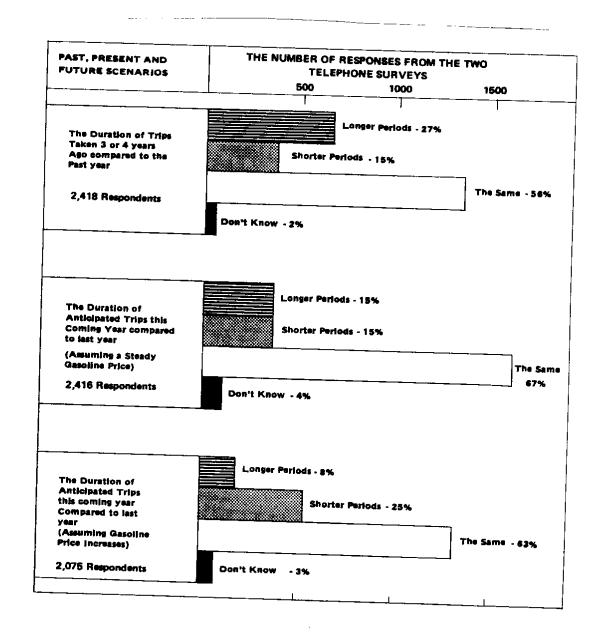


Figure 2.10 Shift in Duration of Trips

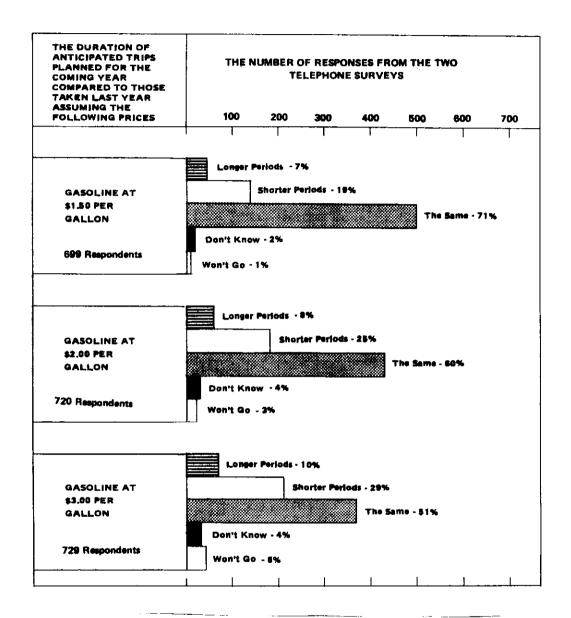


Figure 2.11 Duration of Trips - Increasing Gasoline Price Scenario

# THE TOP FIVE TRIP PURPOSES OF RECREATIONAL TRIPS

The survey data show that visiting friends and relatives is the most frequent trip purpose. The following list ranks the five most frequent trip purposes.

1st - Visit friends/relatives

2nd - Rest/relaxation

3rd - Sightseeing

4th - Fishing

5th - Reunion/convention/cultural events

The impact of higher fuel prices on these activities was analyzed by cross-tabulating the variables "most recent trip purpose" and "changes in trip frequency given gasoline price increases." This approach assumes that the latest trip made by the respondents is typical of the types of trips they generally make and that when they reduce trips, these are the trip types that will be reduced. The resulting profile for reductions in trip frequency for the different types of trips is shown in Figure 2.12.

Fishing appeared to be the most price-sensitive of the top five trip purposes. Those who indicated that fishing was the purpose of their most recent trip responded with the greatest frequency that higher fuel prices would cause them to reduce the frequency of their trips. Relatively fewer people anticipated reducing sightseeing trips.

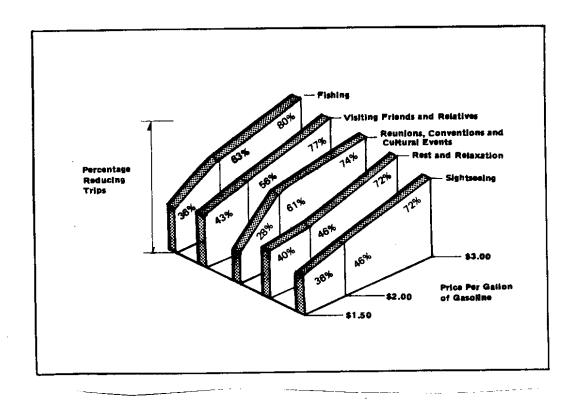


Figure 2.12 Trip Reduction Classified by Trip Purpose

## CHANGES IN RECREATIONAL TRIP BEHAVIOR: OUT-OF-STATE TRAVELERS

The out-of-state traveler survey (see Appendix B) used two types of questions to determine how out-of-state travelers would change their travel habits if the price of gasoline increased. The first question attempted to determine the sensitivity of out-of-state travel to increases in gasoline price. This question asked the respondents if they would have come to Washington with gasoline prices at \$1.50 per gallon, \$2.00 per gallon, and \$3.00 per gallon. The next set of questions asked the respondents to assume the price of gasoline was \$2.00 per gallon. The respondents were then presented with some recreational travel categories to which they could respond increase, remain the same, or decrease. For instance, the travelers were asked whether the frequency of their out-of-state vacations would increase, remain the same, or decrease. As a further example, another question of this type asked the travelers whether their auto size would increase, remain the same, or decrease.

The pattern of behavior for out-of-state travelers is similar to the recreational travel behavior for Washington residents. For both groups, higher fuel costs will tend to influence trip behavior by decreasing the frequency of long trips (trips of five days or more) and increasing the number of trips closer to home (see Table 2.1).

Type of Trip	Increase	Remain the Same	Decrease
Out-of-State Vacation	1.5%	42.0%	54.8%
Long Vacation (5 days or more)	2.2%	45.3%	50.6%
Short Vacation overnight to 4 days)	8.4%	53.6%	36.4%
Trips Nearer Home	35.2%	49.3%	13.5%

TABLE 2.1 Changes in the Frequency of Recreational Trips of Out-of-State Travelers - Given a Gasoline Price of \$2.00 per Gallon

The question regarding the frequency of trips to Washington at varying gas prices indicated an avid willingness to travel among out-of-state visitors. Only 11 percent stated they would take fewer trips at \$1.50 per gallon compared to the 51 percent of Washington residents who responded they would take fewer trips at that price. At \$2.00 per gallon, 36 percent of the out-of-state travelers indicated they would take fewer trips in comparison to 65 percent of Washington residents. At \$3.00 per gallon, 56 percent of the out-of-state travelers indicated they would take fewer trips to Washington. Of the Washington residents interviewed, 75 percent said they would take fewer trips at \$3.00 per gallon (see Table 2.2).

		GASOLINE PRICES		
Survey	\$1.50 per gallon	\$2.00 per gallon	\$3.00 per gallon	
Out-of-state	11%	36%	56%	
In-state	51%	65%	75%	

Table 2.2 Responses to Fewer Trips

The greater willingness among out-of-state travelers to continue traveling at increasing gas prices compared to Washington residents is apparently due to a biased sample. Respondents to the out-of-state survey consisted of those who were already traveling, and therefore initially more inclined toward recreational travel. In contrast, Washington residents surveyed represented a random sample of the population none of whom were traveling at the time they were interviewed.

#### REASONS FOR CHANGE IN TRIP-MAKING BEHAVIOR

So far, this study examined the changes taking place in recreational travel due to decisions based on a scenario of increasing gasoline prices. Gasoline prices were selected because of the historical relationship observed between gas prices and amount of travel. To obtain additional insight into other reasons which might explain changes in recreational trip-making decisions, the respondents from the telephone survey of Washington residents were asked to indicate the main reason for changes in their recreational travel decisions.

As expected, the largest number of respondents (27.8 percent) indicated that gasoline price was the most important reason for change in their recreational travel decisions. However, changes in the amount of time available for recreational travel (13.8 percent), changes in family situations (13.1 percent), and economic conditions (13.0 percent) also influence travel decisions. (See Table 2.3)

RANK	REASON FOR CHANGE	FREQUENCY	PERCENT
lst	Gasoline Price	540	27.8%
2nd	Change in Time Available	269	13.8
3rd	Change in Family Situation	255	13.1
4th	Economy	252	13.0
5th	Other	147	7.6
6th	Changes in Geographic Location	132	6.8
7th	Changes in Interests	127	6.5
8th	Changes in Work Situation	126	6.5
9th	Change in Vehicle Ownership	42	2.2
10th	Don't Know	42	2.2
llth	Cost of Air Travel	10	0.5
TOTAL		1,942	100.0%

Table 2.3 Reasons for Changes in Trip-Making Behavior

#### **CHANGES IN TRAVEL MODE**

The telephone survey showed that increasing gasoline prices appeared to have only a slight effect on recreational travel mode changes (see Figure 2.13). As the price of fuel increases, those responding they would change modes rose from 13 percent at \$1.50 per gallon to 20 percent at \$2.00 per gallon and to 21 percent at \$3.00 per gallon. The combined total of those indicating that a mode change would be contemplated at higher fuel prices was 18 percent of the sample. Those responding that no mode changes would be likely under the same higher fuel price scenario represented 77 percent of the sample.

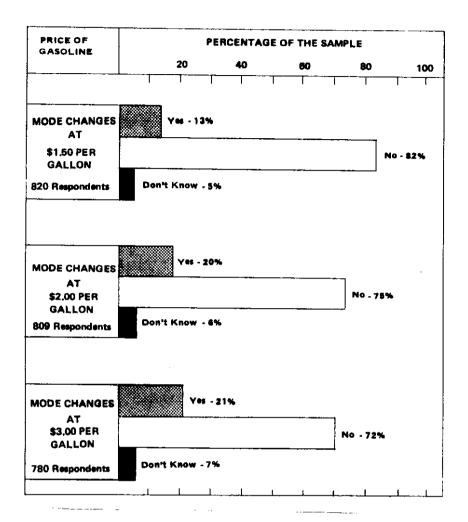


Figure 2.13 Responses to Mode Change at Increasing Gasoline Prices

Even though the question was not directly asked, the data just discussed and the data concerning the changes in trip frequency, duration and distance indicate that recreational travelers will tend to adjust trip frequency, duration and distance, as well as make adjustments in vehicle size before switching from private vehicles to other modes.

The alternate travel modes most preferred by respondents expressing that they would change travel modes with increasing gasoline prices were air-travel (36 percent), bus (20 percent) and train (15 percent). Table 2.4 shows these travel modes and the frequency that they were picked as an alternative to recreational travel by automobile.

ALTERNATE MODE CHOICE	FREQUENCY	PERCENT
Air-Travel Bus Train Other Motorcycles Carpool Bicycle Motorhome	136 78 58 36 21 17 19	35.7% 20.4 15.2 9.5 5.5 4.5 5.0 4.2
TOTAL	381	100.0%

Table 2.4 Top Choices for Alternate Recreational Transportation Mode

#### CHANGES IN RECREATIONAL VEHICLE PREFERENCES

Over one-third of the sample from the telephone survey indicated they owned a recreational vehicle. However, only 9 percent of the recreational vehicle owners stated that increasing fuel prices would cause them to sell their recreational vehicles without replacing them. Those indicating that they would sell with the intention of replacing their recreational vehicle with a fuel-efficient model were 7 percent of the recreational vehicle owners. The majority of recreational vehicle owners (80 percent) stated that higher fuel prices would not cause them to either get rid of or replace their recreational vehicles. Figure 2.14 presents the responses to questions regarding the selling of recreational vehicles in reaction to increasing gasoline prices. The resistance of the group of recreational vehicle owners to the effect of higher fuel prices is quite noticeable. The apparent willingness to retain recreational vehicles against the backdrop of increasing fuel prices appears to be linked to the substantial investment already made in the acquisition of recreational vehicles, and the considerable value placed on recreational travel activities. The value of an investment in a recreational vehicle appears to be viewed more as a cost recoverable mainly through use of the recreational vehicle rather than through resale.

The intentions of recreational vehicle owners that stated they would sell their vehicle given the increasing gasoline-price scenario are shown in Figure 2.15. As

gasoline prices increase, a higher percentage of those planning to sell will not replace the vehicle once it has been sold.

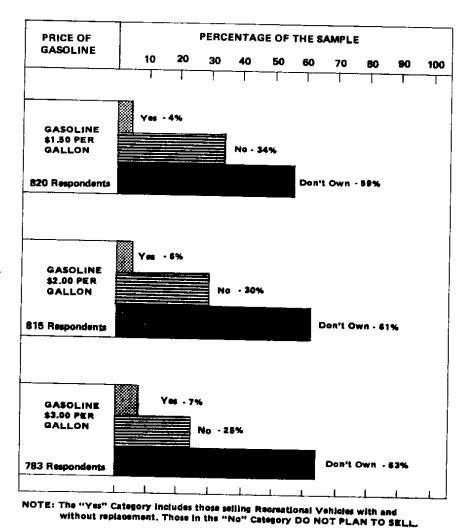


Figure 2.14 Responses to Selling Recreational Vehicle at Increasing Gasoline Prices

An additional consideration regarding changes in recreational vehicle preferences has been the decline of new recreational vehicle registrations (see Figure 2.16). The recreational vehicle profile which emerges is one in which the existing stock of recreational vehicles in use will be largely retained. New purchases will decrease especially if energy costs increase, and those purchases will tend to be more fuel-efficient.

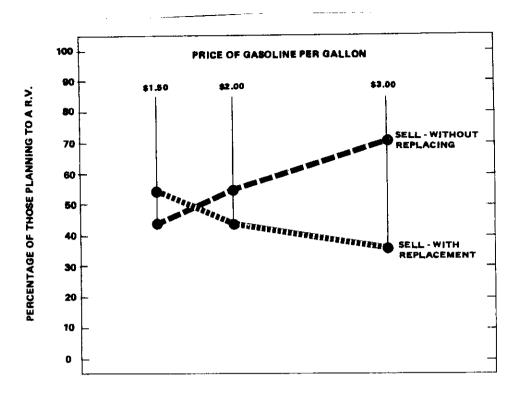


Figure 2.15 Recreational Vehicle: Sell and Replace vs. Sell and Not Replace

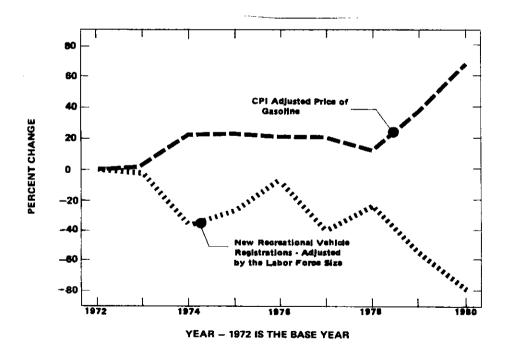


Figure 2.16 Comparison of Gasoline Prices and New Recreational Vehicle Sales

		1
		•

## IMPACT OF ENERGY COSTS BY POPULATION CHARACTERISTICS

#### **INCOME GROUPS**

The telephone survey of Washington residents showed that increasing fuel costs will curb recreational travel activity among all income groups. A cross-classification analysis of household income by trip-frequency reductions showed that the frequency of those reducing trips increased at successively higher gasoline prices (see Figure 2.17). As expected, those in the low income (less than \$15,000) group appear to be the most affected by higher fuel costs. The low income group also reaches the threshold of what they can afford at the \$2.00 per gallon price scenario. The middle income group (\$15,000-\$35,000) shows a steady rate of trip reductions as fuel prices increase. At \$3.00 per gallon, the middle income group begins to approach trip reductions at the frequency of the low income group. The high income (greater than \$35,000) group is not as strongly affected throughout the pricing scenario, but the effects become more acute as fuel prices rise to \$3.00 per gallon.

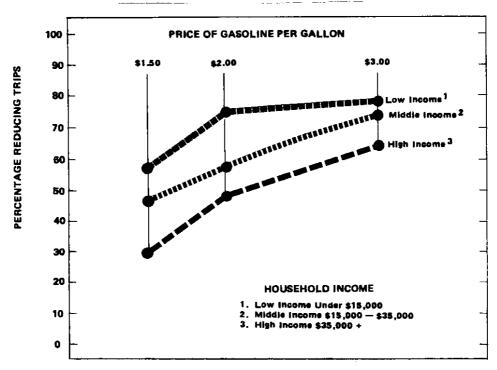


Figure 2.17 Frequency of Trip Reductions by Household Income Group at Higher Gasoline Prices

## **EDUCATION**

A cross-classification analysis of educational level and trip-frequency reductions was performed to determine the impact of increasing fuel prices on different educational groups. Those who would reduce their trips the most were individuals who did not complete high school. Those reducing their trips the least are individuals who have completed college. However, at \$3.00 per gallon the frequency of trip reductions increases dramatically for all educational groups examined in the survey (see Figure 2.18).

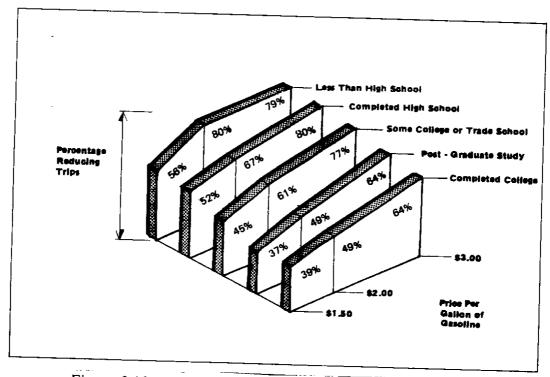


Figure 2.18 Frequency of Trip Reductions by Education at Higher Gasoline Prices

**AGE** 

To determine the impact of increasing fuel prices on different age groups, a cross-classification analysis was performed on age groups and increased fuel prices. This analysis indicated that the age group most affected by higher fuel costs are the youngest in the survey, i.e., those between 18 and 21 years old. Another age group that showed vulnerability to higher fuel costs was comprised of the elderly (61 to 70 years old). Those least affected as an age group were individuals between 26 and 30 years old (see Table 2.5). In general, those in the age group between 22 and

50 years old are individuals more solidly in their income earning period, as opposed to the age groups comprising the young on one end and the elderly on the other end of the age range.

AGE GROUP	PERCENTAGE REDUCING TRIPS	MOST AFFECTED RANKING
18-21 61-70 51-60 71+ 31-40 22-25 41-50 26-30	72.2 67.6 62.3 61.9 59.7 59.2 58.3	1st 2nd 3rd 4th 5th 6th 7th

Table 2.5 Frequency of Trip Reductions by Age Group at Higher Gasoline Prices

#### CHAPTER THREE

#### CONCLUSIONS AND RECOMMENDATIONS

#### **CONCLUSIONS**

The analysis of recreational data developed in this study and presented in Chapter Two has resulted in several conclusions regarding the impact of gasoline price and short supply on recreational travel.

- Recreational Travel: The analysis of travel on Washington highways shows that recreational travel is more sensitive to gasoline price increases and shortages than average weekday travel due to higher priority placed on work trips. Recreational travel tends to return to pre-crisis amounts when gasoline becomes readily available and prices stabilize.
- Gasoline Prices: The increasing price of gasoline is the primary reason stated by Washington respondents (through the telephone survey) for changes in recreational travel. This is supported by the fact that traffic volumes fell substantially during 1979 and 1980, a time when gasoline prices rose and supplies were sometimes limited.
- Trip Frequency: The telephone survey of Washington residents showed that recreational travelers are taking fewer trips than in the past and expect to be taking fewer in the future if gasoline prices increase. Trip frequency is the most price-sensitive trip characteristic analyzed.
- <u>Trip Duration</u>: The length in time of a recreational trip is the least price-sensitive trip characteristic analyzed. Respondents to the telephone survey indicated that the duration of a recreational trip would in most instances remain at previous levels even if gasoline prices increase. The reason for this could be that the marginal transportation cost is perceived to be greater than the cost of staying for an additional period in a destination area.

- Trip Distance: The telephone survey indicates that higher gasoline cost tends to decrease trip distance. The survey results also indicate that travelers will decrease trip frequency before they decrease the distance they travel.
- Mode: Most respondents to the telephone survey indicated that the private vehicle would remain the primary mode of recreational travel. The survey showed that adjustments in trip frequency, duration, and distance, as well as shifts to more fuel-efficient vehicles are likely to take place before a change in mode. When mode changes were indicated, the preferred mode was air travel.
- Recreational Vehicles (RV's): Although the owners of recreational vehicles stated in the telephone survey that they would not be inclined to sell their RV's, their use of RV's had declined. This further supports the previous conclusion that trip frequency is highly sensitive to gasoline price changes.

## RECOMMENDATIONS

The conclusions in the previous section represent our present understanding of recreational travel. Presented below are recommendations to minimize the adverse effects of gasoline prices on recreational travel activity. The recommendations are intended to serve as guidelines to public and private agencies involved in facilitating and or encouraging recreational travel by offering efficient alternatives for consideration.

# Encourage the development of bicycling and hiking pathways

Bicycling and hiking facilities enable the pursuit of non-fossil fuel consuming activities in contrast to motorboating, motorcycling, or snowmobiling. The development of these types of facilities should be encouraged.

# Encourage development of multi-activity recreational areas

Recreational areas are needed to provide a variety of activities at one site. Many of the survey respondents indicated that increasing gas prices would not alter trip duration or distance. Hence, these recreational centers do not necessarily have to be located in or near population centers.

# Encourage development of recreational charter bus service

Charter bus or van service can offer the public a fuel-efficient means of travel - particularly to those areas where the demand justifies it. Such services should be encouraged perhaps in combination with multi-activity recreational areas.

# Recreational activities should be developed in or near population centers

This recommendation addresses the concern for reducing travel costs to reach recreational travel destinations. Combined with activities such as bicycling and hiking, the consumption of fossil-fuel can be considerably reduced for the total recreational trip.

# Encourage telecommunications

Since visiting friends and relatives is one of the most important reasons for making recreational trips, development of less energy-intensive substitutes may result in reduced travel and subsequent energy and cost savings. Presently, telecommunications may not be a social or cost-effective substitute; however, as energy supplies dwindle, society may rely more on technological developments in this area.

## Encourage tourism shuttle service

A shuttle service offering tourists tour packages of the local sights from their accommodations could provide a fuel-efficient alternative for sightseeing travelers. Local roadway congestion from seasonal tourist traffic can also be reduced as private vehicles are substituted by shuttle van or bus.

#### Continued monitoring of recreational routes

The data collected from on-going monitoring of recreational routes are essential elements in the identification of recreational travel trends and in the analysis of how the transportation system is meeting recreational travel demand. These data are also important in assessing travelers' responses to the restraining effects of energy shortages and price increases.

#### . Encourage intermodal integration

Intermodal integration is the coordination of various types of modes through scheduling and information services which enable travelers to select energy-efficient modes to reach their destination(s). A computerized traveler information service can also serve as a reliable source of fuel supply information in addition to providing travelers with access to information for making trip decisions. The development of such a system should be actively pursued.

#### IMPLEMENTATION AND USE

This report can be used by a variety of transportation and recreation planners. It provides some idea of the amount and types of recreational travel, identifies barriers to its growth and recommends some low cost projects and strategies to mitigate them. The methodology used is concise and can be reapplied by others at any future date to estimate change in recreational travel. The methodology can also be adapted to estimate change in other specific types of travel.

Immediate uses of this report will be its inclusion in the next update of the State Transportation Plan.

# APPENDIX A

TELEPHONE SURVEY OF WASHINGTON RESIDENTS

		· ·

# TELEPHONE SURVEY SPECIFICATIONS

INTERVIEWING TECHNIQUE: Random digit telephone dialing.

GEOGRAPHIC DISTRIBUTION: Samples will be taken in the state of Washington relative to population density. The following subareas will be surveyed.

Seattle	Okanogan Co.
Spokane	Clark Co.
Yakima	Pasco
Olympia	Kennewick
Longview	Richland
Grant Co.	

RESPONDENT QUALICATIONS: Qualified respondents will be male and female heads of households, or adults over the age of 18 years who have a valid driver's license.

SAMPLE SIZE: 1200 completed interviews. A 50/50 male-female split is desirable for all areas, however, a 45 percent male and 55 percent female quota split will be acceptable:

Desired sub-sample quota sizes:

Area		Block I	Quota Block 2	Block 3
Seattle Spokane Yakima Olympia Longview Grant Co. Okanogan Co. Clark Co. Pasco Kennewick Richland		96 64 32 32 32 32 31 32	96 64 32 32 32 32 32 31 32	96 64 32 32 32 32 32 31 32 49
Total	1,200	400	400	400

NOTE: The price varies on questions 15, 16, 22

Block 1 used \$1.50 Block 2 used \$2.00 Block 3 used \$3.00

#### Attachment B

McClure Ziz, Inc. 1932 First Avenue Seattle, WA 98101

Job #166

#### Recreational Travel Study

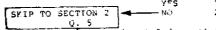
Hello, this is from MZI, a market research firm located in Seattle. We'te doing a survey for the State Department of Transportation about recreation travel. Are you the (male/temale) head of your household?

If NOT, ask to speak to someone who is. Check Male/female quota. If not available, record time for callback on call record sheet.

1. Do you currently have a valid driver's license (from any state)?

IF NOT, ASK TO SPEAK TO someone who does, if that person is also a head of household. If none in household, terminate and record on call record sheet as a "'4". If not available, record time for call-back on call record sheet.

Have you taken any recreational or vacation trips lasting at least overnight since September of 1980 (in last 6 months)?



- SKIP TO SECTION 2

  O. 5

  3. how many trips have you taken that last at least 5 days (4 overnights) since September of 1980?
- 4. And how many trips have you taken that lasted under 5 days, but at lesst overnight since that time?

IF TOOK BOTH TYPES OF TRIPS, SAY:

First I'd like to talk about the longer vacation trip(s) you've taken.

ASK Q.A - N FOR THOSE TRIPS. THEN RETURN TO Q.A. AND SAY,

Mow, I'd like to talk about the shorter trip(s) you've taken. ASK O.A. - N FOR THOSE TRIPS.

of 117 (PRIMARY ACTIVITY)	Long Trip	Short Trip
WITHIN STATE: What part of state?	(10)	(45)
San Juan Islands Northwest part of		
State	1	1
Puget Sound area	2	2
Olympic Peninsula	3	3
Cascade Mountains	•	4
Southwest part of State	5	5
Northeast part of State	ŏ	6
Southeast part of State	7	7
OUTSIDE WASHINGTON STATE: Was that within the continental United States, or outside of it?		
Inside continental U.S.	8	8
Outside continental U.S.	9	9
About how many miles from home did you trave. (INCLUDE PLANE MILES)	l to get there?	
	(11)	(46)
0 - 50 miles	1	1
51 - 100 miles	2	2
101 - 200 miles	3	3
201 - 500 miles	4	4
501+ miles	5	5
DON'T KNOW	6	6

Respondent's	Phone Number:	····- ··· -	<del></del>			
Interview's	Name			Date		
	King County	1	Longview	5		
	Spokane	2	Grant County	6	Male	1
	Yakima	3	Okanogan	7	Female	2
	Olympia	4	Clark	8		
			Tri-Cities	q		

C. H	ow did you get there? By your own chicle, plane, train, some other to	n way:	Long Trip (12)	Short Trip (47)
S	KIP TO Q.E	-Own vehicle Plane Bus	1 2 3.	1 2 3
		Train	4	i
		Boat	5	5
	Did you take a vehicle	Ferry	_	
	onto the ferry?	Other		
		_		
		-YES	6	6
	SKIP TO 0.2	ио	7	7
	id you drive any vehicles once	VEC	(13)	(48)
y.	ou got to your destination?	YES		
	SKIP TO Q.H	• NO	2	2
	hat type of vehicle was that? car, pick-up truck, motorhome,			
	r some other type?		(14)	(49)
•		Car	1	1
		▲Pickup Truck		•
	Was that with a camper	With Camper	2 3	2
	top or without one?	Without Motorhome	4	4
		Recreational van	-	5
	SKIP TO Q.G	-Motorcycle	6	5
		Other:		
F. D	old you have a trailer of any			
S	ort on that?	_YES	(15)	(50)
	How large was that trailer? How many axles	NO	1	1
	dim it have?	One axle (pair of wheels)	2	2
		Two axles (pairs of wheels)	3	3
		DON'T KNOW	4	4
a. 1	About how many miles did you			(54)
· t	ravel while you were at your	0 - 50 miles	(16) 1	(51) 1
c	destination?	51 - 100 miles	2	2
		101 - 200 miles	3	3
		201 - 500 miles	4	4
	·	500+ miles DON'T KNOW	5 6	5 6
1	I'd like to talk a bit now about what you did on your trip. First of all, did you stay overnight at one place, or go to several		/17\	(53)
	different places?		(17)	(52)
		One	1 2	1 2

J. I'm going to read some different types of places you might have stayed and for each one, please tell me how many nights you spent at each.

		Number of of Nights	Number of Nights
(18)	vacation home	none 0	none 0
(19)	hotel/motel	none 0	none 0
(20)	campground	none 0	none 0
(21)	backcountry	none 0	none O
(22)	friend or relative's home	none O	none 0
(23)	boat	none O	none 0
(24)	any other types of place?		
		none 0	none 0

K. What are all the different kinds of things you did on that (vacation) (frip), like sightseeing, visiting friends or relatives, cultural activities or outdoor activities? What others? What others? (PROBE FOR KEY CATEGOPIES) (DON'T READ LIST)

?			
)	(DON'T READ LIST) Vimit friend/relatives	(25-44) 01	(60-79) 01
	<pre>Indoor recreation   (bowling, bridge, etc.)</pre>	02	62
	Sightseeing	03	03
	Spectator sports	04	04
	Reunions, conventions, cultural events	05	05
	OUTDOOR		•
	Camping	C 6	06
	Picknicking	07	07
	Hiking	80	08
	Hunting	09	09
	Fishing	10	10
	Horseback Riding	11	11
	Bicycling	12	12
	Swimming		
	Pool	13	13
	Lake, beach, ocean	14	14
	Skiing	15	15
	Snowmobiling	16	16
	Other snow/ice activities	17	17
	Boating	18	18
	Motor Non-motor (Sailing)	19	19
	Water-skiing	20	20
	Softball/baseball	21	21
	Golfing	22	22
	Tennis	23	23
	Other sports	24	24
	Off-road vehicle	25	25
	Wildlife viewing/studying	26	26
	Other:		

L. Which of those would you say was the main activity or reason for your trip?

(41-42) (76-77)

IF ANY TAKEN

REPEAT Q. A-N FOR SHORT TRIP,

Don't know

	Thinking about the number of recreational or vacation trips you've made in the past year or so, how would you compare it to the number you took three or four years ago? Would you say you've been taking				
			More trips (1	٥	
			Fewer trips	2	
			Or about the same		
			number of trips DON'T KNOW	3 4	
6.	In comparison to	three or four years	ago, would you say your t	rips are	
			Farther from home	1	
			Closer to home	2	
			Or about the same distance	3	
		·	DON'T KNOW	4	
7.	Have they general	ly been	(	12)	
		•	Longer	1	
			Shorter Or about the same	2	
			number of days	3	
			DON'T KNOW	4	
		IF "ABOUT THE SAM!	E* TO 0. 5. 6.		
		AND 7, SKIP TO Q.			
8.	What accounts for	the changes you've	mentioned in the kinds of	trips	
	you've been taking (DO NOT READ LIST	ng?		(13)	
			GASOLINE PRICES	1	
			ECONOMY OTHER:	2	
				- -	
			DON'T KNOW	9	
9.	If the price of	gasoline stays at th	e price it is now, do you	expect	
	you'll take			(14)	
			More vacation or		
			_ recreational trips	1	
			Fewer trips Or about the same	2	
			number of trips		
			this coming year as	_	
			compared to last?	3 4	
10.	Po you expect yo	ur trips will be		(15)	
10.	Po you expect yo	ur trips will be	Farther from home	1	
10.	Po you expect yo	ur trips will be			
10.	Po you expect yo	ur trips will be	Farther from home Closer to home Or about the same distance this year	1 2	
10.	Po you expect yo	ur trips will be	Farther from home Closer to home Or about the same distance this year as compared to last?	1 2	
10.			Farther from home Closer to home Or about the same distance this year as compared to last? DON'T KNOW	1 2	
10.		our trips will be	Farther from home Closer to home Or about the same distance this year as compared to last? DON'T KNOW	1 2 3 4 (16)	
			Farther from home Closer to home Or about the same distance this year as compared to last? DON'T KNOW Longer	1 2 3 4 (16)	
11.			Farther from home Closer to home Or about the same distance this year as compared to last? DON'T KNOW  Longer Shorter Or about the same number of days this	1 2 3 4 (16)	
			Farther from home Closer to home Or about the same distance this year as compared to last? DON'T KNOW  Longer Shorter Or about the same	1 2 3 4 (16)	

12.	How do you expect to travel on most coming year? By your own vehicle,	of the trips you will to plane, train, or some of	ake this
	Way?	pract, crain, or some co	(17)
		Own vehicle	٥
	SKIP TO Q.	15 (Plane	1
		- N Bus	2
		Train	3
		(Boat	4
	ENTE TO O	Ferry Other:	
	3KTF 10 Q.	r) CERET!	5
		DON'T KNOW	<del></del>
	Do you plan to take a vehicle on t	he ferry?	
		YES	7
	SKIP TO Q.	15 - 1 NO	8
	1.4	LOON T KNOM	9
13.	What type of vehicle would that be or some other type?	? A car, pick-up truck,	(18)
	111 bb	Car	1
	with a camper to compare the control of the control	op ←Pick-up truck With camper	2
	or Archode ones	without	3
		Motorhome	4
		Recreational Van	5
		Motorcycle	6
		Other:	
		DON'T KNOW	<sub>9</sub>
14	Do and the second secon		
14.	Do you think you'll have a trailer		(19)
		YES	•
	How large would that	NO T KNOW	1 2
	trailer be? How many axles would it have?	DON 1 KNOW	4
		One axle	3
		(pair of wheels)	
		Two axles	4
		(pair of wheels)	•
		DON'T KNOW	<u> </u>
15.	What if the price of gasoline incre do you expect that you'll take	eases to \$2.00 per gallon	
	ı	More vacation or	(20)
		recreational trips	1
		Fewer trips Or about the same number	2
	· ·	or trips this coming	
		year as you planned?	3
	(	DON'T KNOW	4
	SKIP TO Q. 18	GASOLINE PRICE WON'T AFFE	CT 5
16.	If gasoline were \$2.00 per gallon,	do you expect your trips	will be (21)
		Farther from home	1
		Closer to home	2
	•	Or about the same distance	e
		this coming year as	1
	ı	you planned? DON'T KNOW	3 4
17,	Would your trips be	<del></del>	
		Longer	(22)
		Shorter	2
		Or about the same number	-
		of days as you planned	3

18.	Do you expect you'll use any different way to get there the	nan you r	e	
	planning now?	(23)		
	YES	1 2		
	SKIP TO Q.20: NO			
	(кио	<del></del>		
19.	How do you think you'd get there instead?	(24)		
	Car	0		
	Pickup truck Motorhome	2		
	Recreational van	3		
	Motorcycle Plane	4 5		
	Bus	6		
	Train Boat	7 8		
	Ferry	9		
	Other:	°		
	DON'T KNOW	x		
20.	How many vehicles do you have in your household? (25)			
	SKIP TO DEMOS	NONE	0	
	Skir to believ .			-
21.	What are the make: , model, and year of those vehicles? ()	POR ENCH:		
	ASK:) About how many miles is that (54-58)		τ	ю
	MAKE MODEL YEAR 0-52 51-100 101-20	0 201-500	<u> 501+ 1</u>	.0
-3 <u>01</u>	1 2 3	4	5	
1-3 <u>01</u>	1 2 3	4	5	
	1 2 3	4	5	
	1 2 3	4	5	
	1 2 3	4	5	
22.	If gasoline were \$2.00 a gallon, do you think you would.	••		
22.				
	a) Sell any recreational vehicles you own such as	a camper,	(31)	
	motorhome or trailer?	YES		
	a more fuel-efficient one, or not?	ио	1	
		DON'T KNOW	2	
	······	PEPLACE	3	
		-COL 1.CE	4	
	TON	REPLACE		
		HEO T'HO		
	DO TO NOG			
	DON'T  b) S.11 (any of) your present car(s) or truck(s)  due to this gasoline price?	NEO T*10	5	)
	b) S.il (any of) your present car(s) or truck(s) due to this gasoline price?	NEO T*10	<b>S</b>	)
	DON'T  b) S.11 (any of) your present car(s) or truck(s)  due to this gasoline price?	NEO T*10	<b>S</b>	)
	b) S.il (any of) your present car(s) or truck(s) due to this gasoline price?	- YES	\$ 6 (32	)
	b) S.il (any of) your present car(s) or truck(s) due to this gasoline price?	NOW TOWN	\$ (32 1	)
	b) S.il (any of) your present car(s) or truck(s) due to this gasoline price?	KNOW  YES  HO  DON'T  KNOW	\$ (32 1	)
	b) S.il (any of) your present car(s) or truck(s) due to this gasoline price?	NOW  YES  HO  JON'T  KNOW  REPLACE	\$ (32 1 2 3	)

The next few questions are so we can group your answers with other people like yourself.

**~** ... .

	23.	Including yourself, how man live in your household?	y people	(33)	
	24.	Are you currently employed?	?	_YES (34)	
			Is that full	Full 1	
			time or part time?	Part 2	
				NO	
			Are you retired,	RETIRED 3	
			a homemaker, or	HOMEMAKER 4	
			a student?	STUDENT 5	
				UNEMPLOYED _6_	
-	25.	What is the highest level	of		
	•••	education you've completed	?	(35)	
			Less than high school	1	
			Completed high school	2	
			Some college or trade school	3	
			Completed college	4	
			Post-graduate study	5	
			REFUSED	6	
	26.	How old are you? (IF		(36)	
		NECESSARY, READ LIST)	Under 18	0	
			18-21 22-25	1	
			26-30	2 3 4	
			31-40	4	
			41-50	5 6	
			51-60	6	
			61-70 Over 70	7	
			REFUSED	6. 9	
	27.	What was your total annual	household income		
		last year, including every was it	body in your home?	(37)	
			Under \$5000	1 2	
			5 - 10,000 10 - 15	3	
			15 - 20	4	
			20 - 25	5	
			25 - 35	6	
			35 - 50	7	
			Over 50,000 REFUSED	8 9	

That concludes our survey. Thanks so very much for your time and cooperation!

#### CHARACTERISTICS OF TRAVELERS

#### Proportion of Population Traveling

The percent of the sample population indicating that they took some kind of recreation trip whether extended or short or both was 59 percent. Of those responding that they took a trip, less than one-third indicated that the trip was extended (lasting five days or more). However, close to one-half of the respondents indicated that they took shorter trips (overnight to five days). About 18 percent of the respondents took both an extended and short trip during the survey period.

The significant portion of the sample population taking recreational travel trips indicates the relatively high value placed on vacations. Although factors such as inflation and the general slowing down of the national economy may be acting to suppress or constrain extended recreational travel activity, still almost one-third of the survey respondents indicated that they took one or more extended trips lasting five days or more during the survey period. More of the survey respondents (46 percent) indicated they took one or more short recreation trips during the survey period.

Season	Number Interviewed	Number Taking Extended Trips	Number Taking Short Trips	Number Taking No Trips	Number Taking Both Short And Extended Trips
A-W*	1,204	338	503	535	172
S-S**		427	600	460	272

<sup>\*</sup>Autumn to winter

Table 1 Proportion of Washington Residents Making Recreational Trips

<sup>\*\*</sup>Spring to summer

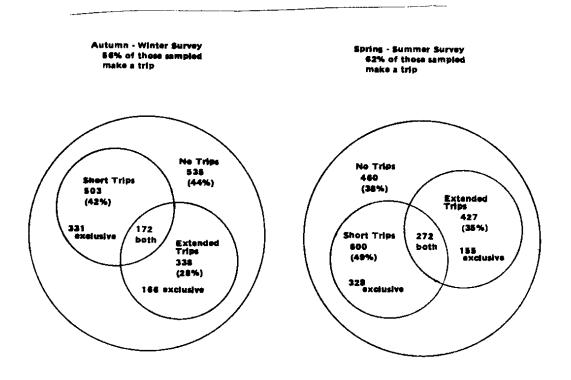


Figure 1 Proportion of Washington Residents Making Recreational Trips

#### Income

The income categories used in the surveys ranged from under \$5,000 per year to over \$50,000 annually. Those who responded most frequently that they took recreational trips earned between \$15,000 and \$25,000 per year. Those earning between \$25,000 and \$35,000 annually were the second most frequent travelers. For all income groups, except those earning \$50,000+ annually, short trips were taken more frequently than extended trips (Table 2-a).

The discrete income groups were also analyzed. The \$50,000+ group was the highest in per capita travel (95.5 percent), followed by the \$25,000 to \$35,000 group (87.8 percent), and the \$35,000 to \$50,000 per year group (86.1 percent). In contrast, the group earning under \$5,000 per year showed a per capita travel rate of 51.5 percent. In general, those with higher salaries responded more frequently that they took a recreational trip, and those earning less (\$5,000 to \$15,000 per year) responded less frequently that they made a recreational travel trip during the survey period (Table 2-b).

Income	Extended Trips		Short Trips		Totals	
Categories	Freq.	Percent	Freq.	Percent	Freq.	Percent
Under \$5K	20	2.6%	32	3,2%	52	3.0%
\$5K - 15K	118	15.6	189	19.1	307	17.6
\$15K - 25K	180	23.8	256	25.8	436	24.9
\$25 - 35K	152	20.1	208	21.0	360	20.6
35K - 50K	111	14.7	137	13.8	248	14.2
\$50K +	67	8.9	60	6.0	127	12.4
No Response	108	14.3	109	11.0	217	12.4
Total	756	100.0%	199	100.0%	1,747	100.0%

Table 2-a Income Distribution of Tripmakers

Income Groups	Total Sample	Total Tripmakers	Percent Tripmakers
Under \$5K	101	52	51.5%
\$5k - 15K	537	307	57.2
\$15K - 25K	623	436	70.0
\$25K - 35K	410	360	87.8
\$35K - 50K	288	248	86.1
\$50K +	133	127	95.5
No Response	327	217	66.3

Table 2-b Ratio of Tripmakers to Sample by Income

Age

Survey respondents who indicated that they took some kind of recreational trip (extended and/or short) during the survey period were represented in all age groups.

The age group 31 to 40 comprised the largest group indicating that they made a trip, followed by those in the age groups 26 to 30, and 51 to 60 (Table 3-a).

The highest per capita (80.6 percent) trip makers of any age group were the individuals 31 to 40 years old. This group was following by the 18 to 21 age groups with 74.2 percent of that group having taken a recreational trip during the survey period. Individuals between 51 to 70 years of age were also found to be traveling at rate close to the 18 to 30 year age group. Hence, the survey indicates that recreational travel is not limited to any age group, but is an activity participated in by all age groups at fairly even rates of participation (Table 3-b).

	Extend	ded Trips	Shor	t Trips	То	tals
Age Group	Freq.	Percent	Freq.	Percent	Freq.	Percent
18-21 22-25 26-30 31-40 41-50 51-60 61-70 71 + No Response	27 76 121 196 94 121 92 23	3.6% 10.0 160.0 25.9 12.4 16.0 12.1 3.0	45 115 157 272 146 137 80 31	4.5% 11.6 15.9 27.5 14.7 13.8 8.1 3.1	72 191 278 468 240 258 172 54	4.1% 10.9 15.9 26.8 13.7 14.8 9.8 3.1
Totals	758	100.0%	991	100.0%	1,749	100.0%

Table 3-a Age Distribution of Tripmakers

Age Groups	Total Sample	Total Tripmakers	Percent Tripmakers
18-21	97	72	74.2%
22-25	260	191	73.5
26-30	376	278	73.9
31-40	581	468	80.6
41-50	362	240	66.3
51-60	358	258	72.1
61-70	241	172	71.4
71 +	105	54	51.4

Table 3-b Ratio of Tripmakers to Sample by Age

#### **Employment Status**

The majority of those responding that they made a recreational travel trip during the survey period indicated they were employed full-time (58.9 percent). Homemakers were the next largest group of travelers (13.8 percent). The smallest group of travelers were the unemployed (3.1 percent). The distribution of travelers by employment status is presented in Table 4-a.

Within employment groups, the highest per capita response were students (87.5 percent), as mentioned in Table 4-b. Part-time workers had a per capita rate of 79 percent. The unemployed responded the least frequently to having taken a recreational trip (54.6 percent). Seventy-four percent of the full time workers interviewed indicated that they made a trip during the survey period.

Employment Status of the	Extend	Extended Trips Short		t Trips	Total by Educational Level	
Respondent	Freq.	Percent	Freq.	Percent	Freq.	Percent
Full-time	436	57.4%	596	60.0%	1,032	58.8%
Part-time	74	9.8	91	9.2	165	9.4
Retired	98	12.8	105	10.6	203	11.6
Homemaker	103	13.6	139	14.0	242	13.8
Student	27	3.6	29	2.9	56	3.2
Unemployed	21	2.8	_33	3.3	54	3.1
Totals	759	100.0%	993	100.0%	1,752	100.0%

Table 4-a Employment of Status of Tripmakers

Employment Status of the Respondent	Total Sample	Total Tripmakers	Percent Tripmakers
Full-time	1,386	1,032	74.5%
Part-time	209	165	79.0
Retired	312	203	65.1
Homemaker	343	242	70.1
Student	64	56	87.5
Unemployed	99	54	54.6
No Response	5		
Totals	2,418	1,752	72.5

Table 4-b Ratio of Tripmakers to Sample by Employment Status

#### Educational Level

Individuals with some college education responded most frequently that they took a recreational trip during the survey period.

The group with some college education comprised the largest group of recreational travelers (35.2 percent), followed by high school graduates (25.2 percent) and college graduates (18.8 percent) as shown in Table 5-a. However, individuals with post-graduate education had the highest per capita trip rate. Ninety-seven percent of those interviewed (see Table 5-b) with post-graduate education indicated that they took a trip during the survey period.

In contrast, 56.3 percent of the individuals with less than high school education indicated they took a recreational trip during the survey period. The educational groups with the highest response rates to having made a trip were those with some college, college graduates and post-graduates. Those with less educational experience appear to travel less.

Educational	Extended Trips		Short Trips		Totals	
Level	Freq.	Percent	Freq.	Percent	Freq.	Percent
Less than H.S. High School Some College College Grad. Post-Graduate No Response	182 262 151	7.5% 23.9 34.3 19.9 13.8 0.5	76 260 355 179 117 6	7.6% 26.2 35.8 18.0 11.8 0.6	133 442 617 330 222 10	7.6% 25.2 35.2 18.8 12.6 0.6
Total	761	100.0%	993	100.0%	1,754	100.0%

Table 5-a Educational Level of Tripmakers

Employment Status of the Respondent	Total Sample	Total Tripmakers	Percent Tripmakers
Less than H.S	236	133	56.3%
High School	730	442	60.5
Some College	805	617	76.6
College Grad.	392	330	84.2
Post-Grad.	227	222	97.8
No Response	26	10	38.5
Totals	2,416	1,754	72.6%

Table 5-b Ratio of Tripmakers to Sample by Educational Level

#### Number in Travel Party

An average of three people were found to travel together on any given recreational trip whether for an extended period of time lasting five days or more, or for shorter trips of overnight to five days. Travel parties of two people were the most common (39.7 percent), followed by travel parties of four and three people. Individuals traveling alone accounted for 10 percent of the responses. Large groups ranging from five people to eight or more accounted for close to 18 percent of the sample population making trips.

	Extended Trips		Short Trips		Totals	
Party Size	Freq.	Percent	Freq.	Percent	Freq.	Percent
One	75	9.8%	112	10.2%	187	10.0%
Two	301	39.2	439	40.0	740	39.7
Three	118	15.4	176	16.0	294	15.8
Four	129	16.8	175	15.9	304	16.3
Five	59	7.7	74	6.7	133	7.1
Six	18	2.3	38	3.5	56	3.0
Seven	14	1.8	24	2.2	38	2.0
Eight +	51	6.6	56	5.1	107	5.7
? ~	3	0.4	4	0.4	7	0.4
Totals	768	100.0%	1,098	100.0%	1,866	100.0%

Average Party Size:

Extended Trips -

3.2 Persons

Short Trips

3.1 Persons

Table 6 Travel Party Size

# TOP FIVE REASONS FOR RECREATION TRIPS

"Visiting friends and relatives" was the most frequent trip purpose indicated by respondents. Other trip purposes among the top five varied only slightly from season to season, and for extended and short trips (see Table 7).

## SPRING AND SUMMER

Rank	Activity	Total	Long Trip	Short Trip
1st 2nd 3rd 4th 5th	Visit Friends/Rel. Rest/Relaxation Sightseeing Fishing Reunion/Conventn./	242 196 127 92	129 67 68 33	113 129 59 59
	Cultural Events	64	33	31

#### **AUTUMN AND WINTER**

Rank	Activity	Total	Long Trip	Short Trip
lst 2nd	Visit Friends/Rel. Sightseeing	289 108	112	177
3rd	Reunion/Conventn./			
4th	Cultural Events Rest/Relaxation	71 65	22 27	49 38
5th	Fishing	31	8	23

## SUMMARY OF SURVEY YEAR

Rank	Activity	Total	Long Trip	Short Trip
lst	Visit Friends/Rel.	531	241	290
2nd	Rest/Relaxation	261	94	1
3rd	Sightseeing	235	127	167
4th	Reunion/Conventn./	2,7,7	127	108
F.1	Cultural Events	135	55	80
<i>5</i> th	Fishing	123	41	82

Table 7 Top Five Trip Purposes

### TRAVEL MODE

### Mode Summary

The majority of the respondents indicated that they used their own vehicle as a mode of travel during recreational trips. A further breakdown of these vehicles is presented in the next section. Seasonal distributions of travel modes reveal the use of planes during the autumn and winter is twice as high as during the spring and summer seasons. An increase in bus ridership is also evident during the autumn and winter in contrast to the spring and summer. This situation may be due to adverse weather conditions which may be influencing decisions about traveling in a private vehicle during autumn and winter months (Table 8-b).

Travel Mode	Freq.	Percent
Own Vehicle Plane Bus Train Ferry w/Vehicle Ferry w/out Vehicle Another's Vehicle Boat	1,542 190 27 11 13 4 64	82.9% 10.2 1.5 0.6 0.7 0.2 3.4 0.5
Total	1,860	100.0%

Table 8-a Travel Mode Summary

SPRING AND SUMMER

	Extended Trips		Short	Trips	Totals by Mode		
Travel Mode	Freq.	Percent	Percent Freq. P		Freq.	Percent	
Own Vehicle	337	79.1%	549	92.1%	886	86.7%	
Plane	59	12.2	12	2.0	71	7.0	
Bus	5	1.0	3	0.5	8	0.8	
Train	4	0.8	-0-	-0-	4	0.4	
Ferry w/Veh.	-0-	-0-	1	0.2	1	0.1	
Ferry w/o Veh.	-0-	-0-	4	0.7	4	0.4	
Another's Veh.	19	4.0	20	3.4	39	3.8	
Boat	2	0.4	7	1.2	9		
Totals	426	100.0%	596	100.0%	1,022	100.0%	

#### **AUTUMN AND WINTER**

	Extend	led Trips	Shor	t Trips	Totals by Mode		
Travel Mode	Freq. Percent		Freq. Percent		Freq.	Percent	
Own Vehicle	217	63.6%	439	88.3%	656	78.3%	
Plane	98	28.7	21	4.2	119	14.2	
Bus	8	2.3	11	2.2	19	2.3	
Train	5	1.5	2	.4	7	0.8	
Ferry w/Veh.	2	.6	10	2.0	12	1.4	
Ferry w/o Veh	-0-	-0-	-0-	-0-	-0-	-0-	
Another's Veh.	11	3.2	14	2.8	25	3.0	
Boat	<u>-0-</u>	0-	0-	0-	0-	0_	
Totals	341	100.0%	497	100.0%	838	100.0%	

Table 8-b Travel Mode by Season and Trip Length

Types of Vehicles in Use

More recreational trips occur in the spring and summer than in the autumn and winter. Also more trips of a shorter duration are made than extended trips lasting five days or more. Of these trips, 84.4 percent are made in private vehicles using the state's system of highways, streets and roads.

Several types of vehicles were identified by survey respondents who indicated they traveled during the survey period (see Table 9-a). The majority of the travelers

(69.0 percent) indicated they traveled in private automobile. Those traveling by pickup accounted for 19.5 percent of the group using vehicles. The use of pickups increased notably for short recreational trips during the spring and summer (see Table 9-b). Recreational vans were also popular on short trips despite seasonal factors such as weather, school or work.

Vehicle Type	Freq.	Percent
Automobile Pickup w/Camper Pickup w/out Camper Motorhome Recreational Van Motorcycle Other	1,187 169 166 87 74 17	69.0% 9.8 9.7 5.1 4.3 1.0 1.1
Totals	1,719	100.0%

Table 9-a Vehicle Type Summary

### SPRING AND SUMMER

	Extend	Extended Trips		t Trips	Total By Vehicle Type		
Vehicle Type	Freq.	Percent	Freq.	Percent	Freq.	Percent	
Automobile Pickup with	265	67.3%	370	64.6%	635	65.7%	
Camper Pickup without	39	9.9	68	11.9	107	11.1	
Camper Motorhome Recreatnl. Van Motorcycle other	42 25 15 4 4	10.7 6.3 3.8 1.0 1.0	69 28 26 6 6	12.0 4.9 4.6 1.0	111 53 41 10 10	11.5 5.5 4.2 1.0	
Totals	394	100.0%	573	100.0%	967	100.0%	

#### **AUTUMN AND WINTER**

	Extended Trips		Short	: Trips	Totals By Vehicle Type		
Vehicle Type	Freq.	Percent	Freq.	Freq. Percent		Percent	
Automobile Pickup with	209	72.9%	343	73.8%	552	73.4%	
Camper Pickup without	23	8.0	39	8.4	62	8.3	
Camper	25	8.7	30	6.4	55	7.3	
Motorhome	13	4.5	21	4.5	34	4.5	
Recreatnl. Van	11	3.9	22	4.7	33	4.4	
Motorcycle	3	1.0	4	0.9	7	0.9	
Other	3	1.0	6	1.2	9	1.2	
Totals	287	100.0%	465	100.0%	752	100.0%	

Table 9-b Vehicle Type by Season and Trip Length

### **DESTINATIONS OF RECREATIONAL TRIPS**

Most of the recreational trips were for destinations outside the state of Washington but within the U.S. (36.5 percent). Within the state, northeastern Washington appears to be the most popular recreational trip destination for both extended and short trips during the spring and summer (see Table 10-a,b). However, the autumn and winter seasons appear to influence trip destinations so that short trips to the Puget Sound region become more frequent. Destinations outside the U.S. were mentioned fourth in frequency (8.9 percent) followed by trips to southwestern Washington (8.2 percent) and southeastern Washington (7.9 percent).

Seasonal factors such as weather, school and work appear to contribute only slightly to differences in trip destinations. Fewer trips are destined for the Cascade Mountains during the autumn and winter than in the spring and summer. On the other hand, more trips have the Puget Sound as their destination during the autumn and winter compared to the spring and summer (see Table 10-b).

	DESTINATIONS									
	San-Juan N.W. WA	Puget Sound	Olympic Penn.	Cascade Mtn.	S.W. Wash.	N.E. Wash,	Ş.E. Wash ,	Outside WA in US	Outside US	TOTAL
FREQUENCY	72	215	87	121	153	224	147	683	166	1868
PERCENT	3.8	11,5	4.7	6.5	8.2	12.0	7.9	36.5	8.9	100

Table 10-a Destinations Summary

### SPRING AND SUMMER

	DESTINATIONS											
EXTENDED TRIP	San-Juan N.W. WA	Puget Sound	Olympic Penn.	Cascade Mtn.	S.W. Wash.	N.E. Wash.	S.E. Wash.	Outside WA in US	Outside US	TOTAL		
FREQUENCY	12	23	18	26	22	30	17	233	45	426		
PERCENT	2.8	5.4	4.2	6.1	5.2	7.0	4.0	54.7	10.6	100		
SHORT TRIP						<u> </u>	·	<del></del>				
FREQUENCY	23	78	32	61	72	106	74	122	31	599		
PERCENT	3.8	13.0	5.3	10.2	12.0	17.7	12.4	20.4	5.2	100		
TOTAL					· · · · · · · ·	·			<u> </u>	<u> </u>		
FREQUENCY	35	101	50	87	94	136	91	355	76	1025		
PERCENT	3.4	9.9	4.9	8.5	9.1	13.3	8.9	34.6	7.4	100		

### **AUTUMN AND WINTER**

DESTINATIONS											
EXTENDED TRIP	San-Juan N.W. WA	Puget Sound	Olympic Penn.	Cascade Mtn.	S.W. Wash.	N.E. Wash.	S.E. Wash.	Outside WA in US	Outside US	TOTAL	
FREQUENCY	6	16	11	4	8	20	9	204	65	343	
PERCENT	1.7	4.7	3.2	1.2	2.3	5.8	2.6	59.5	19.0	100	
SHORT TRIP								<del></del>			
FREQUENCY	31	98	26	30	51	68	47	124	25	500	
PERCENT	6.2	19.6	5.2	6.0	10.2	13.6	9.4	24.8	5.0	100	
TOTAL				<u></u> <u></u>		<u></u> ,	·			<u> </u>	
FREQUENCY	37	114	37	34	59	88	56	328	90	843	
PERCENT	4.4	13.5	4.4	4.0	7.0	10.4	6,6	39.0	10.7	100	

Table 10-b Destination by Season and Trip Length

## THE FREQUENCY, DISTANCE AND DURATION OF RECREATIONAL TRIPS

### Frequency

Frequency refers to the number of vacations which respondents indicated they took during the survey period. As mentioned previously, 59 percent of the sample responded that they took a recreational trip. Of the recreational trip making group, a total of 1,869 responses were obtained which included short, extended, or both types of trips taken during the survey period. The number of responses by type (long or short) of vacation is presented in Table 11-a. Frequencies are also ranked according to the five most common responses regarding the number and type of trips taken during the survey period (Table 11-b). The response most frequently recorded (26.3 percent) is one extended vacation. Whereas 16.6 percent of the responses indicated one short vacation, 22.4 percent indicated two to three short trips during the survey period.

In Table 11-c, it is shown that short trips are taken more frequently than extended trips but that a high percentage of tripmakers took at least one extended trip during the survey period.

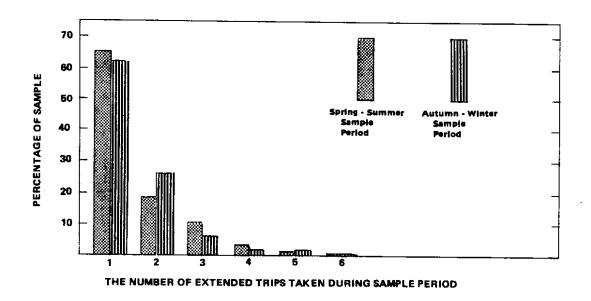
	Short 1 % of		Exter	nded	Total		
Number of Vacations	i .		Responses	% of Total	Responses	Percent	
One Two Three Four Five Six Seven Eight Nine 10-14 15-19 20 +	310 228 191 107 66 58 15 16 4 67 28 18	16.6% 12.2 10.2 5.7 3.5 3.1 0.8 0.8 0.2 3.5 1.5 0.9	492 165 66 19 9 5 3 1 1 1 3 —	26.3% 8.8 3.5 1.0 0.5 0.3 0.2 0.1 0.1 0.1 0.2 41.0%	802 393 257 126 75 63 18 17 5 68 26 19	42.9% 21.0 13.7 6.7 4.0 3.4 1.0 0.9 0.3 3.6 1.4 1.1	

Table 11-a Frequency of Trips by Trip Length Summary

Trip Characteristics

Rank	Number of Vacations	Duration	% of Total
lst	1	Extended Short Short Short Extended	26.3%
2nd	1		16.6
3rd	2		12.2
4th	3		10.2
5th	2		8.8

Table 11-b Five Most Common Types of Trips by Frequency and Duration



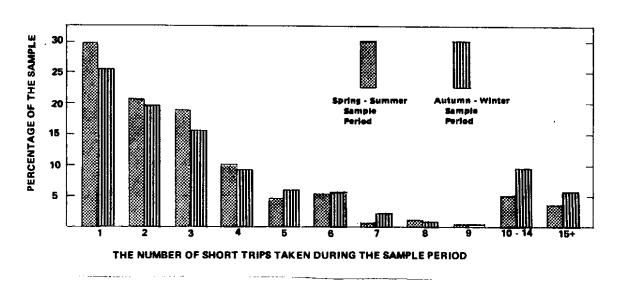


Table 11-c Trip Frequency by Duration and Season

#### Distance

The extended trip (over five days) averaged a distance of over 500 miles from home. This corresponds with the finding that the majority of extended trips were for destinations outside the state of Washington. The average distance of a short trip (under five days) was 200 miles from home. These trips of short duration were made mostly within the state. No significant differences in trip distances were found for spring and summer in contrast to autumn and winter.

		DIS	TANCE - MII	_E\$			· · · · · · · · · · · · · · · · · · ·
	o - 50	51 - 100	101 - 200	201 500	501 +	Don't Know	TOTAL
FREQUENCY	132	321	490	450	448	27	1868
PERCENT	7.1	17.2	26.2	24.1	24.0	1.4	100

Table 12-a Summary of Distance Traveled From Home

### **SPRING AND SUMMER**

		DIS	TANCE - MI	LES	<del></del>		
EXTENDED TRIP	0 - 50	51 - 100	101 - 200	201 500	501+	Don't Know	TOTAL
FREQUENCY	8	31	67	111	199	10	426
PERCENT	1.9	7.3	15.7	26.1	46.7	23	100
SHORT TRIP	78	164	202	100	Г		
THEODEROT		104	203	122	23	9∵	599
PERCENT							

### **AUTUMN AND WINTER**

		DIST	ANCE - MI	LES	<del></del>		
EXTENDED TRIP	0 - 50	51 - 100	101 - 200	201 500	501 +	Don't Know	TOTAL
FREQUENCY	2	17	37	78	202	7	343
PERCENT	0.6	5.0	10.8	22.7	58.9	2.0	100
SHORT TRIP							
FREQUENCY	44	109	183	139	24	1	500
						1	500

Table 12-b Distance Traveled From Home by Season and Trip Length

#### Duration

Trip lengths were grouped by extended trips (four or more nights) and short trips (overnight to three nights). The frequency of both types of trips increased during the spring and summer as mentioned in previous sections of this study. However, seasonal factors are shown to have little effect on trip duration. Therefore, fewer trips were made during the autumn and winter, but the number of nights spent on the trip remained nearly the same as spring and summer trips (see Figures 2 and 3). The average trip length for extended trips was ten nights during the autumn-winter and eight nights during the spring-summer. Short trips average two nights per trip for all seasons.

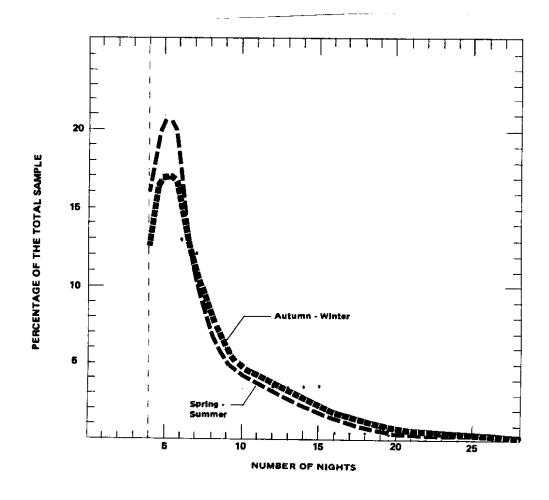


Figure 2 Duration of Long Trips

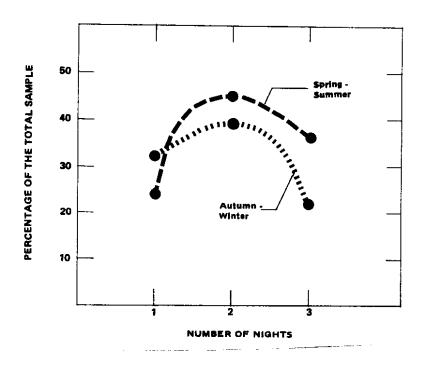


Figure 3 Duration of Short Trips

### **AMOUNT OF MONEY SPENT**

For extended recreational trips, an average of \$620 was spent per trip in contrast to an average of \$120 per trip for short recreational trips. An average of \$500 more per trip is spent on extended recreational vacations and most of these trips (71 percent) are taken out of the state of Washington. Even though a greater number of trips were made during the spring-summer sample period, seasonal factors do not appear to influence the average amount of money spent on any given trip (see Tables 14-a and 14-b).

	AMOUNTS OF MONEY SPENT											
	\$1 - 50	\$50 - 100	\$101 - 150	\$151 - 200	\$201 - 300	\$301 - 500	\$500 - 1000	\$1001- 2000	\$2000 +	Don't Know	TOTAL	
FREQUENCY	388	363	157	165	173	202	167	83	50	120	1868	
PERCENT	20.8	19.5	8.4	8.8	9.3	10.8	8.9	4.4	2.7	6.4	100%	

Table 14-a Summary of Expenditures

### **SPRING AND SUMMER**

			AMO	UNTS O	F MONE	Y SPENT					
EXTENDED TRIP	\$1 - 50	\$51 - 100	\$101 - 150	\$151 - 200	\$201 - 300	\$301 - 500	\$501 - 1000	\$1001- 2000	\$2000 +	Dan't Know	TOTAL
FREQUENCY	23	33	17	40	50	82	79	39	14	43	425
PERCENT	5.4	7.8	4.0	9,4	11.8	19.3	18.6	9.2	3.3	11.3	100
SHORT TRIP				<del></del>	<u> </u>	1	<u></u>				<b>.</b>
FREQUENCY	194	163	59	60	46	27	11	_	1	34	600
PERCENT	32.3	28.0	9.8	10.0	7.7	4,5	1.8		0.2	5.7	100
TOTAL	<del></del>		<del></del>	<u> </u>	1	<del></del>	<u> </u>	!	<u> </u>		I
FREQUENCY	217	201	76	100	96	109	90	39	15	82	1025
PERCENT	21.2	19.6	7.4	9.8	9.4	10.6	8.8	3.8	1.4	8.0	100

### **AUTUMN AND WINTER**

			AMO	UNTS O	MONE	Y SPENT			-		
EXTENDED TRIP	\$1 - 50	\$51 - 100	\$101 - 150	\$151 - 200	\$201 - 300	\$301 - 500	\$501 - 1000	\$1001- 2000	\$2000+	Don't Know	TOTAL
FREQUENCY	12	25	22	17	36	65	66	44	34	22	343
PERCENT	3.5	7.3	6.4	5.0	10.5	19.0	19.2	12.8	9.9	6.4	100
SHORT TRIP			<u> </u>	·		L	<del></del>	<u> </u>	<u> </u>		<del></del>
FREQUENCY	159	137	59	48	41	28	11	-	1	16	500
PERCENT	31.8	27.4	11.8	9.6	8.2	5.6	2.2	_	0.2	3.2	100
TOTAL			·			<u> </u>	<u> </u>	<u> </u>	L		<u></u>
FREQUENCY	171	162	81	65	77	93	77	44	35	38	843
PERCENT	20.3	19.2	9.6	7.7	9.1	11.0	9.2	5.2	4.7	9.5	100

Table 14-b Expenditures by Season and Trip Length

### **ACCOMMODATIONS**

Most recreational travelers (32.1 percent) stayed with their friends and relatives. However, hotel-motel accommodations were also frequently used (27.7 percent), followed by stays at campgrounds (21.5 percent). During the spring and summer, more tripmakers indicated that they stayed at campgrounds than at other types of accommodations. Nonetheless, the homes of friends and relatives, and hotel-motel were mentioned among the three most frequent types of primary accommodations used on recreational trips throughout the survey period (see Tables 15-a and 15-b).

ACCOMMODATIONS										
	Vacation Home	Hotel - Motel	Camp- ground	Back- country	Friends - Relatives Home	Boat	Others	TOTAL		
FREQUENCY	157	503	390	95	581	16	69	1811		
PERCENT	8.7	27.7	21.5	5.3	32.1	0.9	3.8	100		

Table 15-a Primary Accommodation Summary

### **SPRING AND SUMMER**

		AC	COMMOD	ATIONS				
EXTENDED TRIP	Vacation Home	Hotel - Motel	Camp- ground	Back- country	Friends Relatives Home	Boat	Others	TOTAL
FREQUENCY	41	94	101	15	135	8	14	408
PERCENT	10.0	23.0	24.8	3.7	33.1	2.0	3.4	100
SHORT TRIP								
FREQUENCY	58	145	198	37	131	3	17	589
PERCENT	9.8	24.6	33.6	6.3	22.2	0.5	2.9	100
TOTAL	•						<u></u>	
FREQUENCY	99	239	299	52	266	11	31	997
PERCENT	9.9	24.0	30.0	5.2	26.7	1.1	3,1	100

### **AUTUMN AND WINTER**

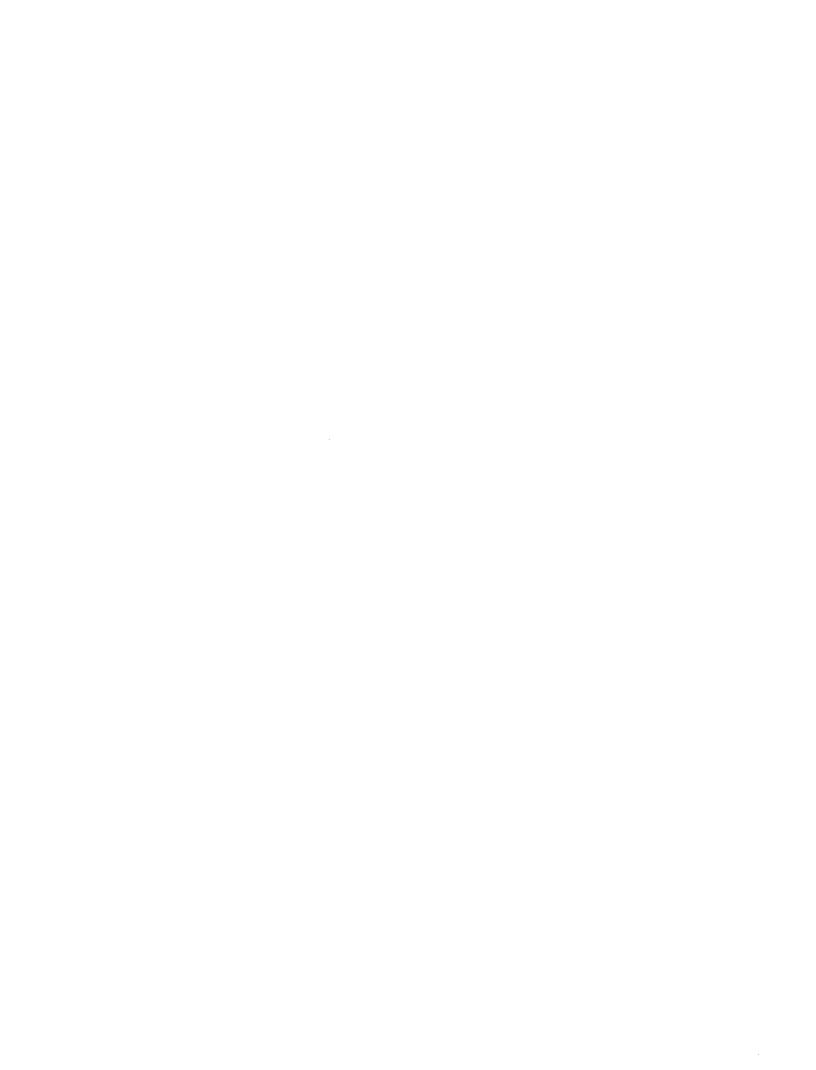
ACCOMMODATIONS											
EXTENDED TRIP	Vacation Home	Hotel - Motel	Camp- ground	Back- country	Friends Relatives Home	Boat	Others	TOTAL			
FREQUENCY	21	109	35	19	113	3	26	326			
PERCENT	6.4	33.4	10.7	5.8	34.7	0.9	8.0	100			
SHORT TRIP		-	-				·				
FREQUENCY	37	155	56	24	202	2	12	488			
PERCENT	7.6	31.8	11.5	4.9	41.4	0.4	2.5	100			
TOTAL							•				
FREQUENCY	58	264	91	43	315	5	38	814			
PERCENT	7.1	32.4	11.2	5.3	38.7	0.6	4.7	100			

Table 15-b Primary Accommodation by Season and Trip Length

	•		
·			
		•	

### APPENDIX B

ROADSIDE SURVEY OF OUT-OF-STATE TRAVELERS



### ROADSIDE SURVEY OF OUT-OF-STATE VEHICLES

1. Vehicle type: (check one)

	Small automobile (Rabbit, Omni, Car or pickup pulling camper, trailer, or boat (includes
	Intermediate automobile (Cutlass.  Aspen, Mustang)  Motorhome
	Large automobile (LTD, Lincoln) — Pickup
t.	Vehicle Occupancy
3.	Age Distribution: (Record number (1.2.3, etc.) on the appropriate line under other passengers.)
	Driver (check one) Other Passengers
	Under 18 Under 18
	18-21
	22-25 22-25
	26-30 26-30
	31-40 31-40
	41-50 41-50
	51-6051-60 61-7061-70
	70+
	•
4.	What was the purpose of you trip to Washington State?
	Visit friends and/or relatives
	Outdoor recreation (camping, skiing, fishing, softball)
	Indoor participant recreation (bridge, basketball)
	Reunions, conventions, cultural events, concerts, and fairs
	Combined business-pleasure trip
	Spectator sports
	Sightseeing and pleasure driving
	Visit a vacation home
	Just passing through
5.	What places did you visit? (check all that apply)
	Olympic Peninsula
	Southwestern Coast
	Cascade Mountains
	Puget Sound Metro. Area (Olympia, Tacoma, Seattle, Everett)
	North-eastern Washington (Includes Spokane)
	South-eastern Washington
	North-western Washington (Includes San Juan Islands)
6.	Would you estimate how much you and your party spent in Washington? \$
7.	And estimate how far did you travel in Washington?miles
8.	How many days were you here? days

9.	Coul	d you	tel	l me v	thy you	chose	to co	ome t	o Wasi	hingt	ton?				
		Beer	her	e befo	re and	decid	ed to	come	back						
		Deci	ded	to see	a new	place									
		Cont	inat	1on tr	·lp (Bu:	siness	-vaca	tion	or vi:	sitir	ng rel	ative	s-va	cation	n).
10.	Would	d you	ı hav	е сопе	to Was	shingt	on if	the	natio	n-wid	de pri	ce of	gas	was:	
	a )	\$1.5	60/ga	llon	1	res .		No							
	b)	\$2.0	10/ga	11on		fes		No							
	c)	\$3.0	)0/ga	llon	'	res		No							
11.	be 1	f the	• pri	ce of	attempi gasoli if your or stay	ie wer	e to	inçre	ase to	a \$2.	.00 ре	r qal	llon.	He	
		Key:		a. b. c.	Increa Remain Decrea	n the	same								
	a.	Out-	of-s	tate v	acation/	1									
		a	ьс												
	b.	Long	, (5	days c	or more	) vaca	tions								
		a	b c												
	c.	Shor	rt (o	verniç	ht to	4 days	) vac	ation							
		a	b c												
	d.	Vaca	tion	5 OT 1	recreat	iona1	trips	near	er hor	me					
		a	Ьс												
	e.	0wne	ershi	pofi	recreat	iona l	vehic	les (	boat.	camp	per. m	otori	ome)		
		a	b c												
	f.	Vaca	tion	ing by	/ trave	mode	s oth	er th	an car	r or	recre	ation	ał v	ehicle	P
		a	b c												
			g.	Auto	mobile										
			9.	a	b c	2126									
			h.		day soc	ial-ra	acrost	iona	l driv	ıi aa					
				a	b c	101-17		. Tona	, uriv	ring					
				•											
		12.	Did come	inter to W	est in ashingt	seeing on?	g Moun	t St Yes	. Hele	ens c No	ontri	oute	to yo	ur de	sire to
		13.	Woul St.	d the Helen	presen s keep	t ash you fi	condi rom re	tion:	or f ing to	furth Was	er po: hingte	ssibl on?	e eru	ption Yes	s of Mou
		14.	What	type	of acc	ommoda	tions	did	you u	ıse?					
				Hote	l or Mo	tel									
				Trai	ler-rec	reatio	ona! v	enic'	le par	·k					
				Camp	ground										
				Frie	nds or	relati	ves								
				Back	country										
				Other	r										

Nº 0386

#### **AGE**

The age distribution of the out-of-state travelers is skewed toward the upper age range (41-60) when compared to the age distribution of licensed drivers in Washington. This observation is a direct contrast to the comparison of the telephone survey distribution with the licensed drivers age distribution. In this latter case, the younger ages (22-30) are over-represented. The out-of-state survey was conducted during October of 1980 - the off-season for "family trips." This reason, most probably, accounts for the over-representation of the older travelers.

	1	of-State velers	of Was	ne Survey shington dents	Licensed Drivers in Washington		
Age Range	Freq.	Percent	Freq.	Percent	Age	Percent	
Under 18	6	0.6	72	4.1	16 - 17	3.2	
18 - 21	32	3.3	191	10.9	18 - 21	9.7	
22 - 25	59	6.2	278	15.9	22 - 24	5.5	
26 - 30	112	11.7	468	26.8	25 - 29	13.8	
31 - 40	177	18.5	240	13.7	30 - 39	23.1	
41 - 50	173	18.1	258	14.8	40 - 49	14.6	
50 - 60	198	20.1	172	9.8	50 - 59	13.7	
61 - 70	169	17.6	54	3.1	60 +	16.4	
70 +	32	3.3	16	0.9			
Total	958	100.0%	1,749	100.0%		100.0%	

Table 16 Distribution of the Age of Out-of-State Travelers

### NUMBER IN TRAVEL PARTY - VEHICLE OCCUPANCY

The average party size for out-of-state travelers during this survey was 2.2. This value is lower than the average party size of Washington residents (3.2) that was determined by the household survey. The lower average reflects the greater number of parties in the "40-70" age group, many of which travel as couples.

Number in Party	Freq.	Percent
One	170	17.7
Two	570	59.5
Three	120	12.5
Four	70	7.3
Five	16	1.7
Six	8	0.8
Seven	1	0.1
Eight	1	0.1
Nine	3	0.3
Total	959	100.0%

Table 17 Vehicle Occupancy Distribution of Out-of-State Travelers

### TRIP PURPOSE

Visiting friends and relatives and sightseeing-pleasure driving are the most important reasons that out-of-state travelers make trips to and through Washington State. Business-pleasure, passing through, and outdoor recreation follow in importance. This ranking in trip purpose is similar to the top reasons that Washington residents make trips. NOTE: This survey allowed the respondents to state more than one trip purpose.

Trip Purpose	Freq.	Percent	Rank
Visit Friends and Relatives	481	50.2	1
Outdoor Recreation	75	7.8	5
Indoor Recreation	9	0.9	8
Reunions and Cultural Events	46	4.8	6
Business-Pleasure	118	12.3	3
Spectator Sports	9	0.9	8
Sightseeing-Pleasure Driving	447	46.6	2
Visit a Vacation Home	27	2.8	7
Passing Through	94	9.8	4

Table 18 Trip Purpose of Out-of-State Travelers

#### TYPE OF VEHICLE USED

Most (76.3 percent) out-of-state travelers traveled by automobile. This value is close to the frequency (73.4 percent) that Washington State residents use automobiles (at their destinations) during the Autumn and Winter sample period.

Recreational vehicle combinations, which include cars or pickups pulling a camper, trailer or boat and pickups with campers, are the next most frequent vehicle types used by recreational travelers.

Vehicle Type	Freq.	Percent
Small Auto - (Rabbit, Omni, Chevette, Vega, Pinto)	237	24.8
Intermediate Auto - (Cutlass, Aspen, Mustang)	240	25.1
Large Auto - (LTD, Lincoln)	252	26.4
Recreational Vehicle - Car or Pickup pulling camper, trailer	109	11.4
or boat, pickup with camper  Motorhome	44	4.6
Pickup	74	7.7
Total	956	100.0%

Table 19 Vehicle Type Used by Out-of-State Travelers

#### **DISTANCE**

The average distance traveled in Washington by out-of-state travelers is 320 miles. The most frequently mentioned mileage category is the 201-300 mile range.

Miles Traveled	Frequency	Percent
0 - 50 51 - 100 101 - 200 201 - 300 301 - 400 401 - 500 501 - 750 751 - 1000 1000 +	60 97 113 267 181 80 83 52	6.3 10.2 11.9 28.3 19.2 8.5 8.8 5.5

Table 20 Estimation of Distance Traveled by Out-of-State Travelers in Washington

### **DURATION**

Out-of-state travelers spent an average of 4.7 days in Washington. Most, however, spent two days.

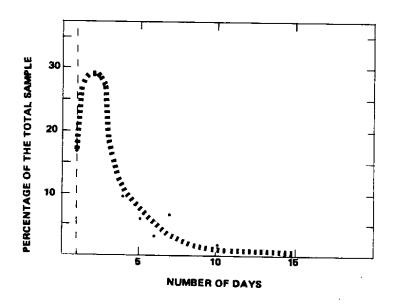


Figure 4 The Duration of Out-of-State Traveler's Trips in Washington

#### AMOUNT OF MONEY SPENT

Out-of-state travelers spent an average of 170 dollars per party while traveling through Washington State. The distribution shown below resembles the expenditure distributions of Washington residents during short trips.

Amount in		
Dollars	Frequency	Percent
\$ 0 - 50 51 - 100 101 - 150 151 - 200 201 - 300 301 - 500 501 - 1000 1000 - 2000 2000 + Don't know	291 215 89 121 82 76 41 11	30.3 22.4 9.3 12.6 8.6 7.9 4.3 1.2
· Total	959	100.0%

Table 21 Expenditures by Out-of-State Travelers in Washington

#### **ACCOMMODATIONS**

The most frequent accommodations used by out-of-state travelers are hotel-motels and friend-relatives. This preference was also observed among Washington residents. Respondents to this survey were allowed to state more than one type of accommodation; therefore, the percent column will total more than 100 percent.

Accommodations	Freq.	Percent
Hotel-Motel	426	44.4
Trailer Park	98	10.2
Campground	98	10.2
Friends-Relatives	406	42.3
Backcountry	5	0.5
Other	46	4.8

Table 22 Accommodations Used by Out-of-State Travelers

### APPENDIX C

IN-STATE AND OUT-OF-STATE VEHICLE CLASSIFICATION
AT ROADSIDE SURVEY LOCATIONS

In-State and Out-of-State Vehicle Classification at Survey Locations

^^	Total Out-of- State	Sampled	270	232	178	133	56
Sample Summary (Out-of-State only)	Non-Rec. Recreational Thrown Travelers Out Surveyed		7.1	28	43	54	23
S. Q	Non-Rec. Thrown Out		661	174	85	79	W
	Summary In-State Out-State	Trucks	1289 2298 333	1540 1223 329	1690 1523 331	1623 1103 156	556 289 28
ю	Single Unit Motor Homes	Hvy.	0 -1	00	6 4	00	00
rvey Points	Single Motor	Med.	3	5 11	6.4	9 10	0 4
l Passing Su	Trucks (in)	(out)	333	329	331	156	28
Universe of Travel Passing Survey Points	Veh. w/ Trailers (in)	(out)	23 30	30	38	42 27	20 8
Uni	Camper Veh. (in)	(out)	17 27	10	13	22 18	7 #
	Cars & P.U. (in)	(out)	1246 2229	1495 1178	1621 1469	1550 1048	532 269
LOCATION DATE			Idaho 10-8 Eastbound	Idaho 10-9 E.B.	. Idaho 10-10 E.B.	Idaho 10-11 E.B.	ldaho 10-12 E.B.

In-State and Out-of-State Vehicle Classification at Survey Locations

<u>ر</u> ج	ly) Total Out-of- State Sampled	242	208	205	156	160
Sample Summary	Cout-oi-State on Non-Rec. Recreational Thrown Travelers Out Surveyed	80	75	87	25	92
8,0	Non-Rec. Thrown Out	162	133	118	104	<i>†</i> ⊗
	Summärÿ In-State Out-State Trucks	0 768 007	379 874 0	713 1178 3	1087 1283 3	426 1387 0
vs	Single Unit Motor Homes Aed. Hvy.	3	1 1		0 1	) I
urvey Point	Singl Motor Med.	1 9	<b>⇒</b> ∞	49	2 8	∞∞
el Passing S	Trucks (in) (out)	1 1	1 1	1 2	1 2	1 1
Universe of Travel Passing Survey Points	Veh. w/ Trailers (in) (out)	2 10	0 %	m ∞	51	2 18
Ü	Camper Veh. (in) (out)	70 70 70	28	10	19	10 50
	Cars & P.U. (in) (out)	393 857	368 841	694 1137	1069	406 1311
LOCATION		Blaine 10-1 Northbound	Blaine 10-2 N.B.	Blaine 10-3 N.B.	Blaine 10-4 N.B.	Blaine 10-5 N.B.

In-State and Out-of-State Vehicle Classification at Survey Locations

×(×)	Total Out-of- State Sampled	124	185	215	216
Sample Summary (Out-of-State only)	Non-Rec. Recreational Thrown Travelers Out Surveyed	65	29	<b>88</b>	119
ΫŌ.	Non-Rec. Thrown Out	59	118	127	26
	Summary In-State Out-State Trucks	3033 1599	1020 2707 1662 780	3236 1809 342	2630 2147 201
S:	Single Unit Motor Homes Med. Hvy.	1	<b>1 t</b>		- 0
urvey Point	Sing Motor Med.	29	32 25	33	33
el Passing S	Trucks (in) (out)	1020	780	342	201
Universe of Travel Passing Survey Points	Veh. w/ Trailers (in) (out)	78	48 34	57 60	67 56
ភ	Camper Vch. (in) (out)	36	18 17 .	22 18	28 29
	Cars & P.U. (in) (out)	2890	2609 1586	3130 1697	2513 2029
LOCATION DATE		Vanc. 10-16 Southbound	Vanc. 10-17 S.B.	Vanc. 10-18 S.B.	Vanc. 10-19 S.B.

# Mechanical Counts of Daily Traffic at Survey Stations

Date	Station	Direction	Volume	Direction	Volume
10-01 10-02 10-03 10-04	Blaine "	NB NB NB NB	2690 3150 4780 5700	SB SB SB SB	3340 3150 4780 5700
10-08 10-09 10-10 10-11	Idaho " " " Vancouver	EB EB EB EB	9400 9760 11180 9460	WB WB WB WB	9160 9350 10430 9040