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A STUDY OF PLEASURE TRIP PLANNING BEHAVIOR WITH
IMPLICATIONS FOR IMPROVED TOURISM PROMOTION

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**A STUDY OF PLEASURE TRIP PLANNING BEHAVIOR WITH IMPLICATIONS
FOR IMPROVED TOURISM PROMOTION**

By

Semok Yoon

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ABSTRACT

A STUDY OF PLEASURE TRIP PLANNING BEHAVIOR WITH IMPLICATIONS FOR IMPROVED TOURISM PROMOTION

By

Semok Yoon

The role of promotion in the tourism industry has increased as competition has increased. While most of the scholarly literature on tourism promotion has focused on identification of media selection behaviors of pleasure travelers and the effectiveness of promotion programs using various promotion vehicles, the issue of timing of promotional messages has received limited attention.

The focus of this study was on the timing aspects of trip planning behavior of Michigan pleasure travelers, with the goal of providing information to tourism marketers so that they can schedule tourism promotion distribution to achieve maximum impact. Four elements were involved and investigated in this study: (1) the duration and frequency distribution for three trip planning intervals, (2) two different decision making approaches underlying the trip planning and decision making process, (3) variables that influence the duration of the total trip planning interval, and (4) the distribution of the three study relevant dates.

The findings of this study are based on data collected from telephone interviews conducted during the three year period January 1996 through December 1998. The data set included 1,476 completed cases during this three year period. The analyses performed were primarily descriptive in nature; however, ordinary least square regression analysis

was performed to identify variables that influence the duration of the total trip planning interval.

Almost 68% of Michigan pleasure travelers began to plan their trips and made final decisions within one month of travelling. The information processing interval was found to be a surprisingly short—seven days long—with a strongly skewed distribution toward zero. In fact, 85% of respondents reported zero number of days engaged in information processing.

Two different decision making approaches, instant decision-makers and hesitant decision-makers, were defined and compared across selected variables. Analyses revealed several statistically significant differences between the two groups. Michigan pleasure travelers are likely to take a longer time to plan their trips if: (1) trips are taken during summer; (2) the travel party is large; (3) they participate in outdoor recreation and attend a festival or event; (4) it is a vacation trip; (5) they stay at a friend's or relative's home; (6) the duration of trip was longer; and (7) if total trip expenditures are greater. An examination of detailed frequency plots of dates when: trip planning began, trip destination was selected, and the trip began revealed a clustering of frequencies early in the month.

Collectively, the results from this study suggest that: (1) most promotional messages would be likely more effective if timed to appear relatively close to when a trip is expected to begin; (2) somewhat appear to be promotion releases are desirable when targeting summer vacation travelers; and (3) advertisements that appear early in the month are likely to have a greater impact than those that appear later in the month. Of these, the first may be the most at odds with current tourism industry promotion practices.

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CHAPTER I

INTRODUCTION

Significance of the Tourism Industry

The tourism industry contributes significantly to local, state, and national economies by generating high volumes of employment and taxes. In 1997, in the United States, tourism was responsible for over sixteen million jobs and added over \$500 billion to the Gross Domestic Product. It generated over \$70 billion in state and local taxes, contributed over \$127 billion in employee compensation, was among the top three leading employers in 32 states, and catered to 45.6 million international visitors, resulting in a net trade surplus of over \$24 billion (Travel Industry Association of America, 1998). During the next ten years, these numbers are expected to grow by as much as 24% (Travel Industry Association of America, 1998).

Unique Characteristics of Tourism

Many states and local destination marketing organizations (DMOs) are increasing marketing efforts to attract more tourists for these economic benefits (English, 1981; Kreisman, 1982; Perdue, 1985). However, destination marketers have been faced with several risks related to tourism marketing (Morrison, 1989; Schmoll, 1977). The origins of these risks are the unique characteristics of tourism, including: instability of demand, inflexibility of supply, and competition among destinations.

A group of interacting factors contributes to an unusually high degree of demand instability in tourism. These factors include a high degree of elasticity of demand in

relation to price and to income, strong seasonal variations in demand, and a low level of customer loyalty with respect to trip destinations.

Demand instability is especially critical because it is combined with a low degree of flexibility on the supply side of the industry. On the supply side, most tourism enterprises cannot easily and quickly react to changes in demand by adapting the quality or the quantity of the services provided.

Another risk in tourism marketing is competition among services and destinations. Over the past decade, the travel industry has become increasingly competitive (Perdue & Gustke, 1992). As a result, substitution is intense between competing products or services whose main characteristics and customer benefits are similar to one another if not virtually identical (Schmoll, 1977). For example, there is strong competition among airlines serving the same routes with identical equipment and minimal differences in schedules of services because one carrier can readily be substituted for any other carrier. Many other tourist services are equally vulnerable to substitution although they are not at all identical.

There is also a high degree of substitution among travel destinations. The potential tourist is confronted with a wide range of alternative services, travel modes, types of arrangements, and destinations. A direct consequence of abundance of choice is the low level of customer loyalty in tourism (Gitelson & Crompton, 1983; Schmoll, 1977; Schul & Crompton, 1983). Few tourists visit the same destination regularly, consistently prefer a certain type of transportation or accommodation, or use the same travel agent or tour operator year after year to prepare their vacation travel. With increasing mobility—by private automobile and by other means of transport, especially air charters—the range

of travel opportunities widens, and destinations and services previously not in direct competition with one another are being considered as alternative choices.

Role of Promotion in Tourism Marketing

Marketing literatures suggest that there are two purposes of promotion. First one is to influence consumers' affect and cognition—their evaluations, feelings, knowledge, meanings, beliefs, attitudes, and images concerning product and brands. The purpose of promotion is to inform, to persuade, to remind, and more specifically, to influence potential customers through communications to think and act in a certain manner (Kotler, 1996; Morrison, 1986; Peter and Olson, 1993; Schmoll, 1977). Promotion in tourism marketing is a tool to reduce the marketing risks described previously and attract more tourists (Kotler, 1996; Morrison, 1986; Peter and Olson, 1993; Schmoll, 1977). For example, the vulnerability of a tourist service or destination to substitution can be reduced through promotional efforts. Destination marketers may reduce the vulnerability to substitution through the communication of messages with potential pleasure travelers that emphasize the unique or unusual characteristics or appeal of the destination (Schmoll, 1977). They also may attempt to obtain a preferential position in the tourism sector through special advantages offered to tourism representatives and/or through sales support efforts that lend additional impact to advertising (Schmoll, 1977).

Promotion Efforts of Tourism Destinations

Many state and local DMOs spend a considerable amount of money on tourism promotion for these benefits of tourism promotion (English, 1981; Kreisman, 1982;

Perdue, 1985). State tourism offices spent over \$478 million for promotion programs in fiscal year 1997-98, an increase of 6.5% over the previous year (Travel Industry Association of America, 1998). The state of Michigan spent \$14.7 million for tourism promotion programs and ranked tenth in the amount of money spent on promotion during fiscal year 1997-98. As states continue to promote increasing numbers of pleasure trip alternatives and spend huge amounts on tourism promotion, the tourism industry has become more competitive which has led to development of more sophisticated research-based promotion programs to maximize the effects of their efforts (Crask, 1981).

Previous Studies on Tourism Promotion

Several studies have identified the media selection behaviors of pleasure travelers and the effects of promotion programs using various promotion vehicles (Ballman, Burke, Korte, & Blank, 1984; Burke & Gitelson, 1990; Burke & Lindblom, 1989; Hunt & Dalton, 1983; Purdue, 1985; Purdue, 1986; Perdue & Botkin, 1988; Woodside, 1981; Woodside, 1990; Woodside & Reid, 1974; Woodside & Ronkainen, 1982; Woodside & Ronkainen, 1984; Yochum, 1985). These studies focused on consumer behaviors related to a variety of promotion tools. Specifically, they revealed which promotion tools attracted the most visitors to a destination. A variety of promotion vehicles were studied, including coupons, information packets, welcome centers, and brochures.

While most of the tourism promotion literature has focused on identification of media selection behaviors of pleasure travelers and the effect of promotion programs using various promotion vehicles, the issue of how tourism promotion messages should be timed has received limited attention in the tourism marketing literature. Proper timing

would appear to be of equal importance to targeting one's high potential customers with effective messages in their preferred media. Timing is more important than ever before given the ever growing numbers of advertising messages which compete for travelers' attention and an increasingly time stressed population with a growing tendency to totally ignore all but the most pertinent and timely promotion messages.

Objectives of Promotion

According to the marketing literature, the issue of promotion timing depends on the objectives of promotion (Coltman, 1989; Peter & Olson, 1993; Kotler, Brown, & Makens, 1996; Morrison, 1989). If the promotion objective is to improve a destination's image among current and potential pleasure travelers, the promotion messages need not be distributed at specific times (Coltman, 1989). On the other hand, if the promotion objective is to persuade present and potential pleasure travelers to take trip to a destination, the promotion must reach them at the time they are beginning to think about their vacation trips (Coltman, 1989). Information about when pleasure travelers begin to plan their trips may obtained from survey such as that from which data for this study were derived.

Time Frames Underlying the Trip Planning and Decision Making Process

The trip planning and decision making process involves several phases, including need arousal, information collection and processing, and decisions on destination, services, and trip date (Moutinho, 1987). Along with this series of trip planing and decision making phases, several relevant time frames can be identified.

Trip planning can be viewed as a continuum bounded by the date trip planning began on one pole and by the date the trip itself began on the other pole. The interval between these extremes is defined herein as the "total trip planning interval". An additional date along this continuum, the date the trip destination was selected, divides the total trip planning interval into two parts which can be defined as the "information processing interval" and the "post decision interval". The former is the number of days between the date trip planning began and the date the trip destination was selected. The latter is the number of days between the dates when the trip destination was selected and the trip began.¹

These time frames are cited as informants in preparing effective and efficient tourism promotion programs or information distribution schedules. For example, Schmoll (1977) stressed that the promotion efforts of travel marketers must be timed in such a way that they reach potential pleasure travelers during the need arousal phase so that their interest and desire to know more about a destination or service is aroused at the most appropriate moment.

Previous Studies and Problem Statement

Several studies have dealt with the time frames of the travel decision making process (Fodness & Murray, 1997; Gitelson & Crompton, 1983; Perdue, 1985; Schul & Crompton, 1983). These studies have reported variables that influence the duration of the length of the total trip planning interval (Gitelson & Crompton, 1983; Schul & Crompton,

¹ For detailed conceptual and operational definitions of these time frames of the travel decision making process, see Chapter III.

1983) and have segmented and profiled the planning interval (Fodness & Murray, 1997; Perdue, 1985).

These studies have focused on primarily one relevant planning interval, that being the total trip planning interval. However, the total trip planning interval alone may not provide sufficient information for preparing effective and efficient promotion or travel information distribution schedules to destination marketers. For example, if a destination marketer has information about only the total trip planning interval and does not know when pleasure travelers make final decisions on trip destinations, he might continue to spend his promotion efforts or budget to attract travelers who already have decided on their trip destinations, or, in the terminology adopted for this study, those out of the information processing interval.

Therefore, further study of this and other identifiable trip planning intervals and their associated frequency distributions is required to more precisely schedule tourism promotion and thereby improve its effectiveness.

The researchable questions that emerge from the above discussion are: do trip planning intervals vary across pleasure travelers, if so, how and why do they, and what are the frequency distributions of the study relevant dates? The answers to these research questions will provide more information about pleasure trip planning behavior to destination marketers who may use them to improve their promotion program distribution schedules.

Study Objectives

The objectives of this study were developed from the researchable questions described above, and they are:

1. To investigate the duration and frequency distributions for the three trip planning intervals defined previously (total trip planning, post decision, and information processing intervals).
2. To investigate two different decision making approaches underlying the trip planning and decision making process.
3. To investigate variables that influence the duration of the total trip planning interval .
4. To investigate the distribution of the three study relevant dates defined previously (the date the trip planning began, the trip destination was selected, and the trip began).

Discussion of Objectives

Duration and Frequency Distributions for Three Trip Planning Intervals (Objective 1)

The three trip planning intervals assessed in this study were the: (1) total trip planning interval (length of time between the beginning of trip planning and the date the trip begins), (2) information processing interval (length of time from the date trip planning begins through the date trip destination selected), and (3) post decision interval (length of time from the date the trip destination is selected through the date the trip begins). The central research question was: do the trip planning intervals vary across pleasure travelers? The duration of these intervals was hypothesized to vary across pleasure travelers. If the duration of these planning intervals is proven to vary across

pleasure travelers, the frequency distributions of these intervals can be used to more effectively time the release of travel promotion to reach specific target audiences.

General knowledge of these frequency distributions is useful especially for those marketers who plan to attract visitors during a specific time period, such as the warm season or a particular festival or event. The distributions of trip planning intervals provide information about how early and late pleasure travelers begin to plan trips (total trip planning interval), make final decisions on trip destinations prior to their trip dates (post decision interval) and after the date trip planning began (information processing interval).

Two Different Decision Making Processes (Objective 2)

As stated previously, the information processing interval is the length of time between the date the trip planning begins and the date the trip destination is selected. During this time interval, people search for relevant information to select their trip destinations. It was expected that some people take less time searching the relevant information and others may take more time. These two groups are expected to differ with respect to: information sources used, media habits, trip behavior, past experience and socioeconomic characteristics. For example, those with short information processing intervals may be those who: visit a destination frequently, do not stay as long, or visit friends or relatives. Therefore, it is potentially beneficial to segment and profile the pleasure travel market based on length of the information processing interval. Two possible groups were defined for this study: (1) those whose information processing interval is zero days—defined as 'instant decision-makers' and (2) those whose

information processing interval is one day or more—defined as 'hesitant decision-makers'.

Variables That Influence the Duration of the Total Trip Planning Interval (Objective 3)

The variables that influence the duration of the total trip planning interval were also investigated. Objective 1 was included in the study objective because it would provide information about how trip planning behavior differs among pleasure travelers. This objective (Objective 3) concerns why planning varies across pleasure travelers. Specifically, this objective involves identification of variables that influence the duration of the total trip planning interval.

This study objective has been addressed in previous studies. Pitegoff (1990) and Davison (1988) both questioned if it is appropriate to assume that the same decision process occurs for such diverse groups as repeat travelers and first-time visitors; day visitors and overnight or long stay visitors; and visitors on shopping trips and those visiting friends and relatives. Schmoll (1977) stressed that the total trip planning interval is variable and, to some degree, is related to the duration of the pleasure trip and its expense.

Frequency Distributions of Trip Related Dates (Objective 4)

The frequency distributions for trip planning intervals provide useful information about the trip planning behavior of pleasure travelers. They are especially useful for those marketers who seek to attract visitors during a specific time period. However, these planning intervals are not so useful when tourism marketers plan to allocate their

promotion efforts or budgets across days of the month or months or seasons of the year. Suppose that a destination marketer plans to distribute promotion programs across the months of the year and has information that, on the average, two-thirds of his target market begins to plan within one month of taking a trip. Without information about the distribution of travel across months of the year, marketers lack information necessary to guide allocation of one's promotion across months of the year. Therefore, it is necessary to examine the frequency distributions of the study relevant dates (the date planning began, destination selected, and the trip began). Knowledge of the frequency distributions for these dates will guide tourism marketers in finding the best time to distribute promotion programs and travel information and also allocate their finite resources of time and money across the year.

Central Research Hypotheses

- Hypothesis 1. The planning intervals underlying the trip planning and decision making process are the same across pleasure travelers.
- Hypothesis 2. No differences exist between instant decision makers and hesitant decision makers with respect to information sources used, media habits, socioeconomic characteristics, travel party composition and trip characteristics, trip behavior, or expenditures.
- Hypothesis 3. Selected socioeconomic characteristics, travel party composition, trip characteristics and behavior, and expenditure variables have no effect on the duration of the total trip planning interval.

Organization of the Paper

The next chapter contains a review of literature related to the topics and techniques used in the study. Background material as well as related research are presented for the topics and techniques included in this study. The methods and procedures used in the study follow the literature review. This chapter includes how the data used were collected and how the analyses proceeded. The results of the study are presented in the Chapter VI in the order that study objectives were presented. The final chapter contains a summary of the procedures and findings along with implications and limitations of the study. Suggestions for further study are also presented in this last chapter.

CHAPTER II

LITERATURE REVIEW

The purpose of this study was to provide information about trip planning behaviors of pleasure travelers to marketers by providing some insight into the relevant time frames underlying the trip planning and decision making process of pleasure travelers. Background material as well as related research are presented for the: (1) concepts related to the topic of the study and (2) methods used in the study.

Initial sections of this chapter describe previous tourism promotion studies, the decision making process of pleasure travelers, and previous studies of the planning intervals of pleasure travelers. Later sections explain techniques used in the study, such as computer-assisted telephone interviewing and regression analysis.

Previous Studies of Tourism Promotion

Previous studies of tourism promotion have focused on evaluations of promotion effectiveness. Empirical studies intended to evaluate the effects of promotion on sales date back to the 1930s. The early studies found that promotion significantly affected market share and firm sales within particular industries. Both Schmalensee (1972) and Comanor and Wilson (1974a, 1974b) recognized the strong correlation between sales and promotion in the tourism industry.

More recently, Fesenmaier and Vogt (1993) evaluated the effectiveness of travel information provided at Indiana welcome centers in modifying travel behavior. The travel behaviors they considered were the amount of time spent in Indiana, the selection of

alternative attractions, and the incremental expenditures produced by longer visits or visiting a variety of places. Their findings suggest that pleasure travelers can be influenced by the information distributed in welcome centers to extend their stay and select alternative attractions which resulted in substantial direct economic impact to the state.

Butterfield, Deal, and Kubursi (1998) estimated the impact of tourism advertising on tourist spending for the "1987-88 Ontario Incredible Advertising Campaign." They linked advertising expenditures to changes in attitudes toward and awareness of potential travel destinations based on advertising tracking data. They then related changes in attitudes and awareness to changes in the number of visits to the destinations, based on LISREL and econometric analysis of advertising tracking data. Finally, they translated changes in the number of visits into changes in tourism expenditures, based on actual visits and expenditures. They found that advertising changes attitude and generates positive impacts on expenditures.

The Travel Decision Making Process and Implications for Tourism Promotion

The decision making process is based on several factors, including: motivation levels, needs and desires of individuals, and their expectations when facing a travel decision (Moutinho, 1987) According to Schmoll (1977) and Moutinho (1987), the decision making process involves four principal phases: tourism need, information gathering and deliberation, decision, and travel preparation (See Table 1).

Table 1. The stages of decision making in pleasure trip choice.

Phase	Events and decisions	Influence and considerations
Tourism need	A general desire to travel is felt. Reasons for and against it are weighed, but no specific information is collected and evaluated.	General travel motivations exist. Questions considered are: When to travel? How much can be spent? Previous travel experiences?
Information gathering and deliberation	A study of travel catalogues and travel advertising, discussions with friends, consultation with travel agents and other specialists occurs	Advice and reports from friends, advertising and promotion, suggestions from travel agent are considered.
Decision	Decisions are made about: - destination, travel mode - timing - intermediary and tourism service enterprise	Intermediaries' advice. Images. Previous experiences.
Travel preparation	Bookings and confirmations are made. Travel funds, clothing and equipment secured.	Travel intermediary, bank, retail stores.

Source: Schmoll (1977).

According to Schmoll (1977), this travel decision making model suggests several conclusions for tourism promotion: (1) advertising and sales support efforts must be timed in such a way that they reach potential customers during the tourism need phase so that their interest in and desire to know more about a destination or service is aroused at the most appropriate moment, (2) the choice of a destination occurs fairly early and not infrequently during the information gathering and deliberation phase. In other words, most customers already have a destination firmly in mind when consulting the travel agent or other intermediary. The intermediary's advice is, therefore, mainly sought on destination arrangements (e.g., hotels, sightseeing, activities) and travel modes (e.g.,

private car, air, rail), travel arrangement type (e.g., individual or package tour), and (3) the time lapse between the travel decision and departure is variable. To some degree, this time lapse is related to the duration of the vacation trip and its expense (longer and more expensive travel is booked earlier than shorter and less expensive trips).

Schmoll (1977) and Moutinho (1987) suggested that the travel decision is composed of a range of decision elements or sub-decisions (Table 2).

Table 2. The elements of customers' travel decisions.

Where to go?	Destination (country, area, or locality)
How to get there?	Transportation (e.g., private car, air, rail, bus, sea)
Where to stay?	Accommodations (e.g., hotel, motel, camping site)
What to do there?	Activities (e.g., museum visits, shopping, outdoor recreation)
What travel arrangements to make?	Individual arrangements (direct at destination or through intermediary), package tour (with or without full service at destination), etc.
How much to spend?	Overall travel budget including transportation, food, accommodations, a reserve for unforeseen purchases, and needs.
Where to book?	Individual arrangements with tourist service enterprises (transport, accommodation, etc.) or booking through a travel agent or tour operator.

Source: Moutinho (1987).

The existing models of buyer behavior describe and explain the processes of purchasing physical goods (consumer products, industrial supplies or equipment) and the factors that have a bearing on the decision to purchase them. Decision making process models for service industries are still in an early stage of development.

The model presented in Figure 1 was adapted from Moutinho's (1986) travel decision making model. The model suggested here can be utilized in four areas. First, it indicates where marketing actions--especially promotions--can be used to influence the decision process in favor of a given travel service or destination. Second, it shows which factors have a bearing on travel decisions, thus indicating which positive influences should be reinforced and which negative influences should be counteracted. Also, it can be used in research planning. Areas where information is incomplete or altogether missing can be readily identified. Finally, the model can be used to determine the criteria by which target markets or market segments of special interest and value to a tourist enterprise or destination can be identified.

The model is based upon the following premises:

1. The decision process and its eventual outcome are influenced by four sets of variables: customer goals, travel opportunities, communication efforts and an intervening or independent variable.
2. It is possible to identify these sets of variables and their individual components and to determine how and when they influence the decision process.
3. The eventual decision (e.g., choice of a destination, travel time, type of accommodations, type of travel arrangement) is in fact the result of a distinct process involving several successive stages or phases.

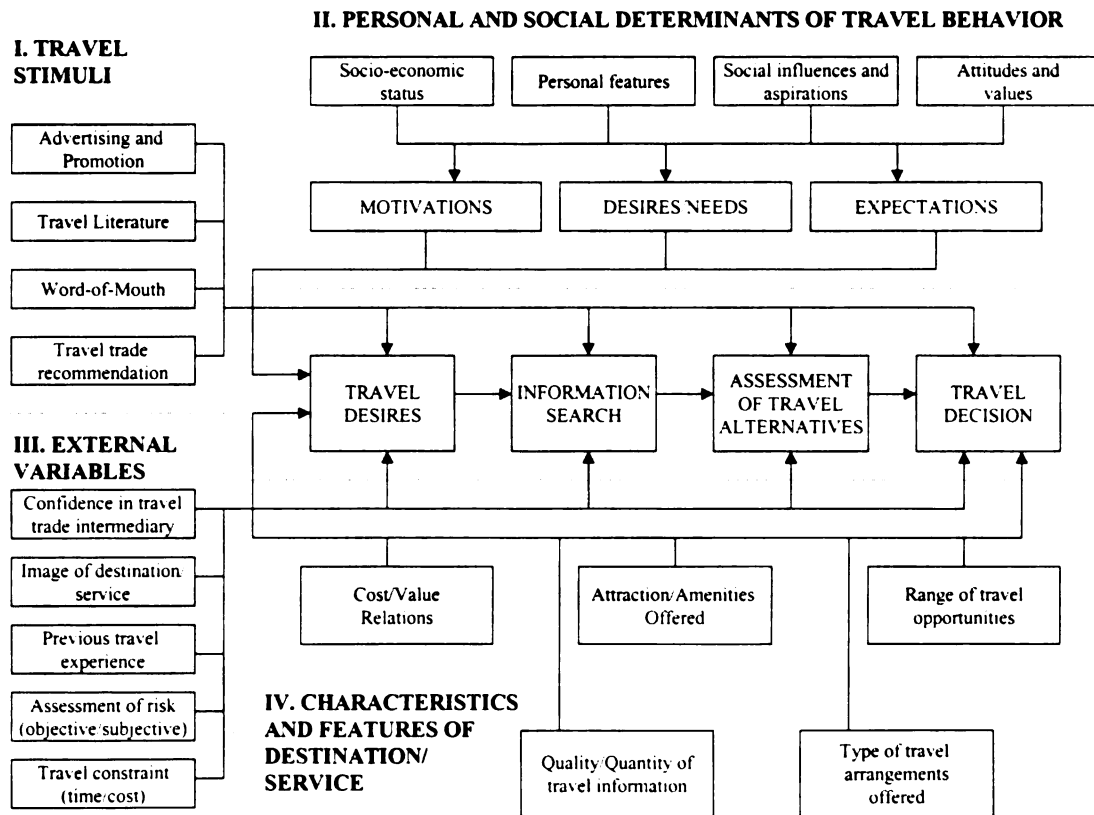


Figure 1. The travel decision making process--A model.
(Adapted from Moutinho, 1986).

In accordance with the premises above, the model is composed of four fields: (1) travel stimuli (2) personal and social determinants of travel behavior, (3) external variables, and (4) characteristics and features of service and destination (Figure 1). The first field, travel stimuli, is comprised of the external stimuli reaching the prospective traveler in the form of promotion messages, travel literature of all kinds, word-of-mouth including suggestions and comments from friends and relatives, and suggestions and recommendations from travel trade intermediaries in response to inquiry.

The second field includes the personal and social determinants of travel behavior. The personal features, socioeconomic status, attributes and values, and social influences and aspirations together determine pleasure travelers' motivations, travel needs and desires, and the satisfaction expected from travel.

External variables, the third field, includes the prospective traveler's confidence in the travel intermediary and the tourist enterprise, the images of competing services and/or destinations, previous experience, assessment of risks, and cost and time constraints that the prospective traveler has to take into account.

The fourth field of the model, characteristics and features of destination and services, illustrate the destination and service related characteristics that have a bearing on the decision process and its outcome. The model presents a visualization of the travel decision process, especially of the different stages or phases of this process. The different stages or phases of the process are influenced by each of the four fields simultaneously.

Decision Making Approaches

Pleasure travelers make decisions using different approaches, from the highly routine to the extensive (Bogart, 1969). Most of marketing literature suggests two different decision making approaches: routine and extensive decision making approaches Engel, Blackwell, & Miniard, 1986; Morrison, 1989; Peter & Polson, 1993; Kotler, 1993). In the case of the routine decision making approach, decisions are made quickly and with little mental effort. The perceived knowledge about the available alternatives is high. When the extensive approach is taken, there is a need for considerable time and effort to be invested in the search for information and the evaluation of alternatives.

Fodness and Murray (1997) studied these two decision making approaches by dividing auto travelers who stopped at official Florida centers into two groups routine searchers and extended searchers. They defined routine searchers as those who took less than one month and considered no more than two information sources in planning their trips. Extended searchers took more than one month and considered more than two information sources. They found significant differences between these groups with respect to socioeconomic characteristics, traveling party and trip characteristics, trip behavior, and expenditures.

Information Search Behavior

Understanding the information search behavior of pleasure travelers is vital to understanding the time frames of the travel decision making process since most planning time may consist of searching for information. Consumer awareness, selection, and choice of tourism and hospitality products depends on the information available and used

by the tourist (McIntosh & Goeldner, 1990; Moutinho, 1987). Identification of information sources and planning behavior offers opportunities to increase the probability that consumers would, at least, be exposed to information about specific destinations.

According to Moutinho (1987):

Information seeking is the expressed need to consult various sources prior to making a purchasing decision. Initially there is the recognition of the problem which is a result of a perceived imbalance or need to shift to a desired state. It activates the decision process, through the search for information about alternatives (p. 12).

The marketing literature generally differentiates between internal and external searches for information by a consumer (Crompton, 1983). Internal searches entail recalling information to which the individual has been exposed in the past. The marketer has little opportunity to influence these internal searches. However, even an individual who has some internal store of knowledge upon which to draw might seek additional information before making a purchase decision.

External searches might be used more frequently in making travel related decisions than in making decisions to purchase many other types of products. Pleasure travelers are likely to turn to such external sources in order to learn about the number of alternative destinations which might meet their needs, the characteristics and attributes of those destinations, their relative desirability, and the relative costs associated with visiting them.

An external search represents a conscious effort to seek out new information through communication with others, from media, from commercial brochures or guidebooks or through attention to commercials. Because of the effort required, the natural tendency of consumers is to keep external searches to a minimum. However, there

are at least three reasons why external searches may be expected to be frequent in the tourism field (Crompton, 1983).

First, a pleasure trip is a high risk purchase. It involves not only a considerable investment of discretionary dollars but also a considerable investment of discretionary time. In general, the greater the degree of perceived risk in a purchase, the greater the propensity to search. Obtaining information through an external search is one way of reducing perceived risk to a more acceptable level.

Second, unlike the retail consumer in a store, the pleasure traveler can neither directly observe what he is buying, nor try it out inexpensively. Therefore, there is considerable reliance on secondary and tertiary sources of information. This suggests that the search for information about potential destinations is likely to be much longer and involve more and a greater variety of consumer products and services than searches for information about other products.

Third, pleasure travelers have a tendency to visit new destinations on each trip. A primary motivation for a vacation is to see new places or to do new things in a different environment (Crompton, 1979). Previous studies in the consumer behavior literature have found that the greater the need for variety, the greater the external search effort is likely to be (Engel, 1994). Unfamiliarity with a new destination suggests that an individual might spend more time searching for information about it.

Studies of the Trip Planning Interval

An early study of the trip planning interval was conducted by Schul and Crompton (1983). They segmented the international vacation market in Texas by: (1) the

length of time indicated by the respondent during which overt trip planning activities occurred prior to the vacation which was the furthest away from the respondent's home and taken in the past 12 months, and (2) the number of travel organizations (e.g. private and public travel organizations, transportation carriers, tour operators, etc.) consulted by the respondent during the trip planning process. They found that four out of six psychographic factors (cultural interest, comfort, activity, and opinion leadership) were statistically significant in the variation of the total trip planning intervals.

Just a few months later, Gitelson and Crompton (1983) published another article about trip planning intervals. Their study examined differences in vacationers' planning intervals and how they related to the length of the trip in terms of distance and length of stay, and trip purposes including desire for excitement, desire for relaxation, and desire for a well-planned trip. These differences were then related to respondents' use of information sources, including printed media, broadcast media, consultants, and destination-specific literature. They found that the most frequently reported total trip planning interval was less than one month (43.4%) followed by one to three months (28.5%), and over 3 months (28.2%). They also found that the total trip planning interval was significantly associated positively with the duration of the trip and distance traveled to the primary destination. A significant level of positive association was found between the total trip planning interval and whether or not it involved a visit to friends or relatives.

Perdue (1985), in an inquiry-conversion study in Nebraska, segmented state travel information inquirers by the timing of the destination decision. The timing of the destination decision was divided into two categories: decisions made about the destination before receiving an information packet and after receiving an information

packet. He found that the information packet was considered the primary influence on the destination decision. People who decided on their trip destinations after receiving information packet about Nebraska were more likely to decide to visit Nebraska than those who made their destination decisions before receiving the information packet.

Rao et al. (1992) examined American pleasure travelers' trip planning behavior and the importance attached to a variety of activities, amenities, and locational variables in considering four foreign destinations (Canada, Mexico, the Caribbean Island, and Europe). They found that the more the expense and the greater the distance involved, the longer the total trip planning interval is for U.S. outbound pleasure travelers.

Fodness and Murray (1997) segmented the leisure tourism market in Florida on the basis of consumer information search behavior. They examined the usefulness of this segmentation by contrasting two approaches to segmenting this market: post hoc and a priori. Two variables were used to segment the Florida leisure tourism market: (1) the length of time based on the response to the question "How long before your most recent trip to Florida did you begin making your travel plans?," and (2) the number of information sources used. From these two variables, they developed the contingency table presented as Table 3.

Table 3. Leisure traveler information search model.

		Number of Sources Considered	
		Fewer	More
Pre-trip Planning Interval	Shorter	Routine Search	Time-limited Search
	Longer	Source-limited Search	Extended Search

(Adapted from Fodness and Murray, 1997).

They found that the pleasure travelers were more likely to spend more time if the trip was a vacation, the length of stay increased, they visited more destinations, and their

expenditures were higher. The length of the total trip planning interval was negatively associated with the use of unpaid lodging such as a friend's or relative's home.

Regression Analysis

The term regression was introduced by Francis Galton (1886) in his famous paper "Family Likeness in Stature." Galton found that, although there was a tendency for tall parents to have tall children and for short parents to have short children, the average height of children born of parents of a given height tended to move or regress toward the average height in the population as a whole. In other words, the height of the children of unusually tall or unusually short parents tended to move toward the average height of the population. Galton's law of universal regression was confirmed by his friend Karl Pearson, who collected more than a thousand records of heights of members of family groups. He found that the average height of sons of a group of tall fathers was less than their fathers' height and the average height of sons of a group of short fathers was greater than their fathers' height thus "regressing" tall and short alike toward the average height of all men. In the words of Galton, this was "regression to mediocrity."

The modern interpretation of regression is, however, quite different. According to Gujarati (1988),

Regression analysis is concerned with the study of the dependence of one variable, the dependent variable, on one or more other variables, the explanatory variables, with a view to estimating and/or predicating the (population) mean or average value of the former in terms of the known or fixed (in repeated sampling) values of the latter.

R. ?

Regression vs. Correlation

Closely related, but conceptually very different from regression analysis, is correlation analysis where the primary objective is to measure the strength or degree of linear association between two variables. The correlation coefficient measures this strength of (linear) association (Gujarati, 1988). For example, we may be interested in finding the correlation (coefficient) between smoking and lung cancer, between scores on statistics and mathematics examinations, between high school grades and college grades, and so on. Regression analysis does not provide such measures. Instead, regression analysis tries to estimate or predict the average value of one variable on the basis of the fixed values of other variables (Gujarati, 1988).

The two techniques of regression and correlation have some fundamental differences that are worth mentioning. According to Gujarati (1988),

In regression analysis, there is an asymmetry in the way the dependent and explanatory variables are treated. The dependent variable is assumed to be statistical, random, or stochastic, that is, to have a probability distribution. Explanatory variables, on the other hand, are assumed to have fixed values (in repeated sampling).² p. 2

In correlation analysis, on the other hand, any (two) variables are treated symmetrically; there is no distinction between the dependent and explanatory variables. After all, the correlation between scores on mathematics and statistics examinations is the same as that between scores on statistics and mathematics examinations. Moreover, both variables are assumed to be random. Most of correlation theory is based on the assumption of randomness of variables, whereas most of the regression theory is

² It is crucial to note that the explanatory variables may be intrinsically stochastic, but for the purpose of regression analysis it is assumed that their values are fixed in repeated sampling (i.e., X assumes the same values in various samples), thus rendering them in effect nonrandom or nonstochastic.

conditional upon the assumption that the dependent variable is stochastic but the explanatory variables are fixed or nonstochastic.³

Asymptotic Property Assumptions of the Classical Regression Model

The value of an estimator changes as the sample size n increases. Asymptotic properties are the properties of an estimator that become true only when the sample size is infinitely large. Three criteria are used to evaluate the performance of the estimator (Greene, 1994).

- (1) Consistency: An estimator of a parameter is said to be consistent if

$$\hat{\theta} \xrightarrow{P} \theta$$

What consistency means is the estimation error will gradually reduce to zero as the sample size increases, so the change in the value of estimator as the sample size increases is "in the right direction." In most estimation problems, proving finite sample property appears intractable, and consistency has become the minimum requirement for any estimator.

- (2) Asymptotic normality: A consistent estimator of the parameter is said to have an asymptotically normal distribution if

³ In advanced treatment of econometrics one can relax the assumption that the explanatory variables are nonstochastic.

$$\sqrt{n} (\hat{\theta} - \theta) \xrightarrow{d} N(0, \Sigma),$$

or,

$$\hat{\theta} \overset{A}{\sim} N\left(\theta, \frac{1}{n} \Sigma\right).$$

Here, Σ/n is called the asymptotic variance-covariance matrix of estimator. A consistent and asymptotically normal estimator is sometimes referred to as a consistently asymptotically normal estimator. The result of asymptotic normality is always based on the central limit theorem.

(3) Asymptotic efficiency: An asymptotically normal estimator of a parameter is said to be asymptotically efficient if its asymptotic variance-covariance matrix is smaller than that of any other asymptotically normal estimator. A consistent, asymptotically efficient, and asymptotically normal estimator is sometimes called a best asymptotically normal estimator.

Hypotheses Tests

Tests of hypotheses are not valid, in general, when the error term is not normally distributed. Indeed, this fact is the crux of the problem. It is still possible to estimate coefficients in a reasonable fashion—the OLS estimator is unbiased, consistent, and indeed BLUE (Best Linear Unbiased Estimator) (Greene, 1994). However, one cannot make probability statements about these estimates because the distributions of estimators and of variance are not known. Of course, if the particular type of nonnormal distribution of error is known, it may be possible to work out the distribution of estimator and of variance, and hence to make the usual type of probability statements about the estimates. Whether or not this can actually be done would naturally depend on the tractability of the

particular distribution. In any case, the usual test procedures are asymptotically justified whether or not the disturbances are normal. The OLS estimator has the same asymptotic distribution whether or not the disturbances are normal. The test is only asymptotically valid. The t-test, Chi-square test, and F-test are also asymptotically valid (Greene, 1994).

Econometric Models for Censored Data

Tobit models refer to regression models in which the range of the dependent variable is constrained in some way. In economics, such a model was first suggested in a pioneering work by Tobin (1958). He analyzed household expenditures on durable goods using a regression model which specifically took account of the fact that the expenditure (the dependent variable of his regression model) cannot be negative. Tobin called his model: "the model of limited dependent variables". It and its various generalizations are known popularly among economists as Tobit models, a phrase coined by Godlberger (1964), because of similarity to probit models. These models were also known as censored or truncated regression models. The model was called truncated if the observations outside a specified range are totally lost and censored if one can at least observe the exogenous variables.

Censored and truncated regression models have been developed in other disciplines (notably biometrics and engineering) more or less independently of their development in econometrics. Biometricians use the model to analyze the survival time of a patient. Censoring or truncation occurs either if a patient was still alive at the last observation date or if he or she could not be located. Similarly, engineers used the model to analyze the time to failure of material or of a machine or a system. These models were

called survival models (Kalbfleisch & Prentice 1980; Miller, 1981). Sociologists and economists have also used survival models to analyze the duration of such phenomena as unemployment, welfare receipts, employment in a particular job, residing in a particular region, marriage, and the period of time between births (Bartholomew 1973; Flinn & Heckman 1982; Lancaster 1979; Singer & Spilerman 1976; Tuma, Hannan, & Groeneveld 1979; Tuma & Robins 1980).

The tobit model has the following structures:

Latent Underlying Regression:

$$y_i^* = \beta'x_i + \varepsilon_i, \quad \varepsilon_i \sim N[0, \sigma^2]$$

Observed Dependent Variable:

if $y_i^* \leq L_i$, then $y_i = L_i$ or unobserved (lower tail censoring or truncation)

if $y_i^* \geq U_i$, then $y_i = U_i$ or unobserved (upper tail censoring or truncation)

if $L_i < y_i^* < U_i$, then $y_i = y_i^* = \beta'x_i + \varepsilon_i$.

In practice, most of the published applications involve censoring rather than truncation.

The thresholds, L_i and U_i , may be constants or variables. Censoring in the upper or lower (or both) tails of the distribution may be accommodated.

Somewhat more elaborate specification is obtained when the range of y^* is censored in both tails (Greene 1995; Rosett & Nelson 1975). This is the two limited probit model. An application is the model of weekly hours worked developed by Nakamura and Nakamura (1983), in which less than half time is reported as 20 hours and more than 40 hours is reported as full time. First they run the model using OLS and, then apply the double bounded (two limited) probit model. They found statistical evidence of parameter instability in a conventional empirical model of the labor force behavior of married women over the range of variation in annual hours of work.

Sampling Design and Random Digit Dialing

The ultimate purpose of sampling is to select a set of elements from a population in such a way that descriptions of those elements accurately portray the parameters of the total population from which the elements are selected (Babbie 1998). A good sample is a miniature version of the population. The best sample is representative of the population (Fink 1995a and 1995b). Survey samples are not meaningful in themselves. Their importance lies in the accuracy with which they represent or mirror the population (Fink 1995b). Sampling methods are usually divided in two ways (Babbie 1990 and 1998; Fink 1995b; Kalton 1983). The first is called probability sampling. Probability sampling provides a statistical basis for saying that a sample is representative of the study population. In probability sampling, every element of the population has a known, nonzero probability of being included in the sample (Babbie 1990 and 1998; Fink 1995b; Kalton 1983). Probability sampling implies the use of random selection. The reasons for using random selection are twofold. First, this procedure serves as a check on conscious or unconscious bias on the part of the researcher. The researcher who selects cases on an intuitive basis might very well select cases that would support his or her research expectations or hypotheses. Random selection eliminates this danger. Moreover, random selection offers access to the body of probability theory, which provides the basis for estimates of population parameters and estimates of error (Babbie 1990 and 1998; Fink 1995b; Kalton 1983).

The second type of sampling is nonprobability sampling. The weakness of all nonprobability sampling is its subjectivity, which precludes the development of a theoretical framework for it. With nonprobability sampling, some members of the eligible

population have a chance of being chosen, whereas others do not. By chance, the survey's findings may not be applicable or generalizable to the population at all (Babbie 1990 and 1998; Fink 1995b; Kalton 1983).

The telephone survey has a rather bad reputation among professional researchers (Babbie 1998). Telephone surveys are limited by definition to people who have telephones. Years ago this method produced a substantial social class bias by excluding poor people from the surveys. However, over time, the telephone has become a standard fixture in almost all U.S. homes (Babbie 1998). The Federal Communication Commission (1998) estimates that 93.8 percent of all household had telephone service in 1995 and 1996, so this earlier form of social class bias has been substantially reduced.

Random digit dialing procedures were developed as a reaction to the problems of under coverage in telephone directories (Babbie 1990 and 1998; Frey 1989; Frey & Oishi 1995). It was necessary to develop a technique that would overcome the problems of incomplete, inaccurate, and out-of-date directory listings. Random digit dialing designs not only provide for the inclusion of unlisted numbers, but they also have the additional advantage of eliminating the need to list sampling elements thereby reducing the time it takes to implement a random digit dialing survey (Frey 1989; Frey & Oishi 1995).

Computer-Assisted Telephone Interviewing

Computer-assisted telephone interviewing (CATI) was developed in response to problems with existing survey methods. Even with the rapid developments that had occurred in telephone survey research, there continued to be some concern with controlling the interview process and interviewer-respondent interactions (Shure &

Meeker, 1978). In addition, surveying large populations and screening to specialized subgroups were discouraged because of cost considerations and the burden such tasks placed on all phases of survey operations (Shanks, Nichols, & Freeman, 1981). Wait times for data retrieval and reporting using telephone surveys proved to be unacceptable, particularly to policy makers who need immediate feedback on a potential action (Frey 1989). Paper-and-pencil or manual telephone surveys were proving to be inefficient with large surveys because they produced an inordinate amount of interviewer error, particularly when numerous screening or filter questions were used. Pencil-and paper surveys were also proving to take too long for completion.

CHAPTER III

METHODS AND PROCEDURES

In this chapter, the procedures and methods employed in this study are discussed. The initial sections describe the study population and data collection procedures. The latter sections explain: how trip planning intervals and dates were defined conceptually, graphically, and mathematically; the variables used in comparisons of two different types of decision makers; what independent variables were included in the regression model; and tests of the regression model's basic assumptions.

Survey Design

Household Telephone Survey

The findings reported herein were derived from a household telephone survey funded by Travel Michigan, a state government agency charged with promoting pleasure travel to Michigan, and various units of Michigan State University. Its fundamental purpose was to evaluate Travel Michigan's promotional programs and to measure the characteristics and behavior of tourists in Michigan's primary market area.

Data were collected in a computer-assisted telephone interviewing (CATI) laboratory maintained by the Travel, Tourism, and Recreation Resources Center at Michigan State University during the three year period January 1996 through December 1998.

Mode of Survey Administration and Data Collecting Instrument

The CATI laboratory has one main server and six stations. The data collection instrument for the survey was an electronic questionnaire programmed for each interviewing station using software called StatPac (StatPac, 1995). Each interview was immediately transmitted electronically to the main server in the laboratory. The questionnaire that was used is shown in Appendix A. Approximately 160 total questions focused on : promotion awareness, Michigan trip profile, Michigan image, pleasure trip profile, Michigan pleasure trip profile, trip origin and destination, advertising influence, pleasure trip expectations, and socioeconomic profiles.

The questionnaire was designed to profile both the respondent's most recent pleasure trip (within the past 12 months) in general and the respondent's most recent pleasure trip to Michigan (within the past 12 months). A flowchart depicting the structure of the questionnaire is presented in Figure 2. The questions in the "Most Recent Pleasure Trip Profile Block" profiled the most recent pleasure trip taken by all respondents who had taken a pleasure trip in the past 12 months. If the destination of this trip was Michigan, the resulting trip profile was also a profile of the respondent's most recent pleasure trip in Michigan. If the destination was not Michigan, the respondent was asked if they had taken a pleasure trip to Michigan at any time during the past 12 months. Those who answered in the affirmative were routed into the "General Michigan Pleasure Trip Block." It was possible for a respondent to be asked questions in the "Most Recent Pleasure Trip Profile Block" and the "General Michigan Pleasure Trip Block", if their most recent pleasure trip was to a non-Michigan destination but they had also taken a less recent trip to a Michigan destination in the past 12 months.

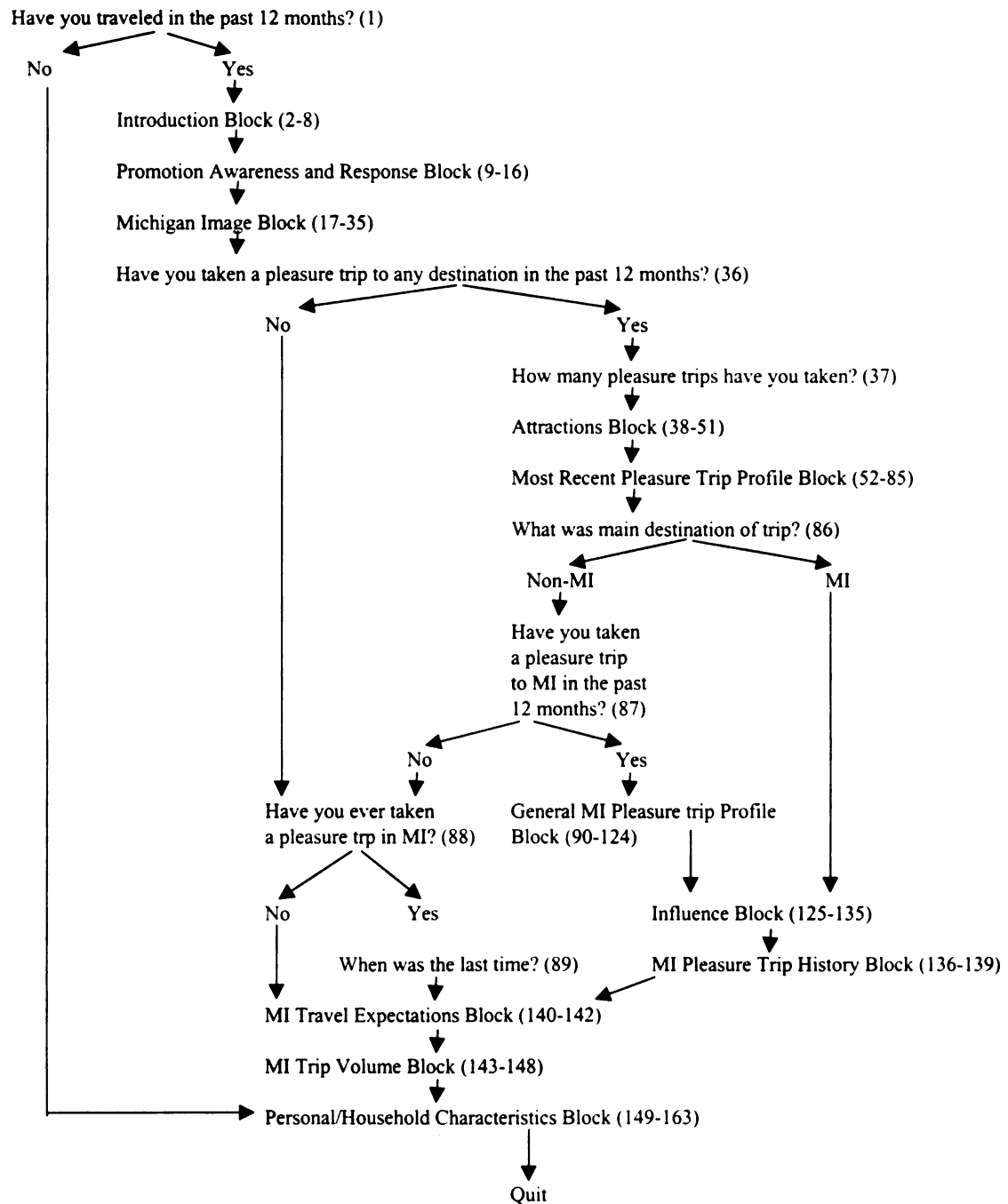


Figure 2. Flow chart for the survey questionnaire.

Sampling and Time Frames

The survey employed random digit-dial sampling of household telephone numbers in the study region purchased from Survey Sampling, Inc. Interviewing occurred on weekdays from 6 p.m. until 10 p.m. and on weekend afternoons throughout the year. The data set included 17,690 completed cases for the three year period January 1996 through December 1998.

Length of Interview

The time to complete the survey depended on whether or not the respondent had taken any kind of trip to any destination in the past twelve months, if the destination of the most recent pleasure trip taken was Michigan or other states or countries, and if the respondent had taken a less recent pleasure trip to Michigan within the past twelve months (See Figure 2). The length of interviews ranged from a few seconds to twenty minutes, with an average length of twelve minutes. Although the questionnaire contained 164 questions, no respondents were asked all questions due to the branching structure of the questionnaire (See Figure 2).

Interviewing and Supervising

In September 1995, twenty interviewers were hired and trained to work on the survey. Interviewers were both undergraduate and graduate students at Michigan State University. A large majority of the interviewers were women.

On average, about 491 interviews were conducted each month. All interviewers were trained and supervised by two doctoral graduate students during the study years.

Trainees received detailed information about their jobs, the concepts and definitions used in the survey, and specific interviewing techniques. Each interviewer conducted several practice interviews as part of their initial training. The work of each interviewer was monitored by supervisors, and feedback was provided. The supervisors checked each interviewer's performance. Interviewer turnover was relatively high over the course of the year, but this was not a data quality concern because only fully trained interviewers were used and each was monitored.

Interviewing occurred on weekday evenings and weekend afternoons. Up to three attempts were made to contact each household in the designated sample. Interviewers randomly selected respondents within households by asking to speak "to the adult over 17 years old who will have the next birthday".

Response Rate

The response rate, including partially-completed interviews, was 44%. The response rate, including only fully-completed interviews, was 35%. About 29% of eligible potential respondents refused the interview. Similar median refusal rates were computed in reviews of telephone surveys conducted by Groves and Kahn (1979), Steeh (1981), and Wiseman and McDonald (1979). A test for possible nonresponse bias in the data revealed few important differences between the characteristics of 173 nonrespondents (other than refusals)⁴ and a subsample of 173 randomly selected respondents on 84 variables, including demographic and socioeconomic characteristics. The only differences between the two groups that were found to be statistically

⁴ It was not possible to test for non-response bias within the refusal population due to the established human subjects guidelines which protect subjects from undue harassment.

significant at the .05 level were: (1) nonrespondents were more likely to have visited a state or national park on their most recent pleasure trip in Michigan (43% vs. 28%), (2) nonrespondents, on the average, rated the desirability of Ontario as a pleasure trip destination on a 10-point scale higher than did respondents (6.7 vs. 5.2), and (3) nonrespondents, on the average, tended to live in households containing somewhat fewer persons than did respondents (2.6 vs. 3.1).

Study Population and Region

The survey population consisted of adults, age 18 or older, who permanently resided in Michigan's primary market area. The primary market area was defined as the six states of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin and the province of Ontario, Canada. A map of the study region is presented in Figure 3. The primary market or study region generates the vast majority (88%) of Michigan's pleasure travelers (Kim, 1999).

Operational Definition of Trip

During interviews the word "trip" was defined as "any overnight or day trip to a place at least 50 miles from your home, unless it was taken in commuting to work or school". A "pleasure trip" was defined as "any overnight or day trip to a place at least 50 miles from your home that was made for your enjoyment, including vacations, weekend getaways, shopping trips, and trips to visit friends or relatives".

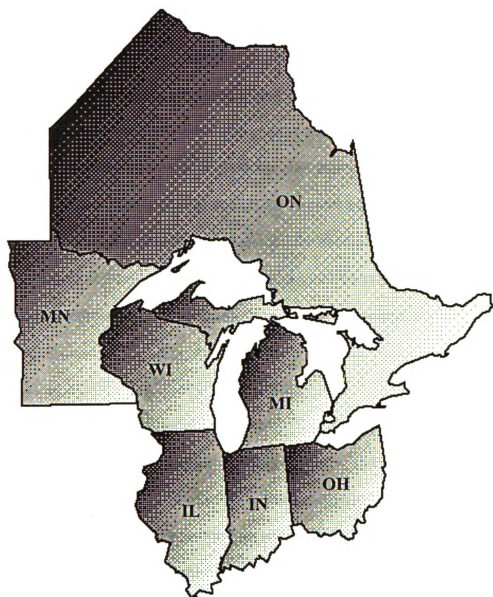


Figure 3. Study region.

Preparation of Data

Most Recent Michigan Pleasure Travelers

This study focused on the most recent pleasure trips taken in the past 12 months to Michigan prior to the interview. As explained in previous a section, the study questionnaire was designed to profile both the respondent's most recent pleasure trip (within the past 12 months) in general and the respondent's most recent pleasure trip in Michigan (within the past 12 months). Because this study focused on the respondents who had visited Michigan during their most recent pleasure trips within the past 12 months, those same respondents were selected for this study.

Based on branches of the questionnaire, an SPSS syntax program was prepared to select respondents who had visited Michigan during their pleasure trip within the past 12 months.

Visiting Friends and Relatives Market

There has been arguments whether or not to include "visiting friends/relative (VFR)" travel market in a destination's marketing strategy. Kim et al. (1998) stressed the importance of VFR market in tourism marketing because this market is a large and lucrative one. They defined the hard core VFR tourist as those who participated in an above-average number of other tourist activities on their recent pleasure trips. Then, they found that the hard core VFR tourists were distinguishable from less active VFR tourists in terms of trip length, trip expenditures, participation in tourists activities, main destination of trip, and other behavior patters. The hard core VFR tourists stayed longer and spent more money during their pleasure trips to Michigan. They concluded that

targeting hard core VFR tourists in marketing campaigns is possible, but challenging, and that on-site marketing to this group through efforts designed to increase length of stay and encourage repeat visits may be especially important.

While their study found the possibility of targeting the hard core VFR tourists, this is not a common practice across DMOs. For example, Travel Michigan has declared that VFR market is excluded from its target markets.

Based on these arguments about the VFR market, including VFR market in this study could be legitimately questioned. The purpose of this study was to provide information about trip planning behaviors of Michigan pleasure travelers to Michigan DMOs, especially Travel Michigan. If Michigan DMOs, including Travel Michigan, do not target the VFR market, including it in this study may not be appropriate. However, as reported by Kim et al (1998), a considerable portion of VFR tourists spend a considerable amount of money and time during their Michigan visits. Therefore, two data sets were used: the data set including VFR market and the data set excluding VFR market. The same analyses were conducted for both data sets. The analyses included: the duration and frequency distributions of trip planning intervals, two different decision making approaches, and frequency distributions for study relevant dates. Separate regression analyses were not performed because the VFR market was included as an independent variable in the regression model fitted to the full data set.

The results from analyses of the data without the VFR market were almost identical to those from analyses of the full data set with VFR market included. Therefore, either data set could have been selected as the basis for this study. It was decided to present results for both the full data set with VFR included and for the partial data set

with VFR excluded. However, the tables related to the latter are reported in (Appendix B) without accompanying discussion in the interest of brevity.

Data Weighting

Data were weighted to correct for uneven participation across state and provincial boundaries of the study region such that the resulting weighted sample conformed to the distribution of households in the six states and Ontario, Canada. Data were also weighted by month to correct for minor variations in the number interviews completed each month of the study period. The 1997 Survey of Buying Power (Sales & Marketing Management, 1997) was used to weight the sample distribution of households to the actual population distribution of households in the study region. The year 1997 was selected because this year is the middle year of the survey periods (from 1996 through 1998).

Study Relevant Time Frames

Time Frames in Questionnaire

Three study relevant time frames were collected via the study questionnaire. Respondents were asked to provide the following information: (1) how far in advance of their trip departure they began to make plans for the trips (the total trip planning interval in the terminology adopted in this study); (2) how far in advance of their trip departure they made a final decision about the trip destination (the post decision interval in terminology adopted in this study); and (3) the date that the pleasure trip began (the date the trip began in terminology adopted in this study). These time frames are listed in Table 4 along with related supplemental information.

Table 4. Definitions and descriptions of the time frames of the travel decision making process from the study questionnaire.

Term	Operational Definitions	Type of Questions	Level of Measurement
Total trip planning interval	About how far in advance of this trip did you begin to make plans for it?	Open-ended	Ratio
Post decision interval	About how far in advance of this trip did you make a final decision about where to go?	Open-ended	Ratio
Date trip began	Approximately when did trip begin — the month and day?	Open-ended	Ordinal

Defining Study Relevant Time Frames Underlying the Trip Planning and Decision Making Process of Pleasure Travelers

The following figure (Figure 4) was adapted from the comprehensive model of the travel decision making process (Figure 1). As seen in this figure, there are three different intervals and three different dates. The three different dates are when: (1) the trip planning began, (2) the trip destination was selected, and (3) the trip began.

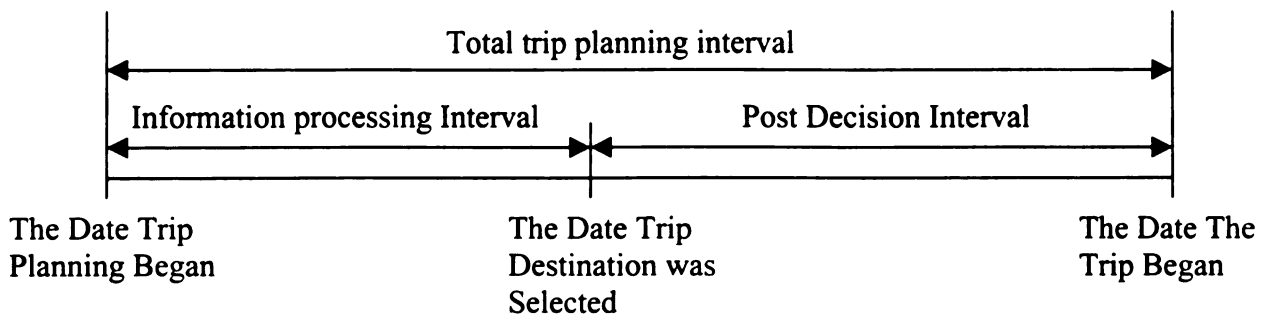


Figure 4. Trip planning and decision making process phases and time frames.

This figure also shows how the study relevant time frames defined in Chapter I are related to the trip planning and decision making process phases faced by pleasure travelers. From the beginning of awareness through the date the trip began, corresponding dates and intervals are defined graphically. Recall that the total planning interval is the

length of time between the date trip planning begins and the date the trip begins; the post decision interval is the length of time between the date the trip destination is selected and the date the trip begins; the information processing interval is the length of time between the date the trip planning begins and the date the trip destination is selected.

Mathematical Definitions of Time Frames of the Travel Decision Making Process

Three study relevant time frames were collected from respondents: the total trip planning and the post decision intervals and the date the trip began. The other three study relevant time frames were not provided by respondents: the information processing interval, the date trip planning began, and the date trip destination was selected. However, it is simple to calculate these time frames from the information that was collected.

The total trip planning interval can be expressed as:

$$TPI_i = DTB_i - DPB_i \quad (1)$$

The post decision interval was the length of time between the date the trip destination is selected and the date the trip begins. Therefore, the post decision interval is expressed as:

$$PDI_i = DTB_i - DDS_i \quad (2)$$

,where TPI_i = total trip planning interval for individual i ;

DTB_i = the date the trip begins for individual i ;

DPB_i = the date the trip planning begins for individual i ;

PDI_i = the post decision interval for individual i ;

DDS_i = the date the trip destination is selected for individual i .

The operational definition of the information processing interval is the length of time between the date trip planning begins and the date the trip destination is selected. Thus, the information processing interval for individual i may be expressed as

$$IPI_i = DPB_i - DDS_i \quad (3)$$

Because the date the trip planning begins (DPB_i) and date the trip destination is selected (DDS_i) were not known from the survey data, this equation may be modified by adding and subtracting the same term (the date the trip began, DTB_i) so that,

$$IPI_i = DPB_i - DDS_i = (DPB_i - DTB_i) - (DDS_i - DTB_i) \quad (4)$$

From the equations for total and post decision intervals,

$$TPI_i = DTB_i - DPB_i \quad (1)$$

$$PDI_i = DTB_i - DDS_i \quad (2)$$

the information processing interval for individual i can be expressed by two terms, TPI_i and PDI_i , which are known from the survey data, as

$$IPI_i = DPB_i - DDS_i = (DPB_i - DTB_i) - (DDS_i - DTB_i) = TPI_i - PDI_i \quad (5)$$

Consequently, the information processing interval of individual i is equivalent mathematically to the length of time between the length of time between the total trip planning and post decision intervals of individual i which are known values from the survey.

The next variable to be calculated in this equation is the date trip planning begins (DPB_i). Figure 4, trip planning and decision making process phases and time frames, shows that the date trip planning begins for individual i is the date backward from the date the trip begins by the total trip planning interval. It can be defined and calculated by the following mathematical expression.

$$DPB_i = DTB_i - TPI_i \quad (6)$$

,which is the difference between the date the trip begins and the total trip planning interval. Because the date the trip begins (DTB_i) and the total trip planning interval (TPI_i) are known from the survey, the date trip planning begins (DPB_i) can be calculated using this equation.

Finally, the date trip destination is selected (DDS_i) can be calculated from equation (2). From equation (2),

$$DDS_i = DPB_i - PDI_i \quad (7)$$

,which is the difference between the date the trip planning begins and the post decision interval. Because the date trip planning begins (DPB_i) is known from equation (6) and the post decision interval (PDI_i) is known from the survey. the date trip destination is selected (DDS_i) can be calculated from this mathematical expression.

The Date Trip Planning Began

As described in the introduction, the objective of most tourism promotion is to persuade potential pleasure travelers to purchase trips to a destination or other travel related services and such promotion should reach potential pleasure travelers at the time they begin to make plans for trips. The premise underlying this study is that when asked: "when did you begin to make plans for this trip" respondents focused when "purchase behavior" began rather than when "awareness raising" began.

However, this premise may be challenged and confound interpretation of results if respondents perceive this question differently. Chubb and Chubb (1980) suggested in their decision making model that when they become aware of the need of trips, pleasure

travelers may react in two alternative ways: (1) react immediately to their awareness of the need of trip, (2) postpone their decision for longtime unless indefinitely or react negatively to the awareness. Of these, the second reaction group may report very long total trip planning intervals.

Only two cases of total trip planning intervals of longer than 365 days were found out of the 2,300 respondents who had visited Michigan during the past 12 months. This small number of cases suggests that the vast majority of respondents interpreted when trip planning began as assumed throughout this report that being: not when they were first made aware of Michigan as a travel destination but rather when they entered the "purchase behavior" mode.

Valid Cases for This Study

The information processing interval was calculated by subtracting the post decision interval from the total trip planning interval. Because of this, only cases which included both the total trip planning and post decision intervals were analyzed in this study. A total 1478 cases were found to meet the screening criteria established to be subjected to further analyses. Of these, two additional cases were eliminated because they contained extreme values (730 days and 1825 days) of questionable reliability.

There are several other reasons why these extreme values were excluded. First, most promotion campaigns schedule are prepared yearly. Often, they are prepared for seasons, months, or even days. Therefore, pleasure travelers whose total trip planning intervals were over one year would not appropriate targets for these travel marketers. Second, as explained in the previous section, these two extreme cases are the reaction (or

awareness) group who postpone their decision whether to take a trip or not for longtime. During their initial awareness phase, their interest and desire to know about alternative trip destinations or services is very low. Therefore, promotion campaign during this phase would not be effective because they would not react (i.e., make a purchase decision) to any promotion campaign at that time. Since the purpose of this study is to provide useful information about trip planning behavior of pleasure travelers to destination marketers so that they can prepare more effective and efficient promotion message distribution schedules, these two cases were excluded from the data set for this study. Two hundred additional cases were eliminated because the third required datum, the date trip began, was missing. Thus, when all screening criteria had been applied, a total of 1266 valid cases remained for further analyses.

Finally, it is important to note that the somewhat elaborate process involved in screening out invalid cases was deemed important to developing a high quality data set for further analyses. The multiple step pairing procedure employed insures that only cases that included all study relevant data were included thereby eliminating missing cases as a possible source of bias in the final results.

Analyses of Data

This section explains how the data set prepared was analyzed to fulfill the study objectives. Discussion is presented in the order that objectives are listed on p. 7. Definitions of variables, steps in the analyses, relevant statistics, and computer programs used in analyses of data are presented in each section.

Duration and Frequency Distributions for the Three Planning Intervals (Objective 1)

The duration of the three planning intervals underlying the trip planning and decision making process were studied. Valid cases, minimum and maximum values, ranges, mean, median, standard deviation of these intervals are included as statistical descriptors. SPSS for Windows version 8.0 (Norusis and SPSS, Inc., 1998) was used to develop reported statistics.

The frequency distributions for these intervals were investigated across different time bases. First, the frequencies of the time frames are presented based on individual planning days such as 0 day, 1 days, 2 days, ... 365 days. While the distributions of the time frames based on individual days provide detailed frequencies of pleasure travelers' planning and decision intervals, such frequency distributions are too complicated to identify the more general trip planning behaviors of pleasure travelers. Therefore, day specific data were grouped into longer time intervals. Individual days were grouped into six time intervals: less than one week, 8-15 days, 16-30 days, 31-60 days, 61-90 days, and over 90 days. These groups were consistent with previous studies based upon this data set (Yoon, Spencer, Holecek & Kim, 1998; Holecek, Yoon & Spencer, 1997; Yoon, Holecek, Spencer & William, 1999). The relevant frequencies are presented for each grouping of data for each of three previously defined trip planning and decision making intervals.

Two Different Decision Making Approaches (Objective 2)

As stated in the discussion of the objectives section, the information processing interval has implications for tourism marketing. Recall that the information processing

interval is the length of time between the date the trip planning begins and the date the trip destination is selected. The total number of cases were divided into two groups identified as: instant and hesitant decision makers.

Cases with a reported zero information processing interval were placed into the instant decision maker group while all others were placed into the hesitant decision maker group. No alternative classification scheme was considered to be viable in this case because 85% of the data set consisted of a zero information processing interval.

These two groups of decision makers were profiled and compared in terms of information sources used and media habits, trip related variables, and socioeconomic variables. The relevant variables for these categories are listed and defined in Tables 5 to 7. Each row contains the definition of a variable, level of measurement, descriptive technique used to analyze the variable and resulting statistics.

Table 5. Sources of information and media habits of Michigan pleasure travelers.

Variable	Level of Measurement	Data analysis	Test Statistics
Media Considered Most Helpful When Selecting Tourist Destinations	Nominal	Frequency/ Percentage	Chi-square
Have Access to the Internet	Nominal	Frequency/ Percentage	Chi-square
Have Used the Internet to Obtain Travel Information	Nominal	Frequency/ Percentage	Chi-square
Have Used Michigan Travel Bureau's Web Site to Obtain Travel Information	Nominal	Frequency/ Percentage	Chi-square
Have Called Any State or Province's Toll-Free Number to Request Travel Information	Nominal	Frequency/ Percentage	Chi-square

Table 6. Demographic and socioeconomic characteristics of Michigan pleasure travelers.

Variable	Level of Measurement	Data analysis	Statistics
Permanent residency	Nominal	Frequency/ Percentage	Chi-square
Composition of household	Nominal	Frequency/ Percentage	Chi-square
Household size	Ratio	Mean/ Median	t-test
Number of full-time wage earners	Ratio	Mean/ Median	t-test
Employment situation	Nominal	Frequency/ Percentage	---
Household income	Ordinal	Frequency/ Percentage	Chi-square

Table 7. Travel behavior of Michigan pleasure travelers.

Variable	Level of Measurement	Data analysis	Test Statistic
Month When Trip Began	Nominal	Frequency/ Percentage	Chi-square
Primary Purpose of Trip	Nominal	Frequency/ Percentage	Chi-square
Activities Participated In:			
General touring or driving for pleasure	Nominal	Frequency/ Percentage	Chi-square
Shopping	Nominal	Frequency/ Percentage	Chi-square
Outdoor recreation	Nominal	Frequency/ Percentage	Chi-square
Explore small city or town	Nominal	Frequency/ Percentage	Chi-square
Visit other attraction	Nominal	Frequency/ Percentage	Chi-square
Dine at unique restaurant	Nominal	Frequency/ Percentage	Chi-square
Nightlife	Nominal	Frequency/ Percentage	Chi-square
Visit an historic site	Nominal	Frequency/ Percentage	Chi-square
Visit state or national park	Nominal	Frequency/ Percentage	Chi-square
Visit museum or hall of fame	Nominal	Frequency/ Percentage	Chi-square
Casino gaming	Nominal	Frequency/ Percentage	Chi-square
Fall color touring	Nominal	Frequency/ Percentage	Chi-square
Main Type(s) of Lodging Used	Nominal	Frequency/ Percentage	Chi-square
Mode(s) of Transportation Used	Nominal	Frequency/ Percentage	---
Travel Party:			
Average party size	Ratio	Mean/ Median	t-test
Average aggregate age of all persons in Party	Ratio	Mean/ Median	t-test
No. Places Where Spent Night	Ratio	Mean/ Median	t-test

Table 7. Travel behavior of Michigan pleasure travelers, continued.

Variable	Level of Measurement	Data analysis	Test Statistic
Main Destination Region in Michigan	Nominal	Frequency/ Percentage	Chi-square
No. Pleasure Trips Taken to Places in Michigan	Ratio	Mean/ Median	t-test
Type of Trip:			
Overnight trip	Nominal	Frequency/ Percentage	Chi-square
Vacation trip	Nominal	Frequency/ Percentage	Chi-square
Family trip	Nominal	Frequency/ Percentage	Chi-square
Arranged by travel agent	Nominal	Frequency/ Percentage	Chi-square
Package tour with lodging	Nominal	Frequency/ Percentage	Chi-square
Trip Duration (Avg.):			
Number of nights spent in Michigan	Ratio	Mean/ Median	t-test
Estimated Total Trip Expenditures in Michigan	Ratio	Mean/ Median	t-test

Variables that Influence the Duration of the Total Trip Planning Interval (Objective 3)⁵

This study employed multiple regression analysis to investigate the relationship between the dependent variable, the total trip planning interval, and independent variables, including selected socioeconomic characteristics, traveling party composition, trip characteristics, trip behavior, and trip related expenditures.

Regression analysis is primarily used for two purposes: (1) for estimating coefficients of interest and testing hypotheses about them (2) and for forecasting (Greene, 1994). Multiple regression analysis in this case was used to estimate the coefficients of independent variables which, if any, impact the length of the total trip planning interval.

The Model

The basic model used is:

$$Y = X\beta + \varepsilon \quad (8)$$

where $Y = N \times 1$ column vector of observations on the dependent variable, the total trip planning interval, $X = N \times k$ matrix giving N observations on $k-1$ variables X_2 to X_k , the first column of 1s representing the intercept term, $\beta = k \times 1$ column vector of the unknown parameters $\beta_1, \beta_2, \dots, \beta_k$, $\varepsilon = N \times 1$ column vector of N disturbances ε_i

Defining Independent Variables

Independent variables were selected based on previous studies (Gitelson & Crompton, 1983; Roehl & Fesenmaier, 1992). Gitelson and Crompton (1983) examined

⁵ From preliminary analysis, it was found that almost 85% of respondents who answered planning interval questions decided the trip destination as they began to plan trip. This preliminary result implies that total and post decision intervals of almost 85% of respondents are the same.

differences in pleasure travelers' planning intervals and related them to the purpose of the trip (if they were visiting friends or relatives), trip distances, and trip duration.

The work of Roehl and Fesenmaier (1992) represents a preliminary step in understanding the relationship between risk attitudes and trip behavior. They included several independent variables including: trip duration, number of previous visits, party size, trips with children, visit friends or relatives as the trip purpose, accommodations at the home of friends or relatives, information acquired from travel agents, benefits sought, and household description (the presence of children 6 years of age or younger in the household). Based on these studies, the variables described in Table 8 were selected as independent variables for the regression analysis.

Internet use behavior is a recent but growing matter of interest in tourism marketing circles. The number of Internet users in Michigan is increasing rapidly year after year (TTRRC, 1997). Reasons for this increasing trend of Internet use in tourism include: (1) 24 hour access to information, (2) near instant response, and (3) low cost of access. Since so little is currently known about Internet use in tourism, it is quite attractive to include Internet use behavior variables in the regression model. It is expected that those who use the Internet will have a relatively short average total trip planning interval. However, the questions related to Internet use behavior were included in the study questionnaire only since September, 1997, which only covered half of the survey period. Therefore, instead of including these variables in the regression model, the significance of these variables in explaining the variation in the dependent variable was tested using the independent sample t-test and one way ANOVA.

Table 8. Descriptions of independent variables.

Variable	Type of Variable	Description
<u>Trip</u>		
<u>Characteristics</u>		
PEAKSEAS	Dummy	0 for non-peak season, 1 for peak season trip
PUR_VFR	Dummy	0 for other purposes, 1 for visiting friends and relatives
PARTYSIZ	Continuous	Average party size
ACT_GEN	Dummy	0 for other activities, 1 for general touring or driving for pleasure
ACT_SHOP	Dummy	0 for other activities, 1 for shopping
ACT_OR	Dummy	0 for other activities, 1 for outdoor recreation
ACT_OTH	Dummy	0 for other activities, 1 for visiting other attraction
ACT_NITE	Dummy	0 for other activities, 1 for nightlife
ACT_HIST	Dummy	0 for other activities, 1 for visiting an historic site
ACT_PARK	Dummy	0 for other activities, 1 for visiting state/national park
ACT_MUSE	Dummy	0 for other activities, 1 for visiting museum/hall of fame
ACT_CASI	Dummy	0 for other activities, 1 for casino gaming
ACT_EVNT	Dummy	0 for other activities, 1 for attending a festival or event
ACT_FALL	Dummy	0 for other activities, 1 for fall color touring
LOG_FRH	Dummy	0 for other type of lodging, 1 for friend's/relative's home
NOPTMI	Continuous	Number of pleasure trips taken to places in MI
TRP_FAM	Dummy	0 for other trip, 1 for family trip
TRP_OVER	Dummy	0 for day trip, 1 for overnight trip
TRP_VACA	Dummy	0 for other trip, 1 for vacation trip
DURATION	Continuous	Number of nights spent in MI
EXPENDIT	Continuous	Estimated total trip expenditures in MI
<u>Socioeconomic</u>		
<u>Characteristics</u>		
MIRESIDE	Dummy	0 for other states/province residence, 1 for MI residence
MEDINCOM	Dummy	0 for below median income, 1 for above median income
HHS_PRE	Dummy	0 for household not contained preschool child(ren), 1 for household contained preschool child(ren)
HHS_SCH	Dummy	0 for household not contained school age child(ren), 1 for household contained school age child(ren)

Regression Estimates

The multiple regression model was used to test the hypothesis that selected socioeconomic characteristics, trip party, characteristics, and behavior, and expenditure variables are not different from zero in explaining the duration of the total trip planning interval. The OLS regression model was employed to test this hypothesis. Coefficients, standard errors, t-statistics, p-values and means of the independent variables are reported to test this hypothesis. Standardized or beta coefficients were also reported to compare the relative impact of the independent variables on the duration of the total trip planning interval.

Regression coefficients provide the estimate for the parameter associated with each independent variable. The t-statistic, which is each coefficient divided by its associated standard error, serves as a statistical test of whether a coefficient is significantly different from zero (significance in the statistical sense, not in a managerial importance sense). The larger the value of the t-statistic, the more statistically significant is the associated estimated coefficient. Generally, a t-test greater than 2 indicates significance. Standardized coefficients may be used to facilitate comparisons between regression coefficients (Neter & Wasserman, 1974). The comparisons of the standardized coefficients provide the ranks of significance level of impact of independent variables on the dependent variable (Neter & Wasserman, 1974).

Reference?

Ideal Conditions of Least Square Regression and Tests

Basically, the OLS regression model can be used if the dependent variable distributes normally and is continuous (Allen, 1997). However, the ideal conditions for

Reference?

the multiple regression model include two additional conditions: (1) constant variance, or homoscedasticity, and (2) multicollinearity and singularity (Greene, 1994).

These conditions are tested to prove whether or not the model is estimated under ideal conditions. The Kolmogorov-Smirnov (K-S) test is used to test the normality of the error terms by analyzing the residuals. K-S compares the cumulative distribution function for a variable with a specified distribution, which may be uniform, normal, or Poisson. The K-S Z is computed from the largest difference (in absolute value) between the observed and theoretical distribution functions (Neter & Wasserman, 1974). Higher values from the K-S test mean a higher chance to reject the null hypothesis that the distribution is not normal distribution. The histogram of standardized residuals is also typically presented to provide a visual check concerning the distribution of error terms.

Multicollinearity occurs when two variables in a matrix are perfectly, or nearly perfectly, correlated and when they show a similar pattern of correlation with the other variables. Singularity occurs when one score is a linear combination of others. Detection of these conditions is often with the use of tolerance measures. Tolerance is a statistic used to determine how closely the independent variables are linearly related to one another (multicollinear). Although multicollinearity and singularity are different, they cause similar problems in multivariate analyzes, specifically by prohibiting or rendering an unstable matrix inversion (Tabachnick & Fidell, 1983). Multicollinearity and singularity issues in this study were evaluated by the tolerance values calculated during the regression analysis. These values are also a measure of independence among the variables.

Double Censored Distribution of the Dependent Variables

The multiple regression model defined above was estimated by the ordinary least square (OLS) regression method because the dependent variable is continuous and assumed to be normally distributed and to satisfy the ideal conditions listed previously. However, closer investigation of the distribution of the dependent variable revealed a possible question in using the OLS: the data are censored by two bounds—0 and 365.

Although the normality of the dependent variable may be confirmed by the K-S test, employing OLS regression for this doubly censored dependent variable should be tested. A commonly used econometric technique that deals with the censored problem is the tobit model.

The tobit model assumes that the dependent variable is censored at some lower or upper level or both. The total trip planning interval was doubly censored at the lower and upper levels. Hence, a double bounded (censored) tobit model would fit for the distribution of the dependent variable of this study which was doubly censored. The double bounded tobit regression model as an alternative regression model was employed to test the robustness of the OLS model used in this study. The coefficients and the significance level for each model were compared to test the robustness of the model.

SPSS version 8.0 was used to run the OLS regression. LIMDEP version 7.0 (Econometric Software, Inc., 1995) was used to run the double bounded tobit regression model on the limited dependent variable. The LIMDEP program was developed to use for limited dependent variables such as logit, probit, or tobit distributions.

Distributions of the Planning Dates

The planning and decision making dates were presented based on three time segments: (1) three parts of a month—early (the first day of the month through 10th), mid (11th to 20th), and the end of a month (21st to the end of month), (2) month, and (3) season. The reason to present the frequency distributions for the dates based on these three different time segments was to provide appropriate information to the marketers who develop promotion program distribution schedules by seasons, months, or more detailed time intervals.

The distributions of these study relevant dates were tested by using the one-sample chi-square test. Chi-square tabulates a variable into categories and computes a chi-square statistic based on the difference between observed and expected frequencies (SPSS Inc., 1986). By default, the chi-square test assumes equal expected frequencies.

CHAPTER VI

RESULTS AND DISCUSSION

The following four objectives for this study were presented in Chapter I:

- Objective 1. To investigate the duration and frequency distribution of the three trip planning intervals.
- Objective 2. To investigate two different decision making approaches underlying the trip planning and decision making process.
- Objective 3. To investigate variables that influence the duration of the total trip planning interval.
- Objective 4. To investigate the distribution of the three study relevant dates defined previously.

In this chapter, results based upon the research methods outlined in the previous chapter will be presented and discussed in order from Objective 1 to Objective 4. The final section includes the results with and without visiting friends and relatives (VFR) included.

Duration and Frequency Distributions of the Three Trip Planning Intervals (Objective 1)

The various planning intervals in the travel decision making process were defined in the previous chapter and included the: total trip planning, post decision, and information processing intervals. They were defined conceptually, operationally, and mathematically. Recall that the total trip planning interval is the length of time between when trip planning begins through when the trip begins; the post decision interval is the length of time from when a final decision on trip destination is made through when the

trip begins; and the information processing interval is the length of time between when trip planning begins through when a final decision on trip destination is made.

Table 9. Summary of statistics for the three planning intervals.

	Total trip planning interval (n=1476)	Post decision interval (n=1476)	Information processing interval (n=1476)
Minimum	0.0	0.0	0.0
Maximum	365	365	363
Range	365 ⁶	365	363
Mean	70.1	63.3	6.9
Median	30.0	30.0	0.0
Standard deviation	104.4	100.3	31.1

Table 9 above contains the statistical descriptions of these planning intervals. Note that they vary considerably across Michigan pleasure travelers. Travelers begin to plan and make final decisions on trip destinations from 0 day to one year prior to when their trips begin. They make final decisions on trip destinations from 0 day to 363 days after the beginning of trip planning. Trip planning is, like pleasure travel, a year round activity.

The mean values of the planning intervals are presented in Table 9. Michigan pleasure travelers, on average, begin to plan about 70 days and make final decisions on trip destinations about 63 days prior to travelling. They decide on trip destinations, on average, only 7 days after the beginning of trip planning.

⁶ Two extreme values were found, 730 and 1825, for both the total trip planning and the post decision intervals. These two responses exceeding far over 365 days were deleted from the data set to mitigate outlier problems in further analyses of this study.

The first hypothesis presented in Chapter I is:

Hypothesis 1. The planning intervals underlying the trip planning and decision making process are the same across pleasure travelers.

The standard deviation gives an indication of how closely or widely the individual independent variable values spread around the mean value (Gujarati 1988). Theoretically, the standard deviation is zero for a constant which has no variation. Analysis of information collected from respondents reveals that the standard deviation is high across the variables relevant to this study. Clearly, trip planning and destination selection behavior vary widely across this set of respondents. Therefore, this hypothesis is rejected.

Distribution of the Total Trip, Post Decision, and Information Processing Intervals

The intention of this section is to answer three questions about the planning or decision making process of pleasure travelers: (1) how far in advance do Michigan pleasure travelers begin to plan trips (e.g., length of the total trip planning interval), (2) how far in advance do Michigan pleasure travelers make final trip destination decisions (e.g., length of the post decision interval), and (3) how far in advance do Michigan pleasure travelers select the trip destinations from the beginning of trip planning (e.g., length of the information processing interval)?

Distribution of Total Trip Planning and Post Decision Intervals

The frequency distributions for the total trip planning and post decision intervals of Michigan pleasure travelers are presented in Tables 10 and 11. The total trip planning interval ranges from less than 24 hours to one year prior to the date the trip begins (Table

10). The most frequently reported total trip planning interval is one month (17.6%) followed by one week (13.9%), two weeks (12.2%), two months (10.4%), one year (8.8%), and three months (5.6%). Almost 29% of Michigan pleasure travelers begin to plan within one week of taking their trips, and 64% begin to plan 30 days or less in advance of their trips.

The frequency distribution of the post decision interval is very similar to that observed for the total trip planning interval. The most frequently reported length of post decision interval is also one month (16.7%) followed by one week (14.3%), two weeks (11.8%), two months (9.0%), one year (7.7%), and one day (7.3%) (See Table 11). Michigan pleasure travelers are likely to make final decisions on trip destinations quite close to the date when trips begin. Almost 34% of them make final decisions on trip destinations within one week, and almost 68% of them do so within one month.

The distributions of total trip planning and post decision intervals are plotted in Figure 5 and 6 respectively. These plots have many similarities. Several intervals have exceptionally frequencies. These intervals are: within one week, two weeks, one month, two months, three months, six months, and one year.

Table 10. Frequency distribution for the total trip planning interval.

Length of planning interval (Days)	Percent of respondents (n=1476)	Cumulative percent (n=1476)
less than 24 hours	2.7	2.7
1	5.1	7.8
2	4.2	12.0
3	2.1	14.1
4	0.5	14.6
5	0.4	15.0
7	13.9	28.9
10	0.1	29.0
11	0.1	29.1
14	12.2	41.3
18	0.1	41.4
21	4.4	45.8
28	0.1	45.9
30	17.6	63.5
35	0.1	63.6
42	1.3	64.9
45	0.2	65.1
56	0.1	65.2
60	10.4	75.6
70	0.2	75.8
75	0.0	75.8
90	5.6	81.4
120	3.0	84.4
150	0.9	85.3
180	4.8	90.1
210	0.2	90.3
240	0.3	90.6
270	0.4	91.0
300	0.1	91.1
360	0.1	91.2
364	0.1	91.3
365	8.8	100.0
Total	100.0	

Table 11. Frequency distribution for the post decision interval.

Length of post decision interval (Days)	Percent of respondents (n=1476)	Cumulative percent (n=1476)
less than 24 hours	3.6	3.6
1	7.3	10.9
2	5.1	16.0
3	2.5	18.5
4	0.6	19.1
5	0.5	19.6
7	14.3	33.9
10	0.2	34.1
11	0.1	34.2
14	11.8	46.0
18	0.1	46.1
21	4.4	50.5
28	0.3	50.8
30	16.7	67.5
35	0.1	67.6
42	1.1	68.7
45	0.2	68.9
56	0.1	69.0
60	9.0	78.0
70	0.2	78.2
90	4.9	83.1
120	2.8	85.9
150	0.8	86.7
180	4.4	91.1
210	0.3	91.4
240	0.3	91.7
270	0.3	92.0
300	0.2	92.2
360	0.1	92.3
364	0.1	92.4
365	7.7	100.0
Total	100.0	

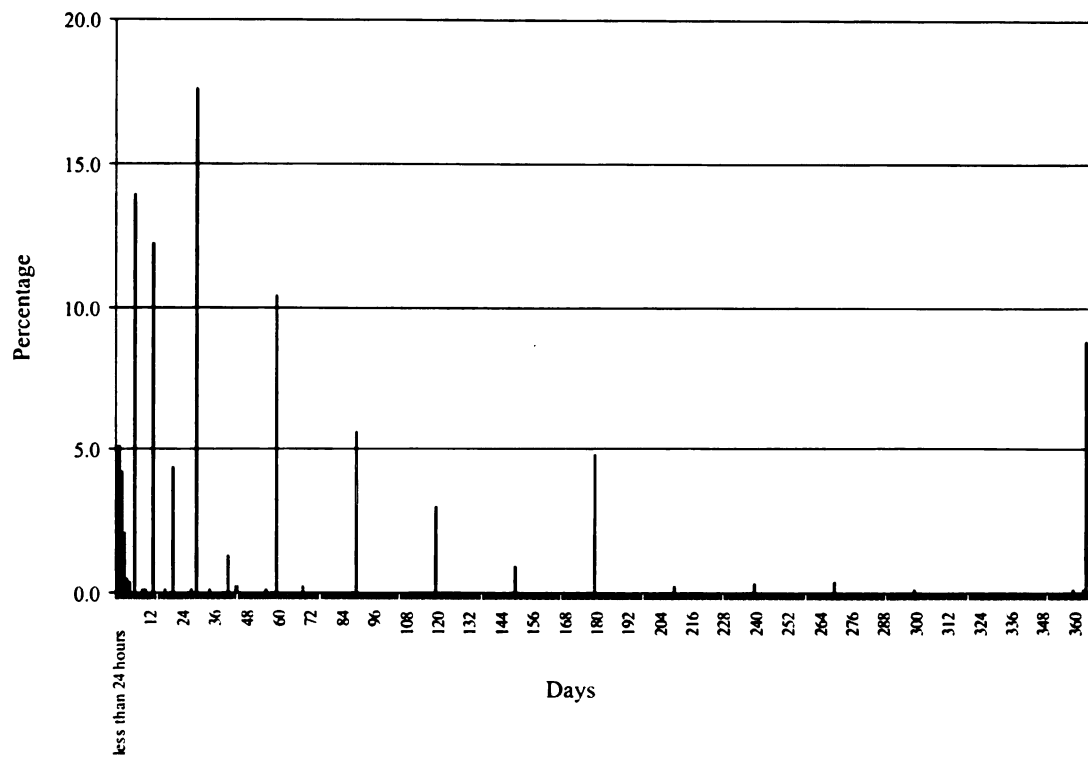


Figure 5. Frequency distribution of reported number of days in the total trip planning interval.

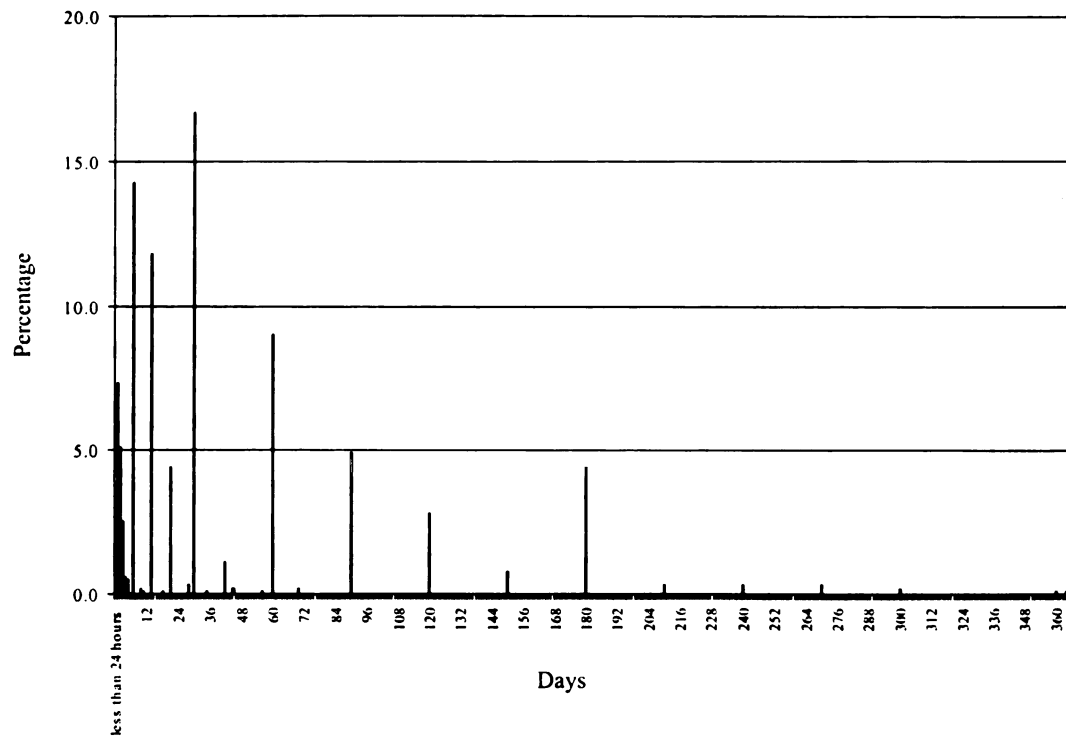


Figure 6. Frequency distribution for reported number of days in the post decision interval.

The peaking displayed in Figures 5 and 6 might be taken to suggest that travel planning behavior is an erratic rather than even flowing process, but it is probably more reasonable to assume that the observed patterns have more to do with how respondents benchmark time intervals. For example, a few days is perceived as one week; a little longer than one week is seen as two weeks; a few weeks is seen as one month; etc. Thus, rather than focus on the specific reported peaks in these frequency distributions, it is probably more meaningful to consider the peaks as defining broader time intervals such as: 0-7 days, 8-15 days, 16-30 days, 31-60 days, 61-90 days, and over 90 days.

Frequencies of responses reported for each of these broader time intervals are presented in Table 12 and Figure 7 for both the total trip planning and the post decision intervals. The most popular total trip planning and post decision intervals are: 0-7 days (28.9% and 33.9%) followed by 16-30 days (22.2% and 21.5%), over 90 days (18.7% and 16.9%). Once again, both the length and frequency of these total trip planning and post decision intervals are nearly identical. In other words, Michigan pleasure travelers are very likely to make final decisions on trip destinations at the beginning of trip planning and devote very little time to collecting additional information. This result is supported by the findings of Schmoll (1977). He concluded from his analysis that the choice of a destination occurs fairly early in the planning process and frequently is made during the information gathering and deliberation phase. In other words, most travelers already have a destination firmly in mind when first consulting a travel agent or other intermediary. The brevity of the information processing interval (on the average, 6.9 days) was reported earlier. Its distribution, presented in the next section, will provide further insights into this aspect of trip planning behavior.

Table 12. Reported frequencies by selected time intervals for the total trip planning and post decision intervals.

Time interval (Days)	Total trip planning interval (n=1476)	Post decision interval (n=1476)
0-7	28.9%	33.9%
8-15	12.4%	12.1%
16-30	22.2%	21.5%
31-60	12.0%	10.6%
61-90	5.9%	5.0%
Over 90	18.7%	16.9%

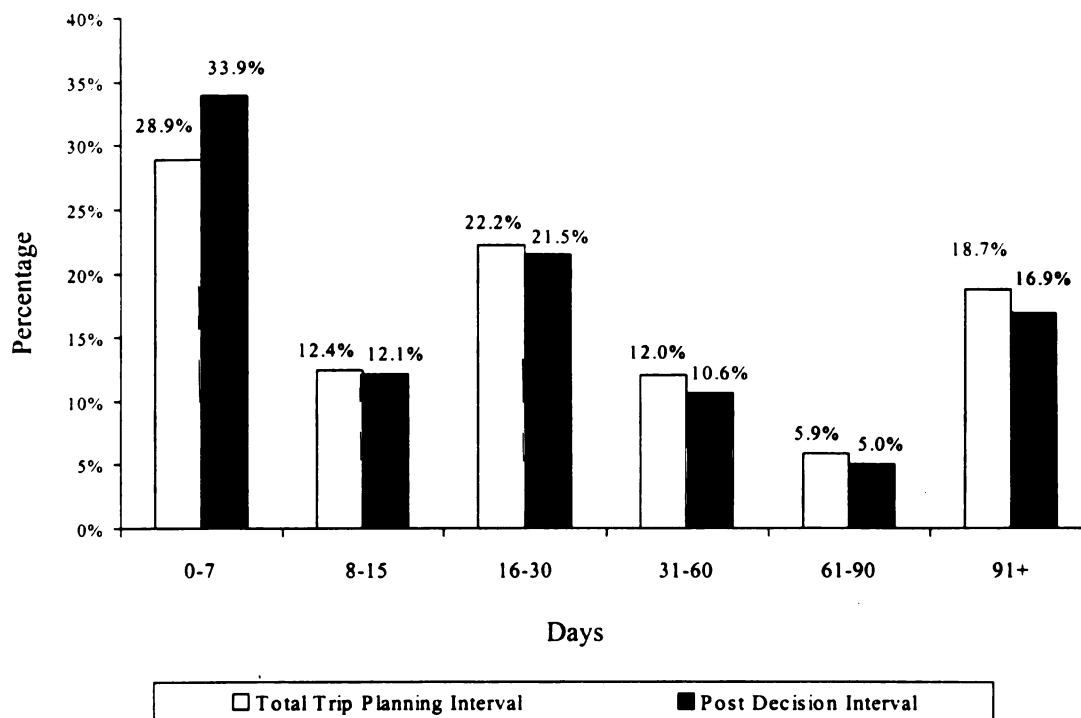


Figure 7. Comparisons between frequencies of reported total trip and post decision intervals for six selected time frames.

Frequency Distribution of the Information Processing Interval

As noted earlier in Table 9, the mean information processing interval for Michigan pleasure travelers is only 6.9 days. However, the mean in this instance is somewhat misleading as the vast majority of respondents reported spending no time at all on this stage of trip planning. Almost 85% of respondents answered that they made final decisions on their trip destinations at the same time as they began to plan their trips, as can be seen from the frequency distribution provided in Table 13. The rest of them (almost 15% of respondents) reported information processing intervals from 1 to 363 day(s).

A possible explanation for this short information processing interval with a strongly skewed distribution toward zero could be perceived risks. According to Roehl and Fesenmaier (1992), when individuals plan to visit a destination, the perceived risks to them are low if they have previous experience with the destination. Also, pleasure travelers with low perceived risks may not heavily use sources of travel information. The portion of first time visitors among the respondents was only about 9%. Thus, this data set is dominated by respondents who are Michigan residents or who have visited the state on at least one previous occasion. It is reasonable to assume that the majority perceive minimal risk in travel in Michigan, hence they do not feel the need to engage in an extended information processing intervals.

Table 13. Frequency distribution for the information processing interval.

Length of information processing interval (Days)	Percent of respondents (n=1476)	Cumulative percent (n=1476)	Length of information processing interval (Days)	Percent of respondents (n=1476)	Cumulative percent (n=1476)
0	85.1	85.1	65	0.1	97.7
1	0.5	85.6	69	0.2	97.9
2	0.7	86.3	76	0.1	98.0
3	0.4	86.7	83	0.0	98.0
4	0.2	86.9	89	0.1	98.1
5	0.2	87.1	90	0.4	98.5
6	0.9	88.0	95	0.1	98.6
7	1.7	89.7	99	0.1	98.6
9	0.3	90.0	106	0.1	98.6
11	0.1	90.1	119	0.1	98.6
12	0.6	90.7	120	0.4	99.0
13	0.3	91.0	150	0.3	99.3
14	0.3	91.3	155	0.1	99.4
15	0.1	91.4	180	0.0	99.4
16	0.7	92.1	185	0.4	99.7
18	0.1	92.2	305	0.0	99.7
19	0.2	92.4	335	0.1	99.8
20	0.1	92.5	351	0.2	99.9
21	0.1	92.6	362	0.1	99.9
23	0.4	93.0	363	0.1	100.0
25	0.1	93.1			
27	0.2	93.3			
28	0.2	93.5			
29	0.4	93.9			
30	1.6	95.5			
35	0.1	95.6			
37	0.1	95.7			
39	0.3	96.0			
40	0.0	96.0			
42	0.1	96.1			
46	0.4	96.5			
53	0.4	96.9			
57	0.1	97.0			
58	0.2	97.2			
60	0.4	97.6			

Two Different Decision Making Approaches (Objective 2)

Most destination marketing organizations focus much of their marketing strategy on attracting travelers who have not decided on their travel destinations, or, in the terminology adopted for this study, those engaged in the information processing interval of the trip planning process. Their advertising messages encourage potential travelers to request an information packet designed to convince them to select that particular destination. The costs of preparing and distributing these information packets is substantial.

The results presented above bring into question the wisdom of basing a promotion strategy on undecided travelers since they constitute a very small percentage (15%) of Michigan's pleasure travel market. And, the fact that about half of these undecided travelers make their destination decisions 21 days after beginning to plan their trips implies that, as often as not, undecided travelers select their destinations before they receive forwarded destination information. A couple of implications that can be made here are: (1) prompt response to information requests is essential if forwarded information is to have an impact on the destination decision and (2) it should be recognized in designing information packets that the vast majority of recipients have already made their trip destination decision. The latter point suggests that the information packet should feature materials that will confirm the correctness of their destination decision, enhance a traveler's experience at the destination, encourage length of stay, and stimulate spending money at the destination, as well as general information designed to lure travelers to that destination.

Although the results reported above discourage over reliance on targeting potential travelers during the information processing interval, further analyses may prove helpful when this segment is selected as a target market.

The frequency distribution in Table 13 suggests that this population can logically be grouped into two categories: (1) those whose information processing interval is zero days—defined as 'instant decision-makers' and (2) those whose information processing interval is one day or more—defined as 'hesitant decision-makers'. These two groups of travelers are compared below across the following three general categories of variables: (1) source of information and media habits, (2) trip characteristics and travel behavior, and (3) demographic and socioeconomic characteristics. Results are presented in Tables 14-16.

Table 14. Sources of information and media habits of instant and hesitant decision-makers.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision- Makers	Test Statistic	Significance
Information Source Most Frequently					
<u>Used in Planning Pleasure Trip¹</u>	<u>n=1427</u>	<u>n=1211</u>	<u>n=216</u>	---	---
AAA/CAA	24.3%	24.1%	25.3%		
Travel agency	18.7%	19.5%	14.4%		
Friends/relatives/co-workers	19.0%	17.8%	25.9%		
Chamber of commerce	4.8%	4.9%	4.4%		
Other travel guide	5.4%	5.4%	5.4%		
Magazine	4.1%	3.9%	5.2%		
Internet/online service	8.2%	8.2%	8.2%		
State travel office	3.3%	3.2%	4.3%		
Travel section of newspaper	2.2%	2.2%	2.0%		
Convention/visitors bureau	1.9%	1.8%	2.9%		
Mobil Travel Guide	1.4%	1.5%	0.8%		
Highway welcome centers	0.4%	0.3%	0.9%		
Travel show	0.2%	0.1%	0.8%		
CD-ROM	0.1%	0.1%	0.0%		
Other source	9.9%	10.0%	9.5%		
No source	14.0%	14.4%	11.9%		
Media Considered Most Helpful					
<u>When Selecting Destinations</u>	<u>n=1157</u>	<u>n=976</u>	<u>n=181</u>	$X^2 = 8.76$	0.033
Magazine	54.5%	54.7%	53.0%		
Newspaper	23.6%	22.3%	30.4%		
Television	18.8%	19.9%	12.7%		
Radio	3.2%	3.1%	3.9%		
<u>Have Access to the Internet</u>	<u>n=1193</u>	<u>n=1025</u>	<u>n=168</u>	$X^2 = 3.72$	0.054
% of Yes	52.6%	51.5%	59.5%		
<u>Have Used the Internet to Obtain</u>					
<u>Travel information</u>	<u>n=624</u>	<u>n=524</u>	<u>n=100</u>	$X^2 = 0.59$	0.444
% of Yes	57.5%	56.9%	61.0%		
<u>Have Used Michigan Travel</u>					
<u>bureau's Site to Obtain Travel</u>					
<u>Information</u>	<u>n=353</u>	<u>n=293</u>	<u>n=60</u>	$X^2 = 0.62$	0.430
% of Yes	15.0%	14.3%	18.3%		
<u>Have Called Any State or</u>					
<u>Province's Toll-Free Number to</u>					
<u>Request Travel Information</u>	<u>n=1464</u>	<u>n=1244</u>	<u>n=220</u>	$X^2 = 0.04$	0.849
% of Yes	33.7%	33.8%	33.2%		

¹ Percentages add to more than 100% due to multiple responses.

Table 15. Trip characteristics and behaviors of instant and hesitant decision-makers.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision- Makers	Test Statistic	Significance
<u>Season When Trip Began</u>	<u>n=1445</u>	<u>n=1227</u>	<u>n=218</u>	$X^2 = 2.75$	0.433
Winter (December through February)	14.0%	14.3%	12.4%		
Spring (March through May)	13.8%	14.3%	11.5%		
Summer (June through August)	44.6%	43.8%	49.1%		
Fall (September through November)	27.5%	27.6%	27.1%		
<u>Primary Purpose of Trip</u>	<u>n=1462</u>	<u>n=1243</u>	<u>n=219</u>	$X^2 = 15.31$	0.018
Outdoor recreation	14.7%	14.2%	17.8%		
Entertainment	13.8%	14.3%	11.0%		
VFR	29.2%	30.2%	23.7%		
Relaxation	10.5%	10.5%	11.0%		
General touring	3.6%	3.5%	4.1%		
Vacation/holiday/recreation/ amusement/pleasure	23.2%	23.2%	23.3%		
Other	4.9%	4.2%	9.1%		
<u>Activities Participated In</u>					
General touring or driving for pleasure	58.7%	57.2%	67.4%	$X^2 = 8.01$	0.005
Shopping	53.8%	53.2%	57.3%	$X^2 = 1.29$	0.256
Outdoor recreation	56.5%	55.5%	62.1%	$X^2 = 3.33$	0.068
Explore small city or town	52.8%	51.9%	57.5%	$X^2 = 2.35$	0.126
Dine at unique restaurant	48.6%	48.0%	52.1%	$X^2 = 1.23$	0.267
Visit other attraction	44.6%	43.8%	49.1%	$X^2 = 2.12$	0.145
Nightlife	32.6%	31.6%	38.1%	$X^2 = 3.49$	0.062
Visit state or national park	31.2%	30.3%	36.2%	$X^2 = 3.00$	0.083
Visit an historic site	28.6%	27.6%	33.9%	$X^2 = 3.66$	0.056
Attend a festival or event	23.3%	24.2%	18.5%	$X^2 = 3.08$	0.079
Visit museum or hall of fame	15.0%	13.9%	21.0%	$X^2 = 7.37$	0.007
Fall color touring	9.4%	9.1%	11.1%	$X^2 = 0.83$	0.363
Casino gaming	11.1%	11.6%	8.5%	$X^2 = 1.57$	0.210
<u>Number of Activities Participated in During Pleasure Trip (Avg.)</u>	<u>n=1424</u> 4.8	<u>n=1208</u> 4.8	<u>n=216</u> 5.2	$t=2.50$	0.013
<u>Main Type(s) of Lodging Used</u>	<u>n=1250</u>	<u>n=1056</u>	<u>n=194</u>	$X^2 = 28.52$	0.000
Hotel/motel/lodge	42.6%	40.0%	57.2%		
Friend's/relative's home	27.4%	29.4%	17.0%		
Owned cabin/cottage/condominium	7.1%	7.6%	4.6%		
Rented cabin/cottage/condominium	7.2%	7.4%	6.2%		
Commercial campground	4.9%	4.8%	5.2%		
Public campground	4.2%	4.2%	4.1%		
Bed & Breakfast	1.7%	1.7%	1.7%		
Boat/ship	0.6%	0.4%	1.5%		
Other	4.3%	4.6%	2.6%		

Table 15. Trip characteristics and behaviors of instant and hesitant decision-makers, continued.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision- Makers	Test Statistic	Significance
<u>Mode(s) of Transportation Used¹</u>	<u>n=1460</u>	<u>n=1241</u>	<u>n=219</u>	---	---
Car/ truck without camping equipment	90.6%	90.7%	90.5%		
Car/ truck with camping equipment	3.0%	2.7%	4.4%		
Motorcoach	2.0%	2.2%	0.7%		
Airplane	2.4%	2.2%	3.0%		
Ship/boat	1.4%	1.2%	2.4%		
Self-contained recreation vehicle	1.5%	1.4%	1.8%		
Rental car	0.8%	0.8%	0.8%		
Motorcycle	0.4%	0.4%	0.0%		
Train	0.2%	0.2%	0.0%		
Bicycle	0.2%	0.2%	0.0%		
Other	0.9%	0.8%	1.4%		
<u>Travel Party</u>					
Average party size	<u>n=1448</u> 3.3	<u>n=1230</u> 3.2	<u>n=219</u> 3.3	t = 0.55	0.583
Average age of all persons in party	<u>n=1398</u> 38.0	<u>n=1191</u> 38.1	<u>n=207</u> 37.8	t = 0.21	0.834
<u>Included person(s) aged...¹</u>	<u>n=1398</u>	<u>n=1191</u>	<u>n=207</u>	---	---
Less than 10	33.9%	34.8%	28.6%		
11 to 20	36.0%	35.9%	36.7%		
21 to 30	53.2%	53.0%	54.2%		
31 to 40	64.6%	65.0%	62.4%		
41 to 50	61.0%	60.2%	65.3%		
51 to 60	34.5%	34.5%	34.5%		
61 to 70	17.5%	18.4%	12.3%		
Above 71	8.2%	8.5%	6.6%		
<u>No. Places Where Spent Night</u>	<u>n=1244</u>	<u>n=1053</u>	<u>n=191</u>	X ² = 12.38	0.000
Spent night at 1 place in MI	91.0%	92.2%	84.3%		
Spent night more than 1 place in MI	9.0%	7.8%	15.7%		
<u>No. Places Where Spent Night (Avg.)</u>	<u>n=1244</u> 1.1	<u>n=1053</u> 1.1	<u>n=191</u> 1.1	t = 2.37	0.018

Table 15. Trip characteristics and behaviors of instant and hesitant decision-makers, continued.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision-Makers	Test Statistic	Significance
<u>Main Destination Region in Michigan²</u>	<u>n=1431</u>	<u>n=1218</u>	<u>n=213</u>	$X^2 = 6.81$	0.235
Upper Peninsula	16.6%	15.8%	20.7%		
Northwest Lower Peninsula	18.0%	17.9%	18.3%		
Northeast Lower Peninsula	16.0%	16.0%	16.0%		
Southwest Lower Peninsula	17.4%	18.2%	12.7%		
Southeast Lower Peninsula without Detroit area	18.5%	18.8%	16.9%		
Detroit area (Wayne, Oakland, and Macomb Counties)	13.6%	13.2%	15.5%		
<u>No. Pleasure Trips Taken to Places in Michigan (Avg.)</u>	<u>n=1456</u> 4.4	<u>n=1237</u> 4.4	<u>n=219</u> 4.6	$t = 0.50$	0.615
<u>Types of Trip</u>					
Overnight trip % of Yes	<u>n=1464</u> 85.2%	<u>n=1245</u> 84.7%	<u>n=219</u> 87.7%	$X^2 = 1.27$	0.260
Vacation Trip % of Yes	<u>n=1470</u> 67.8%	<u>n=1249</u> 66.5%	<u>n=221</u> 75.1%	$X^2 = 6.45$	0.011
Family Trip % of Yes	<u>n=1449</u> 72.3%	<u>n=1232</u> 72.2%	<u>n=217</u> 72.4%	$X^2 = 0.00$	0.973
Arranged by Travel Agent % of Yes	<u>n=1473</u> 3.3%	<u>n=1253</u> 3.4%	<u>n=220</u> 2.7%	$X^2 = 0.29$	0.591
Package Tour with Lodging % of Yes	<u>n=1474</u> 6.2%	<u>n=1253</u> 5.4%	<u>n=198</u> 10.4%	$X^2 = 8.04$	0.005

Table 15. Trip characteristics and behaviors of instant and hesitant decision-makers, continued.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision-Makers	Test Statistics	Significance
<u>Trip Duration (Average)</u>					
No. nights away from home	<u>n=1248</u> 3.8	<u>n=1055</u> 3.7	<u>n=194</u> 4.6	t = 1.77	0.079
No. nights spent in MI	<u>n=1246</u> 3.6	<u>n=1053</u> 3.5	<u>n=193</u> 4.2	t = 1.54	0.125
<u>Average Expenditures in Michigan</u>					
Total spending per trip	<u>n=1384</u> \$539.75	<u>n=1177</u> \$535.24	<u>n=208</u> \$565.30	t = 0.25	0.803

¹ Percentages add to more than 100% due to multiple responses.

² Definitions of regions:

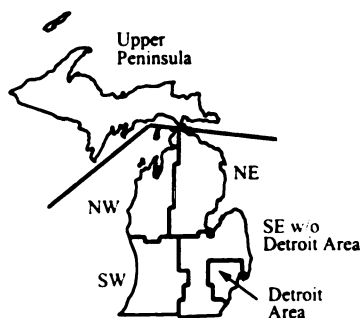


Table 16. Demographic and socioeconomic characteristics of instant and hesitant decision-makers.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision- Makers	Test Statistics	Significance
<u>State/Province of Principal Residence</u>	<u>n=1479</u>	<u>n=1256</u>	<u>n=223</u>	$X^2 = 7.57$	0.272
Illinois	14.5%	13.7%	18.8%		
Indiana	8.6%	9.2%	5.4%		
Michigan	47.4%	47.5%	47.1%		
Minnesota	2.3%	2.2%	2.7%		
Ohio	13.5%	13.5%	13.5%		
Wisconsin	6.0%	6.0%	6.3%		
Ontario	7.8%	8.0%	6.3%		
<u>Household Contained...</u>					
Pre-school child(ren)	14.8%	14.8%	14.7%	$X^2 = 0.00$	0.962
School age child(ren)	34.6%	34.8%	33.6%	$X^2 = 0.11$	0.744
Senior citizen(s)	17.5%	17.1%	19.3%	$X^2 = 0.58$	0.448
Handicapped person(s)	4.5%	4.2%	6.0%	$X^2 = 1.38$	0.241
<u>Gross Annual Household Income</u>	<u>n=1347</u>	<u>n=1147</u>	<u>n=200</u>	$X^2 = 1.57$	0.457
Below \$31,000	19.2%	19.4%	18.0%		
\$31,001 - \$50,000	28.8%	28.2%	32.5%		
Above \$50,000	52.0%	52.5%	49.5%		
<u>Race/Ethnicity</u>	<u>n=1248</u>	<u>n=1065</u>	<u>n=183</u>	$X^2 = 15.28$	0.018
White	93.4%	93.7%	91.8%		
African American	4.1%	3.9%	4.9%		
Hispanic	0.6%	0.4%	1.6%		
Native American	0.9%	1.0%	0.0%		
Asian American	0.6%	0.7%	0.0%		
Multiracial	0.2%	0.2%	0.5%		
Other	0.2%	0.1%	1.1%		
<u>Employment Situation¹</u>	<u>n=1453</u>	<u>n=4235</u>	<u>n=219</u>	---	---
Employed full-time	66.7%	66.6%	67.0%		
Retired	12.0%	12.3%	10.3%		
Employed part-time	9.3%	8.6%	13.0%		
Homemaker	7.4%	7.4%	7.6%		
Student	5.6%	5.8%	4.8%		
Other type(s) employment	1.9%	1.8%	2.2%		
Not employed	2.3%	2.4%	1.9%		
<u>Number of Full-time Wage-Earners in Household (Avg.)</u>	<u>n=1452</u>	<u>n=1233</u>	<u>n=219</u>	$t = 0.25$	0.805
	1.5	1.5	1.5		

¹ Percentages add to more than 100% due to multiple responses.

Sources of Information and Media Habits of Instant and Hesitant Decision Makers

As can be seen in Table 14, instant and hesitant decision makers generally rely on the same information sources and use them with a similar level of frequency. Noteworthy exceptions include: (1) instant decision makers are more prone to use a travel agency and (2) hesitant decision makers rely more on information from word-of-mouth. The only other observed differences in Table 14 of any significance are that instant decision makers tend to rely more on television while hesitant decision makers use newspapers more frequently.

Trip Characteristics and Behaviors of Instant and Hesitant Decision Makers

In comparison to hesitant decision makers, the primary purpose of trip for instant decision-makers is more likely to be visiting friends or relatives (30.2% vs. 23.7%) and is less likely to be outdoor recreation (14.2% vs. 17.8%) (See Table 15).

Instant decision-makers are not as action-oriented as are hesitant decision makers. Instant decision makers participate in 4.8 activities versus 5.2 activities for hesitant decision makers. Instant decision makers are less likely to participate in general touring or driving for pleasure (57.2% vs. 67.4%) and visiting a museum or hall of fame (13.9% vs. 21.0%) than are hesitant decision makers.

Instant decision-makers are more likely to use a friend's or relative's home as their main type of lodging (29.4% vs. 17.0%) during their pleasure trips than are hesitant decision makers. They are also less likely to use hotel/motel/lodge as their main type of lodging (40.0% vs. 57.2%). Hesitant decision makers tend to spend nights at more than one destination which in part explains their tendency to devote more time to the

information processing interval. Finally, a couple of trip type differences can be noted in Table 15. Hesitant decision makers are more likely than their counterparts to purchase a package including lodging (10.4% vs. 5.4%) and to consider their trips to be a vacation (75.1% vs. 66.5%).

Demographic and Socioeconomic Characteristics of Instant and Hesitant Decision-Makers.

Few statistically significant differences were observed in the variables of state/province of principal residence, household composition, household income, employment situation, and number of full-time wage-earners in household that are presented in Table 16.

Variables That Influence Duration of the Total Trip Planning Interval (Objective 3)

Findings presented in the previous section suggest "how" total trip planning, post decision, and information processing intervals fluctuate across Michigan pleasure travelers. In this section, "what variables" are likely to influence the length of planning intervals will be examined.

From the data provided in Table 9, it can be seen that the trip planning behavior clearly varies widely across the responding population. A key question addressed in this study is: why do the planning intervals vary across pleasure travelers? In other words, what factors are significant in explaining variations in observed planning intervals? This question was stated in the form of a hypothesis in Chapter I and is repeated below:

Hypothesis 3. Selected socioeconomic characteristics, travel party composition, trip characteristics and behavior, and expenditure variables have no effect on the duration of the total trip planning interval.

Note that the total trip planning interval was selected as the best dependent variable for testing this hypothesis (See footnote 4 in Chapter III).

The Model

The multiple regression model specified to investigate the relationship between the total trip planning interval and selected socioeconomic and trip related variables is presented below.

$$Y_i = \beta_0 + \beta_1(PEAKSEAS_i) + \beta_2(PUR_VFR_i) + \beta_3(PARTYSIZ_i) + \beta_4(ACT_NITE_i) + \beta_5(ACT_PARK_i) + \beta_6(ACT_MUSE_i) + \beta_7(ACT_HIST_i) + \beta_8(ACT_OTH_i) + \beta_9(ACT_FALL_i) + \beta_{10}(ACT_GEN_i) + \beta_{11}(ACT_OR_i) + \beta_{12}(ACT_SHOP_i) + \beta_{13}(ACT_EVNT_i) + \beta_{14}(ACT_CASI_i) + \beta_{15}(LOG_FR_i) + \beta_{16}(NOPTMI_i) + \beta_{17}(TRP_FAM_i) + \beta_{18}(TRP_OVER_i) + \beta_{19}(TRP_VACA_i) + \beta_{20}(DURATION_i) + \beta_{21}(EXPENDIT_i) + \beta_{22}(MIRESIDE_i) + \beta_{23}(MEDINCOM_i) + \beta_{24}(HHS_PRE_i) + \beta_{25}(HHS_SCH_i) + \varepsilon_i$$

where, Y_i = the total trip planning interval for individual i ; β_{1-25} = coefficients of independent variables 1-25, and ε_i = the error term.

The variables in parenthesis are independent variables that were defined and described in Table 8, Chapter III.

The estimation results using OLS regression are reported and then the ideal conditions for using OLS are tested. The double bounded tobit model was used to test the effect of the double censoring problem in the dependent variable, the total trip planning interval.

Estimation Results

Using the survey data for the period 1996-98, the multiple regression model was estimated. The parameter estimates are presented in Table 17.

Table 17. Estimated influence of selected variables on total trip planning interval-OLS regression results.

Variable	Coefficient	Beta Coefficient	Standard Error	t-statistic	p-value	Mean of X
CONSTANT	-22.6511		67.85766	-0.334	0.7385	
PEAKSEAS	24.46959	0.1096	7.696926	3.179 ^b	0.0015	0.455978
PUR_VFR	-2.86048	-0.0270	9.177873	-0.312	0.7553	0.286376
PARTYSIZ	4.265976	0.1255	1.014099	4.207 ^b	0.0000	3.515292
ACT_NITE	-15.0428	-0.0225	7.764815	-1.937	0.0527	0.360519
ACT_PARK	-3.53504	0.0412	8.760932	-0.404	0.6866	0.355885
ACT_MUSE	-17.3786	-0.0418	10.5181	-1.652	0.0985	0.164968
ACT_HIST	-6.15281	-0.0555	9.224168	-0.667	0.5048	0.320667
ACT_OTH	8.395163	0.0074	7.650179	1.097	0.2725	0.466172
ACT_FALL	15.6012	0.0495	13.10005	1.191	0.2337	8.34E-02
ACT_GEN	-7.25737	-0.0310	7.984626	-0.909	0.3634	0.610751
ACT_OR	18.58603	0.0710	8.260282	2.25 ^a	0.0244	0.613531
ACT_SHOP	3.775085	0.0073	7.606846	0.496	0.6197	0.551437
ACT_EVNT	32.87272	0.0929	8.453	3.889 ^b	0.0001	0.23633
ACT_CASI	6.108705	0.0221	11.12391	0.549	0.5829	0.125116
LOG_FRH	-19.3236	-0.0582	9.408284	-2.054 ^a	0.0400	0.26228
NOPTMI	-0.78658	-0.0408	0.594496	-1.323	0.1858	4.466172
TRP_FAM	1.680766	0.0032	8.335305	0.202	0.8402	0.722892
TRP_OVER	41.64061	0.0193	66.07576	0.63	0.5286	0.99722
TRP_VACA	32.86776	0.1187	8.463422	3.884 ^b	0.0001	0.73494
DURATION	1.97619	0.1118	0.85153	2.321 ^a	0.0203	3.621872
EXPENDIT	0.0153	0.0679	5.83E-03	2.63 ^b	0.0085	541.0028
MIRESIDE	-7.37352	-0.0116	7.390944	-0.998	0.3185	0.52456
MEDINCOM	-4.32036	-0.0185	9.368547	-0.461	0.6447	0.826691
HHS_PRE	-17.0186	-0.0534	9.706769	-1.753	0.0796	0.163114
HHS_SCH	5.396713	0.0234	7.612915	0.709	0.4784	0.363299

note:

^a indicates that a coefficient is significantly different from zero at 95% level for two way test.

^b indicates that a coefficient is significantly different from zero at 99% level for two way test.

In Table 17, the column labeled "Coefficient" provides the estimate for the parameter associated with the variable named in the first column. These are estimates of the parameters and sometimes called unstandardized coefficients. The column labeled "Beta Coefficients" are used to facilitate comparisons between regression coefficients (Nester & Wasserman, 1974). The beta coefficient (or standardized coefficient) reflects the changes in the mean response (in units of standard deviations of the dependent variable) per unit change in the independent variable (in units of standard deviations of the independent variable), when all other independent variables are held constant (Nester & Wasserman, 1974). Ordinarily, it is difficult to compare regression coefficients because of differences in the units involved. The values of beta coefficients can be interpreted as the degree each independent variable impacts on the dependent variable. The column labeled "t-statistic," which is each coefficient divided by its associated standard error, serves as a statistical test of whether the coefficient is significantly different from zero (significance in the statistical sense, not an "importance" sense).⁷ The larger the value of the t-statistic, the more statistically significant is the associated estimated coefficient. Generally, a t-test greater than 2 indicates significance.⁸

The regression analysis results presented in Table 17 indicate that several independent variables, eight of the 25 independent variables, are significant at the 95%

⁷ This is an asymptotic t-value on a two tailed test of the null hypothesis that the coefficient is equal to zero. This is a test of the population mean of a normally distributed variable with unknown variance. It is asymptotic in that the parameter estimates will be exactly normally distributed only as the sample size becomes infinitely large, but the approximation is good in large samples.

⁸ The significance level gives the probability of erroneously deciding the parameter is not zero, when in fact it is. The 20% significance level falls at t equals 1.28, 10% at t equal 1.65, 5% at t equals 1.96, and 1% at t equals 2.58.

level of significance using the two-tailed t-test. The variable whether a pleasure traveler begins to take a trip during peak season or non-peak season is significant. The peak season includes the three summer months (June, July, and August), and the non-peak season includes the rest of the year. Pleasure travelers who take trips during the summer months have a significantly longer total trip planning interval. In other words, peak season pleasure travelers in comparison to the non-peak season pleasure travelers are likely to begin to plan trips earlier.

The variable party size is significant in explaining variation in total trip planning interval. As party size increases, the total trip planning interval increases. Respondents who participate in outdoor recreation are likely to take more time to plan than those who do not participate in outdoor recreation. Pleasure travelers who attend a festival or event begin to plan significantly earlier than those who do not. Type of lodging is also significant for Michigan pleasure travelers. Those who stay at friends' or relatives' homes have a shorter total trip planning interval. The variable whether or not pleasure travelers consider their trips to be a vacation trip is also significant. Trips considered to be vacations involve longer planning horizons. Duration of trip is also a significant explanatory variable. As length of trip increases, the total trip planning interval increases. Finally, estimated total trip expenditures in Michigan is significant. As spending increases, the total trip planning interval increases.

Goodness of Fit

Regression analysis is primarily used for two purposes: (1) for estimating coefficients of interest and testing hypotheses about them and (2) for forecasting (Greene,

1994). For the second, how well the regression model predicts movements in the dependent variable is crucial. The coefficient of determination, R^2 , is a measure of the fit of the model. The R^2 for the regression model used in this study is 17.2%, which implies that the independent variables only explain about 17% of the variation in the dependent variable, the duration of the total trip planning interval. In social science study, the R^2 lower than 20% was often found as an meaningful model to estimate coefficients of interest and testing hypotheses. However, R^2 is somewhat low. Therefore, bivariate analyses are presented in Appendix C with statistic tests as an alternative method to estimate individual coefficients of variables.

Comparisons of Independent Variables

Eight of 25 independent variables were found to be significant in explaining the duration of the total trip planning interval. As explained in the previous section, the standardized or beta coefficients allows one to compare the relative impacts of these significant independent variables. The values of beta coefficients are reported in Table 17. Party size has the strongest impact on the duration of the total trip planning interval followed by the trip was considered to be a vacation (TRP_VACA), the number of nights spent in Michigan (DURATION), trip was taken during peak season (PEAKSEAS), attended a festival or event during the pleasure trip (ACT_EVNT), participated in outdoor recreation (ACT_OR), and the amount of money spent during pleasure trips to Michigan (EXPENDIT). The variable, stayed at a friend's or relative's home (LOG_FRH), was significant, but has the weakest impact on the duration of total trip

planning interval. It is also the only statistically significant variable with a negative impact on the dependent variable.

The Total Trip Planning Interval and Internet Use

While it would have been desirable to include Internet use behavior in the regression model, data were not available for the total time period covered in this study. The Internet use behavior variable was included in the questionnaire one and half years after the beginning of the survey while other independent variables were included from the beginning of the survey. However, the influence of the Internet on the tourism industry is significant. Thus, the influence of the Internet variable on the duration of the total trip planning interval was investigated by descriptive analysis and statistical significance was evaluated using the independent sample t-test or one way ANOVA test. Three Internet variables were investigated: whether or not any member of the household has accessed to the Internet, have used the Internet to obtain travel information, and used the Travel Michigan (formerly Michigan Travel Bureau) site on the World Wide Web to obtain travel information. The mean values of these variable and t-statistics are reported in Tables 18-20.

Table 18. Total planning interval by: Do you or any member of your household have access to the Internet?

	Case	Mean value of total trip planning interval (Days)
Yes	628	66.5
No	565	77.6
t-value = 1.83, significance = 0.068		

Table 19. Total planning interval by: During the past 12 months, have you or any member of your household used the Internet to obtain travel information?

	Case	Mean value of total trip planning interval (Days)
Yes	359	67.5
No	265	64.6
t-value = 0.38, significance = 0.707		

Table 20. Total planning interval by: During the past 12 months, have you or any member of your household used the Michigan Travel Bureau's site on the World Wide Web to obtain travel information?

	Case	Mean value of total trip planning interval (Days)
Yes	53	70.2
No	300	66.6
t-value = 0.24, significance = 0.807		

None of the differences were found to be statistically significant using the two-tailed t-test at 95% confidence interval.

Four segments of Internet users were created from the Internet variables: (1) never accessed Internet, (2) accessed Internet, (3) accessed Internet and obtained travel information, and (4) accessed Internet, obtained travel information, and accessed the Travel Michigan's web site to obtain travel information. The first segment includes those who answered "no" to the all questions listed in Tables 18-20. The second segment includes those who answered "yes" to the question in Table 18 and "no" to the questions in Tables 19-20. The third segment includes those who answered "yes" to the questions in

Tables 18-19 and "no" to the question in Table 20. The last segment includes those who answered "yes" to the questions in Tables 18-20. The degree of Internet involvement increases from the first segment through the fourth segment. These four groups were compared in terms of the mean value of the total trip planning interval and statistical significance was tested using one way ANOVA. This analysis was performed to investigate how the degree of Internet involvement influences the duration of the total trip planning interval. The mean and median values of the four segments are reported in Table 21. The F-value is also reported. No statistically significant relation between the degree of Internet involvement was found.

Table 21. Total planning interval by the degree of Internet involvement.

Internet Users	Cases	Mean value of total trip planning interval (Days)	Median value of total trip planning interval (Days)
Access to Internet & Information & TM ¹	53	70.2	30.0
Access to Internet & Information	298	66.8	30.0
Access to Internet	264	64.7	30.0
No access to Internet	565	77.6	30.0
Total	1180	71.6	30.0

¹ TM stands for Travel Michigan's web site

Test results : F-value=1.227 Significance=0.298

Test for Normality

The assumption of normality can refer either to the variables themselves or to sampling distributions of statistics calculated from samples. Tabachnick and Fidell (1983) state that, with sampling distributions, the central limit theorem protects against failure of normality when the sample size is large and there are roughly the same number

Reference?

of cases in all groups. However, testing the normality of the dependent variable, the total trip planning interval, adds robustness to the estimates derived.

First, the visual method for examining the distribution was employed. The histogram of standardized residuals are plotted in Figure 8. The visual check concerning the distribution of error terms appears to be normal in this histogram. Although histograms provide a visual basis for assessing normality in residuals, this visual check is purely subjective in interpretation. It is often desirable to statistically test the error term's distribution. The Kolomogorov-Smirnov (K-S) one sample test was used for testing the normality of the error terms by analyzing the residuals. The K-S test compares the cumulative distribution function for a variable with a specified distribution, which may be uniform, normal, or Poisson. The K-S Z is computed from the largest difference (in absolute value) between the observed and theoretical distribution functions (Neter & Wasserman, 1974).

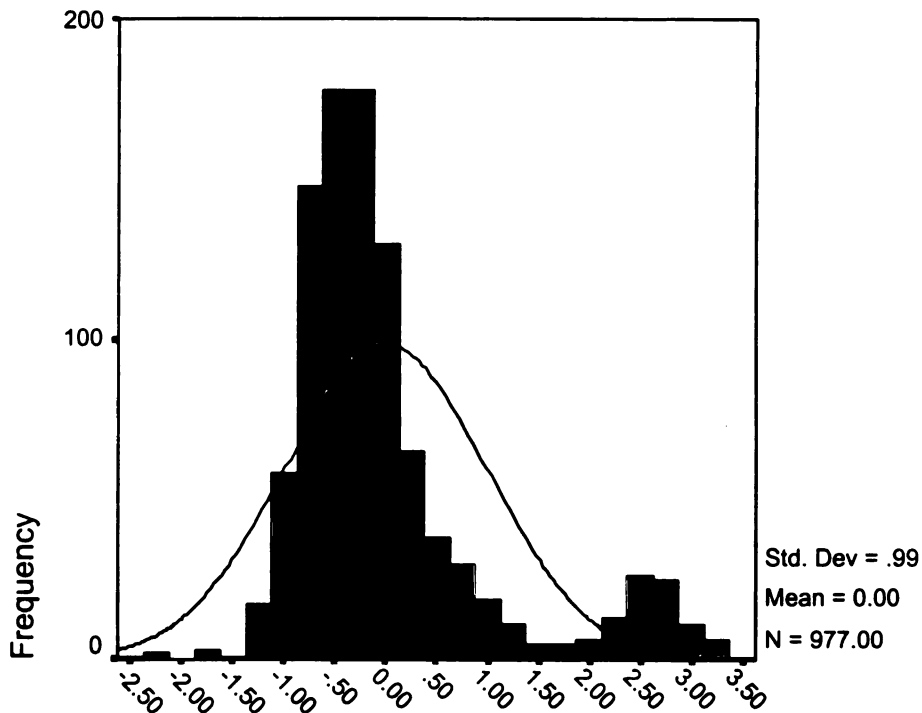


Figure 8. Histogram of regression standardized residuals of the total trip planning interval.

The null hypothesis that the distribution of the residuals was not a normal distribution was tested and the test statistics are reported in Table 22. The test results reveal that the distribution of the residuals is normal. The one-sample chi-square test statistic is 11.695 and is significant at 0.000 level. Thus, the assumption that error terms are normally distributed is met in this analysis.

Table 22. One-sample Kolmogorov-Smirnov Test for normal distribution of residuals.

		Total Trip Planning Interval
Normal parameters	Mean	70.659
	Standard deviation	105.281
Most extreme differences	Absolute	0.296
	Positive	0.296
	Negative	-0.251
Kolmogorov-Smirnov Z		11.695
Significance (two-tailed)		0.000

Multicollinearity and Singularity

There are two different conditions within correlation matrices that can suggest termination of an analysis or render portions of it unstable; they are multicollinearity and singularity. These assumptions are not so much assumptions, but a restriction, and if these conditions are violated, it can render analyses meaningless.

Multicollinearity occurs when two variables in a matrix are perfectly, or near perfectly, correlated and when they show a similar pattern of correlation with the other variables. Singularity occurs when one variable is a linear combination of others. Detection of these conditions is often found with the use of tolerance measures. Again, tolerance is a statistic used to determine how much the independent variables are linearly related to one another (multicollinearity). Although multicollinearity and singularity are different, they cause similar problems in multivariate analyses, specifically by prohibiting or rendering an unstable matrix inversion (Tabachnick & Fidell, 1982).

Multicollinearity and singularity issues in the study were evaluated by the tolerance values calculated during the regression analysis. These values are also a measure of independence among the variables. The test results were reported in Table 23.

Table 23. Multicollinearity test statistics -Tolerance test.

Independent Variables	Tolerance
PEAKSEAS	0.803085
PUR_VFR	0.706585
Q5795MIR	0.766757
ACT_NITE	0.855547
ACT_PARK	0.671167
ACT_MUSE	0.778931
ACT_HIST	0.635854
ACT_OTH	0.813853
ACT_FALL	0.900757
ACT_GEN	0.781571
ACT_OR	0.739355
ACT_SHOP	0.828457
ACT_EVNT	0.930746
ACT_CASI	0.886719
LOG_FRH	0.711804
MIVSTNUM	0.787135
TRP_FAM	0.833788
TRP_OVER	0.979740
TRP_VACA	0.843086
Nights spent in MI	0.783954
Spending in MI	0.745127
MIRESIDE	0.873784
MEDINCOM	0.938983
HHS_PRE	0.927813
HHS_SCH	0.830117

The tolerance of a variable is a commonly used measure of multicollinearity. The tolerance of variable i is defined as $1-R_i^2$, where R_i is the multiple correlation coefficient when the i th independent variable is predicted from the other independent variables (SPSS Inc., 1993). If the tolerance of a variable is small, it is almost a linear combination

Reference

of the other independent variables (SPSS Inc., 1993). The findings revealed that the tolerance values were high enough (all over .6 and most of them are over .8). These high tolerance values indicate that multicollinearity was not a significant limitation on the reported regression results.

Doubly Censored Normal Distribution

A very common problem in consumer behavior data is censoring of the dependent variable (Green, 1994). For example, Tobin (1958) analyzed household expenditure on durable goods using a regression model which specifically took account of the fact that the expenditure (the dependent variable of his regression model) cannot be negative. Tobin called his model "the model of limited dependent variable". Some other examples of this type of dependent variable include: the number of tickets sold (Amemiya, 1984; Maddala, 1983), the number of extramarital affairs (Fair, 1978), the number of arrests after release from prison (Quester & Greene, 1982), and household expenditures on various commodity groups (Jarque, 1987). Using OLS regression for this type of dependent variable (censored) may cause instability of parameters (Nakamura & Nakamura, 1983).

Like Tobin's dependent variable, the total trip planning interval cannot be negative. Recall that the total trip planning interval is the length of time from the date the trip planning begins to the date the trip is taken. A negative total trip planning interval would require the date the trip planning begins to follow the date the trip is taken. Logically, this sequence cannot occur. Therefore, there would be no negative values for the total trip planning interval. The distribution of the total trip planning interval is also

censored at the upper level. Virtually no cases were observed with a total trip planning interval of longer than one year.⁹

It was desirable to test whether or not the dependent variable of this study, the total trip planning interval, has an associated double censoring problem. The most familiar regression model used for censored dependent variables is tobit or standard censored regression. Because the dependent variable in this study was assumed to be doubly bounded, the double bounded tobit model was used to test the robustness of the OLS regression method used.

The coefficients and test values of each model were compared to test the robustness of the OLS model. The results of these two regression estimates are presented in Table 24. The OLS estimates used for hypotheses testing are presented in the first two columns in Table 24. The estimates for the double bounded tobit regressions are given in the third and fourth columns. Three different significant levels are used to compare the test values of the three estimates of the regression parameters: at 90%, 95%, and 99% level of significance for two tailed t-test.

With only a few exceptions, the OLS and the double bounded tobit regression analyses results are quite similar across the full set of independent variables. In comparing the signs across estimated coefficients, two differences are apparent between the OLS and the double bounded tobit estimates (i.e. visit state or national park and family trip). The numeric values of the estimated coefficients from both the OLS and the double bounded tobit regressions are relatively similar with the exception of the

⁹ As explained in methodology chapter, there were two cases of extreme values, 730 days and 1825 days. These two cases were deleted from the data set to mitigate outlier problems in these analyses. Therefore, one year, or 365 days, is the longest interval in the data set.

Table 24. Estimated influence of selected variables on total trip planning interval-OLS, negative binomial, and double bounded tobit regression results.

	OLS		Double bounded tobit	
	Coefficient	t-statistics	Coefficient	t-statistics
CONSTANT	-22.6511	-0.334	-24.4991	-0.373
PEAKSEAS	24.46959	3.179 ^c	24.73347	3.293 ^c
PUR_VFR	-2.86048	-0.312	-4.05137	-0.453
PARTYSIZ	4.265976	4.207 ^c	4.690777	4.691 ^c
ACT_NITE	-15.0428	-1.937 ^a	-12.8031	-1.688 ^a
ACT_PARK	-3.53504	-0.404	3.256491	0.381
ACT_MUSE	-17.3786	-1.652	-11.94	-1.165
ACT_HIST	-6.15281	-0.667	-15.1443	-1.684 ^a
ACT_OTH	8.395163	1.097	7.105128	0.952
ACT_FALL	15.6012	1.191	18.97758	1.483
ACT_GEN	-7.25737	-0.909	-8.78072	-1.128
ACT_OR	18.58603	2.25 ^b	16.59165	2.061 ^b
ACT_SHOP	3.775085	0.496	2.398786	0.323
ACT_EVNT	32.87272	3.889 ^c	29.35669	3.55 ^c
ACT_CASI	6.108705	0.549	6.996827	0.643
LOG_VFR	-19.3236	-2.054 ^b	-17.889	-1.95 ^a
NOPTMI	-0.78658	-1.323	-0.87312	-1.507
TRP_FAM	1.680766	0.202	-2.31784	-0.285
TRP_OVER	41.64061	0.63	39.19948	0.613
TRP_VACA	32.86776	3.884 ^c	36.54552	4.424 ^c
DURATION	1.97619	2.321 ^b	2.635041	3.13 ^c
EXPENDIT	1.53E-02	2.63 ^c	1.42E-02	2.501 ^b
MIRESIDE	-7.37352	-0.998	-3.74347	-0.519
MEDINCOM	-4.32036	-0.461	-1.92917	-0.21
HHS_PRE	-17.0186	-1.753 ^a	-16.9793	-1.795 ^a
HHS_SCH	5.396713	0.709	7.518106	1.011

note:

^a indicates that a coefficient is significantly different from zero at the 90% level of significance for the two tailed t-test.

^b indicates that a coefficient is significantly different from zero at the 95% level of significance for the two tailed t-test.

^c indicates that a coefficient is significantly different from zero at the 99% level of significance for the two tailed t-test.

two previously noted variables with opposite signs and two additional variables (i.e. visit museum or hall of fame and visit a historic site). Importantly, in the sense of testing the robustness of the OLS regression in evaluating which among this set of independent variables may play a significant role in explaining variation in total trip planning interval, the double bounded tobit regression result identifies the same ten variables as being statistically significant as were identified from the OLS regression results. However, the tobit model suggests another variable as being significant (i.e. visit an historic site). On balance, it would appear that the OLS regression model in this application is not influenced by the doubly censoring problem. Therefore, the OLS regression as an instrument for testing this hypothesis is deemed to be adequately robust.

Distributions of the Dates Trip Planning Began, Trip Destination was Selected, and Trip Began (Objective 4)

The results of the planning intervals that have been detailed thus far provide insights into the length of time people employ in planning their pleasure trips. This information is, of course, useful in timing tourism destination promotion across travel seasons of the year, but it does not fully exploit the information content of the available data base. Specifically, the three dates—when planning began, when destination was selected, when trip began—have not been explored for any potentially useful information they might contain to further refine a destination's travel advertising strategy. The date-based analyses and results are reported below.

The distributions of planning and decision making dates were investigated using the following three time segmentations: (1) three parts of a month--early (the first day of

the month through 10th), mid (11th to 20th), and end of a month (21st to the end of month), (2) month, and (3) season.

Three Part Month Segmentation Results

The frequency distributions derived from segmenting each month into three parts are provided in Table 25 for the three dates of interest: (1) when planning began, (2) when destination was selected, and (3) when trip began. As was found to be the case for the frequency distributions of the total trip planning and post decision intervals, the frequency distribution for the date planning began and the date a trip destination was selected here again are quite similar. This similarity comes as no surprise since, as has been discussed previously, the information processing interval plays only a very limited role in overall trip planning behavior among this group of respondents.

An examination of detailed plots of frequencies of these dates reveals a clustering of frequencies in the early and middle of each month. Relatively low frequencies for dates of interest are evident for the end of most months. This pattern is more evident in Table 26 which was derived by adding the frequencies for each monthly segment across the full year. The one-sample chi-square test was employed to test the differences among the frequencies of each variable.

Table 25. Relative frequencies of three different dates related to trip planning by three segments of the month.

Segment of Month	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Jan1 through Jan 10	1.7	3.0	2.9
Jan11 through Jan 20	1.6	2.8	3.0
Jan21 through Jan 31	0.8	2.2	2.1
Feb1 through Feb 10	1.6	2.3	2.2
Feb 11 through Feb 20	2.4	2.0	1.9
Feb 21 through Feb 28	0.8	1.1	0.9
Mar 1 through Mar 10	1.1	2.3	2.2
Mar 11 through Mar 20	1.3	2.2	2.3
Mar 21 through Mar 31	0.7	1.4	1.5
Apr 1 through Apr 10	1.5	2.0	1.9
Apr 11 through Apr 20	1.3	2.1	2.3
Apr 21 through Apr 30	1.0	1.9	1.4
May 1 through May 10	2.2	4.0	4.0
May 11 through May 20	2.1	3.3	2.9
May 21 through May 31	2.4	2.6	2.8
Jun 1 through Jun 10	3.2	4.4	4.3
Jun 11 through Jun 20	3.8	3.9	3.7
Jun 21 through Jun 30	3.1	4.0	3.6
Jul 1 through Jul 10	7.2	5.0	5.2
Jul 11 through Jul 20	6.1	4.5	4.6
Jul 21 through Jul 31	2.9	3.1	3.4
Aug 1 through Aug 10	6.5	5.6	5.6
Aug 11 through Aug 20	7.5	4.9	4.6
Aug 21 through Aug 30	4.2	3.7	3.9
Sep1 through Sep 10	5.8	3.7	3.7
Sep 11 through Sep 20	3.3	2.8	2.9
Sep 21 through Sep 31	2.3	3.8	3.8
Oct 1 through Oct 10	3.4	2.1	2.3
Oct 11 through Oct 20	4.0	2.2	3.0
Oct 21 through Oct 31	1.3	2.1	1.8
Nov 1 through Nov 10	2.0	2.3	2.3
Nov 11 through Nov 20	2.4	1.7	1.6
Nov 21 through Nov 30	3.0	2.3	2.3
Dec 1 through Dec 10	1.8	1.0	1.0
Dec 11 through Dec 20	1.1	0.7	0.8
Dec 21 through Dec 31	2.8	0.9	1.1
Total	100.0	100.0	100.0

Table 26. Significance test of relative frequencies of trip related dates by segment of month in which they occur.

Segment of month	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Early (1-10)	38.0	37.7	37.6
Mid (11-20)	36.9	33.1	33.6
End (21-end)	25.3	29.1	28.6
Chi-square Significance	43.1 0.000	18.5 0.000	21.9 0.000

During the early and mid segments of each month, 38% and 37% respectively of all trips begin while only 25% begins during the end of month segment. Likewise, 38% and 33% of trip planning begins during the early and mid-month segments while 29% begins during the end of the month. Michigan pleasure travelers are also more likely to make a final decision on trip destination during the early and mid-month periods (37.6% and 33.6%) than they are at the end of the month (28.6%). The one-sample chi-square test results reveal that the frequency distributions across the three segments of the month are significantly different.

A possible explanation for these results may be the monthly cycle over which a significant portion of the U.S. population receives income and distributes it to pay monthly bills. A typical household, paid monthly, has more discretionary earnings available early rather than late in the month and may be more inclined to take pleasure trips as well as plan pleasure trips early in the month after the bills are paid and while the checking account is near its monthly high. Another possible explanation is the fact that two very popular holidays during which people take pleasure trips—the Fourth of July and Labor Day— both occur during the beginning of the month.

Of these three possible explanations, it is possible to assess only the third with the data set available. To determine if the Fourth of July and Labor Day holidays exert undue influence on the observed results, the months of July and September were excluded and the frequency distributions for all three study relevant dates (the date the trip began, trip planning began, and trip destination was selected) were recalculated. The revised frequency distributions for the three dates are reported in Table 27. The one-sample chi-square test was again employed to test the differences among the frequencies for each variable.

A clustering of frequencies early and in the middle of each month still exists in the detailed plots of frequencies of the three dates which excluded the two holiday months (July and September). And, relatively low frequencies for dates of interest are still evident for the end of most months. This pattern is more evident in Table 28 which was derived by adding the frequencies for each monthly segment across the full year.

The high frequencies at the early and middle segments of each month still exist for the frequency distributions for the three dates when the July and September data are excluded. The results of the one-sample chi-square test reveal that these differences are statistically significant for each date.

Table 27. Relative frequencies of three different dates related to trip planning by three segments of the month excluding July and September.

Segment of Month	Date trip began (%) (n=966)	Date planning began (%) (n=966)	Date destination selected (%) (n=966)
Jan1 through Jan 10	2.3	3.9	3.8
Jan11 through Jan 20	2.2	3.6	4.0
Jan21 through Jan 31	1.1	2.9	2.8
Feb1 through Feb 10	2.1	2.9	2.9
Feb 11 through Feb 20	3.4	2.6	2.5
Feb 21 through Feb 28	1.1	1.4	1.2
Mar 1 through Mar 10	1.5	2.9	2.8
Mar 11 through Mar 20	1.7	2.9	3.0
Mar 21 through Mar 31	1.0	1.8	1.9
Apr 1 through Apr 10	2.1	2.6	2.5
Apr 11 through Apr 20	1.7	2.8	3.0
Apr 21 through Apr 30	1.4	2.5	1.8
May 1 through May 10	3.0	5.2	5.2
May 11 through May 20	2.9	4.3	3.8
May 21 through May 31	3.4	3.3	3.6
Jun 1 through Jun 10	4.4	5.8	5.7
Jun 11 through Jun 20	5.3	5.1	4.9
Jun 21 through Jun 30	4.2	5.2	4.7
Aug 1 through Aug 10	8.9	7.2	7.3
Aug 11 through Aug 20	10.4	6.3	6.1
Aug 21 through Aug 31	5.7	4.8	5.1
Oct 1 through Oct 10	4.8	2.7	3.0
Oct 11 through Oct 20	5.5	2.9	3.9
Oct 21 through Oct 31	1.8	2.8	2.4
Nov 1 through Nov 10	2.7	3.0	3.0
Nov 11 through Nov 20	3.3	2.2	2.1
Nov 21 through Nov 30	4.1	3.0	3.0
Dec 1 through Dec 10	2.5	1.2	1.4
Dec 11 through Dec 20	1.6	0.9	1.1
Dec 21 through Dec 31	3.9	1.2	1.4
Total	100.0	100.0	100.0

Table 28. Significance test of relative frequencies of trip related dates by segment of month that they occur—excluding two months: July and September.

Segment of month	Date trip began (%) (n=966)	Date planning began (%) (n=966)	Date destination selected (%) (n=966)
Early (1-10)	34.3	37.4	37.6
Mid (11-20)	37.9	33.6	34.3
End (21-end)	27.7	29.0	28.0
Chi-square Significance	9.62 0.008	13.83 0.001	15.98 0.000

The frequency distributions and one-sample chi-square test results are similar for both cases: when including and excluding the two holiday months (July and September). This finding suggests that these two very popular holidays are not dominant factors in explaining the clustering at the early and middle segments of the month for the three dates (the date the trip began, trip planning began, and trip destination was selected).

The other explanation—monthly patterns of financial income and outgo—might influence the high frequencies at the early and the middle segments of the month. Or, there may be other possible reasons that explain the high frequencies during the early and middle segments of the month. However, exploring them is beyond the scope of this study.

The differences of frequency percentages for both cases were compared by subtracting the frequency percentages in Table 26 from Table 28. The differences are reported in Table 29. The differences between the results with and without the two holiday months (July and September) included are minimal.

Table 29. The differences of relative frequencies of trip related dates by segments of month between the data sets including and excluding the July and September.

Segment of month	Date trip began (%)	Date planning began (%)	Date destination selected (%)
Early (1-10)	-3.7	-0.3	0.0
Mid (11-20)	1.0	0.5	0.7
End (21-end)	2.4	-0.1	-0.6

Monthly Analysis of Trip Related Planning Dates

The frequency distributions for the three relevant trip dates are plotted in Figure 9 and reported numerically in Table 30. The most frequently reported month in which trips begin is August (18.1%) followed by July (16.2%), September (11.4%), and June (10.2%). These are also the four most frequently reported months for beginning to plan and to select a destination although in both cases June replaces September in the third ranking position. Finally, as one might expect, trip planning is a more frequent activity than is actual trip taking during the first six months of the year.

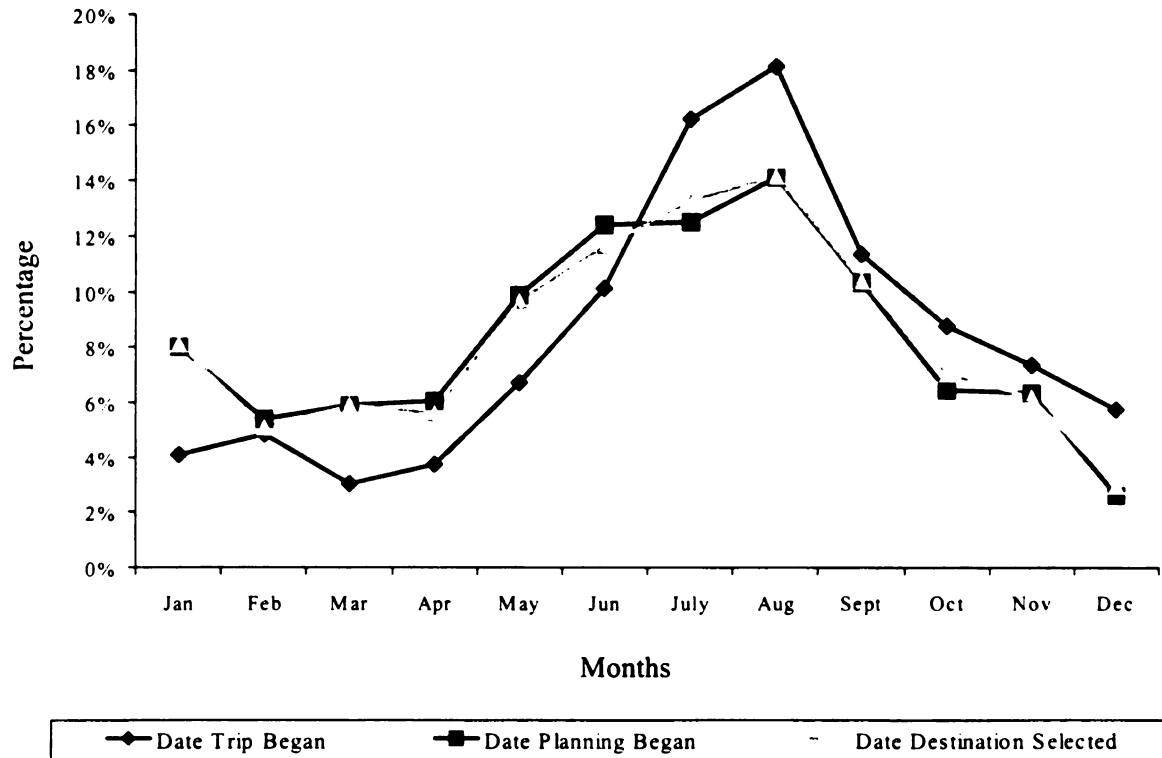


Figure 9. Frequency distribution plots for three trip related dates by month.

Table 30. Frequency distributions for three trip related dates by month.

Month	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Jan	4.1	8.0	8.1
Feb	4.8	5.4	5.1
Mar	3.0	5.9	5.9
Apr	3.7	6.1	5.6
May	6.7	9.9	9.7
Jun	10.1	12.4	11.6
July	16.2	12.5	13.3
Aug	18.1	14.1	14.2
Sept	11.4	10.3	10.4
Oct	8.8	6.4	7.0
Nov	7.3	6.4	6.2
Dec	5.7	2.6	3.0
Total	100.0	100.0	100.0

Seasonal Analysis of Trip Related Planning Dates

The frequency distributions for the relevant trip related dates are presented by season in Figure 10 and Table 31. Based on the definitions of seasons used by the U.S. Travel Data Center, the four seasons are as follows: December through February equal to Winter, March through May equal to Spring, June through August equal to Summer, and September through November equal to Fall.

Michigan pleasure travelers are more likely to begin to plan trips, make final decisions on trip destinations, and begin to take trips during the summer season. Planning begins and destinations are selected for 39% of all trips during the summer season, which is also the season that 44.5% of trips begin. Fall is the second most popular season for all of these activities.

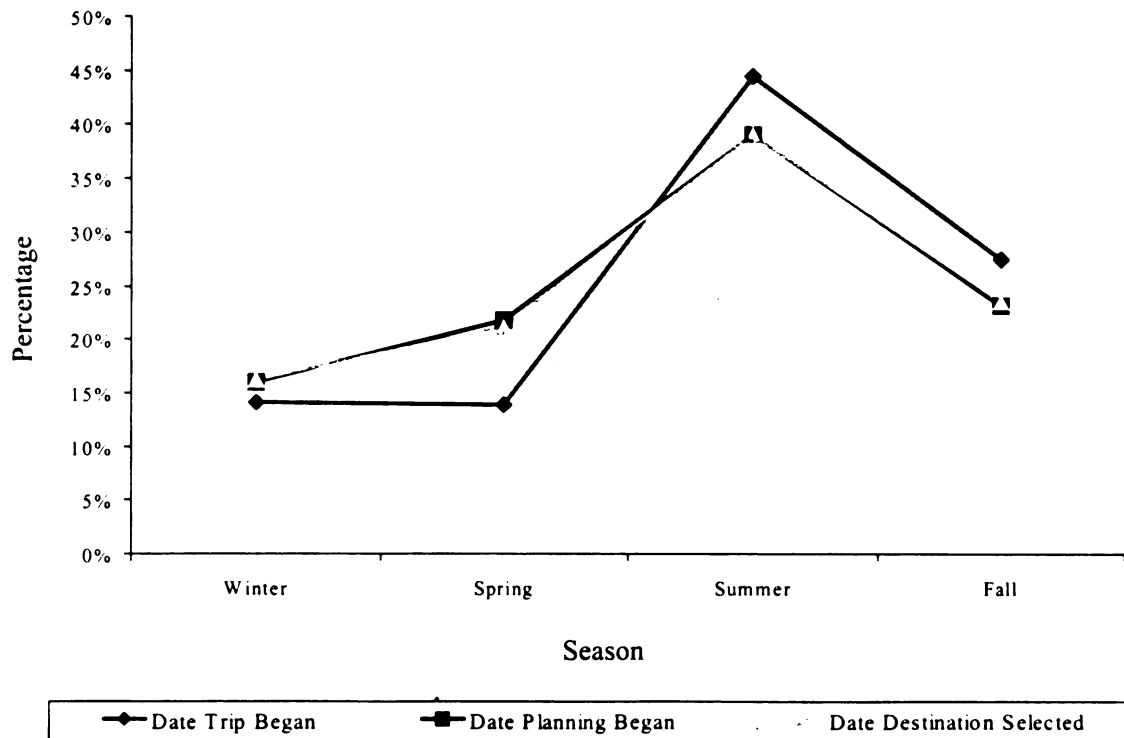


Figure 10. Frequency distribution plots for three travel related dates by season.

Table 31. Frequency distributions for three travel related dates by season.

Season	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Winter (Dec.-Feb.)	14.1	16.0	16.2
Spring (Mar.-May)	13.9	21.8	21.2
Summer (Jun.-Aug.)	44.5	39.0	39.0
Fall (Sept.-Nov.)	27.5	23.2	23.6

Results With and Without Visiting Friends and Relatives (VFR) Included

As discussed earlier, there have been arguments about whether or not to include the VFR travel market in a destination's marketing strategy. Two data sets were used in this study: the data set including the VFR market and the data set excluding the VFR market. The same analyses were conducted for both data sets. The analyses included: the duration and frequency distributions of trip planning intervals, two different decision making approaches, and frequency distributions for study relevant dates. Separate regression analyses were not performed because the VFR market was included as an independent variable in the regression model fitted to the full data set. The results from analyses of the data sets without and with the VFR market are presented in Appendix B. The independent samples t-test and chi-square test were used to test for differences in selected variables between the data sets with and without VFR market.

The summary of statistics for the three trip planning intervals (the total planning, the post decision, and the information processing intervals) for the data sets without and with the VFR market included are presented in Table B1 and B1-1 respectively. The minimum, maximum, range, and median values of the trip planning intervals are identical for the data sets with and without the VFR market.

The reported frequencies by six selected time intervals (0 days to 7 days, 8 days to 15 days, 16 days to 30 days, 31 days to 60 days, 60 days to 90 days, and over 90 days) for the total trip planning and the post decision intervals for the two data sets are presented in Table B4, and B4-1. The frequencies for the two data sets appears to be almost identical across the six selected time intervals.

The frequency distributions for the information processing interval for the two data sets (data sets without and with the VFR market included) are presented in Table B5 and B5-1. The frequency distributions of this interval for both data sets appears to be almost identical across the information processing interval days. Comparing the frequencies in zero information processing interval days, both data sets have very similar frequencies. Almost 83% of respondents in the data set without the VFR market reported that they devoted zero days to the information processing interval, and almost 85% of those in the data set with the VFR market included reported a zero information processing interval.

The relative frequencies of trip related dates by three segments of the month (the early, mid, and end of the month) for the data sets without and with the VFR market are presented in Table B10 and B10-1, respectively. The frequencies for both data sets reveal a clustering of frequencies in the early and middle parts of the month.

CHAPTER V

SUMMARY AND CONCLUSIONS

This final chapter summarizes and discusses the findings, implications of the findings, some limitations of the study, and suggestions for further research. The summary of the findings follows the order in which objectives are listed in Chapter I.

Summary of Results

Three planning intervals and three dates were defined based on the planning behaviors of pleasure travelers. Recall that the total trip planning interval is the number of days between the dates the trip planning began and the trip began; the post decision making interval is the number of days between the dates trip destination was selected and the trip began; and the information processing interval is the number of days between the dates the trip planning began and the trip destination was selected. This study used these study relevant time frames to explore the trip planning behaviors of Michigan pleasure travelers. The summary of the findings of this study are as follows.

Duration and Frequency Distributions for the Three Trip Planning Intervals (Objective 1)

Michigan pleasure travelers, on the average, begin to plan about 70 days and make final decisions on their trip destinations about 63 days prior to travelling. They decide on their trip destinations, on average, only 7 days after the beginning of trip planning.

The most frequently reported total trip planning interval was one month (17.6%) followed by one week (13.9%), two weeks (12.2%), two months (10.4%), one year (8.8%), and three months (5.6%). The detailed intervals were grouped into six meaningful segments based on the following frequently stated total trip planning intervals: within one week, 8-15 days, 16-30 days, 31-60 days, 61-90 days, and over 90 days. Almost 29% of Michigan pleasure travelers begin to plan within one week of taking their trip, and 64% begin to plan 30 days or less in advance of their trips. The higher frequency of the total trip planning interval within one month of travel has been confirmed by Gitelson and Crompton (1983). They found that the most frequently reported total trip planning interval was one month (43.4%) followed by one to three months (28.5%) and over three months (28.2%).

While a few studies were found which included the total trip planning interval, very few studies were found which included the post decision interval. Perdue (1985) included the timing of the destination decision in his inquiry-conversion study in Nebraska and examined the relationship between the destination decision and the timing of decisions (before or after receiving the information packet of Nebraska). However, he did not provide information about when pleasure travelers make final decisions on their trip destinations. The findings of this Michigan traveler study reveal when pleasure travelers finally select their trip destinations. The most frequently reported length of the post decision interval was also one month (16.7%) followed by one week (14.3%), two weeks (11.8%), two months (9.0%), one year (7.7%), and one day (7.3%). Based on some grouping of these intervals, almost 34% of respondents make final decisions on their trip destinations within one week, and almost 68% of them do so within one month.

The information processing interval was found to be a surprisingly short—seven days long—with a strongly skewed distribution toward zero. In fact, 85% of respondents reported that the number of days between the date their trip planning began and the date on which they selected their trip destinations was zero. The interval between when the trip destination was selected and when the trip began was found to be about 63 days. Thus, the total trip planning interval equal 70 days. The distributions for both of these intervals along a 0-365 day axis is strongly skewed toward the zero pole with medians in both cases of only 30 days.

Two Different Decision Making Approaches (Objective 2)

The data set was divided into two groups of respondents: those who made the final decision on their trip destinations on the same day as they began to plan their trips (instant decision-makers) and those who made final decisions on trip destinations from one day to several months after they began to plan their trips (hesitant decision-makers). These two groups were profiled in terms of information sources and media habits, trip characteristics, and socioeconomic characteristics. Instant decision-makers were found to be more likely to rely on a travel agency as a source of information and to report television as the most helpful media in selecting their pleasure trip destinations.

The primary purpose of travel for instant decision-makers was more likely to be visiting friends or relatives and less likely to be outdoor recreation. Instant decision-makers were not as action-oriented but were more likely to use a friend's or relative's home as their main type of lodging during their pleasure trips. They were also more likely to spend all nights at one place during trips.

Hesitant decision makers were more likely to consider their trips as vacation trips and purchase a package, for which they paid one price, that included at least one night of lodging.

Planning Interval and Selected Socioeconomic and Trip Related Variables (Objective 3)

A total of 25 independent variables were analyzed using OLS regression to assess their significance in explaining variation in the dependent variable, the duration of the total trip planning interval. Eight of the 25 were found to be statistically significant at the 95% level of confidence using a two-tailed t-test. The results show that the Michigan pleasure travelers are likely to spend more time planning their trips when trips occur during summer (June, July, and August), the trip party involves a larger number of pleasure travelers, they participate in outdoor recreation, they attend a festival or event, they consider their trips to be a vacation, they stay at a friend's or relative's home, or they spend more nights and more money during their pleasure trip. Some of these significant variables in explaining the variation of the total trip planning interval have been confirmed in several previous studies. Rao et al. (1992) found that the length of the total trip planning interval was longer as pleasure travelers spend more money on their trips. Fodness and Murray (1997) found that pleasure travelers are more likely to take a longer total trip planning interval: for vacation trips, as length of stay increases, when they visited more destinations, or when their trip expenditures are higher. They also found that the length of the total trip planning interval decreases if pleasure travelers stay at the unpaid lodging such as a friend's or relative's home.

While several previous studies have investigated variables that influence the duration of the total trip planning interval, the impacts of these variables on variation in the total trip planning interval have not been examined. The impacts of selected variables on variation in total trip planning interval was examined in this study. The impacts of independent variables on the duration of the dependent variable were compared using standard coefficients (or beta coefficients). Party size was found to have the strongest impact on the duration of the total trip planning interval followed by: trip was considered a vacation, the number of nights spent in Michigan, trip was taken during peak season, attended a festival or event, participated in outdoor recreation, and the amount of money spent during the pleasure trip to Michigan.

The assumption of normality was tested using the Kolomogorov-Smirov test. Test results revealed that the normality assumption was met. Multicollinearity and singularity were tested using the tolerance level test. High values of tolerance were found across all independent variables, and this result suggests that multicollinearity was not problematic.

Using the OLS regression method in this study was questionable because the dependent variable appears to be censored both at the lower and upper levels. Whether or not this was indeed problematic was tested using the double bounded tobit model. The double bounded tobit regression was applied to the same set of 25 variables and yielded nearly identical results, which implies that the double censored nature of the dependent variable had little, if any, impact on reported results. This is further evidence of the robustness of OLS regression in estimating coefficients and testing hypotheses.

Internet use behavior was not included in the model because of the previously discussed discrepancy in sampling time frames. Instead, the significance of these

variables in explaining the variation in the dependent variable was tested using the independent sample t-test and one way ANOVA. Four variables were tested: whether or not access to the Internet, whether or not use the Internet to obtain travel information, whether or not access Travel Michigan's web site to obtain travel information, and the degree of the Internet involvement. None of these variables were found to be statistically significant.

Distributions of Time Frames Underlying the Travel Decision Making Process (Objective 4)

An examination of detailed plots of the frequencies of the date: the trip planning began, the trip destination was selected, and the trip began revealed a clustering of frequencies early in the month. This was confirmed by tallying reported frequencies into the following three segments of the month: early-day 1 to 10, mid-day 11 to 20, and late-day 21 to end of month. Only 25% of respondents reported beginning trips in the late segment of the months, whereas 38% and 37% began trips in the early and middle segments, respectively. Only 29% of respondents made a destination decision or began to plan a trip late in the month. The one-sample chi-square test was used to test results and revealed that the frequencies of the three segments of the month were significantly different for all of the three study relevant dates.

A possible explanation for these results may be the monthly cycle over which a significant portion of the U.S. population receives income and distributes it to pay monthly bills. A typical household, paid monthly, has more discretionary earnings available early rather than late in the month and may be more inclined to travel as well as plan travel early in the month after the bills are paid and while the checking account is

near its monthly high. Another possible explanation is the fact that two very popular holidays during which people take pleasure trips—the Fourth of July and Labor Day—both occur during the beginning of the month.

The popular holiday possible explanation was investigated. The two holiday months (July and September) were excluded from the data set. Frequency distributions and the one-sample chi-square were again calculated. The results were found to be quite similar for both the data set with and without the holiday months included. Thus, holidays do not explain the early to mid-month clustering observed in this data set.

Results With and Without Visiting Friends and Relatives (VFR) Included

As discussed earlier, DMOs vary in how they deal with the VFR market segment. Many choose to ignore it under the assumption that targeting it in promotions is not cost effective, while others develop specific strategies to attract VFR travelers. In any case, the question as to how including VFR respondents in the analyses performed in this study may have influenced results and related conclusions is both interesting and legitimate. In order to resolve the VFR question and to report results relevant to DMOs who target or ignore the VFR market, the full set of analyses was performed for both the with and without VFR respondents data sets.

The same analyses were conducted for the two data sets (the data sets with and without the VFR market). The analyses included: the duration and frequency distributions of trip planning intervals, two different decision making approaches, and the frequency distributions for study relevant dates.

The results from analyses of the data sets with and without the VFR market included were found to be almost identical.

Differences between the two groups were minimal suggesting that either set of results might be utilized by DMOs; however, the data set with VFR respondents is larger and, therefore, results can be applied with slightly more confidence than those from the smaller data set without VFR respondents included.

Implications of Results

The results were at considerable variance from the expectations and from those of many if not most DMOs, based upon observations of the latter's advertising timing and general marketing strategies. A couple of particularly noteworthy examples of variances between current practice and what the results would appear to suggest as preferable strategies are discussed in the following sections.

Implications for Promotion Timing

The time frames defined in this study provide information about when marketers should distribute promotion programs or travel information. The planning intervals provide information about the lengths of time periods underlying pleasure travelers' decision making process. The lengths of the total trip planning, the post decision, and the information processing intervals are especially useful for marketers who try to attract pleasure travelers during specific time periods such as summer season travelers. Marketers seeking to attract more pleasure travelers during non-peak seasons or event managers seeking to attract more visitors are additional examples of applications of these

planning intervals. Suppose, for example, that the majority of the target market, say two thirds, begins to plan within 30 days prior to travelling to attend an event. The event manager should begin to distribute promotion programs or travel information about one month prior to the event. Too early distribution, for example six months before the event, may capture the attention of the portion of the target market that begins to plan six months prior to travelling, but it will miss the majority of the target market. Or, too late distribution, for example one week in advance, might again miss the majority of the target market.

DMOs commonly schedule promotions to appear several months before a tourism season begins and to end at the beginning of that season. For example, summer season promotion in Michigan begins in March and ends in May. Given that the median total trip planning interval is only 30 days, based upon the results of this study, promotional messages placed to appear well into the summer season rather than in spring will reach a greater percentage of people when they are most receptive to summer tourism promotion messages.

While the planning interval results provide information to the marketers who try to promote during specific time periods, other results will be of particular interest to DMOs who promote on a year round basis. Marketers who promote such activities as general touring, shopping, or casino gaming, which have little seasonal variation or time limitations, are examples of year round promotion organizations. Such organizations will find the planning behavior findings across the month of potential interest in timing their monthly promotion strategies. For example, the findings that indicate pleasure travelers tend to plan and take trips earlier in the month rather than at the end of the month

suggests following a similar pattern in releasing of promotion messages. Thus, the findings of this study suggest that timing tourism promotional messages to appear early rather the later in the month is likely to deliver a greater return on investment.

Implications for Information Distribution Timing

Many DMOs devote a high proportion of their promotion budgets to generating and fulfilling inquiries from prospective visitors engaged in what we have defined as the information processing interval. Results from this study suggest that this interval is nonexistent for the majority of travelers (85%), and more than half of the remaining small minority select a destination within 21 days of requesting information. Clearly, prompt response to inquiries is implied by these results. DMOs would also be advised to reconsider how they allocate their promotion budgets between inquiry generating and processing and their other promotion options.

Study Limitations

The following were identified as possible limitation for this study: (1) nonresponse and refusal rates, (2) secondary nature of the data, (3) recall bias, and (4) generalizability. Each is discussed below.

Nonresponse and Refusal Rates

The response rate in this study, including partially-completed interviews, was 44%. The response rate, including only fully-completed interviews, was 35%. About 29% of eligible potential respondents refused the interview. Although these are similar to

those achieved in most other telephone surveys conducted (Groves & Kahn, 1979; Steeh, 1981; and Wiseman & McDonald, 1979), they are nonetheless cause for concern since one can not be assured that the sample population is necessarily representative of the overall population of Michigan travelers. Nonresponse bias was assessed, and the results indicate that differences between respondents and non-respondents is minimal. However, there is no practical way to assess the potential of refusal bias.

Secondary Nature of Data

This study used survey data collected by the Travel, Tourism, and Recreation Resources Center (TTRRC) at Michigan State University. The goal of the survey was to estimate the effectiveness of Travel Michigan's advertising programs and the characteristics and behavior of travelers in Travel Michigan's prime market area. The questionnaire was designed for these survey goals not for the purpose of this study, which was to provide information about the trip planning and decision making behaviors of Michigan pleasure travelers. The data set collected via this questionnaire provide very general information about trip planning and decision behaviors such as the time frames of the trip planning and decision making behaviors. More specific information was not obtained that could have contributed to fulfilling the purposes of this study. More specific information about trip planning and decision behaviors might have been collected which would have yielded a richer and potentially higher quality data base than was available to pursue the objectives of this study. The data available from the survey were extracted and extrapolated from a selected few questions in a rather lengthy research instrument. A

more focused instrument would have offered the opportunity to pursue other aspects of trip planning behavior in more depth and more directly.

Recall Bias

Respondents were asked to answer three study relevant questions: the number of days they had taken to plan their pleasure trips and to make final decisions on their trip destinations and the month and date when they began their trips. Their responses may contain recall biases because it is hard for most respondents to recall the exact number of days they actually devoted to trip planning and selecting the trip destinations or when they travel. Although respondents may recall the number of days requested, they probably provided approximations rather than specifics. For example, a respondent who had taken 33 days for trip planning may answer one month.

Recall bias and the tendency to approximate to some unknown degree negatively influenced the quality of reported results.

Generalizability

The results from this study are based on subsamples drawn from the study region. The study region was limited to the six states of Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin and the province of Ontario in Canada. Further, the analyses of this study were based on the pleasure travelers from the study region who visited Michigan during the past 12 months. Therefore, the results of this study may not be universally generalizable to all pleasure travelers from all origins nor to all destinations. Other origins or destinations may possess a degree of uniqueness with respect to the

distributions of their associated the trip planning intervals and dates. For example, pleasure travelers who visit Florida may have longer trip planning intervals and different distributions across time of year than those who visit Michigan. This in turn suggests that the findings pertaining to any one destination state may not be generalizable to other destination states. The limited study region, thus, is a limitation to generalizability of this study's results.

Suggestions for Further Study

Based on the limitations of this study described previously, several further studies are recommended. First, it is recommended to conduct similar studies using other survey methods (e.g., mail survey) and survey instruments. As described previously, the quality of the data set used for this study may have suffered due to a low response rate and a high refusal rate. These problems may be due to the telephone survey method employed to collect data and a long questionnaire. The telephone survey problems are being exacerbated by: the proliferation of answering machines, fax machines, caller ID, and telemarketing. These factors collectively appear to be lowering average response rates to telephone surveys. Similar studies using other survey methods should be assessed for their potential to mitigate response rate problems.

The questionnaire used for this study is too long for the purpose of the study reported herein. The questionnaire contains 164 questions. Although no respondents were asked all questions, the length of the questionnaire was still long. The length of interview ranged from few seconds to twenty minutes, with an average length of twelve minutes. The long questionnaire probably caused negative impacts on participation rates. Also, as

described previously, the questionnaire was not designed for this study. Therefore, a considerable portion of the questionnaire were not directly related to this study. To provide more specific information as well as to reduce the negative impact on the participation rates, it is recommended to conduct surveys with shorter and well specified questionnaire. Possible specific variables to be included in the further study are the time frames of the trip planning and decision making behaviors on their types of transportation, accommodation, and arrangement of travel. Including these variables in further studies may provide information to the other tourism related marketers such as airline agents, hotel/motel industries, and travel agents.

Second, it is recommended to conduct similar studies for other origins and destinations. As described previous section, the limitations both on the origins and destinations may cause some limitations in generalizability of this study. The origins included in this study were limited as the six states (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin) and the province of Ontario, Canada. Also, the destination was limited as Michigan. Therefore, the results of this study may not be universally generalized to the all pleasure travelers. Comparing the results from analyses of other origins and destinations with the results of this study may test the generalizability of this study.

Although not described in the limitations of this study, the analyses of this study were for the aggregate general pleasure travelers to Michigan. They did not focus on specific submarkets such as summer season travelers, festival or event attendants, or casino gamers. Often, marketers need to promote specific submarkets, however, an overall average approach of this study may not fit these specific situations. Further

studies are recommended to provide the information about the trip planning behaviors of these specific submarkets. For example, comparisons of trip planning and decision making behaviors between festival or event attendants and other pleasure travelers may provide useful promotion information to the marketers seeking effective promotion program distribution schedule for attracting that submarket.

This study found a clustering of frequencies early in the month and presented possible explanations for this phenomenon. However, these possible explanations are based on the author's intuition. Further study should be done for investigating the possible reasons why people are likely to begin to take and plan their pleasure trips and decide trip destination during the early and mid segments of month. Focus group study is one example. The participants of focus group are to answer the reason why they are likely to plan and travel during the early and mid segments of month.

APPENDIX A.
QUESTIONNAIRE

FINAL YEAR 3 CERTEC/SAPMINR PHONE SURVEY QUESTIONNAIRE 9/19/97

[ENTER INTERVIEWER CODE NUMBER] > ____

[ENTER CODE NUMBER] > _____

[ENTER AREA CODE] > ____

Hello, my name is I'm calling from Michigan State University.

We're conducting a study on travel and tourism. We'd greatly appreciate your help in answering a few questions about trips you've made. May I speak to the adult over 17 years old who will have the next birthday? [IF THIS PERSON IS NOT AT HOME, ASK TO SPEAK TO THE ADULT AT HOME WHO WILL HAVE THE NEXT BIRTHDAY]

We're defining a "trip" as any overnight or day trip to a place at least 50 miles from your home, unless it was taken in commuting to work or school.

[ENTER GENDER OF RESPONDENT] > ____

M=Male F=Female -99=Can't determine

[DOUBLE ENTRY REQUIRED]

1. Have you taken any kind of trip in the past 12 months? > ____

1=Yes

2=No ----> GO TO QUESTION 149

-99=DK/NR ----> GO TO QUESTION 149

BEGIN INTRODUCTORY BLOCK

[READ OPTIONS 1-4; IF NECESSARY, PROBE FOR PRIMARY PURPOSE OF TRIP]

2. Was your most recent trip primarily for the purpose of... > ____

1=Visiting friends or relatives;

2=Recreation;

3=Business; or

4=Some other purpose? ----> ASK QUESTION 3

-99=DK/NR

3. And what would that purpose be?

> _____

We're defining a "pleasure trip" as any overnight or day trip to a place at least 50 miles from your home that was made for your enjoyment, including vacations, weekend getaways, shopping trips, and trips to visit friends or relatives.

4. Have you taken a pleasure trip to Illinois in the past 3 years?

[CONTINUE FOR EACH STATE/PROVINCE: "How about _____?"]

1=Yes 2=No -99=DK/NR

Illinois	> ____	Ohio	> ____
Indiana	> ____	Wisconsin	> ____
Michigan	> ____	Ontario	> ____
Minnesota	> ____		

[DO NOT READ LIST]

5. During the next 12 months, do you expect to take more, fewer, or about the same number of pleasure trips as you did during the previous 12 months?

> ____

1=More 2=Fewer 3=Same -99=DK/NR

[DO NOT READ LIST; ACCEPT UP TO 3 RESPONSES]

6. Where do you turn most often when you need information to help plan a pleasure trip? > ____ ____ ____

ORGANIZATIONS

1=Chamber of commerce

2=Convention/visitors bureau

3=State travel office/
call state 800 number

4=Travel agency

OTHER

10=Friends/relatives/co-workers

11=CD-ROM

12=Highway welcome centers

13=Internet/on-line service

14=Travel show

PUBLICATIONS

5=Magazine(s)

6=Travel section of newspaper

7=Mobil Travel Guide

8=AAA/CAA/auto club
publications

9=Other travel guide

15=Other source

16=No source(s)

-99=DK/NR

[READ OPTIONS 1-4]

7. Which one of the following media has been most helpful to you in selecting the destinations you have visited on pleasure trips? > ____

1=Magazines;

2=Newspapers;

3=Television; or

4=Radio?

-99=DK/NR

8. How would you rate the desirability of Illinois as a pleasure trip destination on a scale from 1 to 10, where 1 means "not at all desirable" and 10 means "very desirable?"

[REPEAT FOR EACH REMAINING STATE/PROVINCE:

"How about _____?"]

STATE/ PROVINCE	RATING [1-10]	STATE/ PROVINCE	RATING [1-10]	-99=DK/NR
Illinois	> ____	Ohio	> ____	
Indiana	> ____	Wisconsin	> ____	
Florida	> ____	Ontario	> ____	
Michigan	> ____	Colorado	> ____	
Minnesota	> ____			

END INTRODUCTORY BLOCK

BEGIN PROMOTIONAL AWARENESS AND RESPONSE BLOCK

9. In the past 12 months, have you seen or heard any advertisements promoting travel to any destinations? > ____

1=Yes

2=No ----> GO TO QUESTION 15

-99=DK/NR ----> GO TO QUESTION 15

[ENTER UP TO 5 PLACES; PROBE FOR STATES ASSOCIATED WITH UNCOMMON PLACES; PROBE: Any other places?]

10. What places have you seen or heard ads for?

> _____
> _____
> _____
> _____
> _____

[DON'T READ]

1=Michigan or a place in Michigan mentioned

2=Only non-Michigan places mentioned ----> GO TO QUESTION 15

-99=DK/NR ----> GO TO QUESTION 15

> ____

(ACCEPT 1-99)

11. About how many days ago did you last see or hear a Michigan travel ad?

> ____ -99=DK/NR

12. On a scale from 1 to 10, where 1 means "poor" and 10 means "excellent," how would you rate the quality of the Michigan ads you've seen or heard?

> ____ -99=DK/NR

[DO NOT READ LIST; PROBE TO FIT A CATEGORY]

13/14. Where did you most recently see or hear an ad promoting travel to Michigan? > ____ -99=DK/NR

1=TV

9=Direct mail advertisement

2=Radio

10=Internet/on-line service

3=Newspaper

11=CD-ROM

4=Magazine

12=Chamber of commerce

5=Billboard/outdoors

13=Convention and visitors bureau

6=Travel agent

14=Highway welcome center

7=Travel show

15=At the destination

8=Travel guide

16=Other

15. During the past 12 months, have you called any state or province's toll-free number to request travel information? > ____

1=Yes

2=No ----> GO TO QUESTION 17

-99=DK/NR ----> GO TO QUESTION 17

[ENTER ALL STATES/PROVINCES MENTIONED; PROBE: Any others?]

16. What states' or provinces' toll-free numbers have you called?

> _____

END PROMOTIONAL AWARENESS AND RESPONSE BLOCK

BEGIN MICHIGAN IMAGE BLOCK

[PROBE: What others come to mind?; ACCEPT UP TO 3 RESPONSES]

17. When you think of Michigan as a pleasure trip destination, what positive impressions, if any, come to mind?

> _____
> _____
> _____

[PROBE: What others come to mind?; ACCEPT UP TO 3 RESPONSES]

18. And what negative impressions, if any, come to mind?

> _____
> _____
> _____

[ACCEPT UP TO 3 RESPONSES]

19. What, if any, tourism-related facilities, services, or opportunities do you feel are missing in Michigan?

> _____
> _____
> _____

[ACCEPT UP TO 3 RESPONSES]

20. What types of winter recreation opportunities do you feel Michigan is known for?

> _____
> _____
> _____

We'd like to know how much you agree or disagree with some statements about Michigan. Please use a scale from 1 to 10, where 1 means you "do not agree at all" and 10 means you "agree completely."

Michigan. . .

-99=DK/NR

(ACCEPT 1-10 OR -99)

21. Is close enough for a weekend getaway.....> ____
22. Has many interesting museums.....> ____
23. Is great for summer outdoor recreation activities.....> ____
24. Is an exciting place to visit.....> ____
25. Has a lot of high quality lodging.....> ____
26. Offers much scenic appeal.....> ____
27. Is great for winter outdoor recreation activities.....> ____
28. Is a good place to meet friendly people.....> ____
29. Is a place everyone should visit at least once in their lifetime....> ____
30. Is a safe place to visit.....> ____
31. Offers exciting nightlife and entertainment.....> ____
32. Is a great place for a family vacation.....> ____
33. Is a popular destination with vacationers.....> ____
34. Has many interesting historic sites.....> ____
35. Offers an excellent vacation value for the money.....> ____

END MICHIGAN IMAGE BLOCK

Now we'd like to ask you about pleasure trips that you may have taken. Again, we're defining "pleasure trips" as any overnight or day trips to places at least 50 miles from your home that were made for your enjoyment, including vacations, weekend getaways, shopping trips, and trips to visit friends or relatives.

[DOUBLE ENTRY REQUIRED]

36. In the past 12 months, have you taken any pleasure trips to any destination? > ____

1=Yes

2=No ----> GO TO QUESTION 88

-99=DK/NR ----> GO TO QUESTION 88

(ACCEPT 1-999)

37. About how many pleasure trips have you taken in the past 12 months?

> ____ pleasure trips

[IF RESPONDENT IS UNABLE TO GIVE A SPECIFIC NUMBER, PROBE:]

In the past 12 months, would you say you've taken. . .

2=1 to 3 pleasure trips?

5=4 to 6 pleasure trips?

8=7 to 9 pleasure trips?

15=10 to 20 pleasure trips?

25=More than 20 pleasure trips?

-99=DK/NR

[NOTE: USE CODES ONLY IF RESPONDENT DOESN'T GIVE A SPECIFIC RESPONSE]

BEGIN ATTRACTIONS BLOCK

How interested would you be in the following tourism opportunities proposed for development in Michigan, on a scale from 1 to 10, where 1 means you would have "no interest at all," and 10 means you would be "extremely interested"?

(ACCEPT 1-10 OR -99)

38. Visiting a major amusement park like Cedar Point.....> ____

39. Living and working on a working farm or orchard.....> ____

40. Visiting a park on the Great Lakes with a submarine that would
take you to see shipwrecks dating back to the 1800s.....> ____

41. Taking a guided trip that would enable you to see wildlife in a
natural setting.....> ____

42. Learning to grow grapes and make wine on a working vineyard.....> ____

43. Visiting a major shopping, dining, and entertainment mall like
the Mall of America.....> ____

44. Learning country arts and crafts on a working farm.....> ____

45. Visiting a resort state park with lodging, dining, golfing,
swimming, boating, and hiking facilities.....> ____

46. Working with an archaeologist at an archaeological dig.....> ____

47. Hiking on a trail from one farm Bed & Breakfast to another,
each of which would provide you with lodging and meals.....> ____

48. Have you attended any special events during the past 12 months while on pleasure trips to places at least 50 miles from your home? These would be any scheduled events that were open to the public, such as festivals, fairs, shows, exhibitions, celebrations, sports events, performances, competitions, and so on.

During the past 12 months, did you attend any special events while on pleasure trips? > ____

1=Yes
2=No ----> GO TO QUESTION 52
-99=DK/NR ----> GO TO QUESTION 52

[ACCEPT UP TO 5 RESPONSES]

49. Which types of special events did you attend while on these pleasure trips?

> _____
> _____
> _____
> _____
> _____

50. Were any of these special events in Michigan? > ____

1=Yes
2=No ----> GO TO QUESTION 52
-99=DK/NR ----> GO TO QUESTION 52

[ACCEPT UP TO 5 RESPONSES]

51. Which types of special events did you attend in Michigan?

> _____
> _____
> _____
> _____
> _____

END ATTRACTIONS BLOCK

BEGIN MOST RECENT PLEASURE TRIP PROFILE BLOCK

Now I'd like to ask you about your most recent pleasure trip.

[PROBE FOR MONTH AND DAY; ENTER NUMERICAL VALUES FOR MONTH AND DAY; IF NECESSARY, PROBE FOR BEST GUESS OF DAY]

52. Approximately when did this trip begin -- the month and day?

MONTH CODES

1=January	4=April	7=July	10=October
2=February	5=May	8=August	11=November
3=March	6=June	9=September	12=December

MONTH > ____ DAY > ____ -99=DK/NR

[ACCEPT UP TO 3 RESPONSES; PROBE FOR SPECIFIC PURPOSE(S), ESPECIALLY IF RESPONDENT SAYS "VACATION"]

53. What was the purpose or purposes of this trip?

> _____
> _____
> _____

[ASK IF MORE THAN 1 PURPOSE MENTIONED; PROBE FOR SPECIFIC PURPOSE, ESPECIALLY IF RESPONDENT SAYS "VACATION"]

54. What would you say was the primary purpose of this trip?

> _____

[DO NOT READ LIST; ACCEPT UP TO 3 RESPONSES]

55. What types of transportation did you use? > ____ ____ ____

1=Car/truck without camping equipment
2=Car/truck with camping equipment
3=Self-contained recreation vehicle
4=Rental car
5=Airplane
6=Train
7=Ship/boat
8=Motorcycle
9=Bicycle
10=Motorcoach/Bus
11=Other
-99=DK/NR

56. Other

> _____

[IF RESPONDENT WAS ON A GROUP TOUR, PROBE FOR SIZE OF IMMEDIATE TRAVEL PARTY AS OPPOSED TO SIZE OF ENTIRE GROUP]

(ACCEPT 1-99 OR -99)

57. How many persons, including yourself, were in your immediate travel party? > ____

[IF NECESSARY, PROBE FOR RESPONDENT'S BEST GUESS OF AGE]

(ACCEPT 1-130 FOR AGE VARIABLES)

58. Beginning with yourself, please give me the gender and age of each person who went on this trip:

M=MALE F=FEMALE -55=REFUSED -99=DK/NR

	GENDER	AGE		GENDER	AGE
RESPONDENT	> ____	> ____	PERSON #2	> ____	> ____
PERSON #3	> ____	> ____	PERSON #4	> ____	> ____
PERSON #5	> ____	> ____	PERSON #6	> ____	> ____
PERSON #7	> ____	> ____	PERSON #8	> ____	> ____
PERSON #9	> ____	> ____	PERSON #10	> ____	> ____

59. Did your immediate travel party consist of family members only? > ____

1=Yes 2=No -99=DK/NR

60. Was this an overnight or day trip? > ____

1=Overnight

2=Day trip ----> GO TO QUESTION 66

-99=DK/NR ----> GO TO QUESTION 66

(ACCEPT 1-999)

61. How many nights were you away from home? > ____ -99=DK/NR

(ACCEPT 0-999; IF 0, SKIP NEXT 2 QUESTIONS)

62. How many nights did you spend in the state or province containing the main destination of this trip? > ____ -99=DK/NR

[ACCEPT UP TO 5 LOCATIONS]

63. In which locations did you spend these nights?

> _____
> _____
> _____
> _____
> _____

(ACCEPT 0-999)

64. While you were in the state or province containing the main destination of this trip, about how much, if anything, did you spend per night on lodging in hotels, motels, Bed & Breakfasts, or rental cabins?

> \$ ____ -99=DK/NR

[DO NOT READ LIST UNLESS NECESSARY TO STIMULATE RESPONSES]

65. What was the main type of lodging you used? > ____ -99=DK/NR

- 1=Friend or relative's home
- 2=Hotel, motel, or lodge
- 3=Bed & Breakfast
- 4=Rented cabin, cottage, or condominium
- 5=Owned cabin, cottage, or condominium
- 6=County, state, or federal campground
- 7=Commercial campground (e.g., KOA)
- 8=Boat/ship
- 9=Other

[READ LIST]

66. Which, if any, of the following activities did you participate in?

1=Yes 2=No -99=DK/NR

- Nightlife?> ____
- Visit a state or national park?> ____
- Visit a museum or hall of fame?> ____
- Visit an historic site?> ____
- Visit some other type of attraction?> ____
- Explore a small city or town?> ____
- Dine at a unique restaurant?> ____
- Fall color touring outside of traveling to and from
your destination?> ____
- General touring or driving for pleasure?> ____
- Visit a farmer's market or pick-your-own farm
or orchard?> ____
- Outdoor recreation?> ____

[ACCEPT UP TO 5 RESPONSES]

(ASK IF OUTDOOR RECREATION AFFIRMED ABOVE)

67. What outdoor recreation activities did you participate in?

> _____
> _____
> _____
> _____
> _____

68. Did you do any shopping on this trip? > ____

1=Yes

2=No ----> GO TO QUESTION 72

-99=DK/NR ----> GO TO QUESTION 72

[ACCEPT UP TO 5 RESPONSES]

69. What types of places did you shop at?

> _____
> _____
> _____
> _____
> _____

70. Did you plan to do any shopping before you left home on this trip? > ____

1=Yes

2=No ----> GO TO QUESTION 72

-99=DK/NR ----> GO TO QUESTION 72

71. Was shopping the only reason for this trip, a primary reason for this trip, or a secondary reason for this trip? > ____

1=Only

2=Primary

3=Secondary

-99=DK/NR

72. Did you attend a festival or event on this trip? > ____

1=Yes

2=No ----> GO TO QUESTION 75

-99=DK/NR ----> GO TO QUESTION 75

73. Did you plan to attend a festival or event before you left home on this trip? > ____

1=Yes
2=No ----> GO TO QUESTION 75
-99=DK/NR ----> GO TO QUESTION 75

74. Was attending a festival or event the only reason for this trip, a primary reason for this trip, or a secondary reason for this trip? > ____

1=Only 2=Primary 3=Secondary -99=DK/NR

75. Did you do any casino gaming on this trip? > ____

1=Yes
2=No ----> GO TO QUESTION 78
-99=DK/NR ----> GO TO QUESTION 78

76. Did you plan to participate in casino gaming before you left home on this trip? > ____

1=Yes
2=No ----> GO TO QUESTION 78
-99=DK/NR ----> GO TO QUESTION 78

77. Was casino gaming the only reason for this trip, a primary reason for this trip, or a secondary reason for this trip? > ____

1=Only 2=Primary 3=Secondary -99=DK/NR

(ACCEPT 0-999999 OR -99)

78. What would be your best estimate of how much your immediate travel party spent altogether while in the state or province containing the main destination of this trip? > \$_____ -99=DK/NR

79. Was this a vacation trip? > ____

1=Yes 2=No -99=DK/NR

[ENTER RESPONSE, E.G., 90 DAYS, 2 WEEKS, 3 MONTHS]

80. About how far in advance of this trip did you begin to make plans for it?
> _____

[ENTER RESPONSE, E.G., 90 DAYS, 2 WEEKS, 3 MONTHS]

81. About how far in advance of this trip did you make a final decision about where to go? > _____

82. Were any of the travel arrangements for this trip made by a travel agent?
> _____

1=Yes 2=No -99=DK/NR

83. For this trip, did you purchase a package, for which you paid one price, that included at least one night of lodging? > _____

1=Yes 2=No -99=DK/NR

84. What did you least enjoy about this trip?
> _____

85. And what did you most enjoy about this trip?
> _____

END MOST RECENT PLEASURE TRIP PROFILE BLOCK

[IF NECESSARY, PROBE FOR CITY/PLACE FARTEST FROM HOME]

86. What was the main destination of this trip?

City/Place: > _____

State/Province/Country: > _____

[DON'T READ; DOUBLE ENTRY REQUIRED]

1=Michigan destination ----> GO TO QUESTION 125

2=Non-Michigan destination

> _____

[DOUBLE ENTRY REQUIRED]

87. Was a place in Michigan the main destination of any of the pleasure trips you've taken in the past 12 months? > _____

1=Yes ----> GO TO QUESTION 90

2=No

-99=DK/NR

88. Have you ever taken a pleasure trip to a place in Michigan? > ____

1=Yes

2=No ----> GO TO QUESTION 140

[PROBE FOR YEAR; ENTER LAST TWO DIGITS OF YEAR]

89. When was the last time you took a pleasure trip to a place in Michigan?

> 19__

-99=DK/NR

GO TO QUESTION 140

BEGIN GENERAL MICHIGAN PLEASURE TRIP PROFILE BLOCK

90. Now I'd like to ask you about your most recent pleasure trip in Michigan.

[IF NECESSARY, EXPLAIN THAT WE NEED A PROFILE OF THEIR MOST RECENT PLEASURE TRIP IN MICHIGAN AS WELL AS THEIR MOST RECENT PLEASURE TRIP IN GENERAL.]

[PROBE FOR MONTH AND DAY; ENTER NUMERICAL VALUES FOR MONTH AND DAY; IF NECESSARY, PROBE FOR BEST GUESS OF DAY]

Approximately when did this trip begin -- the month and day?

MONTH CODES

1=January

4=April

7=July

10=October

2=February

5=May

8=August

11=November

3=March

6=June

9=September

12=December

MONTH > __ DAY > __ -99=DK/NR

[ACCEPT UP TO 3 RESPONSES; PROBE FOR SPECIFIC PURPOSE(S), ESPECIALLY IF RESPONDENT SAYS "VACATION"]

91. What was the purpose or purposes of this trip?

> _____

> _____

> _____

[ASK IF MORE THAN 1 PURPOSE MENTIONED; PROBE FOR SPECIFIC PURPOSE, ESPECIALLY IF RESPONDENT SAYS "VACATION"]

92. What would you say was the primary purpose of this trip?

> _____

[DO NOT READ LIST; ACCEPT UP TO 3 RESPONSES]

93. What types of transportation did you use? > ____ ____ ____

- 1=Car/truck without camping equipment
- 2=Car/truck with camping equipment
- 3=Self-contained recreation vehicle
- 4=Rental car
- 5=Airplane
- 6=Train
- 7=Ship or boat
- 8=Motorcycle
- 9=Bicycle
- 10=Motorcoach/Bus
- 11=Other ----> ENTER UNDER QUESTION 94
- 99=DK/NR

94. Other

> _____

[IF RESPONDENT WAS ON A GROUP TOUR, PROBE FOR SIZE OF IMMEDIATE TRAVEL PARTY AS OPPOSED TO SIZE OF ENTIRE GROUP]

(ACCEPT 1-99)

95. How many persons, including yourself, were in your immediate travel party? > ____

[IF NECESSARY, PROBE FOR RESPONDENT'S BEST GUESS OF AGE]

96. Beginning with yourself, please give me the gender and age of each person who went on this trip:

M=MALE F=FEMALE -55=REFUSED -99=DK/NR

	GENDER	AGE		GENDER	AGE
RESPONDENT	> ____	> ____	PERSON #2	> ____	> ____
PERSON #3	> ____	> ____	PERSON #4	> ____	> ____
PERSON #5	> ____	> ____	PERSON #6	> ____	> ____
PERSON #7	> ____	> ____	PERSON #8	> ____	> ____
PERSON #9	> ____	> ____	PERSON #10	> ____	> ____

97. Did your immediate travel party consist of family members only? > ____

1=Yes 2=No -99=DK/NR

98. Was this an overnight or day trip? > ____

1=Overnight

2=Day trip ----> GO TO QUESTION 104

-99=DK/NR ----> GO TO QUESTION 104

(ACCEPT 1-999)

99. How many nights were you away from home? > ____ -99=DK/NR

(ACCEPT 0-999; IF 0, SKIP NEXT 2 QUESTIONS)

100. How many nights were spent in Michigan? > ____ -99=DK/NR

[ACCEPT UP TO 5 LOCATIONS]

101. In which locations in Michigan did you spend these nights?

> _____
> _____
> _____
> _____
> _____

(ACCEPT 0-999)

102. While in Michigan, about how much, if anything, did you spend per night on lodging in hotels, motels, Bed & Breakfasts, or rental cabins?

> \$ ____ -99=DK/NR

[DO NOT READ LIST UNLESS NECESSARY TO STIMULATE RESPONSES]

103. What was the main type of lodging you used? > ____

1=Friend's or relative's home

2=Hotel, motel, or lodge

3=Bed & Breakfast

4=Rented cabin, cottage, or condominium

5=Owned cabin, cottage, or condominium

6=County, state, or federal campground

7=Commercial campground (e.g., KOA)

8=Boat/ship

9=Other

-99=DK/NR

[READ LIST]

104. Which, if any, of the following activities did you participate in?

1=Yes 2=No -99=DK/NR

Nightlife?> ____
Visit a state or national park?> ____
Visit a museum or hall of fame?> ____
Visit an historic site?> ____
Visit some other type of attraction?> ____
Explore a small city or town?> ____
Dine at a unique restaurant?> ____
Fall color touring outside of traveling to and from
your destination?> ____
General touring or driving for pleasure?> ____
Visit a farmer's market or pick-your-own farm
or orchard?> ____
Outdoor recreation?> ____

[ACCEPT UP TO 5 RESPONSES]

(ASK IF OUTDOOR RECREATION AFFIRMED ABOVE)

105. What outdoor recreation activities did you participate in while you were
in Michigan?

> _____
> _____
> _____
> _____
> _____

106. Did you do any shopping on this trip? > ____

1=Yes

2=No ----> GO TO QUESTION 110

-99=DK/NR ----> GO TO QUESTION 110

[ACCEPT UP TO 5 RESPONSES]

107. What types of places did you shop at?

> _____
> _____
> _____
> _____
> _____

108. Did you plan to do any shopping before you left home on this trip? > ____

1=Yes
2=No ----> GO TO QUESTION 110
-99=DK/NR ----> GO TO QUESTION 110

109. Was shopping the only reason for this trip, a primary reason for this trip, or a secondary reason for this trip? > ____

1=Only 2=Primary 3=Secondary -99=DK/NR

110. Did you attend a festival or event on this trip? > ____

1=Yes
2=No ----> GO TO QUESTION 113
-99=DK/NR ----> GO TO QUESTION 113

111. Did you plan to attend a festival or event before you left home on this trip? > ____

1=Yes
2=No ----> GO TO QUESTION 113
-99=DK/NR ----> GO TO QUESTION 113

112. Was attending a festival or event the only reason for this trip, a primary reason for this trip, or a secondary reason for this trip? > ____

1=Only 2=Primary 3=Secondary -99=DK/NR

113. Did you do any casino gaming on this trip? > ____

1=Yes
2=No ----> GO TO QUESTION 116
-99=DK/NR ----> GO TO QUESTION 116

114. Did you plan to participate in casino gaming before you left home on this trip? > ____

1=Yes
2=No ----> GO TO QUESTION 116
-99=DK/NR ----> GO TO QUESTION 116

115. Was casino gaming the only reason for this trip, a primary reason for this trip, or a secondary reason for this trip? > ____

1=Only 2=Primary 3=Secondary -99=DK/NR

(ACCEPT 0-999999)

116. What would be your best estimate of how much your immediate travel party spent altogether on this trip while in Michigan? > \$ _____ -99=DK/NR

117. Was this a vacation trip? > ____

1=Yes 2=No -99=DK/NR

[ENTER RESPONSE, E.G., 90 DAYS, 2 WEEKS, 3 MONTHS]

118. About how far in advance of this trip did you begin to make plans for it? > _____

[ENTER RESPONSE, E.G., 90 DAYS, 2 WEEKS, 3 MONTHS]

119. About how far in advance of this trip did you make a final decision about where to go? > _____

120. Were any of the travel arrangements for this trip made by a travel agent? > ____

1=Yes 2=No -99=DK/NR

121. For this trip, did you purchase a package, for which you paid one price, that included at least one night of lodging? > ____

1=Yes 2=No -99=DK/NR

122. What did you least enjoy about this trip?

> _____

123. And what did you most enjoy about this trip?

> _____

[IF NECESSARY, PROBE FOR CITY/PLACE FARTHEST FROM HOME]

124. What was the main destination of this trip?

City/Place in Michigan: > _____

END GENERAL MICHIGAN PLEASURE TRIP PROFILE BLOCK
BEGIN INFLUENCE BLOCK

125. Before you left home for this most recent pleasure trip in Michigan, did you see or hear any advertisements about travel in Michigan? > ____

1=Yes

2=No ----> GO TO QUESTION 136

-99=DK/NR ----> GO TO QUESTION 136

126. Did you see or hear 1 ad or more than 1 ad about travel in Michigan? > ____

1=1 ad

2=More than 1 ad ----> [USE THE PHRASE "THESE ADS" RATHER THAN

-99=DK/NR "THIS AD" IN QUESTIONS IN THIS SECTION]

[DO NOT READ LIST; ACCEPT UP TO 3 RESPONSES; PROBE FOR ANSWERS]

127. Where did you see or hear this (these) ad(s) about travel in Michigan?

> ____ -99=DK/NR

1=TV

2=Radio

3=Newspaper

4=Magazine

5=Billboard/outdoors

6=Travel agent

7=Travel show

8=Direct mail advertisement

9=Internet/on-line service

10=CD-ROM

11=Chamber of commerce

12=Convention and visitors bureau

13=Highway welcome center

14=State of Michigan publication

15=Other

128. Did this (these) ad(s) have no influence, a partial influence, or a primary influence on your decision to travel in Michigan? > ____

1=No influence

3=Primary influence

2=Partial influence

-99=DK/NR

129. Did this (these) ad(s) promote travel to a specific destination in Michigan or travel to Michigan in general? > ____

1=Travel to a specific destination in Michigan

2=Travel to Michigan in general ----> GO TO QUESTION 131

-99=DK/NR ----> GO TO QUESTION 131

130. Which destination in Michigan?

> _____

131. Did you contact the organization that sponsored this (these) ad(s) to request additional travel information? > ____

1=Yes ----> GO TO QUESTION 134

2=No

-99=DK/NR

132. Did you contact any other organization to obtain travel information about Michigan? > ____

1=Yes

2=No ----> GO TO QUESTION 136

-99=DK/NR ----> GO TO QUESTION 136

133. What organization did you contact?

> _____

134. Did you receive the information you requested before you left home for your trip? > ____

1=Yes

2=No ----> GO TO QUESTION 136

-99=DK/NR ----> GO TO QUESTION 136

135. Did the information on Michigan you received have no influence, a partial influence, or a primary influence on your decision to travel in Michigan? > ____

1=No influence

3=Primary influence

2=Partial influence

-99=DK/NR

END INFLUENCE BLOCK

BEGIN MICHIGAN PLEASURE TRIP HISTORY BLOCK

136. Was this most recent pleasure trip in Michigan the first pleasure trip you've ever taken in this state? > ____

1=Yes ----> GO TO QUESTION 140

2=No

-99=DK/NR

(ACCEPT 1-200; IF 1, GO TO QUESTION 140)

137. About how many pleasure trips to places in Michigan have you taken in the past 12 months? > ____ pleasure trips

[IF RESPONDENT IS UNABLE TO GIVE A SPECIFIC NUMBER, PROBE:]

In the past 12 months, would you say that you've taken. . .

2=1 to 3 pleasure trips?

5=4 to 6 pleasure trips?

8=7 to 9 pleasure trips?

15=10 to 20 pleasure trips?

25=More than 20 pleasure trips?

-99=DK/NR

[NOTE: USE CODES ONLY IF RESPONDENT DOESN'T GIVE A SPECIFIC RESPONSE]

138. Did any of these pleasure trips in Michigan take place on holidays?

> ____

1=Yes

2=No ----> GO TO QUESTION 140

-99=DK/NR ----> GO TO QUESTION 140

[DO NOT READ LIST]

139. On which holidays did these pleasure trips in Michigan occur?

> ____

1=Martin Luther King Day

8=Labor Day

2=Washington's Birthday

9=Yom Kippur

3=Easter/Good Friday

10=Thanksgiving

4=Mother's Day

11=Christmas/New Years

5=Memorial Day

12=Other holiday(s)

6=Father's Day

-99=DK/NR

7=Fourth of July

END MICHIGAN PLEASURE TRIP HISTORY BLOCK

BEGIN MICHIGAN TRAVEL EXPECTATIONS BLOCK

140. During the next 12 months, do you plan to take any pleasure trips to places in Michigan? > ____

1=Yes

2=No ----> GO TO QUESTION 143

-99=DK/NR

[DO NOT READ LIST]

141. Compared to the preceding 12 months, during the next 12 months do you expect to take more, fewer, or about the same number of pleasure trips in Michigan? > ____

1=More 2=Fewer 3=Same -99=DK/NR

142. Do you plan to take any pleasure trips in Michigan. . .

1=Yes 2=No -99=DK/NR

This fall? > ____

How about this Thanksgiving? > ____

How about this Christmas or New Years? > ____

END MICHIGAN TRAVEL EXPECTATIONS BLOCK
BEGIN MICHIGAN TRIP VOLUME BLOCK

143. Now we'd like to find out how many trips you may have recently taken in Michigan. Here we'd like to get information on any kind of trips you may have taken in Michigan, including business trips.

[RESPONSE SHOULD INCLUDE ANY TRIPS RESPONDENT MAY HAVE ALREADY TOLD YOU ABOUT]

(ACCEPT 0-100; IF 0 OR -99, GO TO QUESTION 149)

How many trips of any kind to places in Michigan have you taken that occurred wholly or partially during [MONTH PRECEDING CURRENT MONTH]?
> _____ trips -99=DK/NR

[IF MORE THAN 1 TRIP WAS TAKEN, SAY: I'd like to ask you about the most recent trip that occurred wholly or partially during [MONTH PRECEDING CURRENT MONTH]

144. Was this trip primarily for the purpose of conducting business or attending a convention, seminar, or meeting? > ____

1=Yes ----> GO TO QUESTION 146
2=No
-99=DK/NR

145. Was this trip primarily for some purpose other than business or pleasure, such as moving a household, or going to a funeral or wedding in another city? > ____

1=Yes
2=No ----> GO TO QUESTION 149
-99=DK/NR ----> GO TO QUESTION 149

146. Was this an overnight or day trip? > ____

1=Overnight
2=Day trip ----> GO TO QUESTION 149
-99=DK/NR ----> GO TO QUESTION 149

(ACCEPT 0-999)

147. How many nights were spent in Michigan? > ____ -99=DK/NR

[DO NOT READ LIST UNLESS NECESSARY TO STIMULATE RESPONSES]

148. What was the main type of lodging you used? > ____

1=Friend or relative's home
2=Hotel, motel, or lodge
3=Bed & Breakfast
4=Rented cabin, cottage, or condominium
5=Owned cabin, cottage, or condominium
6=County, state, or federal campground
7=Commercial campground (e.g., KOA)
8=Boat/ship
9=Other
-99=DK/NR

END MICHIGAN TRIP VOLUME BLOCK

BEGIN PERSONAL/HOUSEHOLD CHARACTERISTICS BLOCK

149. To conclude, we'd like to ask just a few questions to help us classify your answers.

In what city do you live? > _____

150. And your state or province? > _____

151. And your zip or postal code? > _____

152. In what county do you live? > _____

[READ LIST]

153. Do any of the following types of persons live in your household?

1=Yes 2=No -55=Refused -99=DK/NR

Pre-school child? > ____

School-age child under age 18? > ____

Senior citizen? > ____

Handicapped person? > ____

(ACCEPT 1-99 OR -99)

154. How many persons, including yourself, live in your household? > ____

(ACCEPT 1-99 OR -99)

155. How many adults over age 17, including yourself, live in this household?
> ____

(ACCEPT 0-99)

156. How many full-time wage-earners live in your household? > ____

-55=Refused -99=DK/NR

[READ LIST; ACCEPT UP TO 2 RESPONSES]

157. Are you..... > ____ ____

1=Employed full-time;

2=Employed part-time;

3=Retired;

4=Not employed;

5=A homemaker;

6=A student; or

7=In some other employment situation?

-55=Refused

-99=DK/NR

158. What racial or ethnic group do you belong to?

> _____

-55=Refused

-99=DK/NR

159. The median household income is \$31,000. Would you say your total household income before taxes in 1996 was above or below the median?

> ____

1=Above the median

2=Below the median ----> GO TO QUESTION 161

-55=Refused [DO NOT READ] ----> GO TO QUESTION 161

-99=DK/NR ----> GO TO QUESTION 161

160. Was your total household income above \$50,000? > ____

1=Yes 2=No -55=Refused -99=DK/NR

161. Do you or any member of your household have access to the Internet?
> ____

1=Yes

2=No ----> GO TO QUESTION 164

-55=Refused ----> GO TO QUESTION 164

-99=DK/NR ----> GO TO QUESTION 164

162. During the past 12 months, have you or any member of your household used the Internet to obtain travel information? > ____

1=Yes

2=No ----> GO TO QUESTION 164

-55=Refused ----> GO TO QUESTION 164

-99=DK/NR ----> GO TO QUESTION 164

163. During the past 12 months, have you or any member of your household used the Michigan Travel Bureau's site on the World Wide Web to obtain travel information? > ____

1=Yes 2=No -55=Refused -99=DK/NR

END PERSONAL/HOUSEHOLD CHARACTERISTICS BLOCK

164. That's all the questions I have. Thank you very much for your time! Have a good evening!

[TERMINATE]

APPENDIX B

RESULTS EXCLUDING THE VISITING FRIENDS AND RELATIVES (VFR)
MARKET

Table B1. Summary of statistics for the three planning intervals (VFR excluded).

	Total trip planning interval (n=1034)	Post decision interval (n=1034)	Information processing interval (n=1034)
Minimum	0.0	0.0	0.0
Maximum	365	365	363
Range	365	365	363
Mean	76.5	68.4	8.2
Median	30.0	30.0	0.0
Standard deviation	109.1	104.3	34.9

Table B1-1. Summary of statistics for the three planning intervals (VFR included).

	Total trip planning interval (n=1476)	Post decision interval (n=1476)	Information processing interval (n=1476)
Minimum	0.0	0.0	0.0
Maximum	365	365	363
Range	365	365	363
Mean	70.1	63.3	6.9
Median	30.0	30.0	0.0
Standard deviation	104.4	100.3	31.1

Table B2. Frequency distributions for total trip planning interval (VFR excluded).

Length of planning interval (Days)	Percent of respondents (n=1034)	Cumulative Percent (n=1034)
less than 24 hours	2.6	2.6
1	5.0	7.6
2	3.7	11.3
3	2.0	13.3
4	0.5	13.8
5	0.4	14.2
7	13.5	27.7
10	0.1	27.8
11	0.1	27.9
14	10.9	38.8
21	3.9	42.7
28	0.2	42.9
30	17.6	60.5
35	0.1	60.6
42	1.3	61.9
45	0.3	62.3
56	0.1	62.4
60	10.1	72.5
70	0.2	72.7
75	0.1	72.8
90	6.1	78.9
120	3.5	82.4
150	0.9	83.4
180	5.2	88.6
210	0.3	88.9
240	0.5	89.4
270	0.4	89.8
300	0.1	90.0
360	0.1	90.0
364	0.1	90.1
365	9.9	100.0
Total	100.0	

Table B3. Frequency distributions for post decision interval (VFR excluded).

Length of post decision interval (Days)	Percent of respondents (n=1034)	Cumulative Percent (n=1034)
less than 24 hours	3.6	3.6
1	7.5	11.1
2	4.3	15.3
3	2.2	17.6
4	0.7	18.3
5	0.7	18.9
7	13.9	32.9
10	0.2	33.0
11	0.1	33.2
14	10.8	44.0
21	3.8	47.9
28	0.2	48.1
30	17.2	65.3
35	0.1	65.4
42	1.2	66.6
45	0.3	67.0
56	0.1	67.1
60	8.5	75.6
70	0.2	75.8
90	5.2	81.0
120	3.3	84.3
150	0.7	85.0
180	5.0	90.0
210	0.3	90.4
240	0.5	90.8
270	0.3	91.1
300	0.3	91.4
360	0.1	91.5
364	0.1	91.6
365	8.4	100.0
Total	100.0	

Table B4. Reported frequencies by selected time intervals for the total trip planning and post decision interval (VFR excluded).

Time interval (Days)	Total trip planning interval (n=1034)	Post decision interval (n=1034)
0-7	27.7%	32.9%
8-15	11.1%	11.1%
16-30	21.7%	21.3%
31-60	12.0%	10.3%
61-90	6.4%	5.4%
Over 90	21.1%	19.0%

Table B4-1. Reported frequencies by selected time intervals for the total trip planning and post decision interval (VFR included).

Time interval (Days)	Total trip planning interval (n=1476)	Post decision interval (n=1476)
0-7	28.9%	33.9%
8-15	12.4%	12.1%
16-30	22.2%	21.5%
31-60	12.0%	10.6%
61-90	5.9%	5.0%
Over 90	18.7%	16.9%

Table B5. Frequency distributions for information processing interval (VFR excluded).

Length of information processing interval (Days)	Percent of respondents (n=1034)	Cumulative Percent (n=1034)	Length of information processing interval (Days)	Percent of respondents (n=1034)	Cumulative Percent (n=1034)
0	83.91761	83.91761	65	0.136516	96.61701
1	0.5122	84.42981	69	0.202987	96.82
2	0.574168	85.00398	76	0.129692	96.94969
3	0.422375	85.42636	83	0.049714	96.9994
4	0.152356	85.57871	89	0.210964	97.21037
5	0.076666	85.65538	90	0.406068	97.61644
6	1.123014	86.77839	95	0.154837	97.77127
7	1.880661	88.65905	99	0.098406	97.86968
9	0.299179	88.95823	119	0.126292	97.99597
11	0.083518	89.04175	120	0.409612	98.40558
12	0.541179	89.58293	150	0.398832	98.80442
13	0.216503	89.79943	180	0.055438	98.85985
14	0.348338	90.14777	185	0.552083	99.41194
15	0.158207	90.30598	335	0.15758	99.56952
16	0.801957	91.10793	351	0.263914	99.83343
18	0.086981	91.19491	362	0.082491	99.91592
19	0.139807	91.33472	363	0.084078	100
20	0.078213	91.41293	Total	100	
21	0.156545	91.56948			
23	0.370921	91.9404			
27	0.054553	91.99495			
28	0.117026	92.11198			
29	0.630779	92.74276			
30	1.561171	94.30393			
37	0.083518	94.38745			
39	0.2973	94.68475			
40	0.0539	94.73865			
46	0.567771	95.30642			
53	0.404943	95.71136			
57	0.087098	95.79846			
58	0.062226	95.86069			

Table B5-1. Frequency distributions for information processing interval (VFR included).

Length of information processing interval (Days)	Percent of respondents (n=1476)	Cumulative percent (n=1476)	Length of information processing interval (Days)	Percent of respondents (n=1476)	Cumulative percent (n=1476)
0	85.1	85.1	65	0.1	97.7
1	0.5	85.6	69	0.2	97.9
2	0.7	86.3	76	0.1	98.0
3	0.4	86.7	83	0.0	98.0
4	0.2	86.9	89	0.1	98.1
5	0.2	87.1	90	0.4	98.5
6	0.9	88.0	95	0.1	98.6
7	1.7	89.7	99	0.1	98.6
9	0.3	90.0	106	0.1	98.6
11	0.1	90.1	119	0.1	98.6
12	0.6	90.7	120	0.4	99.0
13	0.3	91.0	150	0.3	99.3
14	0.3	91.3	155	0.1	99.4
15	0.1	91.4	180	0.0	99.4
16	0.7	92.1	185	0.4	99.7
18	0.1	92.2	305	0.0	99.7
19	0.2	92.4	335	0.1	99.8
20	0.1	92.5	351	0.2	99.9
21	0.1	92.6	362	0.1	99.9
23	0.4	93.0	363	0.1	100.0
25	0.1	93.1			
27	0.2	93.3			
28	0.2	93.5			
29	0.4	93.9			
30	1.6	95.5			
35	0.1	95.6			
37	0.1	95.7			
39	0.3	96.0			
40	0.0	96.0			
42	0.1	96.1			
46	0.4	96.5			
53	0.4	96.9			
57	0.1	97.0			
58	0.2	97.2			
60	0.4	97.6			

Table B6. Sources of information and media habits of instant and hesitant decision-makers (VFR excluded).

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision- Makers	Test Statistic	Significance
<u>Information Source Most Frequently</u>					
<u>Used in Planning Pleasure Trip¹</u>	<u>n=1000</u>	<u>n=837</u>	<u>n=162</u>	---	---
AAA/CAA	25.9%	26.3%	23.9%		
Travel agency	17.7%	18.1%	15.7%		
Friends/relatives/co-workers	18.8%	17.1%	27.5%		
Chamber of commerce	5.0%	5.0%	4.8%		
Other travel guide	5.4%	5.3%	5.8%		
Magazine	4.2%	4.1%	5.0%		
Internet/online service	8.2%	7.9%	9.5%		
State travel office	3.5%	3.3%	4.6%		
Travel section of newspaper	2.4%	2.4%	2.3%		
Convention/visitors bureau	1.3%	1.1%	2.4%		
Mobil Travel Guide	1.8%	2.0%	1.1%		
Highway welcome centers	0.5%	0.5%	0.5%		
Travel show	0.2%	0.2%	0.6%		
CD-ROM	0.1%	0.1%	0.0%		
Other source	10.2%	10.2%	10.3%		
No source	12.9%	13.5%	9.7%		
<u>Media Considered Most Helpful</u>					
<u>When Selecting Destinations</u>	<u>n=830</u>	<u>n=689</u>	<u>n=141</u>	$X^2 = 10.54$	0.014
Magazine	55.3%	55.7%	53.2%		
Newspaper	22.9%	21.2%	31.5%		
Television	18.6%	20.0%	11.3%		
Radio	3.3%	3.0%	4.3%		
<u>Have Access to the Internet</u>	<u>n=838</u>	<u>n=710</u>	<u>n=128</u>	$X^2 = 3.27$	0.071
% of Yes	52.0%	50.7%	59.4%		
<u>Have Used the Internet to Obtain</u>					
<u>Travel information</u>	<u>n=431</u>	<u>n=355</u>	<u>n=76</u>	$X^2 = 0.76$	0.385
% of Yes	58.7%	57.7%	63.2%		
<u>Have Used Michigan Travel</u>					
<u>bureau's Site to Obtain Travel</u>					
<u>Information</u>	<u>n=249</u>	<u>n=202</u>	<u>n=47</u>	$X^2 = 0.65$	0.420
% of Yes	17.3%	16.3%	21.3%		
<u>Have Called Any State or</u>					
<u>Province's Toll-Free Number to</u>					
<u>Request Travel Information</u>	<u>n=1032</u>	<u>n=865</u>	<u>n=167</u>	$X^2 = 0.38$	0.536
% of Yes	36.2%	36.6%	34.1%		

¹ Percentages add to more than 100% due to multiple responses.

Table B7. Trip characteristics and behaviors of instant and hesitant decision-makers (VFR excluded).

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision- Makers	Test Statistic	Significance
<u>Season When Trip Began</u>	<u>n=1024</u>	<u>n=857</u>	<u>n=167</u>	$X^2 = 1.84$	0.606
Winter (December - February)	15.3%	15.9%	12.6%		
Spring (March - May)	12.7%	13.0%	11.4%		
Summer (June - August)	46.1%	45.4%	49.7%		
Fall (September - November)	25.9%	25.8%	26.3%		
<u>Primary Purpose of Trip</u>	<u>n=1035</u>	<u>n=868</u>	<u>n=167</u>	$X^2 = 10.91$	0.053
Outdoor recreation	20.8%	20.3%	23.4%		
Entertainment	19.5%	20.5%	14.4%		
Relaxation	14.9%	15.0%	14.4%		
General touring	5.1%	5.1%	5.4%		
Vacation/holiday/recreation/ amusement/pleasure	32.8%	33.2%	30.5		
Other	7.0%	6.0%	12.0		
<u>Activities Participated In</u>					
General touring or driving for pleasure	61.0%	59.6%	68.7%	$X^2 = 4.84$	0.028
Shopping	54.7%	54.6%	55.4%	$X^2 = 0.03$	0.849
Outdoor recreation	61.6%	60.1%	69.3%	$X^2 = 4.97$	0.026
Explore small city or town	56.3%	55.1%	62.7%	$X^2 = 3.20$	0.074
Dine at unique restaurant	51.0%	50.8%	51.8%	$X^2 = 0.05$	0.814
Visit other attraction	47.9%	47.5%	50.0%	$X^2 = 0.36$	0.548
Nightlife	32.8%	32.1%	36.1%	$X^2 = 1.03$	0.309
Visit state or national park	34.2%	33.0%	40.6%	$X^2 = 3.54$	0.060
Visit an historic site	31.1%	30.0%	36.5%	$X^2 = 2.77$	0.096
Attend a festival or event	24.7%	25.7%	19.5%	$X^2 = 2.62$	0.106
Visit museum or hall of fame	15.6%	14.4%	21.7%	$X^2 = 5.60$	0.018
Fall color touring	9.7%	9.2%	12.1%	$X^2 = 1.30$	0.253
Casino gaming	12.2%	12.6%	10.1%	$X^2 = 0.76$	0.384
<u>Number of Activities Participated in During Pleasure Trip (Avg.)</u>	<u>n=1019</u> 5.0	<u>n=854</u> 5.0	<u>n=166</u> 5.4	$t=1.61$	0.205
<u>Main Type(s) of Lodging Used</u>	<u>n=873</u>	<u>n=723</u>	<u>n=150</u>	$X^2 = 15.15$	0.056
Hotel/motel/lodge	49.0%	46.5%	61.3%		
Friend's/relative's home	12.6%	13.7%	7.3%		
Owned cabin/cottage/condominium	9.5%	10.2%	6.0%		
Rented cabin/cottage/condominium	9.3%	9.5%	8.0%		
Commercial campground	6.4%	6.5%	6.0%		
Public campground	5.3%	5.3%	5.3%		
Bed & Breakfast	1.6%	1.7%	1.3%		
Boat/ship	0.7%	0.6%	1.3%		
Other	5.6%	6.1%	3.3%		

Table B7. Trip characteristics and behaviors of instant and hesitant decision-makers (VFR excluded), continued.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision- Makers	Test Statistic	Significance
<u>Mode(s) of Transportation Used¹</u>	<u>n=1030</u>	<u>n=864</u>	<u>n=166</u>	---	---
Car/ truck without camping equipment	89.7%	89.5%	90.5%		
Car/ truck with camping equipment	3.6%	3.3%	5.3%		
Motorcoach	2.4%	2.8%	0.3%		
Airplane	2.0%	2.0%	1.7%		
Ship/boat	1.6%	1.5%	2.3%		
Self-contained recreation vehicle	1.8%	1.8%	1.9%		
Rental car	0.9%	0.9%	1.1%		
Motorcycle	0.2%	0.2%	0.0%		
Train	0.2%	0.3%	0.0%		
Bicycle	0.2%	0.3%	0.0%		
Other	1.1%	0.9%	1.9%		
<u>Travel Party</u>					
	<u>n=1021</u>	<u>n=855</u>	<u>n=166</u>		
Average party size	3.4	3.4	3.4	t = 0.14	0.892
	<u>n=987</u>	<u>n=832</u>	<u>n=155</u>		
Average age of all persons in party	37.7	37.7	37.8	t = 0.61	0.952
<u>Included person(s) aged...¹</u>	<u>n=1398</u>	<u>n=1191</u>	<u>n=207</u>	---	---
Less than 10	31.6%	33.5%	21.8%		
11 to 20	36.4%	36.4%	36.0%		
21 to 30	56.0%	56.5%	53.5%		
31 to 40	71.3%	72.1%	67.1%		
41 to 50	62.8%	62.0%	67.0%		
51 to 60	36.8%	36.6%	37.4%		
61 to 70	16.7%	17.6%	11.9%		
Above 71	6.4%	6.9%	3.9%		
<u>No. Places Where Spent Night</u>	<u>n=871</u>	<u>n=723</u>	<u>n=148</u>	X ² = 7.85	0.005
Spent night at 1 place in MI	90.6%	91.8%	84.5%		
Spent night more than 1 place in MI	9.4%	8.2%	15.5%		
	<u>n=870</u>	<u>n=723</u>	<u>n=147</u>		
<u>No. Places Where Spent Night (Avg.)</u>	1.2	1.1	1.3	t = 2.11	0.037

Table B7. Trip characteristics and behaviors of instant and hesitant decision-makers (VFR excluded), continued.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision-Makers	Test Statistic	Significance
<u>Main Destination Region in Michigan²</u>	<u>n=998</u>	<u>n=836</u>	<u>n=162</u>	$X^2 = 8.08$	0.152
Upper Peninsula	16.7%	15.7%	22.2%		
Northwest Lower Peninsula	19.9%	19.6%	21.6%		
Northeast Lower Peninsula	18.4%	18.4%	18.5%		
Southwest Lower Peninsula	15.3%	16.1%	11.1%		
Southeast Lower Peninsula without Detroit area	19.0%	19.9%	14.8%		
Detroit area (Wayne, Oakland, and Macomb Counties)	10.5%	10.3%	11.7		
<u>No. Pleasure Trips Taken to Places in Michigan (Avg.)</u>	<u>n=1017</u> 4.4	<u>n=852</u> 4.3	<u>n=165</u> 4.7	$t = 0.64$	0.520
<u>Types of Trip</u>					
Overnight trip	<u>n=1034</u>	<u>n=868</u>	<u>n=166</u>	$X^2 = 5.29$	0.021
% of Yes	84.4%	83.3%	90.4%		
Vacation Trip	<u>n=1028</u>	<u>n=861</u>	<u>n=167</u>	$X^2 = 3.67$	0.055
% of Yes	72.4%	71.2%	78.4%		
Family Trip	<u>n=1025</u>	<u>n=861</u>	<u>n=164</u>	$X^2 = 0.20$	0.657
% of Yes	67.4%	67.1%	68.9%		
Arranged by Travel Agent	<u>n=1031</u>	<u>n=865</u>	<u>n=166</u>	$X^2 = 1.24$	0.265
% of Yes	3.2%	3.5%	1.8%		
Package Tour with Lodging	<u>n=1032</u>	<u>n=865</u>	<u>n=167</u>	$X^2 = 9.17$	0.002
% of Yes	7.1%	6.0%	12.6%		

Table B7. Trip characteristics and behaviors of instant and hesitant decision-makers (VFR excluded), continued.

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision-Makers	Test Statistics	Significance
<u>Trip Duration (Average)</u>					
No. nights away from home	<u>n=874</u> 4.1	<u>n=724</u> 3.9	<u>n=150</u> 5.0	t = 1.57	0.118
No. nights spent in MI	<u>n=872</u> 3.8	<u>n=723</u> 3.7	<u>n=149</u> 4.6	t = 1.39	0.167
<u>Average Expenditures in Michigan</u>					
Total spending per trip	<u>n=970</u> \$617.32	<u>n=814</u> \$616.74	<u>n=156</u> \$620.34	t = 0.04	0.968

¹ Percentages add to more than 100% due to multiple responses.

² Definitions of regions:

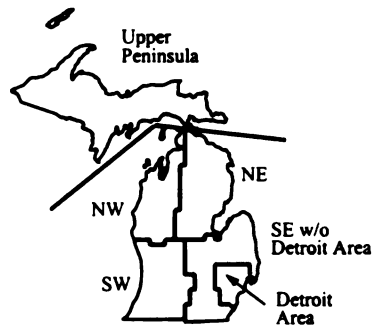


Table B8. Demographic and socioeconomic characteristics of instant and hesitant decision-makers (VFR excluded).

Variable	All Pleasure Travelers	Instant Decision- Makers	Hesitant Decision- Makers	Test Statistics	Significance
<u>State/Province of Principal Residence</u>	<u>n=1035</u>	<u>n=869</u>	<u>n=166</u>	$X^2 = 10.86$	0.093
Illinois	12.1%	11.0%	17.5%		
Indiana	8.8%	9.7%	4.2%		
Michigan	51.5%	52.1%	48.2%		
Minnesota	2.2%	2.2%	2.4%		
Ohio	12.9%	12.5%	15.1%		
Wisconsin	5.3%	5.2%	6.0%		
Ontario	7.1%	7.2%	6.6%		
<u>Household Contained...</u>					
Pre-school child(ren)	15.2%	15.2%	14.7%	$X^2 = 0.03$	0.868
School age child(ren)	35.5%	35.7%	34.4%	$X^2 = 0.11$	0.743
Senior citizen(s)	16.4%	16.2%	17.8%	$X^2 = 0.27$	0.607
Handicapped person(s)	4.3%	4.3%	4.3%	$X^2 = 0.00$	0.999
<u>Gross Annual Household Income</u>	<u>n=945</u>	<u>n=795</u>	<u>n=150</u>	$X^2 = 0.16$	0.922
Below \$31,000	19.0%	19.2%	18.0%		
\$31,001 - \$50,000	28.4%	28.2%	29.3%		
Above \$50,000	52.6%	52.6%	52.7%		
<u>Race/Ethnicity</u>	<u>n=876</u>	<u>n=740</u>	<u>n=136</u>	$X^2 = 11.75$	0.068
White	93.8%	93.9%	93.4%		
African American	3.4%	3.5%	2.9%		
Hispanic	0.7%	0.5%	1.5%		
Native American	0.7%	0.8%	0.0%		
Asian American	0.8%	0.9%	0.0%		
Multiracial	0.2%	0.1%	0.7%		
Other	0.3%	0.1%	1.5%		
<u>Employment Situation¹</u>	<u>n=1019</u>	<u>n=855</u>	<u>n=164</u>	---	---
Employed full-time	67.1%	66.6%	69.8%		
Retired	11.4%	11.7%	9.5%		
Employed part-time	9.9%	9.5%	12.3%		
Homemaker	7.2%	7.3%	6.7%		
Student	5.4%	5.4%	5.3%		
Other type(s) employment	2.0%	2.0%	1.8%		
Not employed	2.3%	2.3%	2.5%		
<u>Number of Full-time Wage-Earners in Household (Avg.)</u>	<u>n=1020</u>	<u>n=856</u>	<u>n=164</u>	$t = 0.58$	0.564
	1.5	1.5	1.5		

¹ Percentages add to more than 100% due to multiple responses.

Table B9. Relative frequencies of three different dates related to trip planning by three parts of months of the month (VFR excluded).

Segment of Month	Date trip began (%) (n=883)	Date planning began (%) (n=883)	Date destination selected (%) (n=883)
Jan1 through Jan 10	2.9	2.9	1.9
Jan11 through Jan 20	3.3	3.8	1.9
Jan21 through Jan 31	2.3	2.2	0.9
Feb1 through Feb 10	2.4	2.3	1.6
Feb 11 through Feb 20	2.6	2.5	2.9
Feb 21 through Feb 28	1.3	1.0	1.0
Mar 1 through Mar 10	2.4	2.4	1.3
Mar 11 through Mar 20	2.1	2.2	1.4
Mar 21 through Mar 31	1.1	1.2	0.9
Apr 1 through Apr 10	1.6	1.4	1.1
Apr 11 through Apr 20	1.8	1.9	0.9
Apr 21 through Apr 30	1.5	1.1	0.6
May 1 through May 10	4.0	4.0	2.1
May 11 through May 20	3.6	3.1	2.1
May 21 through May 31	2.0	2.1	2.0
Jun 1 through Jun 10	4.9	4.5	2.6
Jun 11 through Jun 20	4.1	4.0	3.5
Jun 21 through Jun 30	3.7	3.1	3.0
Jul 1 through Jul 10	5.2	5.6	7.6
Jul 11 through Jul 20	5.1	5.3	7.1
Jul 21 through Jul 31	3.4	3.7	3.1
Aug 1 through Aug 10	5.3	5.1	6.5
Aug 11 through Aug 20	5.4	5.0	8.2
Aug 21 through Aug 31	3.9	4.4	4.5
Sep1 through Sep 10	3.8	3.9	6.5
Sep 11 through Sep 20	2.0	2.3	2.6
Sep 21 through Sep 30	3.6	3.6	2.1
Oct 1 through Oct 10	2.2	2.0	3.0
Oct 11 through Oct 20	1.9	2.8	3.9
Oct 21 through Oct 31	1.7	1.3	1.3
Nov 1 through Nov 10	2.4	2.5	1.1
Nov 11 through Nov 20	2.0	1.8	2.7
Nov 21 through Nov 30	2.2	2.3	2.2
Dec 1 through Dec 10	0.9	1.1	2.3
Dec 11 through Dec 20	0.3	0.4	1.2
Dec 21 through Dec 31	1.1	1.2	2.4
Total	100.0	100.0	100.0

Table B9-1 Relative frequencies of three different dates related to trip planning by three parts of months of the month (VFR included).

Segment of Month	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Jan1 through Jan 10	1.7	3.0	2.9
Jan11 through Jan 20	1.6	2.8	3.0
Jan21 through Jan 31	0.8	2.2	2.1
Feb1 through Feb 10	1.6	2.3	2.2
Feb 11 through Feb 20	2.4	2.0	1.9
Feb 21 through Feb 28	0.8	1.1	0.9
Mar 1 through Mar 10	1.1	2.3	2.2
Mar 11 through Mar 20	1.3	2.2	2.3
Mar 21 through Mar 31	0.7	1.4	1.5
Apr 1 through Apr 10	1.5	2.0	1.9
Apr 11 through Apr 20	1.3	2.1	2.3
Apr 21 through Apr 30	1.0	1.9	1.4
May 1 through May 10	2.2	4.0	4.0
May 11 through May 20	2.1	3.3	2.9
May 21 through May 31	2.4	2.6	2.8
Jun 1 through Jun 10	3.2	4.4	4.3
Jun 11 through Jun 20	3.8	3.9	3.7
Jun 21 through Jun 30	3.1	4.0	3.6
Jul 1 through Jul 10	7.2	5.0	5.2
Jul 11 through Jul 20	6.1	4.5	4.6
Jul 21 through Jul 31	2.9	3.1	3.4
Aug 1 through Aug 10	6.5	5.6	5.6
Aug 11 through Aug 20	7.5	4.9	4.6
Aug 21 through Aug 31	4.2	3.7	3.9
Sep1 through Sep 10	5.8	3.7	3.7
Sep 11 through Sep 20	3.3	2.8	2.9
Sep 21 through Sep 30	2.3	3.8	3.8
Oct 1 through Oct 10	3.4	2.1	2.3
Oct 11 through Oct 20	4.0	2.2	3.0
Oct 21 through Oct 31	1.3	2.1	1.8
Nov 1 through Nov 10	2.0	2.3	2.3
Nov 11 through Nov 20	2.4	1.7	1.6
Nov 21 through Nov 30	3.0	2.3	2.3
Dec 1 through Dec 10	1.8	1.0	1.0
Dec 11 through Dec 20	1.1	0.7	0.8
Dec 21 through Dec 31	2.8	0.9	1.1
Total	100.0	100.0	100.0

Table B10. Significance test of relative frequencies of trip related dates by segment of month that they occur (VFR excluded).

Segment of month	Date trip began (%) (n=883)	Date planning began (%) (n=883)	Date destination selected (%) (n=883)
Early (1-10)	38.2	37.6	37.7
Mid (11-20)	34.0	35.2	38.4
End (21-end)	27.8	27.2	23.9
Chi-square Significant	35.1 0.000	16.3 0.000	20.9 0.000

Table B10-1. Significance test of relative frequencies of trip related dates by segment of month that they occur (VFR included).

Segment of month	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Early (1-10)	38.0	37.7	37.6
Mid (11-20)	36.9	33.1	33.6
End (21-end)	25.3	29.1	28.6
Chi-square Significance	43.1 0.000	18.5 0.000	21.9 0.000

Table B11. Relative frequencies of three different dates related to trip planning by three parts of the month excluding July and September (VFR excluded).

Segment of Month	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Jan1 through Jan 10	2.7	3.8	3.9
Jan11 through Jan 20	2.6	4.3	5.1
Jan21 through Jan 31	1.2	3.0	2.9
Feb1 through Feb 10	2.3	3.1	3.0
Feb 11 through Feb 20	4.1	3.4	3.3
Feb 21 through Feb 28	1.4	1.7	1.4
Mar 1 through Mar 10	1.8	3.2	3.2
Mar 11 through Mar 20	2.0	2.7	2.8
Mar 21 through Mar 31	1.2	1.4	1.6
Apr 1 through Apr 10	1.6	2.1	1.8
Apr 11 through Apr 20	1.3	2.3	2.6
Apr 21 through Apr 30	0.8	1.9	1.5
May 1 through May 10	2.9	5.1	5.3
May 11 through May 20	3.0	4.7	4.1
May 21 through May 31	2.9	2.5	2.8
Jun 1 through Jun 10	3.6	6.4	5.9
Jun 11 through Jun 20	5.0	5.4	5.3
Jun 21 through Jun 30	4.3	4.8	4.1
Aug 1 through Aug 10	9.1	6.9	6.8
Aug 11 through Aug 20	11.6	7.0	6.7
Aug 21 through Aug 31	6.3	5.1	5.8
Oct 1 through Oct 10	4.3	2.8	2.6
Oct 11 through Oct 20	5.5	2.4	3.7
Oct 21 through Oct 31	1.9	2.3	1.7
Nov 1 through Nov 10	1.6	3.2	3.3
Nov 11 through Nov 20	3.8	2.6	2.4
Nov 21 through Nov 30	3.1	2.9	3.0
Dec 1 through Dec 10	3.2	1.2	1.5
Dec 11 through Dec 20	1.6	0.3	0.5
Dec 21 through Dec 31	3.4	1.4	1.5
Total	100.0	100.0	100.0

Table B11-1. Relative frequencies of three different dates related to trip planning by three parts of month excluding July and September (VFR included).

Segment of Month	Date trip began (%) (n=966)	Date planning began (%) (n=966)	Date destination selected (%) (n=966)
Jan1 through Jan 10	2.3	3.9	3.8
Jan11 through Jan 20	2.2	3.6	4.0
Jan21 through Jan 31	1.1	2.9	2.8
Feb1 through Feb 10	2.1	2.9	2.9
Feb 11 through Feb 20	3.4	2.6	2.5
Feb 21 through Feb 28	1.1	1.4	1.2
Mar 1 through Mar 10	1.5	2.9	2.8
Mar 11 through Mar 20	1.7	2.9	3.0
Mar 21 through Mar 31	1.0	1.8	1.9
Apr 1 through Apr 10	2.1	2.6	2.5
Apr 11 through Apr 20	1.7	2.8	3.0
Apr 21 through Apr 30	1.4	2.5	1.8
May 1 through May 10	3.0	5.2	5.2
May 11 through May 20	2.9	4.3	3.8
May 21 through May 31	3.4	3.3	3.6
Jun 1 through Jun 10	4.4	5.8	5.7
Jun 11 through Jun 20	5.3	5.1	4.9
Jun 21 through Jun 30	4.2	5.2	4.7
Aug 1 through Aug 10	8.9	7.2	7.3
Aug 11 through Aug 20	10.4	6.3	6.1
Aug 21 through Aug 31	5.7	4.8	5.1
Oct 1 through Oct 10	4.8	2.7	3.0
Oct 11 through Oct 20	5.5	2.9	3.9
Oct 21 through Oct 31	1.8	2.8	2.4
Nov 1 through Nov 10	2.7	3.0	3.0
Nov 11 through Nov 20	3.3	2.2	2.1
Nov 21 through Nov 30	4.1	3.0	3.0
Dec 1 through Dec 10	2.5	1.2	1.4
Dec 11 through Dec 20	1.6	0.9	1.1
Dec 21 through Dec 31	3.9	1.2	1.4
Total	100.0	100.0	100.0

Table B12. Significance test of relative frequencies of trip related dates by segment of month that they occur excluding July and September (VFR excluded).

Segment of month	Date trip began (%) (n=966)	Date planning began (%) (n=966)	Date destination selected (%) (n=966)
Early (1-10)	33.2	37.9	37.3
Mid (11-20)	40.5	35.1	36.5
End (21-end)	26.3	27.0	26.3
Chi-square Significance	20.2 0.000	16.0 0.000	13.6 0.000

Table B12-1. Significance test of relative frequencies of trip related dates by segment of month that they occur excluding July and September (VFR included).

Segment of month	Date trip began (%) (n=966)	Date planning began (%) (n=966)	Date destination selected (%) (n=966)
Early (1-10)	34.3	37.4	37.6
Mid (11-20)	37.9	33.6	34.3
End (21-end)	27.7	29.0	28.0
Chi-square Significance	9.62 0.008	13.83 0.001	15.98 0.000

Table B13. Frequency distributions for three trip related dates by month (VFR excluded).

Month	Date trip began (%) (n=883)	Date planning began (%) (n=883)	Date destination selected (%) (n=883)
Jan	4.6	8.5	8.9
Feb	5.5	6.3	5.8
Mar	3.5	5.6	5.8
Apr	2.6	4.9	4.4
May	6.2	9.5	9.2
Jun	9.1	12.7	11.6
July	17.8	13.7	14.6
Aug	19.2	14.6	14.6
Sept	11.3	9.5	9.8
Oct	8.3	5.8	6.1
Nov	6.0	6.7	6.6
Dec	5.9	2.3	2.6
Total	100.0	100.0	100.0

Table B13-1. Frequency distributions for three trip related dates by month (VFR included).

Month	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Jan	4.1	8.0	8.1
Feb	4.8	5.4	5.1
Mar	3.0	5.9	5.9
Apr	3.7	6.1	5.6
May	6.7	9.9	9.7
Jun	10.1	12.4	11.6
July	16.2	12.5	13.3
Aug	18.1	14.1	14.2
Sept	11.4	10.3	10.4
Oct	8.8	6.4	7.0
Nov	7.3	6.4	6.2
Dec	5.7	2.6	3.0
Total	100.0	100.0	100.0

Table B14. Frequency distribution for three travel related dates by season (VFR excluded).

Season	Date trip began (%) (n=883)	Date planning began (%) (n=883)	Date destination selected (%) (n=883)
Winter (Dec.-Feb.)	16.0	17.1	17.4
Spring (Mar.-May)	12.3	20.0	19.4
Summer (Jun.-Aug.)	46.0	41.0	40.8
Fall (Sept.-Nov.)	25.6	22.0	22.4

Table B14-1. Frequency distribution for three travel related dates by season (VFR included).

Season	Date trip began (%) (n=1266)	Date planning began (%) (n=1266)	Date destination selected (%) (n=1266)
Winter (Dec.-Feb.)	14.1	16.0	16.2
Spring (Mar.-May)	13.9	21.8	21.2
Summer (Jun.-Aug.)	44.5	39.0	39.0
Fall (Sept.-Nov.)	27.5	23.2	23.6

APPENDIX C

**DURATION OF TOTAL TRIP PLANNING INTERVAL FOR SELECTED
VARIABLES**

Table C1. Duration of the total trip planning interval for selected variables.

Variable	Average No. Days	Correlation	Test Statistics	Significance
<u>Season When Trip Began</u>	<u>n=1445</u>		t=5.99	0.000
Nonpeak season	55.7			
Peak Season	89.4			
All	70.7			
<u>Primary Purpose of Trip</u>	<u>n=1460</u>		t=4.18	0.000
Other purpose	76.5			
Visiting friends or relatives	53.7			
All	69.9			
<u>Travel Party</u>		<u>n=1476</u>		0.000
Average party size		0.119		
<u>Activities Participated In</u>				
General touring or driving for pleasure	<u>n=1460</u>		t=0.99	0.324
Yes	72.5			
No	67.0			
All	70.2			
Shopping	<u>n=1460</u>		t=1.47	0.141
Yes	73.9			
No	65.8			
All	70.2			
Outdoor recreation	<u>n=1460</u>		t=6.69	0.000
Yes	86.0			
No	49.7			
All	70.2			
Visit other attraction	<u>n=1460</u>		t=2.38	0.018
Yes	77.3			
No	64.3			
All	70.1			
Nightlife	<u>n=1459</u>		t=0.06	0.951
Yes	70.5			
No	70.2			
All	70.3			
Visit an historic site	<u>n=1456</u>		t=2.98	0.003
Yes	83.7			
No	65.1			
All	70.4			
Visit state or national park	<u>n=1456</u>		t=3.65	0.000
Yes	85.9			
No	63.1			
All	70.3			

Table C1. Duration of the total trip planning interval for selected variables, continued.

Variable	Average No. Days	Correlation	Test Statistics	Significance
Visit museum or hall of fame	<u>n=1461</u>		t=2.32	0.021
Yes	85.3			
No	67.5			
All	70.2			
Casino gaming	<u>n=1339</u>		t=1.11	0.268
Yes	80.7			
No	69.5			
All	70.7			
Attend a festival or event	<u>n=1339</u>		t=3.60	0.000
Yes	91.1			
No	64.5			
All	70.7			
Fall color touring	<u>n=1457</u>		t=0.11	0.911
Yes	71.2			
No	70.2			
All	70.3			
<u>Main Type(s) of Lodging Used</u>	<u>n=1246</u>		t=7.43	0.000
Others	88.3			
Friend's/relative's home	46.1			
All	76.7			
<u>No. Pleasure Trip Taken to Michigan</u>		<u>n=1476</u> -0.069		0.008
<u>Types of Trip</u>				
	<u>n=1447</u>		t=1.68	0.094
Non-Family Trip	77.6			
Family Trip	66.8			
All	69.8			
	<u>n=1447</u>		t=8.18	0.000
Day Trip	31.5			
Overnight Trip	76.9			
All	70.1			
	<u>n=1468</u>		t=9.89	0.000
Non-Vacation Trip	37.5			
Vacation Trip	85.5			
All	70.0			
<u>Trip Duration</u>				
No. nights spent in MI		<u>n=1476</u> 0.195		0.000

Table C1. Duration of the total trip planning interval for selected variables, continued.

Variable	Average No. Days	Correlation	Test Statistics	Significance
<u>Estimated Total Trip Expenditure in MI</u>		<u>n=1476</u> 0.074		0.006
<u>State/Province of Principal Residence</u>	<u>n=1476</u>		t=0.33	0.745
Other states	71.0			
Michigan	69.2			
All	70.1			
<u>Gross Annual Household Income</u>	<u>n=1347</u>		t=1.23	0.220
Below \$31,000	62.7			
Above \$31,000	71.5			
All	69.8			
<u>Household Contained...</u>				
Pre-school	<u>n=1459</u>		t=3.18	0.750
No	70.3			
Yes	67.8			
All	69.9			
School age	<u>n=1458</u>		t=1.89	0.059
No	66.2			
Yes	77.0			
All	70.0			

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