

THE TRAVEL MARKET

1955

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by

John B. Lansing

Ernest Lilienstein

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SURVEY RESEARCH CENTER

Institute for Social Research

The University of Michigan

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PREFACE

This volume reproduces exactly three reports prepared by the staff of the Survey Research Center for submission to sponsors of its series of National Travel Market Surveys. These reports are as follows:

The Travel Market 1955
The Travel Market 1956
The Travel Market 1957

Three subsequent reports for the years 1958, 1959-60, and 1961-62 have also been reprinted and are available in a companion volume. A third volume which summarizes the principal findings of the series of studies is scheduled for publication in 1964. It will contain a detailed combined index to the series of three volumes.

THE TRAVEL MARKET 1955

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A Report to the Travel Research Association

John B. Lansing

Ernest Lilienstein

**Survey Research Center
Institute for Social Research
University of Michigan**

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ACKNOWLEDGMENTS

No book is the product of the one or two individuals whose names appear as its authors. This statement certainly is true of a volume which reports the findings of a large-scale research project. A great number of people contributed to this project.

The basic research could not have been carried out without the support of the two sponsoring organizations, the Port of New York Authority and the New York Central Railroad. Members of the staffs of these organizations made important contributions also to the research itself. We owe much to the enthusiasm and insight of Norman L. Johnson of the Port Authority and John S. Gallagher Jr., of the New York Central.

At the Survey Research Center responsibility for the selection of the sample was carried by C. Edwin Dean under the supervision of Leslie Kish. The design of the questionnaire benefited from the work of Charles Cannell, head of the Center's field staff. We are indebted to some hundreds of the Center's interviewers for their work in collecting the basic data, and to the thousands of persons who generously gave information to them.

Processing of the interviews required the services of many persons in the Center's coding section and in the Tabulating Service of the University of Michigan. We should mention in particular the skill and efficiency of Doris Mann in carrying out what proved to be an unusually complex set of manipulations involving tens of thousands of punched cards.

The research was carried out within the Economic Behavior Program of the Survey Research Center. George Katona is director of this program, while the director of the Center is Angus Campbell. The Survey Research Center is a division of the Institute for Social Research of the University of Michigan. The Institute is under the direction of Rensis Likert. Each of these men contributed to this project.

Publication of this report was made possible by an arrangement with *Time*, Inc. for the advance sale of a substantial number of copies. This commitment by *Time* was made as a contribution to the Travel Research Association. The book represents a report to the Association, a nonprofit organization whose purposes are to promote scientific research into the travel market and to disseminate the results of such research.

This report has been edited by Annette Wigod, Editor of the Institute for Social Research.

INTRODUCTION

With continuing prosperity, more people have come to share in a variety of goods and services not previously accessible to them. When earnings no longer need to be used entirely for the necessities of life, it is incumbent upon those who would forecast economic activity to take the mass of income-earners into account. The travel market, especially, because it is so largely dependent upon surplus funds, may be expected to reflect the changed spending habits of participants in an economy of abundance.

Members of the travel industry and social scientists are equally interested in studying the development of the travel market. Information gained can be used (1) to aid in forecasting the amount and kinds of travel for which there is likely to be an effective demand, (2) to contrast the actual with the potential travel market, and (3) to determine the circumstances under which the potential market can be turned into actual travel.

In 1955 the Port of New York Authority and the New York Central Railroad sponsored the first comprehensive National Travel Market Survey. It was carried out by the Survey Research Center of the University of Michigan, and bore on three broad topics:

Who travels and why?

Who does not travel and why?

Why do travelers use one mode of transportation rather than another? Data collection and analysis proceeded in terms of three major areas:

1. *Economic*: What are the incomes and occupations of those who do travel and those who do not travel?
2. *Demographic*: How can travelers and nontravelers be described with reference to such variables as age, education, and place of residence?
3. *Psychological*: How do travelers and nontravelers perceive traveling; what do they regard as the major advantages and disadvantages of each mode of transportation?

The travel market is a relatively new research area. Comparable survey data have not heretofore been collected for the nation as a

whole. The findings reported here should be regarded, therefore, as preliminary. Moreover, the perspective is that of the consumer. No attempt is made to arrive at the determinants of the *availability* of travel facilities. For this reason the economist, who conceives of a "market" in terms of the *supply* of services as well as the *demand* for them, will regard the present study as emphasizing only one aspect of the travel market. Finally, even the demand side is not exhausted by these findings. Household expenditures for travel, the manner in which individual and family decisions to travel are arrived at, and the budgeting of travel expenditures are not treated here. And because only trips of 100 miles or more away have been studied, no statements can be made concerning differences between long-distance and short-distance travel.

Methods

The methods used in this survey were the techniques which have become standard practice at the Survey Research Center based on ten years of experience at the University of Michigan and the earlier experience of its key personnel. These techniques emphasize the importance of high quality both in sampling and in interviewing.

Sampling

The sample used in this study is a probability sample; that is, every member of the population had a known chance of being included. The population sampled is the adult population of the United States exclusive of what is called the "institutional population." By institutional population is meant persons living on military reservations, in hospitals, prisons, college dormitories, and the like. A more detailed discussion of the sample appears in Appendix A.

Interviews were taken in two waves. Half of the sample were interviewed in the latter half of May and in June, while the other half were interviewed in October and early November. In both the spring and fall halves of the survey, two questionnaires were used, making four questionnaires in all. The four were identical for the most part. Some questions were asked only of part of the sample.

Interviewing

Interviews lasted about one hour and covered three topics—current economic attitudes, life insurance ownership, and travel.¹ The type of interview was similar to that used in other economic studies of the Survey Research Center, involving a mixture of open-ended or discussion-type questions and factual questions.

In addition to their general instructions and specific instructions about sampling and interviewing on this study, the interviewers were given a statement of the objectives of each question about travel. In each interview questions were asked about trips taken by the respondent and also trips by other members of the respondent's family.

The over-all response rate was 87 per cent. That is, the interviewers obtained usable interviews from 87 per cent of all designated respondents.

Definition of a Trip

A trip, for the purposes of this study, is defined as a round trip to a point over 100 miles away. A trip may be made by any method or methods of travel, and may cover any length of time. Moving to a new home 100 or more miles away is also considered a trip.

To make certain that the interviewers had a fairly definite idea of how far 100 miles might be, a road map marked with a circle with a radius of 100 miles was mailed to each county. Of course, it would have been possible to draw different circles with centers at different points in the county. But no attempt was made to achieve absolute precision about the distance of 100 miles. The purpose of the maps with the circles was to make sure that if a respondent said, "We went to Albany," the interviewer would be able to estimate with reasonable accuracy whether Albany was more or less than 100 miles from the point of interview.

Trips taken by employees of common carriers in connection with their work, such as trips made by a railroad conductor or an airline hostess, have been excluded. Trips taken by members of the Armed Forces using military planes or other military vehicles also have been excluded. Finally, trips using company-owned aircraft have been excluded whenever possible. It should be stated, however, that the decision to exclude the types of trips mentioned in this paragraph

¹The material on current economic attitudes has been published in *Consumer Expectations: 1953-1956*, by George Katona and Eva Mueller, June 1956, Survey Research Center Monograph #16. The material on life insurance appears in *The Life Insurance Public*, published by the Institute of Life Insurance.

was made explicit too late for inclusion in the instructions to interviewers. Trips of these types were deleted in the office on the basis of information about the person's occupation plus the interviewer's comments. (Interviewers have a general instruction to comment on any peculiarities of a respondent's situation). Past experience in similar situations suggests that this procedure was adequate for most but not all interviews.

Outline of This Report

Chapter II contains a short summary of major findings. There follows a general discussion of the frequency with which people travel, the factors that determine how many trips they take, and whether they are likely to travel for business or nonbusiness reasons. In this discussion the number of trips people take is analyzed with no distinction according to the means of travel used. The statistics discussed refer, for example, to the total number of trips by all modes or the total number of business trips by all modes. This section is intended as a frame of reference for the more specific analysis to follow.

Each of the next four chapters is devoted to a different mode of travel. The modes treated are air, rail, bus, and auto. In each case we distinguish between nonbusiness and business travel, examining those characteristics of travelers that seem best to account for their selection of a given mode.

Chapter VII contrasts the four modes, with particular emphasis upon the choice between common carrier and automobile travel. Also discussed is the relative popularity of coach versus first-class accommodations, and the frequency of all-expense tour packages.

The concluding chapter is a brief discussion of vacations and vacation travel.

Four appendixes complete the volume. Appendix A describes in detail the sampling methods and discusses the errors which may be expected in data based upon a sample rather than upon the entire population. Readers may wish to refer to these tables of sampling error as they examine the main body of the report. Appendix B contains an attempt to expand the sample in order to arrive at aggregate air travel for the population as a whole. A comparison is then made between an estimate of the total frequency of air travel based on the sample and an estimate based on outside statistics. The comparison requires that the statistics be adjusted to make them comparable, and these adjustments turn out to be difficult. The questionnaire used in the survey constitutes Appendix C. Appendix D provides a set of tables representing the basic data upon which this report is based.

SUMMARY OF MAJOR FINDINGS

II

Frequency of Travel by All Modes Combined

1. *Proportion who take a trip.* Six people out of ten take a trip during a twelve-month period, but most travel only by auto. Only two out of ten take a trip by common carrier.

2. *Purpose of travel.* Of all trips by all modes, about one trip out of five is taken for business purposes. Most trips are taken for vacation and pleasure reasons. The most common objective is to visit friends or relatives. Business trips and trips taken because of personal affairs occur with about equal frequency.

3. *High-frequency travelers.* A fraction of one per cent of all adults take 100 trips or more a year. These high-frequency travelers travel primarily by auto on business.

4. *People who never have traveled.* About 7 per cent of all adults never in their lives have taken a trip to a point 100 miles away. The nontravelers tend to be low-income people living either in central cities of large metropolitan areas or in rural areas.

5. *Share of trips by high-income people.* About 17 per cent of all trips were taken by 8 per cent of adults from families with incomes over \$10,000. These adults account for 13 per cent of all nonbusiness trips and 29 per cent of all business trips.

Air Travel

6. *Experience with air travel.* One quarter of the adult population have at some time in their lives taken an air trip.

7. *Use of air in one year.* Seven per cent of all adults took an air trip in the year prior to interview.

8. *Income and use of air.* Most air travelers earn substantial incomes. Half of all air trips in the year prior to interview were taken by people with family incomes of \$10,000 or more. Of adults with family incomes of under \$4,000, 2 per cent took an air trip in the year prior to interview. Of adults with income over \$10,000, 30 per cent took an air trip.

9. *Other factors influencing air travel.* The probability that an adult will travel by air and the number of trips he takes are associated with his occupation, his education, and the type of community in which he lives.

10. *The first air trip.* In 1954-1955 in nine cases out of ten the first-time air traveler was taking a nonbusiness trip.

11. *Attitudes toward air travel.* The greatest advantage of air travel as people see it is speed. Disadvantages include fear of flying, expense, and the difficulty of reaching terminals.

Rail Travel

12. *Experience with rail travel.* Seven out of ten adults have at some time in their lives taken a trip by rail.

13. *Use of rail in one year.* In a year about one adult in ten takes a trip by rail.

14. *Income and use of rail.* Of adults with family incomes of under \$4,000, 7 per cent took a rail trip in the year prior to interview. Of adults with family incomes over \$10,000, about one in four took a rail trip.

15. *Other factors influencing rail travel.* The probability that a person will take a trip by rail and the number of trips he takes are associated with his income, his occupation, and the type of community in which he lives.

16. *Attitudes toward rail travel.* The advantages of rail travel as people see them include comfort, safety, and economy. The disadvantages mentioned include expense, slowness, and problems of schedules, connections, and reaching terminals.

Bus Travel

17. *Experience with bus travel.* About half the adult population have at some time in their lives taken a trip by bus.

18. *Use of bus in one year.* Seven per cent of all adults took a bus trip in the year prior to interview.

19. *Income and bus travel.* Of adults at low-income levels about the same proportions use bus in a year as of adults at high-income levels. If anything, low-income people are more likely to travel by bus.

20. *Type of community and bus travel.* People in all types of community travel by bus, but adults living in towns and cities of moderate size are most likely to travel by bus.

21. *Attitudes toward bus travel.* Bus travel has two major advantages in people's minds, economy and good connections. The disadvantage most frequently mentioned is bad connections, which includes problems of schedules.

Auto Travel

22. *Experience with auto travel.* Nearly nine out of ten adults have taken a trip by auto at some time in their lives.

23. *Use of auto in one year.* About 55 per cent of all adults took a trip by auto in the year prior to interview.

24. *Income and auto travel.* Of adults with family incomes below \$4,000, about 42 per cent took a trip by auto. Of adults with incomes over \$6,000, about seven out of ten took a trip by auto.

25. *Type of community and travel by auto.* People living in the central cities of large metropolitan areas are less likely than those living elsewhere to take a trip by auto.

26. *Attitudes toward travel by auto.* People see few disadvantages of travel by auto and many advantages, including economy, freedom to time one's trip as one pleases, and convenience.

Comparisons Among the Four Modes

27. *Experience.* The ranking of the modes in order of the number of people who have ever used them is auto, rail, bus, and air.

28. *Use in one year.* The ranking of the modes in order of the number of people who use them in one year is auto first, with rail a poor second, and bus and air approximately tied in third place.

29. *Income.* The position of auto compared to the common carriers is relatively weakest for the very low- and very high-income groups. Air travel is primarily by high-income people. Rail travel is somewhat more frequent among high-income than low-income people. Bus travel is, if anything, more common among low-income people than high-income people.

30. *Type of community.* The relative position of air and rail is strongest in large cities. Bus and auto are strongest in the smaller cities and towns.

Vacation Travel

31. *Frequency of paid vacations.* Of all adults about 43 per cent are employed and work for someone else. About two-thirds of this group took a vacation with pay of a week or more in the year prior to interview.

32. *Frequency of vacation travel.* Of the adults who had one or more vacations in the year prior to interview, about half took a trip during their most recent vacation. Most went to places under 500 miles away.

HOW FREQUENTLY DO PEOPLE TRAVEL?



The question, How frequently do people travel? may be answered in terms of the number of trips people take in one year. From this point of view, very high-frequency travelers are at the end of a continuum. At the other extreme are the people who never have taken a trip in their lives. Each of these groups is the subject of a section of this chapter. The chapter also includes a description of the purposes of travel and of the proportion of all trips accounted for by people in different groups in the population. (No distinction among the several modes of travel is made until the succeeding chapters). The chapter concludes with a discussion of the authors' approach to the development of a theory of travel, which raises the question, Why do people travel, and what explains the number of trips they take?

The Number of Trips People Take in One Year

Of all adults in the United States, 61 per cent take one or more trips in a year, while 39 per cent take no trip to a point as far as 100 miles from home. This estimate refers, strictly speaking, to adults who took a trip in a period ending on the average in mid-1955. It applies to other years only to the extent that no changes occur from year to year. This caveat should be understood as applying to other similar statements in this report. The probability that an adult will take one or more trips in a year depends on his income. The proportions of adults from families with different incomes who took a trip "last year" are as follows: (See also the chart on page 11).

<u>Family Income</u>	<u>Proportion of Adults From Families With This Income Who Took a Trip "Last Year"</u>
Under \$4000	47%
\$4000-5999	67
\$6000-9999	75
\$10,000 or more	83
All incomes	61

Thus, the proportion of adults who took a trip rises sharply with income. Forty-seven per cent of those in the income group under \$4,000 took a trip and 53 per cent did not. Of those in the income group over \$10,000, 83 per cent took a trip and only 17 per cent did not.

The proportion of adults who took different numbers of trips is as follows: (See also the chart on page 13).

<u>Number of Trips</u>	<u>Proportion of All Adults Who Took the Number of Trips Shown in One Year</u>
None	39%
One	21
Two	11
Three	6
Four	4
Five	3
Six	3
Seven	2
Eight	1
Nine	1
Ten or more	8
Took a trip, but number of trips not ascertained	1
Total	100%

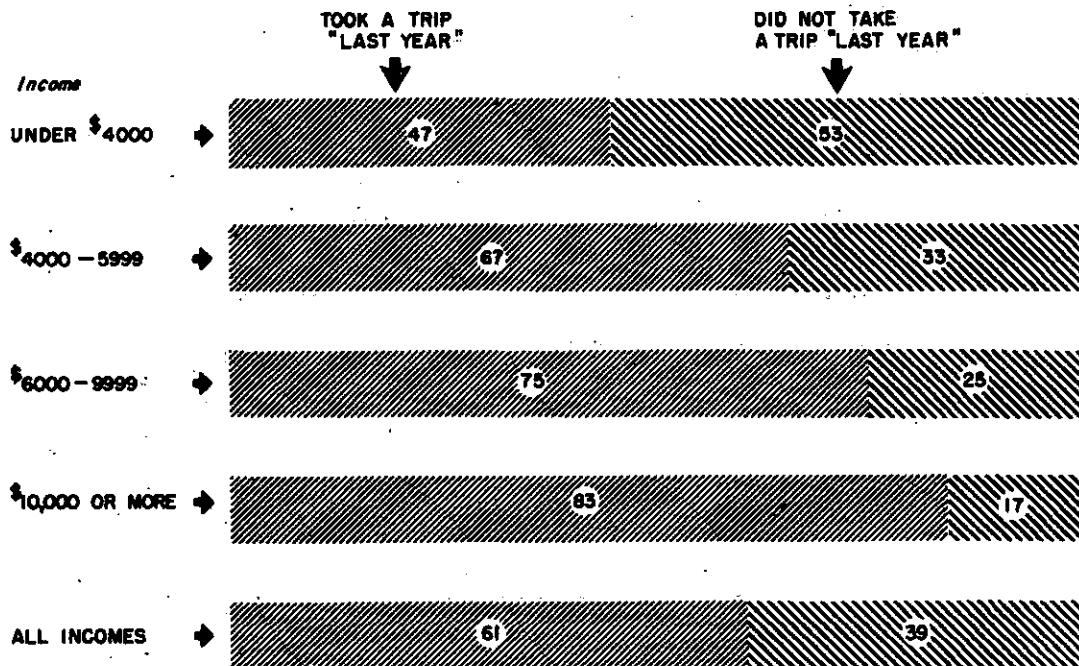
Roughly speaking, of every ten adults four took no trip and two took one trip, while one in ten took two trips. Three in ten took more than two trips, including one in ten who took eight or more trips.

Very High-Frequency Travelers

At the extreme upper limit of the distribution are the very high-frequency travelers, people who take 100 or more trips a year. About 0.2 per cent of all adults travel with this frequency. One hundred trips a year implies two round trips a week to points 100 miles or more away. People who travel so often must be on the move a considerable part of the time.

Detailed information about each of the 24 adults in the sample who travel with this frequency is included in Table 4 of Appendix D. A few examples, however, may indicate the type of person who travels very frequently. One man is an asphalt salesman for a petroleum refining company. He took 120 auto trips and 20 air trips in connection with his work. Another man buys, sells, and leases real

PROPORTION OF ADULTS FROM FAMILIES WITH DIFFERENT INCOMES WHO TOOK A TRIP LAST YEAR



estate for a chain store. He took 208 auto trips and 26 air trips for business purposes. Still another person is a manager of a corporation engaged in farming and a specialist rancher. The property in which he is interested is scattered. He reports "at least two" auto trips a week for business purposes. His wife usually accompanies him on these trips.

Thus the very high-frequency travelers are people in unusual situations which require them to be constantly on the move. Most of them travel primarily by auto, though a few take large numbers of air trips.

Whenever, in analysis, the emphasis is on the trip rather than the individual traveler, the few persons who travel very frequently could become very important in the statistics, even when a total of 8,485 adults are involved as in the present survey. It is doubtful whether any survey which is basically a cross-section of the population of a geographic area such as the United States can properly represent individuals who take over 100 trips a year. These persons are easy to find in surveys made in transit in planes, trains, or buses. They are difficult to find at home. Small chance fluctuations in the number of these persons who appear in a sample will produce large chance fluctuations in the results. For these reasons the 24 adults in the sample who took 100 or more trips are excluded from all tabulations in this report which are based on numbers of trips.

People Who Have Never Taken a Trip

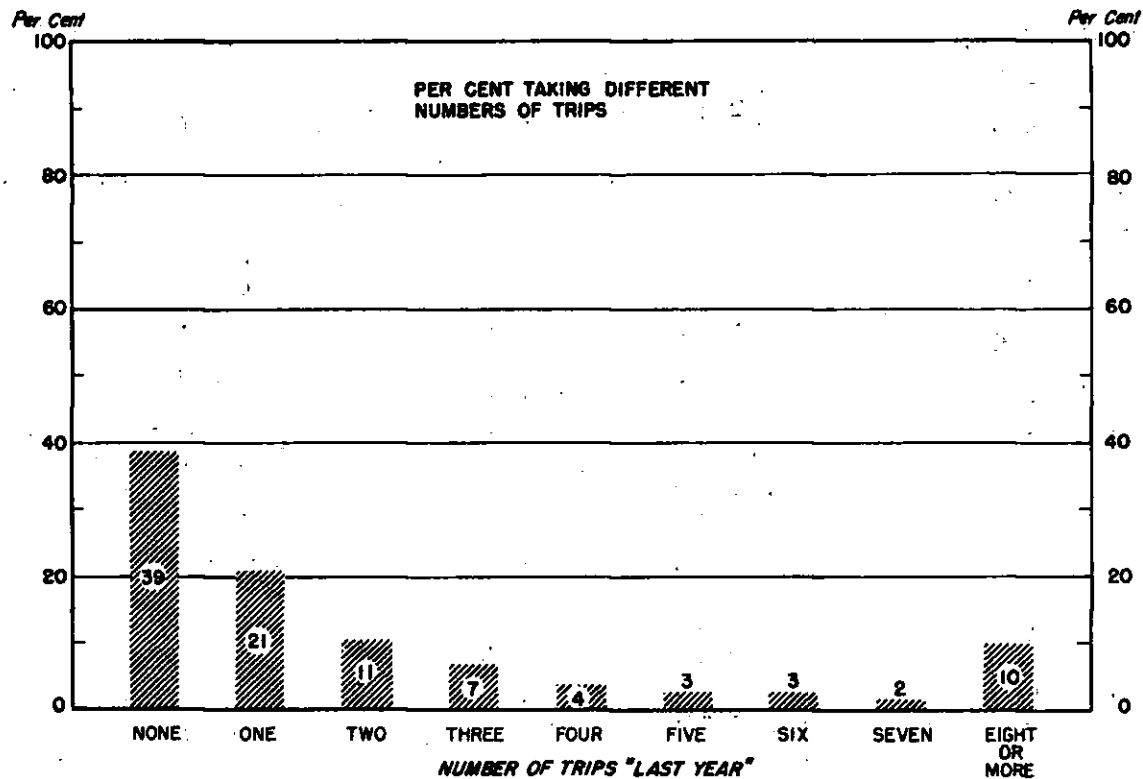
Of the adult population of the United States about 7 per cent have never taken a trip to a point 100 miles or more away from home. The pattern of their movements is opposite to that of the high-frequency travelers who twice every week travel farther than these nontravelers have been in their lives.

Of adults who never have taken a trip, 65 per cent have family incomes below \$4,000. Of the entire adult population, about 44 per cent come from families with incomes below \$4,000.¹ Thus, non-travelers are typically people with lower incomes than the rest of the population.

Of adults who have never taken a trip, 19 per cent are aged 65 or over. Of the entire adult population, about 12 per cent are aged 65

¹Table 5 shows 41 per cent rather than 44 per cent with incomes below \$4000. Table 5 shows separately those whose income was not ascertained. In general, cases which are not ascertained are shown as a separate group in the tables in Appendix D, but are allocated on the basis of the known distribution in the text and in the charts.

PER CENT OF ALL ADULTS WHO TOOK DIFFERENT NUMBERS OF TRIPS IN ONE YEAR



or over. Thus, nontravelers are slightly more concentrated in the oldest age group than is the general population.

Of adults who have never taken a trip, 27 per cent live in central cities of large metropolitan areas. Only 16 per cent of the entire adult population live in the central cities. At the other extreme, 41 per cent of nontravelers live in rural areas. Only 33 per cent of the adult population live in rural areas. Thus, nearly seven out of ten of the adults who have never taken a trip live either in large cities or in rural areas. Either they live in the shadow of the Brooklyn Bridge or they live in the back country!

The Purposes of Travel

As a first step to studying the reasons why people travel, it is essential to separate business travel from nonbusiness travel. In the interviews people were asked to keep separate trips "in connection with your work," and seemed able to make the distinction between these trips and other trips.

From this study it is possible to make two estimates of the proportion of all trips which were taken for business purposes. The first estimate is based on a simple count of the total number of trips which people reported were taken for business and for non-business purposes. The results follow:

<u>Purpose</u>	<u>Per Cent of All Trips</u>
Business	19%
Non-business	81
Total	100%

The second estimate is based on a complex procedure. It is possible to obtain from people much more detailed information about the most recent trips they have taken than about trips in the more remote past, recollections of which have begun to blur. In this survey people were asked a number of questions about their own most recent trip, provided they had taken a trip in the twelve months before being interviewed. (Those who had taken their most recent trip of all by auto were asked also about their most recent trip by common carrier, provided they had taken one during the last twelve months.)

The most recent trips are not an unbiased sample of all trips because only one trip enters the sample of trips from each person interviewed regardless of the number of trips he took. It is known that frequent travelers differ in various respects from occasional

travelers and also that they take different types of trips. To remove the resulting bias, each trip may be counted as many times as the total number of trips taken by the individual traveler in a year. This procedure assumes that the most recent trip by each individual is typical of all of his trips.

Estimated in this way, the main purpose of the most recent trip was as follows:

<u>Purpose of Trip</u>	<u>Weighted Proportion of All Trips</u>
<u>Vacation and pleasure travel</u>	<u>64%</u>
To visit friends, relatives	25
Other pleasure travel	39
<u>Business travel</u>	<u>19</u>
For an employer	8
By self-employed workers	8
Conventions, meetings	3
<u>Personal affairs</u>	<u>17</u>
Emergency, illness, medical	7
Moving to a new home	2
To escort or drive someone	3
Other personal affairs	5
Total	100%

Thus, both estimating procedures indicate that 19 per cent of all trips were business trips. The agreement between the two is close, but it should be remembered that the estimates are not independent. Both are based on the same individuals. And both exclude people who took 100 or more trips.

The tabulation based on the most recent trip makes possible a more detailed discussion of the reasons why people travel. The most important specific reason for travel is to visit friends or relatives. We may assume that the friends or relatives have lived in the same vicinity at some time. (It is possible to form friendships by correspondence, but that is surely not the way most friendships are built.) Internal migration from one part of the country to another, therefore, is one of the major underlying causes of travel.

Travel for pleasure, without the objective of visiting friends or relatives, accounts for about four out of ten trips. These trips may have specific goals, such as attending some event, but most of them seem to have more general objectives such as recreation. Expenditure on travel for pleasure we take to be discretionary. The trips without the objective of visiting someone are particularly discretionary. An individual may or may not take such trips, depending on his income, his financial commitments, and, we would speculate, his optimism about his own financial position.

Travel because of personal affairs is almost as frequent as travel on business. Of the trips classified under personal affairs, the largest subgroup has to do with illness, medical treatment, emergencies, or death. This category also includes moves to a new home and trips taken to escort or drive someone who did not wish to travel alone. These trips are less likely to be perceived as discretionary or optional than trips taken for pleasure.

Shares of All Trips Taken by Different Groups

Who travels? is a question which may be answered in two ways. The first method is to place emphasis on the individual person, counting each adult as one regardless of the number of trips he takes. This method was used in the first sections of this chapter.

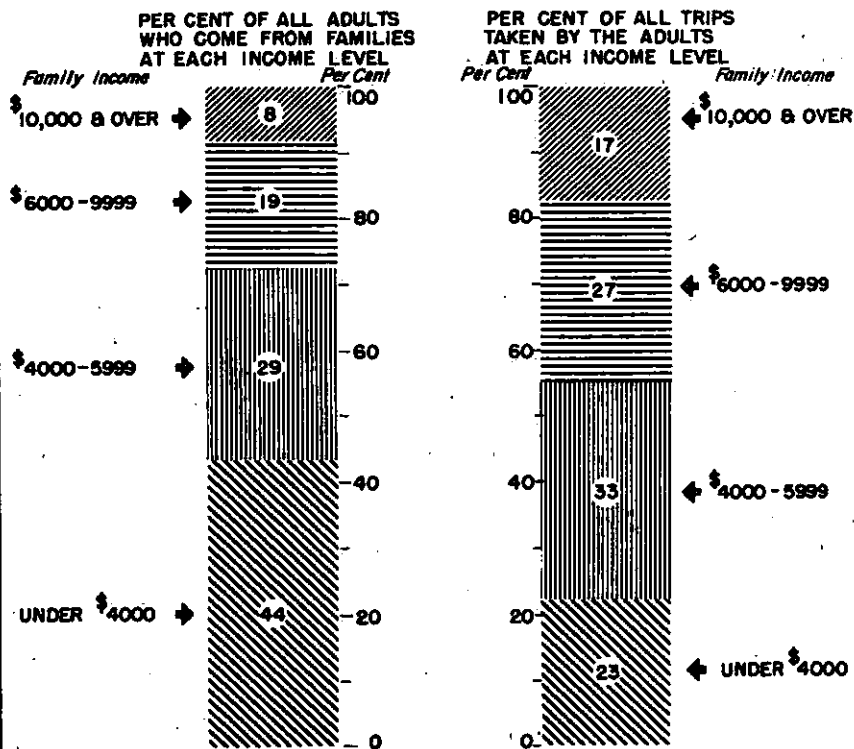
The second method is to place emphasis on the individual trip, counting each trip as one. Then one will speak of the proportion of all trips accounted for by people with different characteristics. This method is used in the discussion which follows.

What proportion of all trips are accounted for by people at different levels of income? The distribution is as follows: (See also the chart on page 17).

	Per Cent of All Adults Who Come From Families at Each Income Level	Per Cent of All Trips Taken by Adults From Families With This Income
Under \$4000	44%	23%
\$4000-5999	29	33
\$6000-9999	19	27
\$10,000 and over	8	17
Total	100%	100%

Adults from families with incomes over \$10,000 represent 8 per cent of all adults. They account for about 17 per cent of all trips. Adults with incomes from \$6,000-9,999 represent 19 per cent of all adults. They took 27 per cent of the trips. Adults with incomes below \$4,000 comprise 44 per cent of all adults. They took 23 per cent of all trips. Thus, the upper-income groups account for a larger proportion of trips than one would expect simply on the basis of the number of people in those income brackets. The reverse is true for the low-income groups.

PER CENT OF ALL TRIPS BY ALL MODES TAKEN BY ADULTS FROM FAMILIES WITH DIFFERENT INCOMES



What proportion of all trips are accounted for by people in different occupations and industries? The results are summarized as follows:

<u>Occupation</u>	<u>Proportion of All Trips Taken by Adults in This Occupation</u>	<u>Proportion of All Adults in This Occupation</u>
Professional and managerial workers	27%	13%
Clerical and sales workers	12	9
Blue-collar workers	25	29
Farmers	3	4
Retired	1	4
Housewives, students, others not employed	31	40
Not ascertained	<u>1</u>	<u>1</u>
Total	100%	100%

The group of housewives, students, and others not employed is made up primarily of married women who are not in the labor force. People in this category do not take business trips. Hence, it is not surprising to find that, although they represent 40 per cent of the adult population, they take only 31 per cent of the trips.

The two groups which account for the largest proportions of total travel are the professional and managerial workers and the blue-collar workers. The distributions by industry of these groups are as follows:

<u>Industry</u>	<u>Proportion of All Trips Taken by Adults in This Occupation and in This Industry</u>	
	<u>Professional and Managerial Workers</u>	<u>Blue-Collar Workers</u>
Manufacturing	4%	9%
Construction	2	3
Transportation, communications, utilities	1	3
Government	1	3
Wholesale, retail trade	7	2
Professional and related services	6	1
Other	<u>6</u>	<u>4</u>
Total	27%	25%

Shares of Business and Non-Business Trips Taken by Different Groups

What proportions of all nonbusiness trips and of all business trips are taken by adults from families with different incomes? The distributions are as follows:

Family Income	Per Cent of Trips Taken by Adults From Families With This Income	
	Non-Business Trips	Business Trips
Under \$4000	26 %	13
\$4000-5999	33	32
\$6000-9999	28	24
\$10,000 and over	13	30
Total	100 %	100 %

The proportion of all nonbusiness trips taken by adults with incomes over \$10,000 is 13 per cent, but this income group accounts for 30 per cent of all business trips. Business travel is much more concentrated among people in the top income group than is nonbusiness travel.

We may compare in the same manner the proportion of business and nonbusiness trips taken by adults with different occupations. The distributions are as follows:

Occupation	Per Cent of Trips Taken by Adults in This Occupation	
	Non-Business Trips	Business Trips
Professional and managerial workers	20 %	57 %
Clerical and sales workers	10	19
Blue-collar workers	27	17
Farmers	2	4
Retired	2	-
Housewives, students, others not employed	39	3
Total	100 %	100 %

Professional and managerial workers account for over half of all business trips but only for about 20 per cent of nonbusiness trips. Clerical and sales workers also account for a larger proportion of business trips than of nonbusiness trips. Blue-collar workers, however, account for a much smaller proportion of business travel than of travel not in connection with their work. The group of people who were not employed at time of interview account for 3 per cent of all business trips. These trips were taken when the individuals were employed during the year prior to interview. This group accounts for the same proportion of nonbusiness trips which it represents of the total population. Married women, who make up the largest part of this category, travel about as often as their husbands if non-business travel only is considered. In fact, 73 per cent of married couples report exactly the same number of nonbusiness trips for the wife as the husband. (See Table 11.)

People who take business trips tend to be concentrated in certain industries as well as in certain occupations. The proportion of all business trips accounted for by different industries is as follows:

<u>Industry</u>	<u>Proportion of All Business Trips</u>	<u>Proportion of All Employed Adults in This Industry</u>
Wholesale, retail trade	25%	17%
Manufacturing	18	27
Professional and related services	10	8
Construction	9	8
Government	7	7
Transportation, communication, utilities	7	7
Agriculture, forestry, fisheries	5	11
All other	19	15
Total	100%	100%

Thus, 17 per cent of all employed adults are engaged in wholesale and retail trade. These adults account for 25 per cent of all business trips.

Sources

The preceding discussion is based on Tables 1-13 in Appendix D.

Toward a Theory of Travel

In one sense it might be regarded as unnecessary to include in a highly factual report such as this a discussion of theory. Yet even

in this report in adopting a way of formulating and approaching the subject of travel the authors have implied a theoretical position. It may be appropriate to make it explicit. An explicit statement may serve, in particular, to make clear the sense in which this report should be seen as preliminary, and to suggest further research which should be undertaken.

The starting point for this study was the choice of a dependent variable, or, more accurately, of a group of dependent variables. These variables have to do with the number of trips taken by different individuals in the population by different modes of transportation. Other aspects of people's behavior as travelers have been studied, but have received only passing attention.

Perhaps it should be mentioned here that from the point of view of the sponsors of the project, there are three main reasons for studying travel. These objectives are to predict, to influence, and to serve. Prediction is important to any agency which must provide facilities to meet the demand for travel in the future. A decision to build facilities of a certain capacity which will last for a certain period of years necessarily implies a forecast of traffic for that period. The forecast need not be made as such, but if decisions which influence the future capacity of facilities must be made, a judgment of some kind must be made as to future needs.

To influence prospective travelers is, of course, an objective of any profit-making organization in the travel business. To this end it will be useful to define the prospective travelers and to investigate the factors that now influence their behavior. Knowledge of these factors may guide the strategy of attempts to influence them. It may also guide attempts to adapt the service to the desires and needs of the prospective travelers.

From the point of view of the authors, the selection of dependent variables was also influenced by considerations which have their origin in economic theory. These considerations have to do with what is called the consumption function and the prospects for long-run shifts in that function. There has been in economics a controversy over the possibility of saturation. It has been argued that, as time goes on, people may satisfy, or partly satisfy, their desires for such commodities as cars, other durable goods, and houses. They may wish to spend less of their income and seek to save more out of a given level of income. From this point of view it is relevant to raise the question, Will people in the future wish to spend an increasing share of their income for travel? On the face of the matter it is not possible for people to accumulate a stock of travel in the sense that they can accumulate a stock of durable goods. It is conceivable, however, that, having taken a certain number of trips, people will lose interest in more trips. We do not wish to argue these issues here, but only to suggest that the empirical study of the

dependent variables we are investigating may be relevant to the study of the future of the consumption function.

We are also interested in the problem of explaining the phenomenon of travel for its own sake. We confess to curiosity about the behavior of consumers in general and about expenditure on travel as one type of consumer expenditure.

Given, then, these dependent variables, the problem is one of selecting relevant explanatory variables. From a statistical point of view, the problem is straightforward. One selects one of the dependent variables, defines it exactly, and searches for independent or explanatory variables which will help to explain it. Theory is needed, however, to guide the search for explanatory variables.

In our view, no one of the social sciences provides the variables needed to explain travel. We suggest that it may be useful to think of four different groups of explanatory variables. These groups of variables are indicated in the accompanying diagram, and are discussed below. (See chart, page 23.) The arrows in the diagram indicate the postulated direction of causal influence. Thus, arrows go from the other boxes to the box containing the heading "Number of Trips," for the number of trips an individual takes by a given mode would be considered a dependent variable.

We shall consider each of the four categories of explanatory variables in turn:

1. *Economic Situation.* Under this heading we would include any measures of the consumer's ability to pay for travel. His ability to buy depends in the first instance on his income, but may also depend on his liquid assets, his ability to borrow, his fixed financial obligations, and so forth.

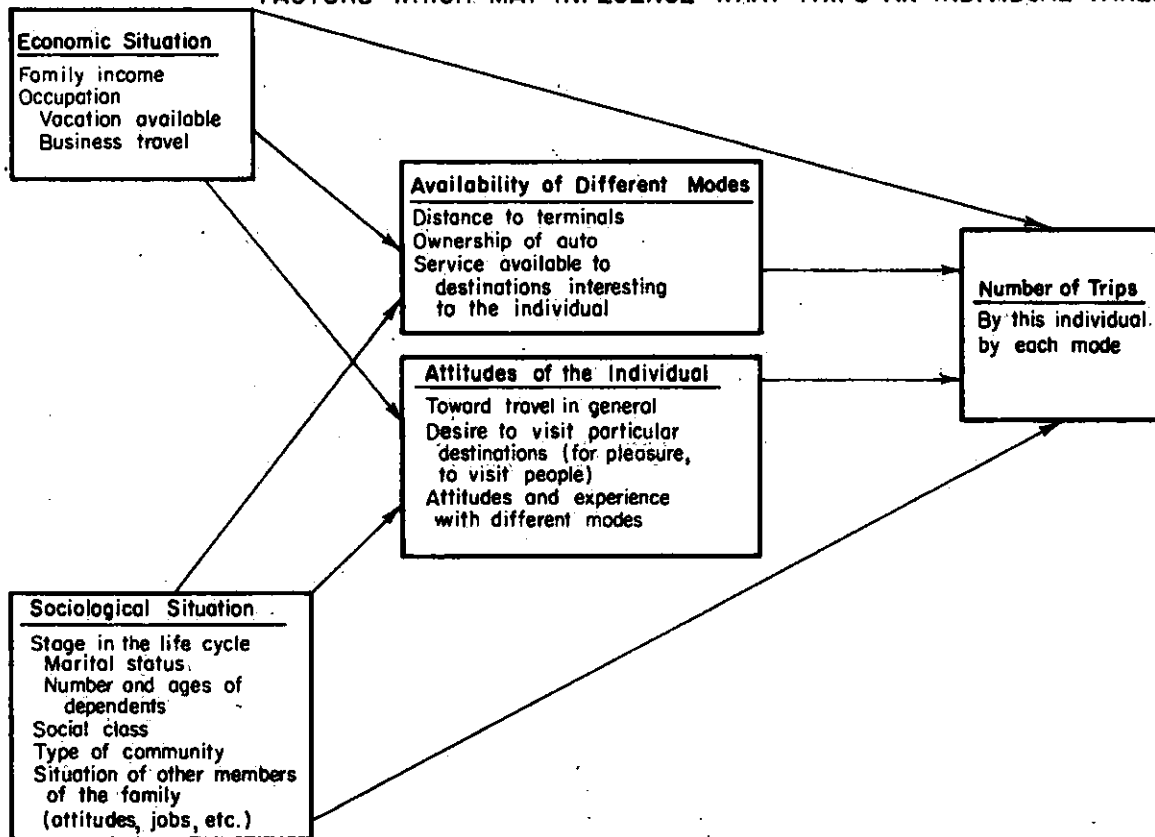
Travel is different from commodities in that it requires time. One may buy a television set and never look at it or a car and never drive it, but one is not likely to pay for a trip and never take it. A person's economic situation, therefore, should be defined to include his ability to leave his job on a vacation.

To the extent that we are interested in business as well as non-business travel we must also take into account the requirements for business travel associated with a person's occupation.

2. *Sociological Situation.* We would include under a person's sociological situation his social status or membership in a social class. Social status and economic status, of course, are closely related. Frequently one finds them referred to as "socio-economic status." Yet we believe it may be useful to distinguish between a person's financial position and the attitudes and experiences which go to make up his social position.

We would also include under sociological situation the person's stage in the life cycle. His calendar age, marital status, and the number of his dependents and their ages may be thought of as associated with his stage in the life cycle.

FACTORS WHICH MAY INFLUENCE WHAT TRIPS AN INDIVIDUAL TAKES



The type of community in which a person lives may also be considered as part of his sociological situation. Communities, of course, may be classified by size, as we have done in this report, or by function, or in other ways not exploited here but potentially useful.

Finally, if we are to have a complete view of the factors influencing an individual, we must take into account other persons in his family. For example, the trips taken by a married woman may be influenced by whether her husband has a paid vacation.

3. *Availability of Different Modes.* The trips taken by a person by a given mode may depend upon the distance to the nearest terminal and upon the nature of the service available at that terminal to destinations interesting to him. The "nature of the service" should include its price as well as the frequency of departure, type of equipment, and so forth. Whether a person owns an auto is of obvious relevance to his choice of modes.

Ownership of an automobile by an individual or by a family depends upon its economic situation and its sociological situation. Thus, arrows are drawn from those boxes in the diagram to the box headed "Availability of Different Modes."

4. *Attitudes of the Individual.* A person's attitudes toward travel in general may influence the number of trips he takes. He may like to take trips, or he may not! He may have specific reasons to visit particular destinations, for pleasure, to visit his family, or, perhaps, to attend school. He may have favorable or unfavorable attitudes toward particular modes of travel.

These attitudes may be thought of as depending to some degree on his economic and sociological situation. The arrows on the chart are drawn to suggest such relationships. A person's attitudes, however, may also be considered in their relation to the kind of person he is. That is, they may be analyzed in terms of their relationship to other attitudes or values which he may hold. Or the question might be raised, What function do these attitudes serve for this individual? Such questions may lead to a clinical approach to the explanation of people's attitudes and to the introduction of measures of different aspects of people's personalities into the analysis. Thus, we have grouped under "Attitudes," variables which in more intensive studies might easily be divided into several categories.

To list a series of variables such as that above, is not the same as to develop a theory. In our view, the next step in the development of a theory of travel is empirical. The problem is one of measuring the variables, testing which of the explanatory variables help to explain one of the dependent variables, and exploring the interrelations among the explanatory variables. An alternative opinion would be that what is now required is a more complete and rigorous statement of what particular independent variables should be chosen for study and why, and how they may be expected to operate. We would welcome efforts in this direction.

The preceding discussion may at least have served the purpose of suggesting that many problems remain unsolved and much work remains to be done to develop an adequate theory of travel. It may also serve as a background for the discussion of travel by the different modes which follows.

IV

AIR TRAVEL

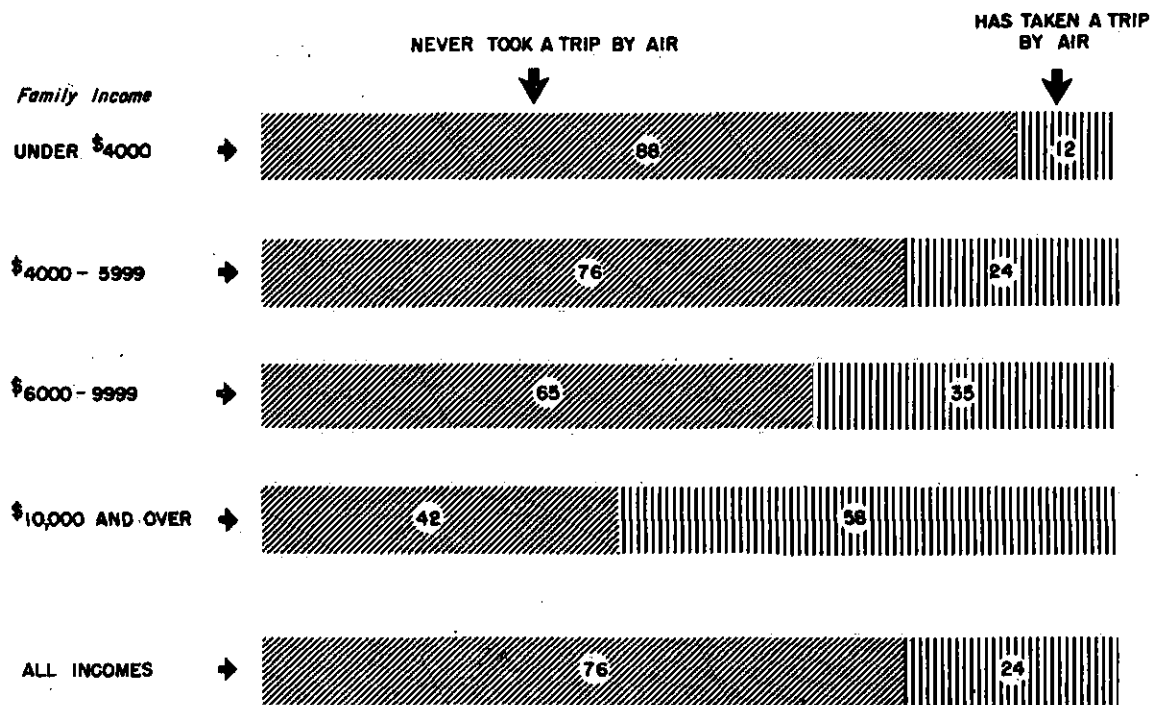
Air Travel History of the Adult Population

New products and services are not shared in equally by all members of the population. At first it is the people with relatively high incomes who have access to them. Only later, and then gradually, do people with lower incomes enter the market. The reaching down into the lower-income levels spells the difference between a high- and a low-production economy, and goes far in explaining the dynamic character of American economic life. Nowhere is the process more evident than in the expansion of air travel in the United States since World War II. But the process is by no means complete. For at every turn in their analysis of air travel the authors were confronted by what economists call "the income effect." Detailed study of the data indicates that some part of the income effect may be attributable to other variables, as is discussed below. But the effect of income itself is powerful.

Most American adults - 76 per cent - have never taken a trip by air. Most adults from families making at least \$10,000 a year - 58 per cent - have taken an air trip. The higher a person's income, the greater the likelihood that he has experienced air travel. The differences from one income group to the next are substantial. Only 12 per cent of low-income people have traveled by air, but twice as many in the middle-income group, three times as many in the middle-to-high income families, and almost five times as many in the wealthiest stratum have taken an air trip at some time in their lives. (See chart, page 27.)

Income is but one of a number of elements determining a person's social class position or his ability to command the resources of his society. The way in which he earns his income is another. The two, of course, are closely interrelated. By and large, one is a reward for the other: the higher the social esteem in which one's occupation is held the greater, in general, are one's earnings. It is not surprising, therefore, that when we compare the air travel history of people in different occupations the relationship we find is very similar to that which emerged in the case of income:

AIR TRAVEL HISTORY OF ADULTS FROM FAMILIES WITH DIFFERENT INCOMES



<u>Occupation of This Adult</u>	<u>Per Cent of All Adults in This Group Who Have Ever Traveled by Air</u>
Professional and managerial workers	45%
Clerical and sales workers	33
Blue-collar workers	22
Not employed (includes housewives and students, but not retired persons)	17

Adults who do professional or managerial work — occupations characterized by high social status — are twice as likely to have experienced air travel as those in the lower-status, blue-collar categories.

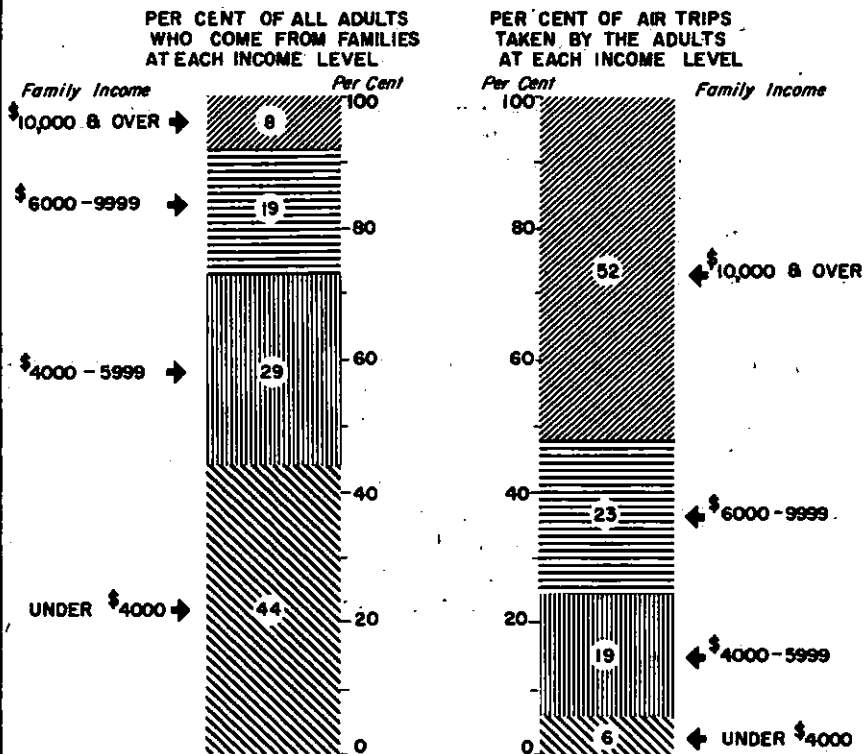
Air Travel in 1955

Although it is clear that air travel *in the past* has been closely related to income, the question remains whether air travelers at present are likely to be high-income people. From the accompanying chart, (p. 29) it would appear so. Almost three-fourths of all air trips are accounted for by people with family incomes of at least \$6,000. Whether or not air travel is becoming increasingly accessible to those with lower incomes, it continues to be true that the current demand for it is concentrated within little more than a fourth of the population. When people refer to the air traveler as "important," or "rich," their comments reflect these facts.

An estimate of the proportion of air trips accounted for by people at different income levels was made independently by the Port of New York Authority on the basis of a survey among passengers on flights out of New York. The findings are similar to those just described. Detailed comparison between the two estimates appears in Table 67.

But it would be too simple to assume that the greater frequency of air travel by high-income people is explained entirely by their ability to pay for it. For often they don't pay for it at all. Although, for example, it is true that those with incomes of \$10,000 or more take more than three times as many nonbusiness trips as those earning less than \$4,000, it is also true, and perhaps more significant, that they take more than fifteen times as many business trips, which ordinarily are paid for by their employers. (See Table 17.) If they are especially likely to travel by air, it is not so much because their means enable them to do so, but because their occupations (of which their incomes are a reflection) require it. In short, they do not fly because they have higher incomes, but they have higher incomes because they work at jobs which require that they fly.

PER CENT OF ALL AIR TRIPS TAKEN BY ADULTS FROM FAMILIES WITH DIFFERENT INCOMES



Air travel is an urban phenomenon. In part this is true because air facilities are more easily available to city than to country dwellers. But in part this fact also reflects the income and occupational status of air travelers which require that they live in or near the great commercial centers. The movement toward the suburbs by middle- and high-income people so frequently noted in the past few years requires that we seek the air traveler not only in cities of the large metropolitan areas, but in their suburbs as well. We should, therefore, expect to find that the probability that a person will fly is greater in the large metropolitan areas than elsewhere. This expectation is borne out by the findings below:

	<u>Large Metropolitan Areas</u>					<u>Other Areas</u>		
	<u>All Adults</u>	<u>Central Cities</u>	<u>Suburbs</u>		<u>Rural Suburbs</u>	<u>Cities</u>	<u>Cities</u>	<u>Rural</u>
			<u>50,000</u>	<u>2,500-</u>		<u>50,000</u>	<u>2,500-</u>	<u>Farm</u>
			<u>& Over</u>	<u>50,000</u>		<u>& Over</u>	<u>50,000</u>	<u>& Open Country</u>
Proportion of adults who traveled by air "last year"	7%	10%	9%	12%	7%	8%	6%	3%

In every type of metropolitan community but one there were more air travelers than there were in any nonmetropolitan community. The exception is trivial. Only 2 per cent of the population live in the rural suburbs of metropolitan areas, and the sample from these places is small. If we take the metropolitan area as a whole and contrast it with nonmetropolitan communities it becomes apparent that the greater the population density the more frequent is air travel. In the preceding text table we refer to "last year" with quotation marks. By "last year" is meant the year prior to interview, which is June 1954-May 1955 for one half of the respondents and November 1954-October 1955 for the other half.

The First Air Trip

The hypothesis has been advanced that people tend to take their first air trip for business reasons. Once they have experienced the delights of air travel, according to this view, they may begin to take nonbusiness trips also by air. In the fall survey people who took an air trip "last year" were asked if they had taken their first air trip in that period. Answers to this question are summarized in the following table:

<u>Type of Air Trip</u>	<u>Took First Air Trip in "Last 12 Months"</u>	<u>Took First Air Trip Be- fore "Last 12 Months"</u>
Business	11%	48%
Non-business	89	52
Total	100%	100%

Nine out of ten of the trips taken by people who took their first air trip in 1955 were nonbusiness trips. Most people take their first air trip for nonbusiness reasons. About half of the trips by experienced air travelers were nonbusiness trips. About 2 per cent of all adults took their first air trip last year, counting both those who traveled on business and those who traveled for nonbusiness reasons.

If instead we ask whether these adults took more business than nonbusiness trips during the year, we again find that the hypothesis fails to be supported. (The following data are from the fall survey only.)

<u>Type of Traveler and Trip</u>	<u>Proportion of Air Trips</u>
Travelers who took first air trip in last 12 months	
Non-business air trips	13
Business air trips	2
Travelers with earlier experience	
Non-business air trips	41
Business air trips	44
Total	100

First-time air travelers account for fewer business trips than do experienced air travelers. This relation holds true for all income groups.

Roughly 15 per cent of all air trips were taken by those whose first air trip occurred in the "last twelve months." The proportion of all air trips accounted for by people who took their first flight during this period varies with income as follows:

<u>Family Income</u>	<u>Proportion of All Air Trips Taken by Those Whose First Trip Was in the "Last 12 Months"</u>
Under \$4000	27%
\$4000-5999	23
\$6000-9999	12
\$10,000 and over	11
Average	15

More than a fourth of all air trips by those with incomes below \$4,000 were taken by people whose first air trip occurred during the preceding year. This finding demonstrates the tendency for air travel to penetrate further into the lower-income groups. The data suggest that this process is not yet complete for air travel.

Attitudes Toward Air Travel

For a rounded picture of the air traveler we require more than information about what he does for a living, how much he earns, and where he lives. We must also examine how he feels about air travel. What does he like about it, and what does he dislike? It is possible to obtain from people detailed information about their most recent trip, provided they have taken a trip in the twelve months before being interviewed. In this section, then, we ask: What advantages does the air traveler see in air travel, and what disadvantages? What experiences, pleasant and unpleasant, stand out for him about his most recent trip?

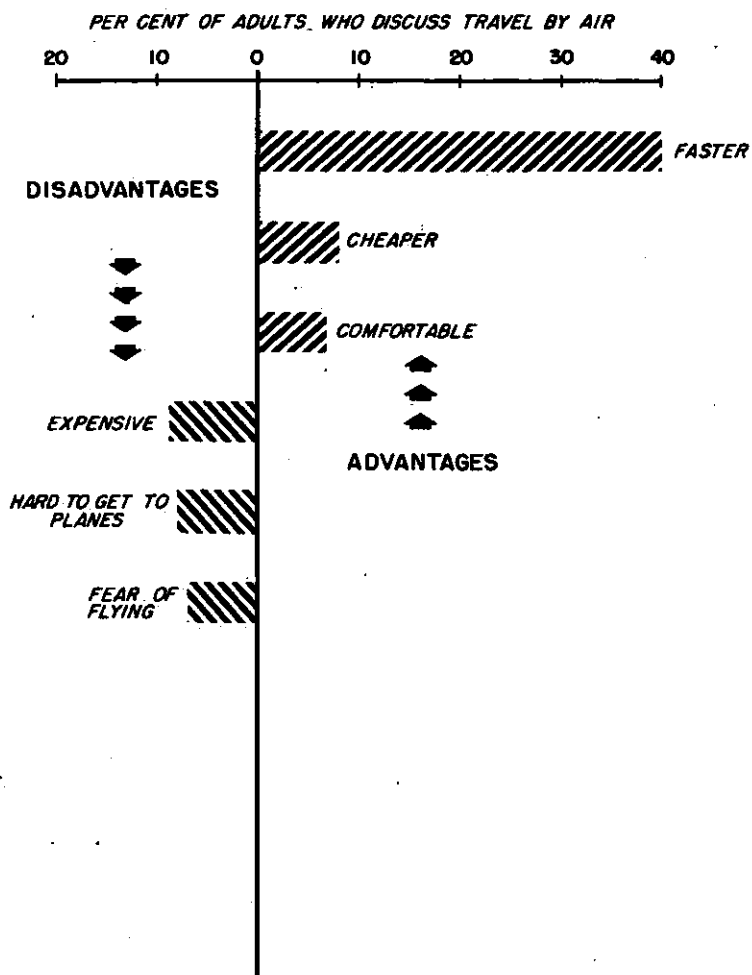
By far, the greatest advantage he sees is that of speed. (See chart, p. 33). Forty per cent of all comments, both favorable and unfavorable, about the most recent trip made reference to it. Five times as much mention was made of speed as of any other advantage. Three other attributes of air travel were discussed relatively often: that it was cheaper, that it was more comfortable, and that it provided better connections than did other modes of travel.

The disadvantages of air most frequently mentioned were that it is hard to get to an air terminal from the person's home or wherever he started his trip, and that the respondent or someone in his family is nervous or fearful about planes.

These comments were elicited by asking travelers why they chose the mode they used for their most recent trip in preference to other modes. This approach has the advantage of focusing on an actual situation in which the respondent did take a trip and did travel by air or consider traveling by air. But it has the disadvantage that only a fraction of the population discuss each mode. It also has the limitation that it tends to lead to well rationalized answers, the type of answer that the respondent feels sure will make sense to the interviewer.

As a supplement, therefore, people were asked more general and indirect questions about why "some people" travel or do not travel by plane and by train. The question about reasons why some people travel by plane leads to emphasis on the same factors mentioned in the discussion of reasons for going by air on one's most recent trip: speed (mentioned by almost everyone), cheapness, and comfort. One

ADVANTAGES AND DISADVANTAGES OF TRAVEL BY AIR FOR THE MOST RECENT TRIP



new factor turned up which was entirely missing before. A number of people mention the idea that some people may fly because they get a thrill out of it. Flying, they suggest, can be exciting. (See Table 21.)

The following quotations illustrate some of the answers to the question about why "some people" travel by plane:

It's faster. And some people *like* to fly.

If your time is valuable it's more economical to go by plane.

Time — motion sickness doesn't last as long by plane. Some people might just like the thrill of flying.

In discussing reasons why they themselves did not fly, some people mention fear; in discussing reasons why other people do not fly, almost everyone mentions fear. It appears to be easier to mention fear in connection with other people than in talking about one's own last trip. Expense also is mentioned by a substantial fraction of the population. Some quotations follow:

Most folks wouldn't want to spend that much money to go places.

Well, a lot of people are nervous about flying.

Well, like me, maybe: I'm gonna keep one foot on the ground!

Still another aspect of people's attitudes toward air travel is their pleasant or unpleasant recollections of their last trip. The respondents were asked to think of their own last trip and tell what they liked about it and what they did not like. These questions differ from those about how they selected the mode they used.

The pleasant comments about the last air trip include observations about speed and time saved, about comfort, and about the thrill of flying, all of which had been mentioned in response to the general question about why people fly. In addition, people often mention favorably the stewardess or other personnel, the service, or the meals. (See Table 22.)

The comments about unpleasant aspects of the last air trip include references to fear and to air-sickness, and to inconvenient location of the terminal, which had been mentioned in answer to other questions. People also speak of jarring, air-pockets, and rough take-offs or landings in answer to this question. Some people felt cramped in the plane. (See Table 23.)

Some of the strategies here described for eliciting people's attitudes toward air travel were also followed in asking about attitudes toward other modes of travel. The results for each of these modes of travel will be presented in the appropriate chapter.

Notes Toward the Prediction of Air Travel

Prediction of air travel requires more than a description of those who now travel by this mode. It requires an analysis of why they travel. Surveys of consumers are better adapted to the study of reasons for nonbusiness than business travel, and the analysis in this section is restricted to nonbusiness travel.

The nonbusiness air traveler is not necessarily a frequent traveler. Sixty percent of nonbusiness air trips are taken by persons who leave home on a trip fewer than ten times a year. The distribution follows:

<u>Number of Trips by All Modes "Last Year"</u>	<u>Per Cent of All Non-Business Air Trips</u>
0 - 9	60%
10 - 19	20
20 - 39	16
40 - 99	<u>4</u>
	100%

Thus, 20 per cent of all nonbusiness air trips were taken by moderate travelers, those who took altogether between 10 and 19 trips by all modes during the year. Only 4 per cent were taken by frequent travelers, people who travel as often as 40 times a year. Frequent travelers do not account for a large proportion of nonbusiness air travel.

One method of forecasting the number of air trips which people will take in the future would be as follows: (1) Estimate the number of air trips per 100 adults at each level of income at present. (2) Estimate the number of adults who will be found at each income level at some date in the future, taking into account the best available forecasts of population and of income. (3) Multiply the number of air trips per adult at a given income level obtained in (1) by the future number of adults at that income level as estimated in (2). (4) Add estimates for each income level to yield a total estimate for the future.

This method may be worth trying, but it is open to objection. The resulting estimates may tend to be too high. It may not be true that people who now have an income of \$X would spend an income of \$X plus \$Y in the same way that people who now have the higher income spend the money.

To test this reasoning the following hypothesis was developed: Income is associated with social status in a community, but it is not the same as social status. Travel by air may be determined by social status as well as by income. Social status cannot easily be

measured directly in a survey, but education is known to be a correlate of status, and education can be measured. Therefore, it is reasonable to predict that people with lower education will travel by air less than people of the same income with higher education.

This hypothesis was tested, and the results may be summarized as follows, showing only the adults with low and high education:

<u>Family Income</u>	<u>Non-Business Air Trips per 100 Adults</u>		
	<u>All Levels of Education</u>	<u>0-8 Grades Only</u>	<u>College</u>
Under \$4000	2	1	8
\$4000 - 5999	7	3	16
\$6000 - 9999	13	6	19
\$10,000 and over	44	17	56

These results indicate that education does have an influence on non-business air travel which is independent of the correlation between income and education. People with a college education take more air trips than people with similar incomes who have only a grammar school education.

A method of forecasting air travel, based on these results, might be developed. One possible conservative assumption would be that the distribution of "education" in the population will not change. Of course, the population is in fact becoming better educated as time passes. Education, however, was not introduced into the discussion in its own right, but as a proxy for social status. The distribution of the population by status need not change, even if the average level of education rises. Another way of stating the same assumption is to say that as the income of people with relatively low education rises the number of air trips they take will be comparable to the number taken by people with relatively low education and higher income.

Business Air Travel

The man who flies for business reasons differs from the nonbusiness air traveler in one important respect: he is likely to make many trips, by various modes, during the course of the year. Whereas only 4 per cent of all nonbusiness air trips were taken by persons who traveled 40 times or more during the year, 37 per cent of all business air trips were taken by people traveling that frequently.* Only 23 per cent of business air trips were taken by people who take nine trips or less a year altogether, counting their trips by all modes. These results may be summarized as follows:

*As noted above, very high-frequency travelers (defined as those who make 100 or more trips per year) are omitted from this analysis.

Number of Trips by
All Modes Last Year

0 - 9
10 - 19
20 - 39
40 - 99

Per Cent of All
Business Air Trips

23%
20
20
37

100%

We have said that income functions indirectly in its effect upon air travel, serving as a reflection of the person's job. One would therefore expect to find an especially high concentration of business air travel in certain occupations - those marked by prestige and responsibility. That this concentration exists is shown below:

Proportion of All Business Air Trips
Taken by Adults in This Occupation Group

Professional and managerial
workers
Clerical and sales workers
Blue-collar workers
Other

72%
17
9
2

100%

Of every ten business air travelers, seven are professional or managerial people, while only one works at a blue-collar job.

Industrial concentration is more marked for business air travel than for business travel generally - four out of every five business trips are taken in connection with work for only four industries: manufacturing, wholesale and retail trade, government, and professional services. Only about three out of five employed adults work in these industries. Persons in construction and agriculture who were seen to contribute a sizable share of business travel evidently use modes other than air.

The proportion of business air trips taken by adults from different industries is shown below. The same distribution was estimated on the basis of a survey of passengers on flights out of New York City published by the Port of New York Authority in a report entitled "New York's Air Travelers." (See also Table 66.) The two distributions are as follows:

<u>Industry</u>	<u>Proportion of Business Air Trips</u>	
	<u>From Inflight Survey</u>	<u>From This Survey</u>
Manufacturing	39%	42%
Wholesale and retail trade	15	20
Professional and related services	7	8
Construction	5	3
Government	4	9
Transport, utilities	6	1
Business and personal services	9	5
Other	15	12
	100%	100%

The surveys are not exactly comparable, for reasons discussed in footnotes to Table 66, but broad agreement was to be expected and broad agreement does appear.

Sources

Text tables in this chapter are derived from Tables 15, 16, 18-27 and 66. The complete list of tables in Appendix D which refer to air travel includes Tables 14-27, 47, 48, 50, 51, 53, 60, 66 and 67.

RAIL TRAVEL

V

Rail Travel History of the Adult Population

Well-to-do consumers are more likely to travel by air than people with more modest incomes. If, as we have suggested, this reflects the relatively short history of air travel, we should expect a traditional mode like rail to attract its passengers from a broader income base. We should expect that more people have taken a rail trip at some time in their lives than have taken an air trip. In fact, as it turns out, whereas air travel has thus far been restricted to a quarter of the population, 70 per cent of all adult Americans have at some time traveled by train. Even of the income group below \$4,000, 62 per cent have taken a rail trip.

But income remains a powerful force. The proportion of adults who have experienced rail travel increases about nine percentage points in each successive income class, if we think of income classes of under \$4,000, \$4,000-\$5,999, and \$6,000-\$9,999. Of people with family incomes of at least \$10,000, all but 12 per cent have taken a train trip at some time. (See chart, p. 40.)

A larger proportion of people in occupations carrying high prestige have at some time taken a train trip than is the case for those who work at jobs held in lower social esteem. But the gap is not as great as it is for air travel. The findings for rail are shown below:

Per Cent of All Adults in
This Group Who Have
Ever Traveled by Rail

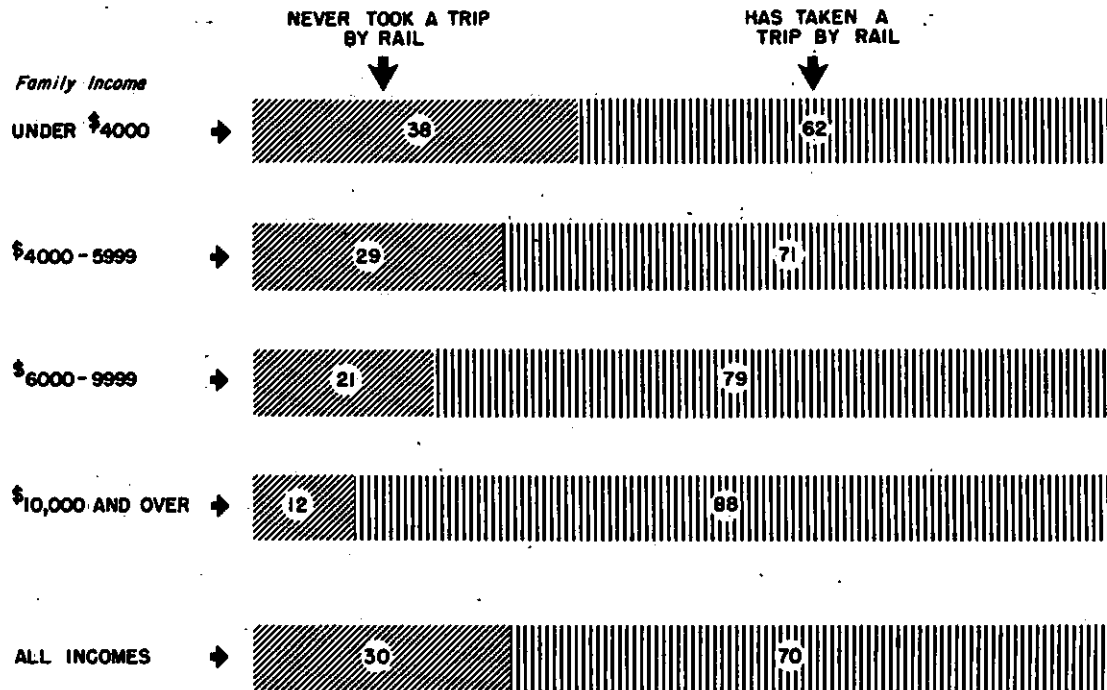
Occupation of This Adult

Professional and managerial workers	84%
Clerical and sales workers	77
Blue-collar workers	68
Not employed (including housewives and students, but not retired persons)	62

Rail Travel in 1955

People with family incomes of at least \$10,000 are almost four times as likely to have taken a train trip during the year preceding

RAIL TRAVEL HISTORY OF ADULTS FROM FAMILIES WITH DIFFERENT INCOMES



interview as are those with incomes of less than \$4,000. The statistics are as follows:

<u>Family Income</u>	<u>Per Cent of Adults in This Group Who Took at Least One Rail Trip "Last Year"</u>
Under \$4000	7%
\$4000-5999	9
\$6000-9999	14
\$10,000 and over	26
All incomes	10

Thus, only 7 per cent of those adults with incomes under \$4,000 took a rail trip, compared to 26 per cent of those with incomes over \$10,000. Contrasting this result with the findings just discussed about rail travel history, we may say that income has more influence on whether people took a rail trip "last year" than on whether they have ever taken one.

From a study of the proportion of people in each income group who took one or more rail trips last year, one would predict that people in high-status occupations would be more likely to take a rail trip than people in low-status occupations. The following results confirm this prediction:

<u>Occupation of This Adult</u>	<u>Per Cent of Adults in This Group Who Took at Least One Rail Trip "Last Year"</u>
Professional and managerial workers	19%
Clerical and sales workers	12
Blue-collar workers	9
Not employed (including housewives and students, but not retired persons)	10

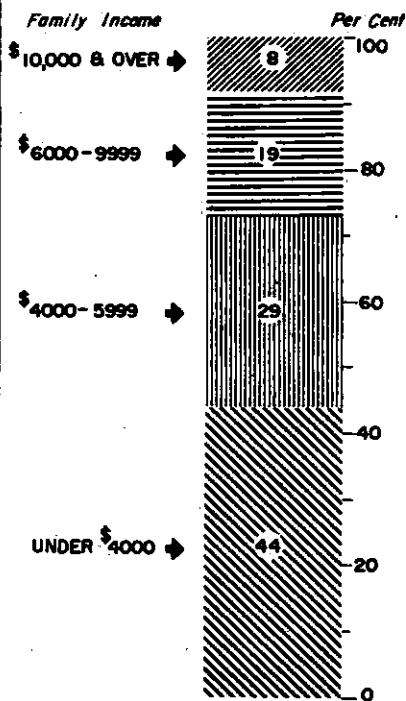
The probability that an adult who is a professional or managerial worker will take a rail trip is about twice as large as the probability that a blue-collar worker will take a rail trip. This statement refers to any trip, whether for business or nonbusiness reasons. These two categories of trips are analyzed separately below.

We have been considering the question, What determines whether an individual will take a trip? We now raise a different question.

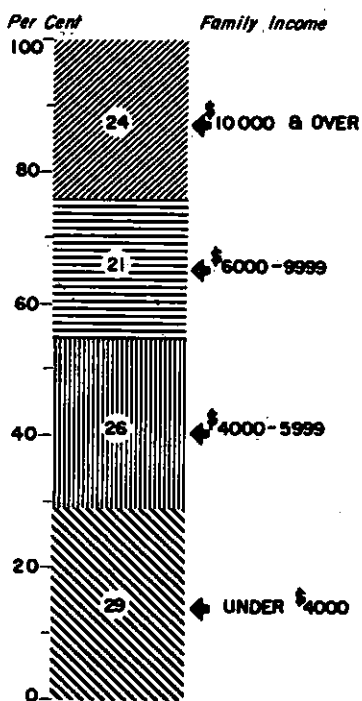
If we consider all the trips by rail taken during the course of the year, how large a share is contributed by each of the income groups? The upper-income group accounts for more than its share of rail travel. (See chart, p. 42.) But while half of all air trips are taken by those with incomes over \$10,000, only about one-fourth of the rail trips are taken by people in this group. Those with incomes under

PER CENT OF ALL RAIL TRIPS TAKEN BY ADULTS FROM FAMILIES WITH DIFFERENT INCOMES

PER CENT OF ALL ADULTS
WHO COME FROM FAMILIES
AT EACH INCOME LEVEL



PER CENT OF RAIL TRIPS
TAKEN BY THE ADULTS
AT EACH INCOME LEVEL



\$4,000 account for more trips than those with incomes over \$10,000. Of course, separate statistics for Pullman travel would show a different pattern.

The chart is designed to answer the question, Is it true that the proportion of rail trips which each income group accounts for is equal to the proportion of the adults in the population who fall in that group? For the two middle-income groups, the answer is Yes. The income group below \$4,000, however, accounts for 29 per cent of the trips but includes 44 per cent of the population. The income group above \$10,000 accounts for 24 per cent of the trips but includes only 8 per cent of the population. The people who ride the trains come from all levels of income, but, if a man has an income over \$10,000, the chances are better that you will find him on a train than his less affluent fellow citizens.

Rail travelers are not as heavily concentrated in urban centers as are air travelers, although some concentration is apparent. In part this reflects the greater accessibility of train facilities in the less populous areas, in part also the predominance of commercial over noncommercial air travel. More than half of all air trips are business trips; roughly a fourth of all rail travel is done for business reasons. It is not surprising that the large urban centers, especially the great metropolitan areas, yield more air trips than they do rail trips. Nonetheless, there is some tendency for rail travelers to come from the more densely populated areas, as is evident in the following distribution:

	Large Metropolitan Areas					Other Areas		
			Suburbs	Suburbs	Rural			Rural
	All	Central	50,000	2,500-		Cities	Cities	Farm
	Adults	Cities	& Over	50,000	Suburbs	Over	50,000	& Open Country
Proportion of adults who used rail "last year"	10%	14%	11%	12%	8%	13%	11%	7%

Attitudes Toward Rail Travel

That trains are primarily taken for other than business purposes is reflected in the reasons people offer for going by rail. Comfort is most frequently mentioned. People tended to choose a train for their most recent trip because of a feeling that rail travel is restful

and that the facilities for passengers are good. Economy and speed were also mentioned frequently.

Some people discussed rail travel when asked about the choice of modes on their most recent trip, but made unfavorable comments. The most commonly mentioned reason for not using rail travel on the most recent trip was that trains do not go to the right places. Difficulty in getting to the station, and lack of train service at convenient times were also mentioned as reasons for not taking the train. (See chart, p. 45.)

As a reason why other people take the train, comfort is as prominent as in discussing one's own most recent trip. Economy and speed also continue to be important. Safety, however, becomes much more prominent. In the interview the questions about reasons for and against travel by rail preceded those about travel by air. Hence, the emphasis on safety is not the result of a previous discussion of fear of flying. Another answer which is much more prominent in this context is that people may take the train because they do not own a car or do not like to drive. Examples of some actual comments about why "other people" travel by train follow:

Traveling by train reflects safety and comfort, as well as reaching your destination in a reasonable amount of time.

It's cheaper, and you would see more of the country that way.

The general disadvantages of rail travel run much less in terms of the accessibility of the terminal and the adequacy of service than the comments about the most recent trip. Instead people speak much more freely of expense. One hesitates to admit the limitations of one's own means; it is easier to talk of other people's. People also suggest that "other people" may not travel by rail because trains are slow, a comment which hardly came up at all in connection with their own most recent trip. (See Table 32.) Sample quotations follow:

If it's a long trip, the expense is great. The schedules are very often inconvenient. There is more fatigue and discomfort on a train.

Too much waiting and changing.

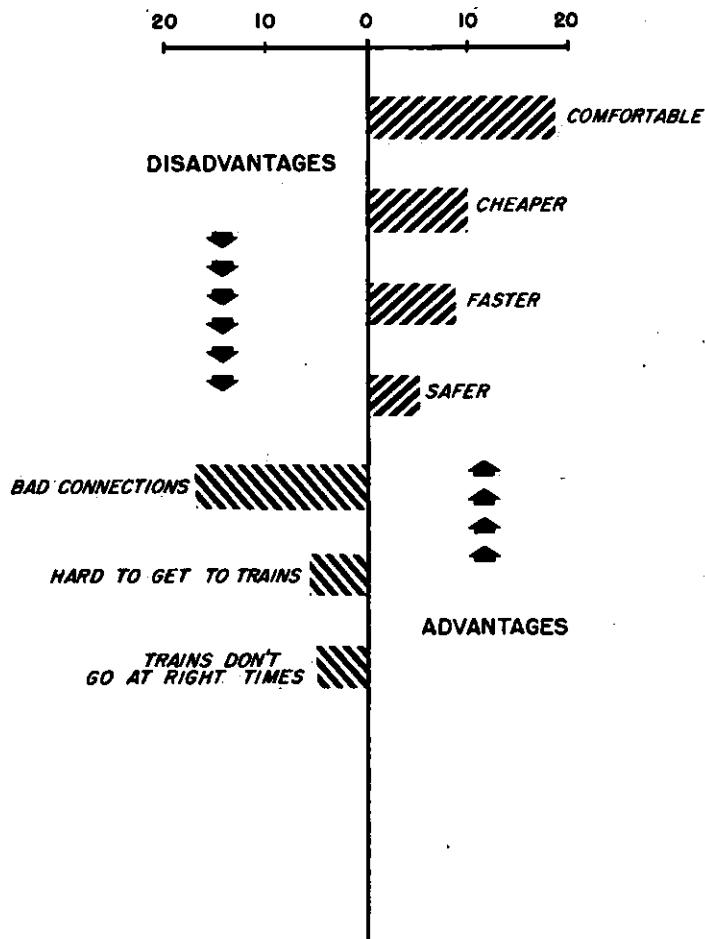
If they have an automobile, why should they go by train?

They could go by auto. With two or three it's cheaper to go by car than by train.

Among people's pleasant recollections of their own last rail trip, the most frequent is that it was comfortable or restful, a result

ADVANTAGES AND DISADVANTAGES OF RAIL FOR THE MOST RECENT TRIP

PER CENT OF ADULTS WHO DISCUSS TRAVEL BY RAIL



which is not surprising in view of the answers to other questions. People remember favorably the dining car and other facilities, such as the washrooms. A comment which is more frequently made in answer to this question than to others is that people like to look at the scenery. There is a minority who look back pleasantly on the people they met on the train. (See Table 33.)

Of the unpleasant recollections of the last rail trip, the comment most easily predictable from earlier questions is that the train was too slow. The most frequent complaint, however, is that the train was uncomfortable and the trip fatiguing. Many people also complain that it was dirty or unsanitary. Difficulties in making connections between trains rank fourth in frequency among people's unpleasant recollections of their last rail trip. (See Table 34.)

Non-Business Rail Travel

Income is extremely powerful in explaining air travel and moderately powerful in explaining rail travel when nonbusiness and business trips are considered together. While some relation exists between income and nonbusiness rail travel, for incomes below \$10,000 it is not impressive:

<u>Family Income</u>	<u>Non-Business Rail Trips per 100 Adults</u>
Under \$4000	13
\$4000-5999	17
\$6000-9999	17
\$10,000 and over	32
All Incomes	17

On the average every 100 adults take about 17 nonbusiness rail trips a year. If we look at the income group below \$4,000, every 100 adults at that level take 13 nonbusiness rail trips. Every 100 adults with incomes from \$4,000-\$9,999 take 17 such trips, while every 100 adults with incomes of \$10,000 and over take 32 nonbusiness rail trips.

Since the income effect is weaker for nonbusiness rail than for nonbusiness air travel, it is less important to ask how much of the income effect is attributable to income itself. When we examine differences in the frequency of rail travel for people with the same income but different levels of education, we find that only for the

college-educated group does the number of rail trips increase systematically as we ascend the income scale. As a matter of fact, education appears to have a stronger effect than income, or so the following table suggests:

<u>Education of Head of Family</u>	<u>Non-Business Rail Trips per 100 Adults</u>
None or grammar school	11
High school	19
College	27

Further investigation suggests that the education effect is less strong for people with family incomes under \$10,000 than for those earning \$10,000 or more. The distribution is shown in Table 36.

In general, high income or high education does not by itself lead to frequent rail trips. Only when a person meets *both* these status requirements is he likely to travel frequently by train.

A pattern may seem to be emerging: people with high status take more trips. We may predict that more people in the high-status occupations will take rail trips in a year. If we do make that prediction, as far as nonbusiness rail trips are concerned we will be wrong.

The blue-collar worker is about as likely to have taken a non-business rail trip in the course of a year as is the professional and managerial worker. (This, of course, is not to say that he will have taken *as many* trips.) Only in the degree that the professional or managerial person is required to travel *on business* does he differ from the blue-collar worker in the likelihood that he will take a train trip during the year. The pattern is shown below:

<u>Occupation of This Adult</u>	<u>Per Cent of All Adults in This Group Who "Last Year" Took at Least One:</u>	
	<u>Non-Business Rail Trip</u>	<u>Business Rail Trip</u>
Professional and managerial workers	9%	9%
Clerical and sales workers	10	2
Blue-collar workers	8	1
Not employed (including housewives and students, but not retired persons)	10	

The probability that a person will take at least one business rail trip does depend on his occupation, but not the probability that he will take a nonbusiness rail trip.

Business Rail Travel

We have seen that income is not as useful for predicting the frequency of rail travel as it is for predicting air travel. Is this true for business trips also? A comparison between business travel by air and by rail follows:

<u>Family Income</u>	<u>Per Cent of Adults at Each Income Level</u>	<u>Per Cent of Business Trips Accounted for by Adults at Each Income Level</u>	
		<u>Air</u>	<u>Rail</u>
Under \$4000	44%	3%	7%
\$4000-5999	29	16	19
\$6000-9999	19	19	27
\$10,000 and over	8	62	47
	100%	100%	100%

People with incomes under \$4,000 rarely take trips by air or by rail in connection with their work. Roughly half of all rail trips on business, and six out of ten air trips on business are taken by persons earning over \$10,000.

But although the upper-income groups take considerably more than their share of rail business trips, the concentration falls short of that shown for air. The train traveler, whatever the purpose of his trip, is not quite so well-to-do.

Nor is he so frequent a traveler. Thirty-seven per cent of all business air trips are made by frequent travelers, people who take at least 40 trips during the course of a year. But only 28 per cent of all rail trips are accounted for by persons traveling this frequently. The comparison is as follows:

<u>Number of Trips by All Modes "Last Year"</u>	<u>Proportion of Business Trips by Each Mode Accounted for by Adults With This Frequency of Total Travel</u>	
	<u>Air</u>	<u>Rail</u>
0 - 9	23	28
10 - 19	20	22
20 - 39	20	22
40 - 99	37	28
	100%	100%

Business rail travelers come from the same occupations as do business air travelers. But professional and managerial workers take an even greater share of business rail trips than they do of

business air trips. Clerical and sales workers contribute a correspondingly higher share of business air trips. This is shown below:

Occupation of This Adult	Per Cent of All Business Air Trips Taken by Adults in This Occupation Group	Per Cent of All Business Rail Trips Taken by Adults in This Occupation Group
Professional and managerial workers	72%	81%
Clerical and sales workers	17	6
Blue-collar workers	9	9
Other	2	4
	100%	100%

Manufacturing does not predominate as much in business rail travel as it does in business air travel: 43 per cent of all business air trips are taken by adults from this industry, as compared to 19 per cent of all business rail trips. Otherwise, the shares of business travel contributed by the different industries follow the same pattern for rail as they do for air. Besides manufacturing, business rail trips are concentrated in wholesale and retail trade, government, and professional services.

Sources

Text tables in this chapter are derived from Tables 29, 31, 32, 33, 34, 35, 36, 37 and 38. The complete list of tables in Appendix D which refer to rail travel includes Tables 28-38, 47, 48, 50, 51, and 53-59.

BUS TRAVEL

Bus Travel History of the Adult Population

Experience with bus travel is spread more evenly throughout the population than experience with any other mode. Income differences are at a minimum. About half the members of each income class have traveled by bus at some time in their lives. The proportions are as follows: (See also chart, p. 51.)

<u>Family Income</u>	<u>Per Cent of Adults in This Income Class Who Have Ever Traveled by Bus</u>
Under \$4000	46%
\$4000-5999	51
\$6000-9999	47
\$10,000 and over	44
Average for all income groups	48

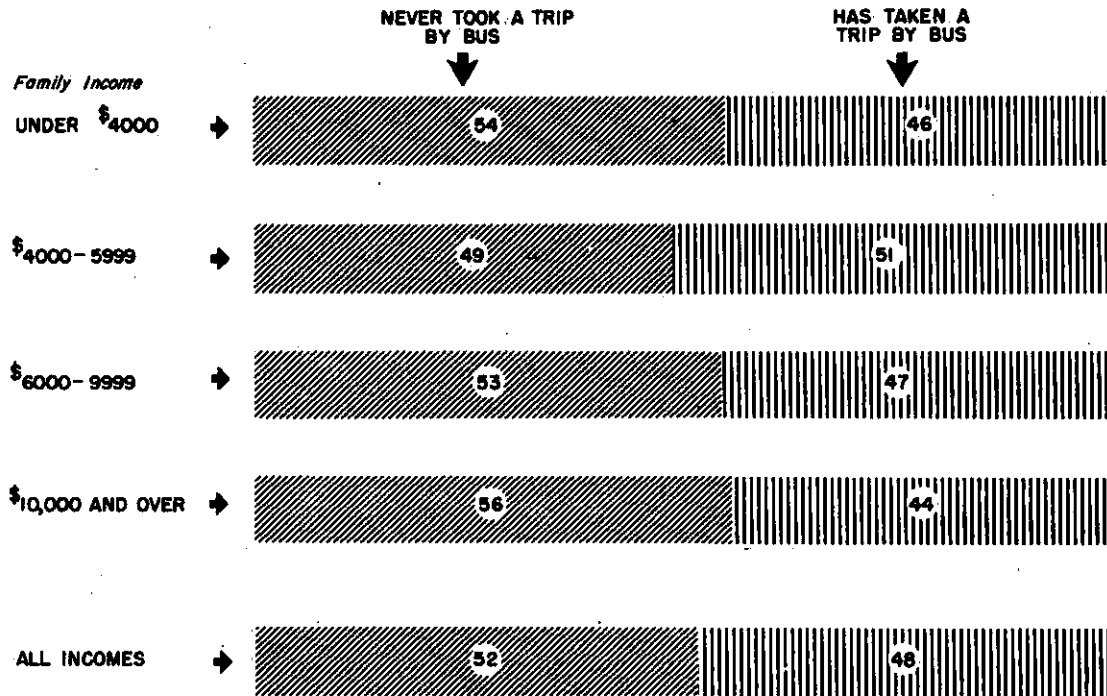
If anything, people in the higher-income groups are less likely than those in the middle-income groups to have taken a bus trip.

Similarly, differences among occupation groups are small. Roughly half of the members of each occupation group have traveled by bus at some time in their lives. Farmers are exceptions: slightly less than half the farmers have ever taken a bus trip.

The proportion of those in each occupational group who have taken a bus trip at some time in their lives is as follows:

<u>Occupation</u>	<u>Per Cent of Adults in This Occupation Who Have Ever Traveled by Bus</u>
Professional and managerial workers	51%
Clerical and sales workers	51
Blue-collar workers	51
Farmers	44
Retired	42
Housewives, students, others not now employed	44

BUS TRAVEL HISTORY OF ADULTS FROM FAMILIES WITH DIFFERENT INCOMES



That fewer retired people than those now employed have taken a bus trip may reflect the fact that long-distance bus travel is relatively new in this country. People aged 65 in 1955 were 18 in 1908. They lived much of their adult lives in a period when long-distance bus travel did not exist.

It must be kept in mind that this report is concerned only with trips to points 100 miles or more away from home. This limitation as to distance removes from consideration almost no air trips, but it does rule out many short trips by the other modes. Undoubtedly more people have taken short bus trips than long ones.

Bus Travel in 1955

The people who took bus trips in 1955 formed a cross-section of the population, at least with respect to income. In the case of no other mode does the proportion of all trips contributed by each income group so nearly equal the proportion of that income group in the population. Low-income people contributed the largest share of bus trips, high-income people the smallest. (See chart, p. 53.) Of all adults, 44 per cent come from families with incomes below \$4,000. These adults took 48 per cent of all bus trips. Of all adults, 29 per cent came from families with incomes between \$4,000 and \$5,999. These adults took 28 per cent of all bus trips. Similarly, the 19 per cent of adults from the income group \$6,000-\$9,999 took 18 per cent of the bus trips, and the 8 per cent from the top income group took 6 per cent of the trips.

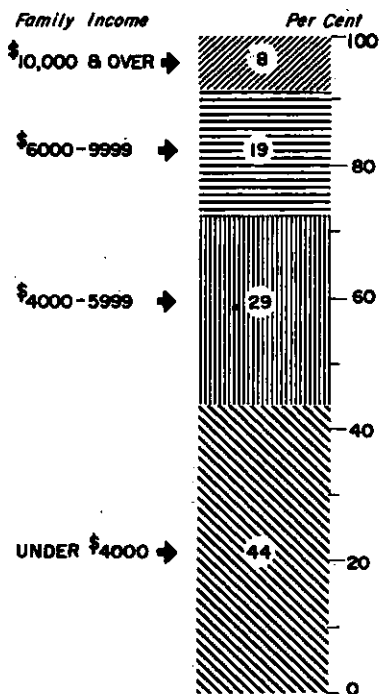
Another way to look at the relation between income and bus travel is to compare for different income groups the proportion of adults in the group who took one or more bus trips last year. The statistics are as follows:

<u>Family Income</u>	<u>Per Cent of Adults in This Income Class Who Took a Bus Trip "Last Year"</u>
Under \$4000	7
\$4000-5999	6
\$6000-9999	6
\$10,000 and over	5
All Incomes	7

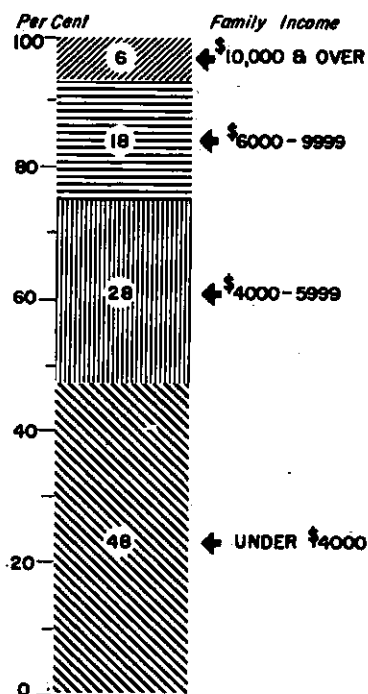
The observed differences from one income class to the next are small enough to be attributable to sampling error. The chances that in one year a given person will take a bus trip are low, about 7 out

PER CENT OF ALL BUS TRIPS TAKEN BY ADULTS FROM FAMILIES WITH DIFFERENT INCOMES

PER CENT OF ALL ADULTS
WHO COME FROM FAMILIES
AT EACH INCOME LEVEL



PER CENT OF BUS TRIPS
TAKEN BY THE ADULTS
AT EACH INCOME LEVEL



of 100, and do not depend on his income. Reasons for taking bus trips, however, may differ for different income groups, as is discussed below.

The geographical concentration of bus travelers is the reverse of that found for the users of the other common carriers. The predominance of the large urban centers was seen to be not nearly as great for rail travel as for air. It is not evident at all in the case of bus. On the contrary, proportionately more bus travelers are to be found in the nonmetropolitan areas. The proportions which bus travelers represent of the populations of different types of communities are as follows:

	Large Metropolitan Areas					Other Areas		
	All Adults	Central Cities	Suburbs 50,000 Over	Suburbs 2,500- 50,000	Rural Suburbs	Cities 50,000 Over	Cities 2,500- 50,000	Rural Farm & Open Country
Proportion of adults who used bus "last year"	7%	6%	3%	4%	7%	8%	9%	6%

In part, these data reflect the fact that buses are more readily available in smaller towns and rural places than are other common carriers. In part also they are accounted for by the infrequent use made of buses for business travel.

Business travel is primarily an urban phenomenon, whereas bus travel is not. Only one per cent of the population took a business trip by bus "last year." Fewer people take business trips by bus than by any other common carrier.

Attitudes Toward Bus Travel

The reasons for bus travel probably vary more with income than do the reasons for taking any other mode. For some people it is the only kind of travel within financial reach. But well-to-do people may take the bus because the schedule is convenient or the connections are good.

The most frequently mentioned advantage of bus travel is its low cost. That bus trips are cheaper is mentioned in 15 per cent of the discussion of why a bus was or was not used on the most recent trip. Others say that they went by bus because buses go to more

places and are sometimes "the only way you can get there." Still other reasons are that one can see more of the scenery, and a few mention that the bus is fast.

There is disagreement on the last point. The statement that buses are fast occurs about as frequently as the statement that buses are slow. The most frequently mentioned reason for not taking the bus, however, is that there was no bus to the right destination. Some people also commented unfavorably on the schedule and on the lack of comfort of bus travel. (see chart, p. 56.)

Sources

The text tables in this chapter are derived from Tables 39-41 in Appendix D. The complete list of tables in Appendix D which refer to bus travel includes Tables 39-42, 47, 48, 51, 53-56, 58, and 59.

ADVANTAGES AND DISADVANTAGES OF BUS FOR THE MOST RECENT TRIP

PER CENT OF ADULTS WHO DISCUSS TRAVEL BY BUS

20 10 0 10 20

DISADVANTAGES



BUSES DO NOT GO TO
THE RIGHT PLACES

SLOW

CHEAPER

ONLY WAY TO GET THERE

SEE THE SCENERY



ADVANTAGES

AUTO TRAVEL

VII

Auto Travel History of the Adult Population

It is the automobile which justifies the reputation of Americans as a people on the move. Nine out of ten adults have at some time taken an auto trip, as compared with seven out of ten who have experienced travel by the next most frequently used mode, rail. Since 29 per cent of all families did not own a car as of early 1955 (according to the 1955 Survey of Consumer Finances), many people must have taken trips in cars owned by friends or relatives.

People with family incomes of \$4,000 or more are almost certain to have experienced auto travel. But almost a fifth of the lowest-income group have never taken a trip by car. As shown in the chart on page 59, the proportions are as follows:

<u>Family Income</u>	<u>Proportion of Adults in This Income Class Who Have Ever Traveled by Auto</u>
Under \$4000	82%
\$4000-5999	93
\$6000-9999	94
\$10,000 and over	96
All incomes	89

The prevailing customs in the United States are such that one wonders why a few people in the middle- and upper-income brackets have never taken an auto trip rather than why nearly every adult in these brackets has.

The relative newness of the automobile has something to do with the matter. The proportion of retired persons who have never taken an auto trip is higher than the proportion of persons now employed, as the following table shows:

<u>Occupation</u>	<u>Per Cent of Adults in This Occupation Who Have Ever Traveled by Auto</u>
Professional and managerial workers	95%
Clerical and sales workers	91
Blue-collar workers	86
Farmers	86
Retired	82
Housewives, students, others not now employed	85

The slight differences which exist among employed adults are in the familiar pattern— the high-status occupations contain larger proportions of adults who have taken a trip by auto.

Auto Travel in 1955

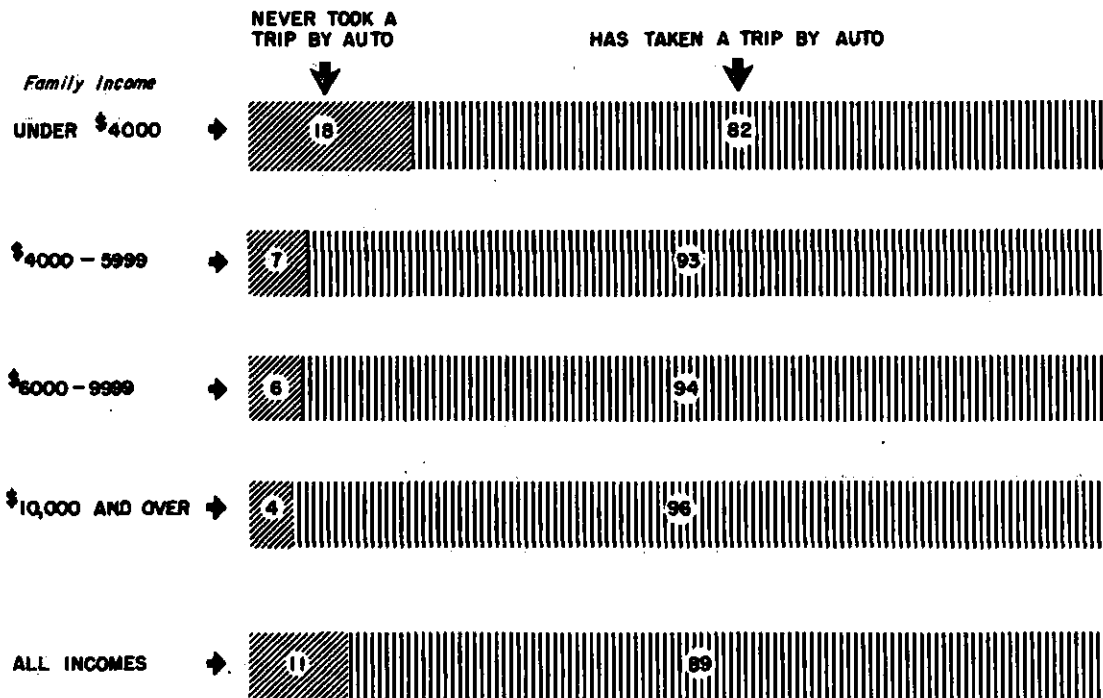
Only when the likelihood of travel by competing modes *in a given year* is considered does the pre-eminence of the automobile become fully apparent. A majority of all adults take a trip of 100 miles or more away by car in the course of a year. For no other mode is this true. Indeed, five times as many people take a trip by auto as by any other mode. The comparison is as follows:

	<u>Auto</u>	<u>Rail</u>	<u>Air</u>	<u>Bus</u>
Proportion of adults who used this mode "last year"	55%	10%	7%	7%

Since experience with auto travel is so pervasive and use of the auto so common throughout the population, we should not expect large differences in the proportions contributed by the four income groups. Nor do we find them. The proportion of adults at different income levels who took one or more auto trips last year is as follows:

<u>Family Income</u>	<u>Proportion of Adults in This Income Class Who Took a Trip by Auto "Last Year"</u>
Under \$4000	42%
\$4000-5999	62
\$6000-9999	70
\$10,000 and over	72
All incomes	55

AUTO TRAVEL HISTORY OF ADULTS FROM FAMILIES WITH DIFFERENT INCOMES



Thus the probability that an adult will take an auto trip in a year increases with income from 42 chances out of 100 if his income is below \$4,000, to 72 chances out of 100 if his income is over \$10,000.

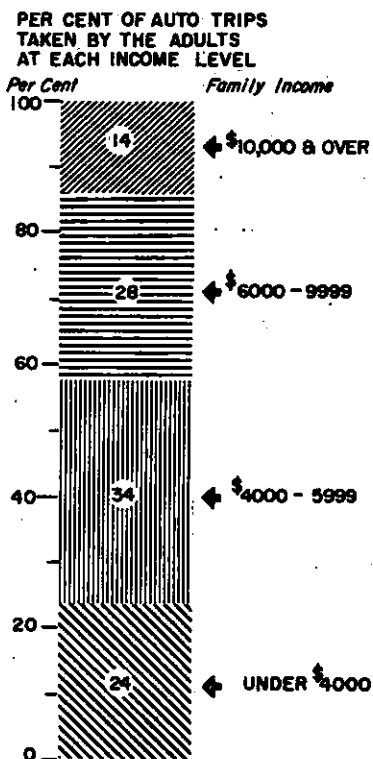
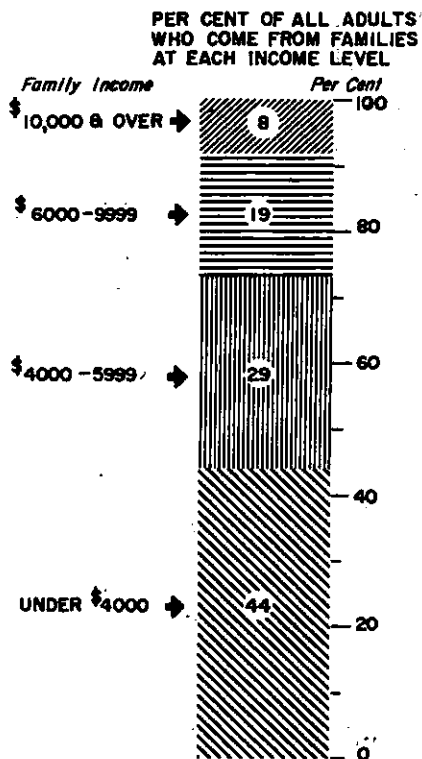
There is one further property of this set of numbers which is worth noting. Although the probability that an adult will take a trip does increase, as we have noted, as his income increases, it increases at a decreasing rate. In fact, the difference between 70 per cent (for the income group \$6,000-\$9,999) and 72 per cent (for the income group \$10,000 and over) is so small that it may be the result of random fluctuation in the sample. Thus, the probability shows no signs of rising over 70-75 per cent. The fact that a person has a high income does not guarantee that he will take an auto trip. Other forces must be at work which hold down the probability that he will take one.

Car trips are spread more equally throughout the population than trips by any other mode except bus. This is not to say that income differences do not exist. The \$10,000 and over group yields considerably fewer, and the \$4,000-\$5,999 correspondingly more, trips than does either of the other income classes. These results should be considered in the light of the proportion of adults in each income class, as is done in the accompanying chart. (See chart, p. 61.) Of all adults, 44 per cent come from families with incomes below \$4,000. These adults take only 24 per cent of the auto trips taken per year. As we have noted, less than half of these adults take even one trip per year. Of all adults, 29 per cent come from families with incomes between \$4,000 and \$5,999. These adults take 34 per cent of the auto trips. Of all adults, 19 per cent come from the income group \$6,000 to \$9,999. Among them, these adults account for 28 per cent of the auto trips. Of all adults, 8 per cent come from the top income class. These adults account for 14 per cent of all auto trips.

What is the effect of membership in different occupational groups on the probability that an adult will take an auto trip? The statistics follow:

<u>Occupation</u>	<u>Per Cent of Adults in This Occupation Who Took an Auto Trip "Last Year"</u>
Professional and managerial workers	70%
Clerical and sales workers	63
Blue-collar workers	54
Farmers	50
Retired	36
Housewives, students, others not now employed	51
All occupations	55

PER CENT OF ALL AUTO TRIPS TAKEN BY ADULTS FROM FAMILIES WITH DIFFERENT INCOMES



Of retired adults, only 36 per cent took an auto trip "last year," compared to 55 per cent of all adults. As far as automobile travel is concerned, these statistics shatter the stereotype that retirement is a stage of life when people take frequent trips.

The proportions of the other occupational groups who took an auto trip are about what one might expect in the light of the figures for the different income classes. Blue-collar workers and farmers are almost as likely to take an auto trip as the average for all occupations. White-collar workers are more likely to take a trip than the average for all occupations.

Cars are especially useful in areas where other forms of transportation are hard to reach, and in communities which are dependent for much of their economic life upon more or less distantly located urban centers. The smaller such communities are the more inaccessible is common carrier travel, and the greater and the more frequent the distances which must be traveled in order to maintain ties with friends and relatives. On the other hand, the difficulties of travel by auto for people living in the center of New York and other great cities are notorious. Geographical variations in the use of automobiles reflect these facts:

	Large Metropolitan Areas					Other Areas		
	All Adults	Central Cities	Suburbs	Suburbs	Rural Suburbs	Cities	Cities	Rural
			50,000 & Over	2,500- 50,000		50,000 & Over	2,500- 50,000	Farm & Open Country
Proportion of adults who used auto "last year"	55%	43%	52%	55%	64%	60%	60%	55%

In central cities of large metropolitan areas fewer than half the adults use cars for long trips in a year; in rural suburbs and small towns three-fifths do so. These differences, it should be kept in mind, are opposite in direction from differences in income. Incomes are *higher* in large cities, where the probability that a person will take an auto trip is *lower* than in smaller cities and towns.

Few of those who travel by auto during the year do so for business reasons. About 7 per cent of all adults take a business trip by auto in a year. These adults who do take business trips by car are concentrated in the higher-income levels. Professional and managerial workers, as well as farmers, are more likely to make use of automobiles for business travel than are members of other occupations. This is shown as follows:

<u>Occupation of This Adult</u>	<u>Per Cent of All Adults in This Occupation Who Took a Business Trip by Auto During the Year</u>
Professional and managerial workers	22%
Clerical and sales workers	9
Blue-collar workers	6
Farmers	15
Average for all occupations	7

In general, members of high-status occupations are more likely to have experienced automobile travel, and to have taken a car trip during the year, than workers at lower-status jobs, but there is wide experience at all levels.

Attitudes Toward Auto Travel

The advantage of auto travel most often cited is that it is cheap. In addition to those who mention cheapness explicitly, people comment that "more of us could go" by car. The second most commonly mentioned reasons for taking one's last trip by auto were that one can time one's trip as one pleases and choose one's own route. Some observe that, to the destination they had in mind, it was faster to go by auto. People also comment that one can see the scenery by auto.

The advantage of having one's car available for use at the destination was mentioned by a number of people. Others point out that the car goes "door-to-door." It avoids the problems of getting to and from terminals with luggage. Some mention that they feel it is easier to travel by auto with children or with old people. And several report that they enjoy driving.

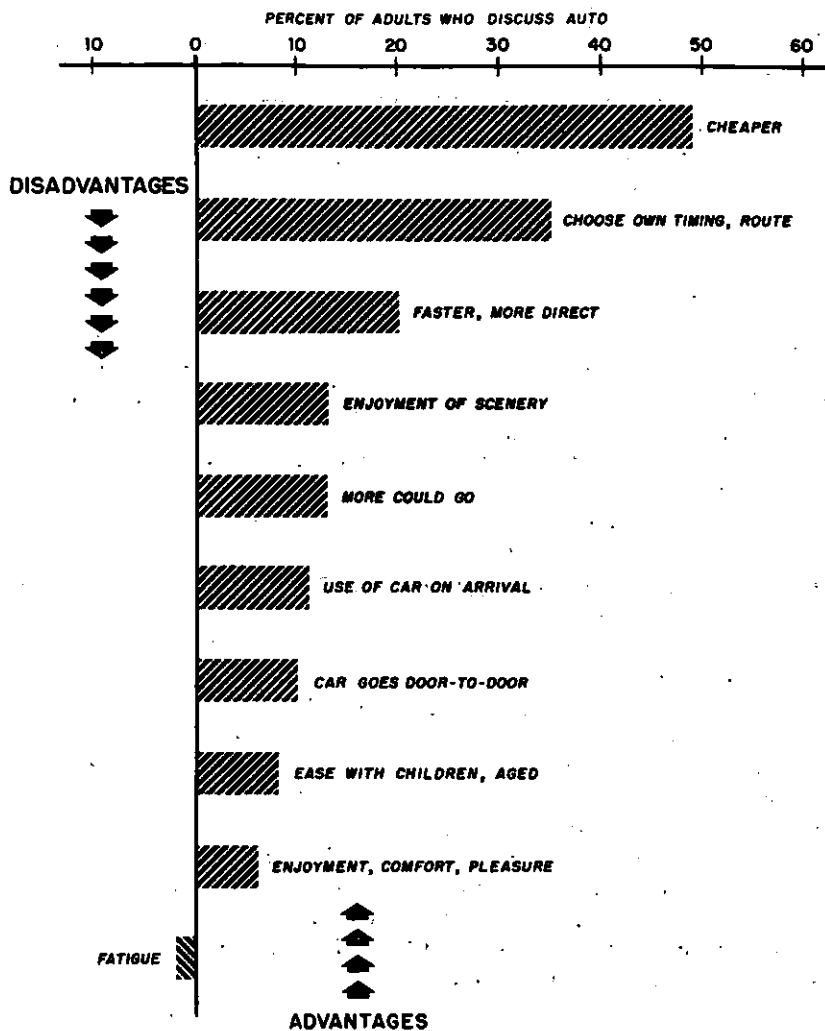
Taken together these advantages of travel by auto, as seen by people who take trips, help to explain why travel by auto is so much more common than travel by other modes.

Only one disadvantage of auto travel is mentioned at all frequently, the fatigue of driving and the related problems of bad driving conditions. Very few people, however, made unfavorable comments about automobile travel in discussing the mode they chose for their most recent trip. (See chart, p. 64.)

Sources

The text tables in this chapter are derived from Tables 43, 44, and 45 in Appendix D. The complete list of tables in Appendix D which refer to auto travel includes Tables 43-49, and 51-56.

ADVANTAGES AND DISADVANTAGES OF AUTO FOR THE MOST RECENT TRIP



COMPARING THE FOUR MODES

VIII

Although the preceding chapters have considered separately each of the four major means of transportation, occasional comparisons of one type of transportation with another have been made. The purpose of the present chapter is to bring together more systematically comparisons among the four modes. Not all possible comparisons will be made. The emphasis is on comparing the effect of income and place of residence on the modes of travel which people use. The final sections of this chapter compare modes in terms of the number of companions who travel together, the use of coach versus first-class accommodations, the place where tickets are bought, and the frequency of all-expense tour packages.

Travel History and Use "Last Year" of the Four Modes

As already noted, of all adults 7 per cent used air "last year"; 7 per cent used bus; 10 per cent, rail; and 55 per cent, auto. (See chart, p. 67.) The common carriers, even considered together, are used by far fewer people than the automobile. The proportions who have ever used the modes, however, are more nearly equal. Nine out of ten have used auto, but seven in ten have used rail, and five out of ten have taken a bus trip. Only one in four, however, has ever taken a trip by air. The ranks of the three common carriers in order of the proportion of persons who have used them are the same as their ranks in order of how long they have been available. Rail travel is oldest, and has been used by the most people. Bus travel follows, and then air. The difference between the proportion who have used bus and the proportion who have used air may also be attributed to differences in the number of people in the low and the high income groups, respectively.

Differences Among Income Groups

People's incomes make a difference in the modes they use. The proportion of adults at each income level who used each mode last year is summarized in the chart on page 69.

Air travel is more closely associated with income than travel by any other mode. Only a very small proportion of those with low incomes took an air trip. The proportion rises steadily with income, approximately in a straight line.

Bus travel is another matter. The proportion of adults who use this mode is, if anything, *lower* among the high-income groups. But the proportion falls at most only a few percentage points as income rises. Even at the highest-income levels about 6 per cent took a bus trip. As a first approximation, the proportion of adults who take a bus trip is the same at all income levels.

Rail travel is much more common than air travel (though less common than bus travel) at the lowest-income levels. Rail trips are about as common as bus trips for people with incomes up to \$4,000, but over \$4,000 more people take rail trips. It is only in the \$10,000 up bracket that more people take air trips than rail trips in a year.

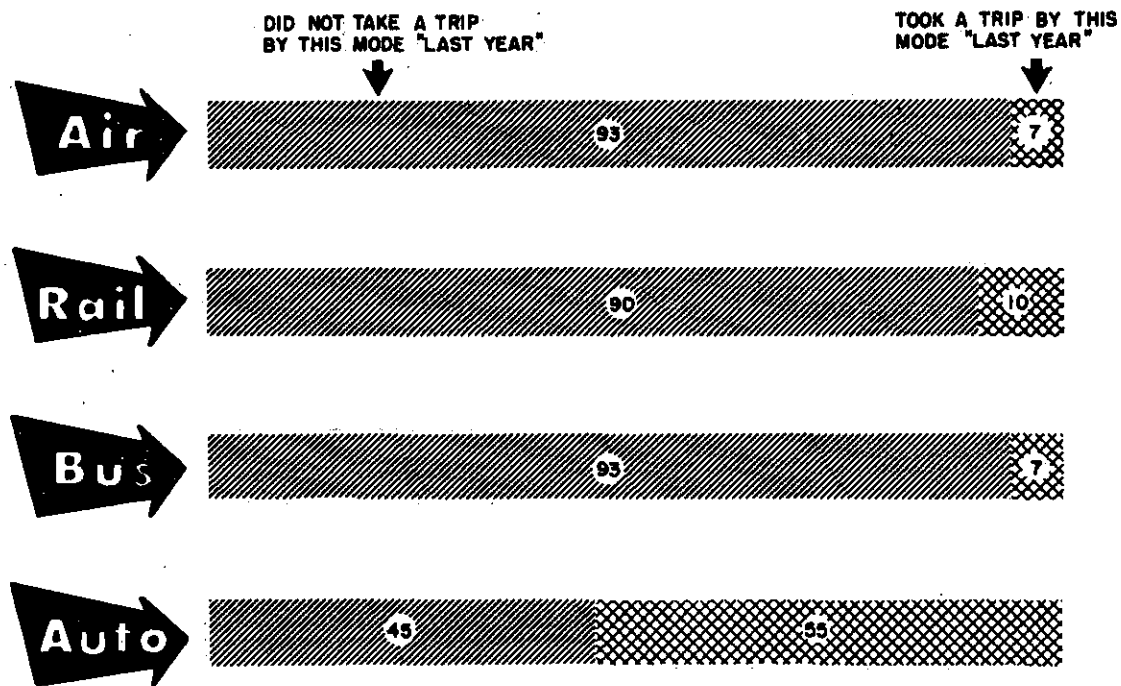
Auto trips are taken by a much larger proportion of adults at *all* levels than the proportion using any other mode. The relative position of the automobile is less strong at the extremes of the income distribution. At the lowest-income levels people are not likely to take auto trips. People at the highest-income levels are likely to take auto trips, but they are also likely to travel by common carrier.

The preceding discussion concerns only whether people used a given mode at all. The number of trips which people take is taken into account in the following table which shows the number of *non-business* trips by each mode for every 100 adults at a given level of income.

Family Income	Number of Non-Business Trips Per 100 Adults by ...			
	Air	Rail	Bus	Auto
Under \$4000	2	13	9	127
\$4000-5999	7	17	11	259
\$6000-9999	13	17	11	321
\$10,000 and over	44	32	8	319

These results follow the same general pattern as the results just discussed. People in the income class under \$4,000 took only two nonbusiness air trips for every 100 adults in the group. The number of air trips per 100 adults rises with income to 44 for every 100 adults in the top income group. People in the income class under \$4,000 took nine bus trips for each 100 adults in the group. The number of bus trips per 100 adults in the other income groups is similar. The number of nonbusiness rail trips per 100 adults rises with income, but less dramatically than the number of air trips. The number of auto trips per 100 adults rises with income but levels off. It

PROPORTION OF ALL ADULTS WHO USED EACH OF THE DIFFERENT MODES "LAST YEAR"



is about the same for the highest-income groups as for the next highest. The number of nonbusiness air and rail trips per 100 adults for different levels of income is plotted in the accompanying chart, p. 69. The graph is very similar to the one showing the per cent of adults at each income level who took one or more trips by these modes. (See p. 71.)

The increased use of air and rail at the upper-income levels implies that people at those income levels probably use more modes during a year than is true of people in the lower-income groups. The statistics are as follows:

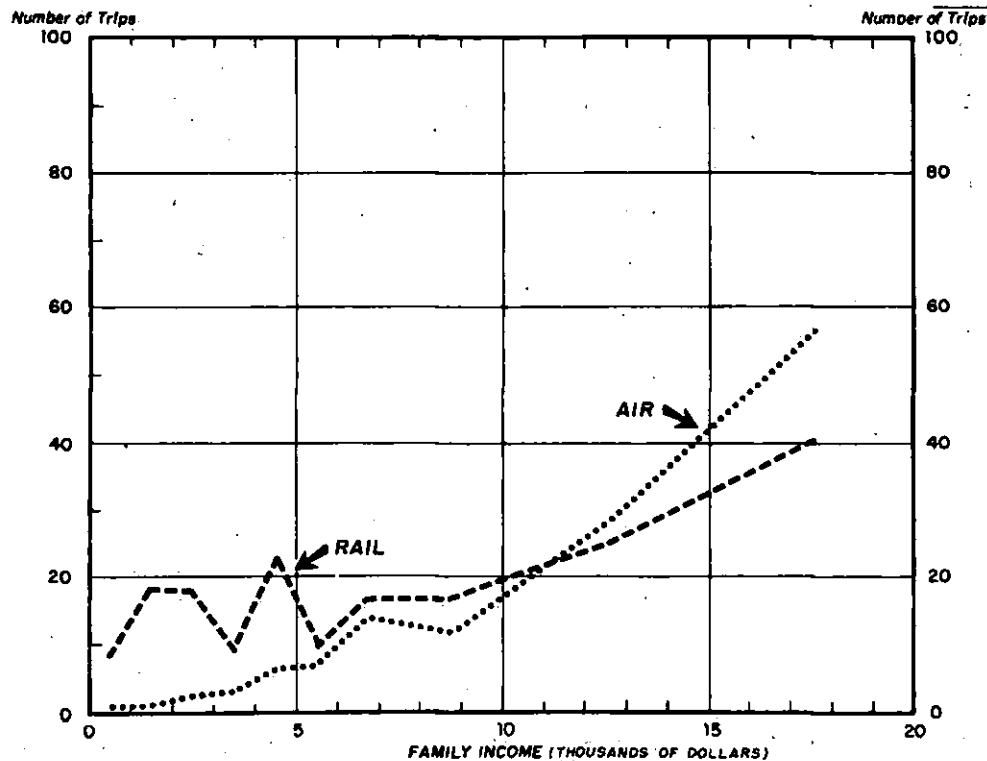
<u>Number of Modes Used</u>	<u>Family Income</u>			
	<u>Under \$4000</u>	<u>\$4000- 5999</u>	<u>\$6000- 9999</u>	<u>\$10,000 & Over</u>
<u>Took a trip</u>	<u>47%</u>	<u>67%</u>	<u>75%</u>	<u>83%</u>
Auto only	33	50	51	39
One common carrier only	5	4	4	8
Two modes	7	10	15	23
Three or four modes	2	3	5	13
<u>Took no trip</u>	<u>53</u>	<u>33</u>	<u>25</u>	<u>17</u>
Total	100%	100%	100%	100%

The proportion of adults who used three or four modes does prove to be higher in the upper-income groups. Only 2 per cent of those with incomes below \$4,000 used three or four modes, compared to 13 per cent of those with incomes over \$10,000. The proportion of the adult population who used any one or more of the three common carriers rises from 14 per cent of those with incomes below \$4,000 to 44 per cent of those with incomes above \$10,000.

Though the probability that a person will travel and the number of trips that he is likely to take rise with his income, it does not necessarily follow that the upper-income groups predominate among people taking trips. One must take into account the number of people at each income level and look directly at the proportion of trips accounted for by people in different income classes. The comparison between the shares of all nonbusiness trips accounted for by the different income classes is as follows:

<u>Family Income</u>	<u>Shares of All Nonbusiness Trips</u>			
	<u>Air</u>	<u>Rail</u>	<u>Bus</u>	<u>Auto</u>
Under \$4000	10%	36%	52%	27%
\$4000-5999	22	30	26	37
\$6000-9999	28	20	17	23
\$10,000 and over	40	14	5	13
Total	100%	100%	100%	100%

NUMBER OF NON-BUSINESS AIR AND RAIL TRIPS PER 100 ADULTS FOR DIFFERENT LEVELS OF INCOME



The lowest-income group accounts for half of the nonbusiness bus travel, 36 per cent of rail travel, 27 per cent of auto travel, and only 10 per cent of nonbusiness travel by air. The highest-income group accounts for 40 per cent of nonbusiness air travel, but for only 13-14 per cent of travel by automobile and by train and only 5 per cent of travel by bus.

These results may be contrasted with those for business travel:

<u>Family Income</u>	<u>Shares of All Business Trips</u>			
	<u>Air</u>	<u>Rail</u>	<u>Bus</u>	<u>Auto</u>
Under \$4000	3%	6%	25%	16%
\$4000-5999	16	19	42	35
\$6000-9999	18	27	19	27
\$10,000 and over	63	48	14	22
Total	100%	100%	100%	100%

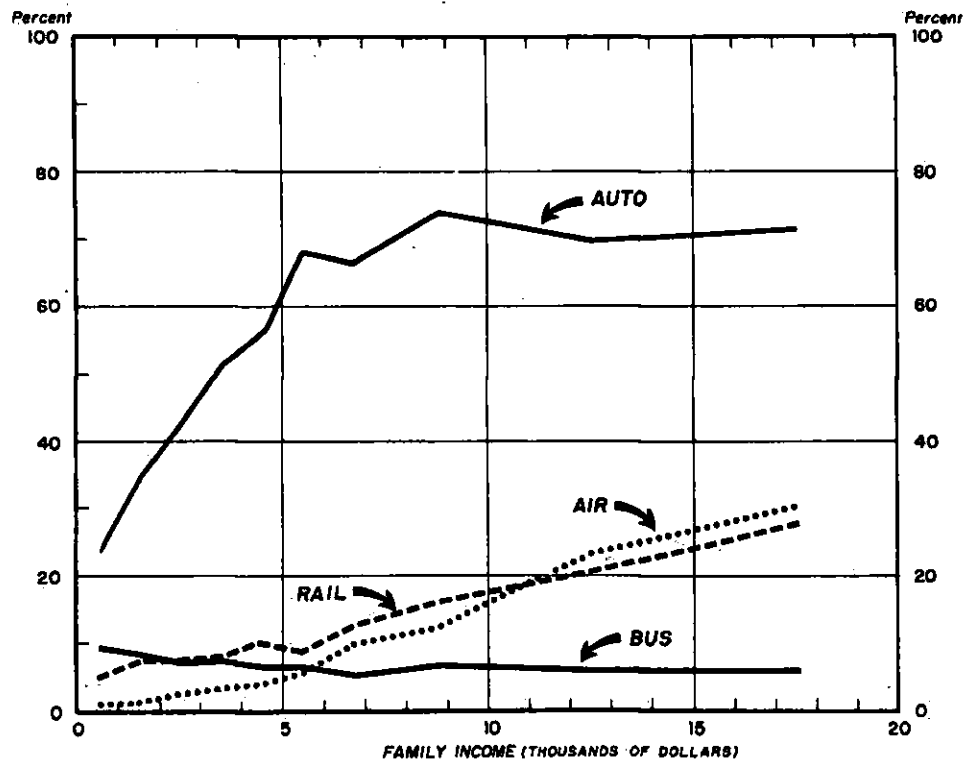
Business travel is much more concentrated among the upper-income groups than nonbusiness travel. About 63 per cent of business air trips are taken by people in the top income group, and 48 per cent of business rail trips. Business trips by bus, however, are much less concentrated. Fourteen per cent of these trips are taken by people in the top income group. Most business trips by bus are taken by people with incomes of \$4,000-9,999. As noted above, a majority of all *nonbusiness* trips by bus are taken by people in the income group below \$4,000. Most business trips by auto are taken by those in the income groups from \$4,000-9,999. These income groups also account for most of the nonbusiness trips by automobile.

In summary, people in the upper-income groups are more likely to take trips than those in the lower-income groups. The upper-income groups are particularly important for the study of business travel, and especially business travel by air and rail. They are also likely to take auto trips, but automobile travel is primarily an activity of the large segment of the population in the middle- and upper middle-income groups. The bus is used by all income groups. The middle- and lower-income people account for most of the bus travel.

Differences Among Life Cycle Groups

Whether a person takes a trip does not depend on his income alone. It also depends on whether he is single or married, whether he has children, and how old the children are. Typically people pass through a succession of stages in which they are, first, young and single, then, young and married but (as yet) childless. There

PERCENT OF ADULTS AT DIFFERENT INCOME LEVELS WHO TOOK ONE OR MORE TRIPS "LAST YEAR" BY EACH MODE



follows a span of years in which the family includes dependent children. How old the children are may make a difference in the family's travel—the age of the youngest child is an indicator of the age of the children. After the children leave home there is a period when the couple are still together, and a final period when one single older person remains as the last of this unit. Not everyone passes through these stages in the manner outlined, of course, but most people can be classified as being at one stage or another without doing violence to the facts.

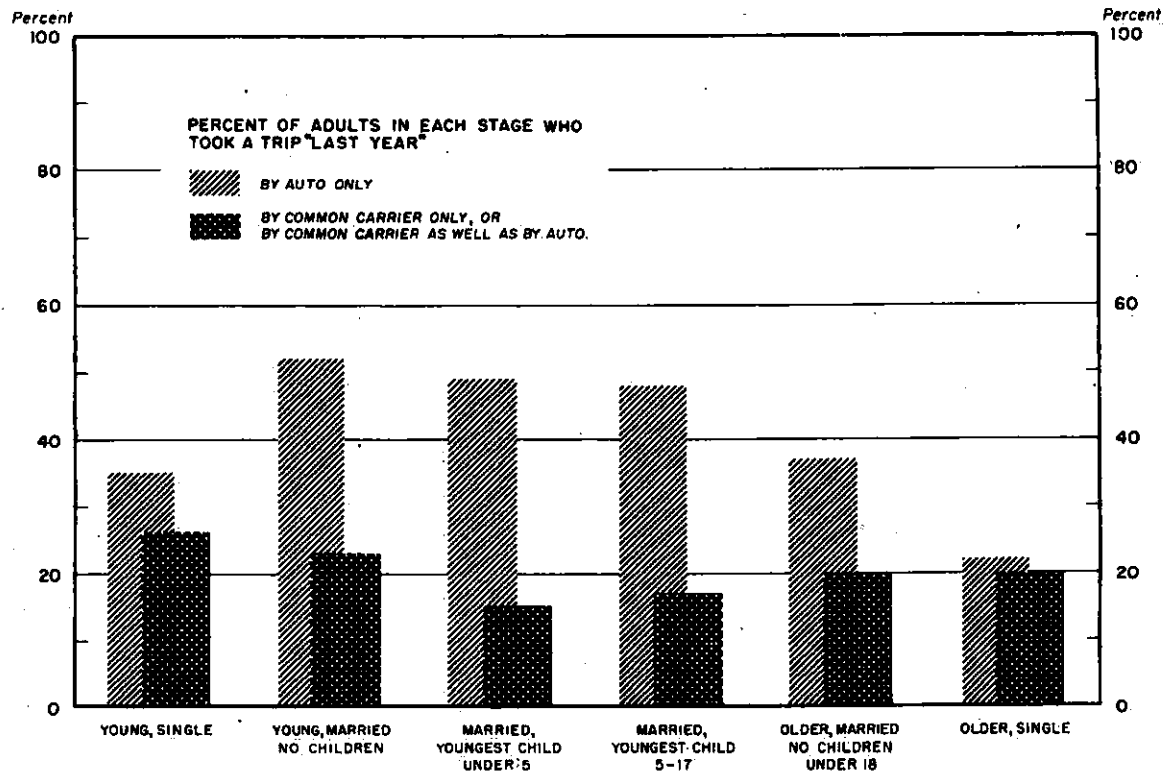
The proportion of those at each stage who took one or more auto trips but no trip by common carrier, and the proportion who took a trip by common carrier, is shown in the accompanying graphs. People who traveled both by auto and by common carrier are shown as taking common carrier trips on this chart. The distribution follows:

Modes Used "Last" Year	All Adults	Young, Single	Young, Married Childless	Married		Married, Children 5 - 18	Older, Married, Older, Childless Single	
				Youngest Child Under 5				
Auto only	42%	35%	52%	49%		48%	37%	22%
Common carrier (plus auto)	19	26	23	21		17	20	20
Took no trip	39	39	25	30		35	43	58
Total	100%	100%	100%	100%		100%	100%	100%

People who have children are less likely to travel by common carrier than young married people. Only 17 per cent of those with children between the ages of five and eighteen took such a trip. Since the number of dependent children is likely to be highest at this life cycle stage, it is the period during which claims upon parental time and resources are at a maximum. These data support the hypothesis which has been suggested by some demographers that people make a choice between having babies and taking trips. When the children have left home, people are more likely to take a trip by common carrier. But it is the young people who are most likely to take a trip by common carrier.

Travel by automobile follows a different pattern. Young single people are less likely to travel by auto than young married people. According to the 1955 Survey of Consumer Finances only 45 per cent of spending units headed by young single people own an auto, compared to 82 per cent of the units consisting of young married people with no children. Evidently some of the young single people travel by common carrier instead of by auto because they do not own a car. Couples with young children are slightly less likely to

TRIPS BY ADULTS IN DIFFERENT STAGES OF THE LIFE CYCLE



take an auto trip, but the difference is small. About 52 per cent of the adults in young families with no children traveled by auto only, compared to 49 per cent of those with children under five. Older people, contrary to popular impression, travel infrequently, in spite of their relative freedom from responsibilities.

These results seem to hold when the number of trips is taken into account. For example, when we consider the frequency of non-business air travel separately, a comparable pattern appears. The following distribution shows the number of nonbusiness air trips taken per 100 adults:

<u>Stages in the Life Cycle</u>	<u>Number of Non-Business Air Trips per 100 Adults</u>
Young, single	18
Young, married, no children	11
Married, children, youngest under 2	5
Married, children, youngest 2 - 4-1/2	8
Married, children, youngest 5 - 14-1/2	5
Married, children, youngest 15 - 17	11
Older, married, no children under 18	9
Older, single	7
All stages	9

The number of nonbusiness air trips per 100 adults is high at the early stages of the cycle, falls during the years when there are dependent children in the home, and rises after the children leave home, although the rise stops short of the level characteristic of the early stages.

Place of Residence and Modes Used Last Year

People's choice of mode is influenced by the type of community in which they live. The size of the city influences the availability of common carriers. The larger the city, as a rule, the more adequate the service by air and rail. In smaller cities and rural areas the automobile and bus are likely to enjoy a stronger relative position.

The proportion of adults in each type of community using each mode in a year is shown in Table 51, Appendix D. That table may be summarized as follows for selected types of community:

<u>Modes Used</u>	<u>Per Cent of All Adults Living in Different Types of Community Who Used Each Mode</u>		
	<u>Central Cities of Large Metro- politan Areas</u>	<u>Other Cities of 50,000 & Over</u>	<u>Rural Areas</u>
Air	10	8	3
Rail	14	13	7
Auto	43	60	55
Bus	6	8	6
None	47	34	42

The tabulation shows that while 10 per cent of adults in central cities took an air trip, only 3 per cent of those in rural areas took such a trip "last year." Fourteen per cent of the people in central cities took a rail trip, but only 7 per cent of those in rural areas. On the other hand the proportion who used bus is highest in the towns and cities of intermediate size. The proportion who took an auto trip is comparatively low in the central cities, though even here the automobile far outdistances the common carriers. (See chart, p. 77.)

In summary, rail and air appear to be strongest relative to the other modes in the large cities and weakest in rural areas. Auto is weakest in the central cities and strong especially in small towns and moderate-sized cities. Bus is strongest in the small towns and moderate-sized cities and least impressive in the suburbs of the large metropolitan centers.

Study of the number of modes which people from different sizes of city use in a year does not add to these findings. The use of three or four modes in a year is unusual for a resident of any type of community. (See Table 52, Appendix D.)

Number of Companions and Mode of Travel

Another approach to the relative position of different modes is to investigate the number of people in the party on trips by different modes. This topic was investigated in the questioning about the respondent's most recent trip. The results can be summarized as follows:

<u>Number of Companions</u>	<u>Mode of Travel</u>			
	<u>Air</u>	<u>Rail</u>	<u>Bus</u>	<u>Auto</u>
Went alone	53%	41%	49%	14%
One companion	33	27	35	32
Two companions	5	9	6	19
Three or more	9	23	10	35
Total	100%	100%	100%	100%

Of those who went by air, half traveled alone. The same is true of travelers by bus. Of those who went by rail, just under half traveled alone. But of those who traveled by auto, only about 14 per cent had no companions. On the contrary, on their most recent auto trip 35 per cent of travelers had three or more companions, making a party of four or more altogether. Whenever several people travel together, these data suggest, the tendency is for them to travel by auto.

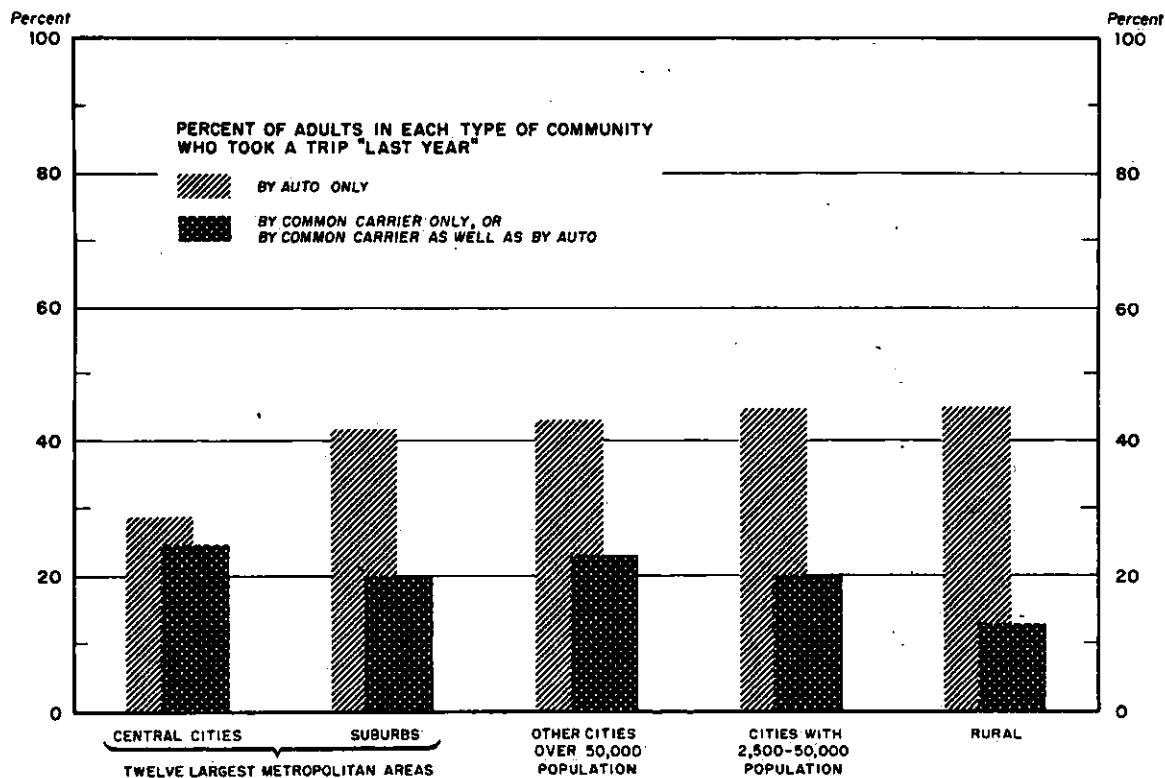
Frequency of Coach Travel Versus First Class

The data collected in this study make possible an estimate of the proportions of air trips and of rail trips which were first-class. These estimates are based on respondents' reports of their most recent trip by common carrier. Of all air trips an estimated 22 per cent are by coach. Of all rail trips an estimated 63 per cent are by coach. Since these estimates are based on people's most recent trips by common carrier weighted by their total number of trips during the year, they are subject to large sampling errors. (See also Table 57, Appendix D.)

Place of Ticket Purchase

The data also make possible rough estimate of the proportion of tickets sold at different places. Travel agents account for about one ticket sold out of five, if all three common carriers are considered. For air the proportion estimated is 22 per cent; for rail, 20 per cent; and for bus, 11 per cent. (See also Table 58, Appendix D.)

TRIPS BY ADULTS WHO LIVE IN DIFFERENT TYPES OF COMMUNITIES



All-Expense Tour Packages

All-expense tour packages are only a small proportion of all trips by common carrier. From 2 to 3 per cent of all trips are of this type. The proportion estimated is approximately the same for bus, rail, and air. (See also Table 59, Appendix D.)

Sources

This chapter is based on Tables 47-59, Appendix D.

VACATION TRAVEL

IX

A vacation with pay, from the point of view of the travel industry, is an opportunity to take a trip. The more workers enjoy paid vacations, the more people there are who may enter the market for non-business trips.

What constitutes a "vacation" is clear for some sections of the population, but not for others. A salaried employee of a large organization has a vacation, or does not have one. If he has a vacation, the length of time he may be away from his job is well understood between him and his employer. Even for hourly employees "a vacation with pay" is a phrase with an unambiguous meaning. For people who work for themselves, however, a vacation may not be easy to distinguish from a period when work is slack. For example, if there is not much to do for a week, does that constitute a vacation? If a person remains at home but is "on call," is that a vacation? He may think so, but the travel industry will not, since he is not free to leave town.

Housewives or retired people may take vacation trips which they enjoy as genuine vacations. Yet, these are not "vacations with pay" in the same sense as vacations taken by salaried employees.

In this survey information was obtained only about the vacations of adults who work for others. No questions were asked about vacations of housewives, students, retired people, farmers, or self-employed businessmen or professionals.

Of the adult population about 43 per cent work for someone else. Some 27 per cent of all adults work for someone else and had a vacation with pay "last year" of a week or more. About 16 per cent work for someone else but had no paid vacation.

Of those with a paid vacation about 75 per cent took their vacation all at one time. The remaining 25 per cent took two vacations, or, in a few instances, three or more. The teaching profession is probably the largest segment of the population which enjoys multiple vacations, though no data on this point were collected in this survey. The practice of taking more than one vacation, however, has become common. As just noted, one in four of those with a vacation took their vacation at two or more times during the year.

What do people do with their vacations? Of the adults who enjoyed

vacations with pay, half took a trip. The others did not necessarily stay at home since a trip as the word is used in this study refers to a point 100 miles or more away. How far do people travel on their vacation trips? The distribution of vacation trips by length is shown in the following tabulation:

<u>Whether Took a Trip</u>	<u>Proportion of Adults With Paid Vacation</u>
<u>Took a trip</u>	<u>50%</u>
100 - 500 miles away	28
500 - 999 miles away	8
1000 miles or more	7
Not ascertained how far	7
<u>Did not take a trip</u>	<u>50</u>
Total	100%

About one trip out of three taken by people with paid vacations is to a point 500 miles or more away. About one in six is to a point 1,000 miles or more from home. By any reasonable standard, such a trip is a considerable excursion.

Given that they have a vacation, what determines whether people will take a trip and how far they will go? The longer the vacation, the greater the tendency to take a trip. The relation between length of vacation and taking a trip is as follows:

	<u>All Adults With Paid Vacation</u>	<u>Length of Vacation</u>		
		<u>One Week to 10 Days</u>	<u>11 Days- 2 Weeks</u>	<u>3 Weeks or Longer</u>
Proportion who took a trip	49%	41%	50%	66%

Of those with a vacation of three weeks or more, two-thirds took a trip, compared to only 41 per cent of those with a vacation of only a week or 10 days.

It is not surprising to find that income also influences whether people who had a vacation with pay took a trip. The relationship is as follows:

<u>Family Income</u>	<u>Proportion of Those With a Vacation With Pay Who Took a Trip</u>
Under \$4000	34%
\$4000-5999	51
\$6000-9999	58
\$10,000 and over	62

The proportion of people who took a trip on their vacation nearly doubles from the income group below \$4,000 to the group with income of \$10,000 or over.

There is also a tendency for the proportion of those with a paid vacation who went to a point more than 1,000 miles away to be higher among the high-income groups. Of those with incomes over \$10,000, about two in ten took such a trip, compared to one in ten or less of those with incomes below \$10,000.

Long trips require money or time or both. The following table looks at the matter in a different way. It asks: Of those who took vacation trips of given distances, what proportion had different lengths of time away from work?

Length of Paid Vacation	All With Paid		100-500 Miles	500-999 Miles	1000 Miles or More
	Vacation	No Trip			
Week to 10 days	36%	42%	36%	31%	15%
11 days to 2 weeks	51	50	49	51	54
3 weeks or more	13	8	15	18	31
	100%	100%	100%	100%	100%

Of those who went to a point from 100 to 500 miles away, 36 per cent had a vacation of a week to 10 days. Of those who went to a point 1,000 or more miles away, 15 per cent had only a week to 10 days, while 54 per cent had 11 days to two weeks. These people traveled 1,000 miles a week or more. Only 31 per cent of those who took a trip of this length had as long as three weeks' vacation.

In making long run forecasts of travel, one factor which should be considered is the probable increase in the proportion of the population who enjoy vacations with pay. The effect of having a vacation on air travel is especially interesting. To obtain some information about the importance of paid vacations one may compare the frequency of nonbusiness air travel at present among those with and without vacations with pay. For this purpose those who work for themselves or are not employed are not relevant.

The following table shows the number of nonbusiness air trips per 100 adults for those with and without a paid vacation. (Note that this table, unlike others in this chapter, does not refer to the most recent trip.)

	Non-Business Air Trips per 100 Adults				
	All Incomes	Under \$3000	\$3000- 4999	\$5000- 7499	\$7500 and Over
Did have paid vacation	8	2	6	6	16
Did not have paid vacation	4	2	1	9	16
Average	6				

Those with paid vacations are more likely to take a nonbusiness air trip than those who did not have a paid vacation. Specifically, those with paid vacations average eight nonbusiness air trips per 100 adults, while those employed persons who did not have paid vacations average four nonbusiness air trips per 100 adults. This relation, however, is almost a textbook example of a spurious correlation. People with high incomes are more likely to have paid vacations, and they are also more likely to take trips than those with low incomes. If income is taken into account, the difference in frequency of air travel between those with and those without a paid vacation tends to vanish. At the upper-income levels people who do *not* have paid vacations are likely to take trips by air.

How are we to interpret this result? One explanation is that at the income level above \$5,000 it is possible for people to scrape together the price of an air ticket. But it is not always possible for people to leave their jobs. It may be that some people take air trips because they do not have time enough to take trips by other modes. In this connection it should be kept in mind that "a paid vacation" is defined in this survey as a vacation of a week or more. People who did not take as long as a week may have had extended weekends, which they used to take trips by air.

These data are still consistent with the hypothesis that as people at the lower-income levels have more vacations with pay they may take more air trips. For the income class \$3,000-4,999 the data point in that direction. This last finding, however, is highly tentative. It may be the result only of sampling fluctuation. The main finding is that giving people more time need not induce them to travel by air. Given more time people are likely to take more trips, but they may take them by the slower means of transportation.

SAMPLING METHODS AND SAMPLING ERRORS

APPENDIX

A

by C. Edwin Dean

1. The Sample

The sample was selected by the method known as area sampling. By this method every member of the population sampled had a known chance of being selected. The basic procedure was to choose first a sample of places (counties, or towns, or communities); then, within these places a probability sample of households was chosen. In each household one respondent was selected from each family unit for interviewing.

This study is based on two national cross-section samples of approximately 2,000 households each, making a total of about 4,000 interviews. Each of the two samples was selected from the same 66 primary sampling units. A primary sampling unit is composed of a single county or a group of counties. The primary sampling units are widely scattered throughout the United States. Within each of the 66 primary sampling units several places were selected, about five on the average. These places were cities, towns, villages and the open country around them.

Within each sample city or town a random selection of blocks was made. For cities with populations of 50,000 or more, census statistics showing average rental and property values are available for each block; this information was used as a basis for stratification of the blocks.¹

In smaller cities and towns the map was divided into blocks and numbered systematically so as to yield a rough geographical stratification. The dwelling units found in the selected blocks were listed systematically and a random subsample of them was taken.

Rural areas were divided into small segments containing from

¹Each block was chosen with a probability directly proportional to its number of dwelling units reported for the census. On the basis of the census figures, a sampling rate was applied in such a manner that all dwelling units had the same chance of being included in the sample; generally from two to four dwelling units were selected from a block. It should be noted that if there were any major changes in population since the census figures were obtained, these changes are reflected by area sampling in an increased or decreased yield of interviews from the affected areas.

four to eight dwelling units, and a probability selection was made from these segments. All the dwellings in the selected segments were included in the sample.

Each sample block or segment was marked on a map or aerial photograph. These mapping materials and detailed instructions guided the interviewers in carrying through an exact sampling procedure.

The sample thus selected consists of private dwelling units in the continental United States. It does not include military posts, institutions, hotels and large rooming houses. Hence, the institutional population, transients and most military personnel are not represented in the sample. The interviewers are given no latitude in selecting addresses. They must try to obtain an interview with each family unit in each of the selected dwelling units and no substitutions are permitted.

After a representative sample of dwelling units has been selected, the interviewer is instructed to take one interview with each family in the dwelling unit. A family is defined to include all people who are related by blood, marriage, or adoption, and who live in the same dwelling unit at the time of the interview. A family may consist of a single person. More than one family may live in a dwelling; for example, there may be a lodger in addition to the primary family unit.

In families where the head is married, husband and wife are selected alternately as respondents. Where the head is unmarried (living alone or with relatives) he (or she) is automatically the respondent. If an individual to be interviewed was not at home on the first call, at least two or three call-backs were made in an attempt to reach him (or her). However, even after repeated calls, a small number of the designated individuals were not found at home and a few refused to be interviewed.

In each interview certain questions applied only to the respondent or to items for which the respondent could give a single answer for the entire family unit. These are designated as "per interview" responses. Other questions required answers from the respondent pertaining to each adult of the household. These are designated as "per adult" responses.

2. Sampling Variability

Percentages. — Properly conducted sample interview surveys yield useful estimates but they do not yield exact values. Errors arise from several sources: sampling, non-response, reporting and processing. Each source of error may be important in evaluating the

accuracy of information. The present discussion is limited to sampling errors.

Sample statistics reflect the random variations arising from interviewing only a fraction of the population. The distribution of individuals selected for a sample will usually differ by an unknown amount from that of the population from which the sample is drawn. The value which would have been obtained if the entire population had been designated to be interviewed by the same survey procedures will be referred to as the population value. If different samples were used under the same survey conditions, some of the estimates would be larger than the population value and some would be smaller. The sampling error is a measure of the chance deviation of a sample statistic from the corresponding population value. The sampling error does not measure the actual error of a particular sample estimate; rather, it leads to statements in terms of confidence intervals that are correct in a specified proportion of cases in the long run. Each statement declares that the range of the sampling error on either side of the sample estimate includes the population value.

"Sampling error" as used here is to be interpreted as two standard errors; it is the range, on either side of the sample estimate, chosen frequently in social research in order to obtain the 95% "level of confidence." If one requires a greater degree of confidence than this, a wider range than two standard errors should be used. On the other hand, most of the time the actual error of sampling will be less than the sampling error defined above; in about 68 cases of every 100 the population value can be expected to lie within a range of one-half the sampling error (one standard error) of the sample estimates.

For example, the survey estimate that 29.6% of all adults have never taken a rail trip is subject to a sampling error of about 2.6² percentage points (see Table B). Thus, the statement that the population value is within the range of 27.0 to 32.2 per cent has at least 95 in 100 chances of being correct. The chances are 5 in 100 that the population value lies outside that range; however, the chances are 68 in 100 that it lies within the range 28.3 to 30.9 per cent (plus or minus one standard error).

The sampling errors of proportions of respondents having a certain characteristic depend on the size of the sample and also on the size of the proportions being estimated. Approximately, the sampling error is inversely proportional to the square root of the sample size. Thus, the sampling error of an estimate based on 400 cases is about one-half as large as that of an estimate based on 100 cases.

Sampling errors (standard errors) also vary with the proportion

²Reference to Table B will show that the sampling error lies between 1.0 and 2.6%. In the above example the maximum value (2.6%) was used. Consult explanation below Table A for application of double limit tables.

being estimated and reach a maximum, for samples of a given size, when the proportion is 50 per cent. The relations of sampling error to sample size and proportion being estimated are evident in the formula for the computation of sampling errors for simple random samples. The sampling errors of such samples are equal to $2\sqrt{\frac{p(1-p)}{n}}$

where p is the proportion under consideration and n is the sample size. Although the survey uses a complex rather than a simple random sample, the relationship of sampling errors to the sample size and proportion being estimated is somewhat similar to that of the above formula.

There are other important factors that influence the size of the sampling error of any characteristic based on the interviews from the entire sample or from some specific subgroup. (See section 1 for a discussion of the procedures used in the sample selection.) The effect of such factors varies for every type of estimate and for every subgroup of the population. For example, percentages based on only a subset of all of the sampling units tend to have larger sampling errors than proportions of the same magnitude based on all sampling units. Among such subsets are regional breakdowns, cities of a specific size, and urban-rural breaks. The fact that the sampling errors in this study are likely to be somewhat higher than simple random sampling errors arises from the fact that the sample selection involved clustering dwelling units, which may increase sampling error if the characteristic being sampled is "clustered."

The sampling errors themselves are products of the sampling processes and are subject to the effects of random fluctuations. Therefore, a range, rather than a single value, has been used in presenting sampling errors of estimates of approximate proportions based on samples of a given size. These estimates are presented in Table A for "per interview" responses and in Table B for "per adult" responses. The upper limits are based on actual computations of data from the Travel study. They are not averages but values on the high or conservative side; only a small proportion of the computations yielded estimates larger than the upper limits in the table and most were smaller. The smaller estimates were computed by use of the formula $2\sqrt{\frac{p(1-p)}{n}}$ which can be viewed as the lower bound to the survey's sampling errors. In our computations most survey statistics were found to have sampling errors between these two types of estimates. Whether the sampling error of an estimate tends toward the upper or lower bound depends on the type of data involved and the basis of classification.

Differences. - Differences between survey estimates are often of even greater interest than the levels of the estimates. These differences reflect the random fluctuations of the sampling process as

well as differences in population values. The sampling errors of differences indicate the range in which the "true" differences between the population values of the two compared classes can be expected to fall in a given proportion of trials, usually 95 out of 100 times. As with the sampling errors of single percentages, greater or lesser degrees of confidence in the statement are associated with larger or smaller multiples of the standard error.

Tables C and D, which are tables of sampling errors of differences for "per interview" responses and for "per adult" responses, respectively, also contain two estimates. These numbers are based on the computations carried out on actual survey data. The large numbers are on the "safe" side; most sampling errors actually computed are smaller than these larger estimates. A lower bound is set by the smaller sampling errors of the table. This latter group is based on an approximation³ to the standard formula for differences between estimates obtained from simple random samples. Most of the sampling errors computed were found to lie between these limits.

³The approximation used was $2 \sqrt{p(1-p) (1/n_1 + 1/n_2)}$ where p is a proportion approximating those being compared and n_1 and n_2 are the number of cases in the two samples.

TABLE A

**Approximate Sampling Errors of Percentages¹
For "Per Interview" Responses
(Expressed in Percentages)**

Reported Percentage	Number of Interviews										
	4200	3000	2000	1500	1000	700	500	400	300	200	100
50	1.5	1.8	2.2	2.6	3.2	3.8	4.5	5.0	5.8	7.1	10.0
	2.6	2.9	3.4	3.9	4.6	5.3	6.1	6.7	7.6	9.1	12.7
30 or 70	1.4	1.7	2.0	2.4	2.9	3.5	4.1	4.6	5.3	6.5	9.2
	2.3	2.7	3.2	3.5	4.2	4.8	5.6	6.1	6.9	8.4	11.6
20 or 80	1.2	1.5	1.8	2.1	2.5	3.0	3.6	4.0	4.6	5.7	8.0
	2.0	2.3	2.8	3.1	3.7	4.2	4.9	5.3	6.0	7.3	10.2
10 or 90	0.9	1.1	1.3	1.5	1.9	2.3	2.7	3.0	3.5	4.2	6.0
	1.5	1.8	2.1	2.3	2.8	3.2	3.6	4.0	4.5	5.5	7.6
5 or 95	0.7	0.8	1.0	1.1	1.4	1.6	1.9	2.2	2.5	3.1	4.4
	1.1	1.3	1.5	1.7	2.0	2.3	2.7	2.9	3.3	4.0	5.5

¹ The sampling error measures the sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. For most items the chances are 95 in 100 that the value being estimated (the percentage of spending units possessing a given attribute) lies within a range equal to the reported percentages plus or minus the sampling error.

Two estimates of the sampling error are presented for each cell. The lower values are based on the standard error formula for simple random samples. The higher values are based on extensive computations of individual sampling errors carried out on National Travel Market Survey data, and allow for the departures from simple random sampling in the Survey design such as stratification and clustering.

The sampling error does not measure the total error involved in specific survey estimates since it does not include non-

TABLE B

Approximate Sampling Errors of Percentages¹
 For "Per Adult" Responses
 (Expressed in Percentages)

Reported Percentage	Number of Interviews												
	8500	4200	3000	2500	2000	1500	1000	700	500	400	300	200	100
50	1.1	1.5	1.8	2.0	2.2	2.6	3.2	3.8	4.5	5.0	5.8	7.1	10.0
	2.9	3.5	4.0	4.2	4.7	5.3	6.2	7.3	8.6	9.6	11.0	13.4	18.8
30 or 70	1.0	1.4	1.7	1.8	2.0	2.4	2.9	3.5	4.1	4.6	5.3	6.5	9.2
	2.6	3.2	3.6	3.9	4.3	4.8	5.7	6.7	7.9	8.8	10.1	12.3	17.2
20 or 80	0.9	1.2	1.5	1.6	1.8	2.1	2.5	3.0	3.6	4.0	4.6	5.7	8.0
	2.3	2.8	3.2	3.4	3.7	4.2	5.0	5.9	6.9	7.6	8.8	10.7	15.0
10 or 90	0.7	0.9	1.1	1.2	1.3	1.5	1.9	2.3	2.7	3.0	3.5	4.2	6.0
	1.7	2.1	2.4	2.5	2.8	3.2	3.7	4.4	5.2	5.7	6.6	8.1	11.3
5 or 95	0.5	0.7	0.8	0.9	1.0	1.1	1.4	1.6	1.9	2.2	2.5	3.1	4.4
	1.3	1.5	1.7	1.8	2.0	2.3	2.7	3.2	3.7	4.2	4.8	5.9	8.2

¹ See note 1, Table A.

TABLE C

Sampling Errors of Differences¹
 For "Per Interview" Responses
 (Expressed in Percentages)

Size of Subgroup	Size of Subgroup							
	2000	1500	100	700	500	300	200	100
For percentages from about 35% to 65%								
2000	3.2-4.9	3.4-5.2 3.7-5.5	3.9-5.7	4.4-6.3	5.0-7.0	6.2-8.3	7.4-9.8	10.2-13.2
1500			4.1-6.0	4.6-6.5	5.2-7.2	6.3-8.4	7.5-9.9	10.3-13.3
1000			4.5-6.5	4.9-7.0	5.5-7.6	6.6-8.9	7.8-10.2	10.5-13.5
700				5.4-7.4	5.9-8.0	6.9-9.2	8.0-10.5	10.7-13.8
500					6.3-8.6	7.2-9.7	8.4-11.0	11.0-14.1
300						8.2-10.7	9.1-11.9	11.5-14.8
200							10.0-12.9	12.2-15.7
100								14.1-18.0
For percentages around 20% and 80%								
2000	2.5-3.9	2.7-4.1 2.9-4.4	3.1-4.6	3.5-5.0	4.0-5.6	5.0-6.6	5.9-7.8	8.2-10.6
1500			3.3-4.8	3.7-5.2	4.1-5.8	5.1-6.7	6.0-7.9	8.2-10.6
1000			3.6-5.2	3.9-5.6	4.4-6.1	5.3-7.1	6.2-8.2	8.4-10.8
700				4.3-6.0	4.7-6.4	5.5-7.4	6.4-8.4	8.6-11.0
500					5.1-6.8	5.8-7.8	6.7-8.8	8.8-11.3
300						6.5-8.6	7.3-9.5	9.2-11.8
200							8.0-10.3	9.8-12.6
100								11.3-14.4

2000	1.9-2.9	2.1-3.1	2.3-3.4	2.6-3.8	3.0-4.2	3.7-5.0	4.5-5.9	6.1-7.9
1500		2.2-3.3	2.4-3.6	2.7-3.9	3.1-4.3	3.8-5.0	4.5-6.0	6.2-8.0
1000			2.7-3.9	3.0-4.2	3.3-4.6	3.9-5.3	4.7-6.1	6.3-8.1
700				3.2-4.5	3.5-4.8	4.1-5.5	4.8-6.3	6.4-8.3
500					3.8-5.1	4.3-5.8	5.0-6.6	6.6-8.5
300						4.9-6.4	5.5-7.1	6.9-8.9
200							6.0-7.7	7.3-9.4
100								8.5-10.8
For percentages around 5% and 95%								
2000	1.4-2.1	1.5-2.3	1.7-2.5	1.9-2.7	2.2-3.0	2.7-3.6	3.2-4.3	
1500		1.6-2.4	1.8-2.6	2.0-2.9	2.2-3.1	2.8-3.7	3.3-4.3	
1000			1.9-2.8	2.1-3.0	2.4-3.3	2.9-3.9	3.4-4.4	
700				2.3-3.2	2.6-3.5	3.0-4.0	3.5-4.6	
500					2.8-3.7	3.1-4.2	3.6-4.8	
300						3.6-4.7	4.0-5.2	
200							4.4-5.6	

¹ The values shown are the differences required for significance (95 per cent probability) in comparisons of percentages derived from two different subgroups of the National Travel Market Survey. Two values - low and high - are given for each cell. See note 1 to Table A.

TABLE D

[illegible]

4000	1.3-3.0	1.6-3.5	1.8-3.8	1.9-4.0	2.1-4.3	2.5-4.9	2.8-5.8	3.6-7.0	4.4-8.3	
2000		1.9-4.0	2.1-4.2	2.2-4.4	2.3-4.7	2.6-5.2	3.0-5.9	3.7-7.1	4.5-8.5	
1500			2.2-4.5	2.3-4.6	2.4-4.9	2.7-5.4	3.1-6.1	3.8-7.3	4.5-8.6	
1250				2.4-4.8	2.5-5.1	2.8-5.6	3.2-6.2	3.9-7.4	4.6-8.8	
1000					2.7-5.3	3.0-5.8	3.3-6.4	3.9-7.6	4.7-8.9	
700						3.2-6.2	3.5-6.8	4.1-7.9	4.8-9.2	
500							3.8-7.3	4.3-8.4	5.0-9.5	
300								4.9-9.4	5.5-10.4	
200									6.0-11.3	
For percentages around 5% and 95%										
4000	1.0-2.2	1.2-2.6	1.3-2.8	1.4-2.9	1.5-3.1	1.8-3.6	2.1-4.1	2.6-5.1	3.2-6.1	
2000		1.4-2.9	1.5-3.1	1.6-3.2	1.7-3.4	1.9-3.8	2.2-4.3	2.7-5.2	3.2-6.2	
1500			1.6-3.2	1.7-3.4	1.8-3.6	2.0-3.9	2.2-4.4	2.8-5.3	3.3-6.3	
1250				1.7-3.5	1.8-3.7	2.1-4.1	2.3-4.5	2.8-5.4	3.3-6.4	
1000					1.9-3.9	2.1-4.2	2.4-4.6	2.9-5.5	3.4-6.5	
700						2.3-4.5	2.6-4.9	3.0-5.8	3.5-6.7	
500							2.8-5.3	3.1-6.1	3.6-6.9	
300								3.6-6.8	4.0-7.5	
200									4.4-8.2	

See note 1, Table C.

EXPANDING THE SAMPLE

B

As described in Appendix A, the sample of this survey was so selected as to constitute a sample of that part of the adult population of the continental United States living in private dwelling units.

The survey excludes about 2.8 million residents of quasi-households, that is, residents of institutions, large hotels, and rooming houses. It also excludes about 2.2 million members of the armed forces living on post in the United States and overseas. It includes 800,000 members of the armed forces living with their families outside military posts.

As of April 1955 there were approximately 104,000,000 adults aged 18 and over in the population sampled. This estimate is based on data reported by the Census Bureau as of April 1955 in Current Population Reports, Population Characteristics, Series P-20, No. 62. Since interviewing took place not in April but in June and October 1955, the population sampled was slightly larger than 104,000,000. August 1955 may be taken as the "average" date of interview. At that time the relevant population was about 105,000,000 adults. Tables showing "percent of all adults" should be understood as referring to that number of individuals.

Comparison with C.A.B. Data

It is possible to compare estimates of the total number of air trips taken by adults in the population based on the National Travel Market Survey with estimates based on reports to the Civil Aeronautics Board. The comparison, however, requires that the data be adjusted to make them comparable. The adjustments are crude. To put it bluntly, it is necessary to make up numbers to "adjust" for certain factors. Nevertheless the comparison may be worth the trouble of preparing it. It reveals, at least, the information which would be necessary for a proper comparison to be made.

The comparison is complicated by the fact that there are two methods of estimating the number of air trips taken from the survey.

We will present first an estimate of the number of United States domestic air passengers based on C. A. B. data, and then the two estimates based on data from the survey.

Number of scheduled air "passengers"

June 1954-May 1955 (These dates cover the year prior to the interviews in the first wave.)	35,201,000
November 1954-October 1955 (These dates cover the year prior to the interviews in the second wave.)	37,572,000
Average number of scheduled "passengers"	<u>36,386,000</u>

Non-scheduled "passengers"

1954	695,000
1955	639,000
Average number of non-scheduled "passengers"	<u>667,000</u>

<u>Total "passengers"</u>	<u>37,053,000</u>
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The C. A. B. data are based on the number of tickets sold. Thus, the figure of 37,053,000 represents the total number of "one-way" air trips. But a round trip may include more than two "one-way" trips if the traveler stops at several cities or transfers en route. Passengers transferring from one airline to another, or interrupting a single trip by stop-overs en route, may be counted repeatedly. As far as we know no estimates are available of the number of trips which involved several tickets in this way. Hence, one can only guess at the number of round trips as defined in this survey represented in the count of 37,053,000 "one-way" trips.

Starting from the survey data, there are two methods of proceeding, as noted above. The first method involves essentially multiplying the number of air trips taken by individuals covered in the survey by the reciprocal of the fraction of the population covered by the survey. The calculation is shown below. Several adjustments to the survey data are necessary. Many of the adjustments rely on a survey of passengers on domestic flights leaving New York taken by the Port of New York Authority. In view of the uncertainty of these adjustments, in addition to the column containing the authors' estimates a column is provided for the reader to enter his own calculations.

	<u>Authors' Estimates</u>	<u>Reader's Estimates</u>
Number of one-way trips estimated from Survey data for Survey population	38,000,000	
<p>The respondents took 1,573 round trips by air in one year, or 3,146 one-way air trips. The survey covered 8,617 adults out of 105,000,000 or one in 12,000. By multiplying 12,000 by 3,146 one can estimate the total number of air trips by the population.</p>		
<u>Plus trips by foreigners.</u>	+ 720,000 to	
<p>The survey population excludes foreigners. The New York Inflight Survey estimated that 6 percent of passengers out of New York were foreigners. New York is a major port of entry for foreigners, and it is reasonable to suppose that foreigners make up a larger proportion of domestic passengers out of New York than out of, say Chicago. One can guess that for the U. S. as a whole the average is 2 - 4 percent or 720,000 to 1,440,000 trips.</p>	+1,440,000 ??	
<u>Plus trips by children.</u>	+2,880,000	
<p>The estimate from the Inflight Survey is that 8 per cent of passengers are under 18. It is reasonable to guess that flights leaving New York are typical in this respect.</p>		
<u>Plus trips by men in the Armed Forces living on military reservations.</u>	+ 360,000 to	
<p>Some 800,000 men living off military reservations were included in the survey, while 2,200,000 living on reservations or overseas were not included. According to the Inflight Survey, 5 per cent of travel from New York is by men in the Armed Forces. At a guess, the military personnel living on reservations or overseas accounted for 1 - 4 per cent.</p>	+1,440,000 ??	
<u>Plus trips by very frequent travelers.</u>	+1,440,000	
<p>The very frequent travelers account for 4 per cent of air trips, according to the New York Inflight Survey. The National Survey excludes these travelers from counts of trips.</p>		
<u>Plus trips of under 100 miles.</u>	+ 720,000	
<p>The C. A. B. reports 2 per cent of all air trips are under 100 miles.</p>		

	<u>Authors' Estimates</u>	<u>Reader's Estimates</u>
Minus trips in planes owned by businesses or private individuals.	- 360,000 to	
Interviewers in the National Survey were instructed to exclude trips in company planes, military planes, and private planes if the respondent volunteered that these types of aircraft were included. It seems reasonable to suppose that some of the frequent travelers on business used these aircraft and did not mention the fact since the questions did not cover the point. Thus some of the trips in the National Survey were by company plane, etc. Any estimate of how many trips were involved is a pure guess. Arbitrarily one can take a number equal to one to four per cent of all air trips. The true proportion could be very different.	-1,440,000 ??	
<u>Equals</u> adjusted total one-way air trips based on National Survey data.	43,000,000 to 46,000,000	

Roughly speaking, these estimates indicate that the mean number of air trips estimated from the National Survey may have been too high by 20 to 30 per cent.

The second method of estimating the total number of trips from the survey is more complex. The method is based on the proposition that better information can be obtained from the Bureau of the Census than from the survey about the number of adults in different age groups, income groups, and so forth. The procedure is to make use of an estimate from the Census of the number of people in a category, and to use the survey only to estimate the number of air trips taken by people in that category.

The first step in this method was to select variables which are important in determining the number of air trips. Different variables were selected for personal travel and business travel. For personal travel the population was divided into 160 cells based on five occupation groups, two education groups, four income groups, and four age groups. For business travel the population was divided into cells based on seven occupation groups, 14 industry groups, and five income groups. Cell populations for 1955 were calculated by the staff of the Forecast and Analysis Division of the Port of New York Authority on the basis of data from the Bureau of the Census and the Bureau of Labor Statistics. The number of air trips per person was estimated for each cell from the survey. This estimate involved an element of judgment since some smoothing of the data was involved.

That is, estimates for individual cells were occasionally raised or lowered in the light of the data for nearby cells. The total number of air trips was obtained by multiplying for each cell the number of people times the number of trips per person and then adding the number of trips for the different cells.

This method yields a total of 30,382,000 trips for 1955. The comparable total estimated by the first method is 38,000,000 trips, as noted above. The difference presumably arises because by chance the survey found more people in the cells which yield large numbers of trips than it should have.

To derive an estimate comparable to the estimate based on data from the C. A. B., the 30,382,000 trips must be adjusted in exactly the same manner as the 38,000,000 trips. The detail of these adjustments need not be repeated, but the warning as to their doubtful validity may be worth mentioning once more. The final estimate of the number of adjusted total one-way air trips based on the second method is 35,000,000 to 38,000,000 trips. The comparable estimate based on the C. A. B. data is 37,000,000 trips. The estimate from the C. A. B. is too high, by an unknown amount, as noted above, because of the problem of round trips which involve more than two tickets. Nevertheless the data from the survey do appear to be reasonably consistent with the data from the C. A. B. as far as one can tell from the available information.

THE QUESTIONNAIRE

APPENDIX

C

As noted in the *Introduction*, interviews were taken in two waves, half in the spring and half in the fall. Two forms, known as the "A" and "B" questionnaires, were used in the spring, and two slightly different and improved forms were used in the fall, or a total of four different questionnaires in all. The "B" questionnaire in the fall is reproduced below. It includes all of the questions in the "A" questionnaire in the fall plus a few questions asked only of respondents in the "B" half of the sample. Questions on topics other than travel were asked in the interview but are omitted here. No attempt has been made to reproduce here the format of the original questionnaire nor are the boxes reproduced which were provided for the interviewer to check the answer to certain factual questions. Answers to attitudinal questions were taken down approximately verbatim by the interviewer.

Form B

Interviewer's Name _____ Interview No. _____

Interviewer: *Before* you ask Question 1, list *ALL* people in dwelling unit related to head or his wife, and record their age, sex, and marital status.

For *EACH* person including children ask:

- A. How old is . . . ?
- B. Sex (if age 15 or over)
- C. Is . . . married now? (if age 18 or over)

Ask Q. T1-T5 about head and about each additional adult who works regularly

T1. What kind of work does (head) do?

IF APPROPRIATE

T1a. What kind of business is that in?

T1b. Does (head) work for himself or someone else or what?

IF WORKS FOR SOMEONE ELSE

T2. Did he (she) have a vacation with pay of a week or more anytime in the last 12 months?

T2a. How long did he have off altogether in the year?

If
had
a
vacation
with
pay

T2b. Did he take his paid vacation all at one time, or how?
(If all at one time)

T3. During his vacation did he take a trip to a point 100 miles or more away?

T3a. Where did he go? (town, state)

(If not all at one time)

T4. During his most recent vacation of a week or more, did he take a trip?

T4a. Where did he go? (town, state)

T5. Altogether, how many of the vacations involved a trip?

Q. T6. Have you (has he) ever taken a trip to a place 100 miles or more away by air?

(IF YES) T6a. How many trips to places more than 100 miles away did you (he) take by air in the last 12 months?

(IF AIR TRIP IN LAST 12 MONTHS) T6b. Did you take your first air trip in the last 12 months?

Q. T 7. Have you (has he) ever taken a trip to a place 100 miles or more away by rail?

(IF YES) T7a. How many trips to places more than 100 miles away did you (he) take by rail in the last 12 months?

Q. T 8. Have you (has he) ever taken a trip to a place 100 miles or more away by auto?

(IF YES) T8a. How many trips to places more than 100 miles away did you (he) take by auto in the last 12 months?

Q. T 9. Have you (has he) ever taken a trip to a place 100 miles or more away by bus?

(IF YES) T9a. How many trips to places more than 100 miles away did you (he) take by bus in the last 12 months?

Q. T10. Were any of your trips in the last 12 months business trips - I mean, trips in connection with your work?

(IF ANY BUSINESS TRIPS) Q. T11. How many of your air trips were business trips? your rail trips? your auto trips? your bus trips?

If RESPONDENT took one or more trips in the last 12 months, ask about RESPONDENT'S most recent trip to a place 100 miles or more away. (If respondent took trip but not in last 12 months, omit Questions T12 through T31. If respondent never took trip, omit Questions T12 through T34.)

Q. T12. When did you last take a trip to a place 100 miles or more away?

Q. T13. What was the purpose of the trip?

T13a. Was there any other reason for the trip?

Q. T14. Where did you go? (town and state)

Q. T15. How long were you away?

Q. T16. Did anyone go with you? (How many went besides yourself?)

Q. T17. How did you travel?

Q. T18. How did you happen to choose this way of traveling instead of some other?

T18a. Were there any (other) advantages of going this way?

(IF "BAD CONNECTIONS") T18b. In what way were the connections bad?

If rail
or air

T19. Did you travel coach or first class?

If by
rail,
air,
or bus

T20. Did you buy your ticket from a travel agent or did you buy it directly from the (railroad) (bus line) (airline), or what?

T21. Was it one of these all-expense tour packages?

If trip above was by common carrier - omit Questions T22 through T31.

If trip above was by auto - go to Q. T22 provided R. took a trip by common carrier in the last 12 months.

NOTE: T22 - T31 are the same questions as T12 - T21.

ASK ALL RESPONDENTS WHO HAVE EVER TAKEN ANY TRIP TO A PLACE 100 MILES OR MORE AWAY: (See Q. T6-T9 for respondent):

T32. Now I have a few questions about how people choose the way they travel

T32a. Why do you think some people travel by *train*?

T32b. What might keep some people from traveling by *train*?

IF "BAD CONNECTIONS" What do you have in mind?

T32c. Why do you think some people travel by *plane*?

T32d. What might keep some people from traveling by *plane*?

ASK ALL RESPONDENTS WHO HAVE EVER TAKEN A *RAIL* TRIP OF 100 MILES OR MORE AWAY: (See Q. T7 for respondent):

T33. Thinking of your own last trip by *train*, we're interested in what you liked most about it and what you liked least about it. What did you like most?

T33a. What did you like least?

ASK ALL RESPONDENTS WHO HAVE EVER TAKEN AN *AIR* TRIP OF 100 MILES OR MORE AWAY: (See Q. T6 for respondent):

T34. Thinking of your own last trip by *plane*, we're interested in what you liked most about it and what you liked least about it. What did you like most?

T34a. What did you like least?

Personal Data

1. How long have you people been living here in the . . . (community) . . . area?

2. How many grades of school have you (head) finished?

IF MORE THAN 8: 2a. Have you (head) had other schooling?

IF YES: 2b. What other schooling have you (head) had?

(Type of schooling)

(College, Secretarial, Business, Etc.)

IF ATTENDED COLLEGE 2c. Do you (head) have a college degree?

3. Would you tell me how much income you and your family expect to be making this year, 1955? I mean before taxes? Does that include the income of everyone in the family?

4. Do you expect that your income for 1955 will be larger, the same, or smaller than your income last year, 1954?

IF "LARGER" OR "SMALLER" 4a. Would you say much larger (smaller) or somewhat larger (smaller)?

5. Race: ☐ White ☐ Negro Other (specify) _____

Thumbnail Sketch

Interviewer: Use this space for any additional information which will give us more insight into the respondent's answers.

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Table 1

**NUMBER OF TRIPS TAKEN "LAST YEAR" BY ADULTS
CLASSIFIED ACCORDING TO INCOME
(Percentage Distribution of Adults)**

Number of Trips	Family Income					Not Ascertained
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	
None	39	53	33	25	17	51
One	21	20	23	20	16	23
Two	11	9	12	13	9	7
Three	6	5	7	8	8	4
Four	4	3	4	7	7	3
Five	3	2	4	5	6	1
Six	3	2	3	4	5	2
Seven	2	1	1	2	2	1
Eight	1	1	1	2	4	1
Nine	1	*	1	1	2	*
Ten or more	8	3	10	12	23	6
Took a trip but number of trips not ascertained	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Total	100	100	100	100	100	100
Number of adults	8485	3616	2388	1605	646	230

* Less than half of one per cent.

Table 2

SHARES OF ALL TRIPS BY PURPOSE OF TRIP AND FAMILY INCOME¹
 (Percentage distribution of all trips in the last 12 months)

Purpose of Trips	Family Income					Not Ascertained
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	
Business	19	2	5	6	6	1
Non-business	81	21	26	21	11	1
Total	100	23	31	27	17	2
Total number of trips	26,564					
Number of adults	8,461					

¹ This table excludes 24 adults who took 100 or more trips.

Table 3

PURPOSE OF MOST RECENT TRIP
 (Percentage distribution of adults who took a trip in
 the "last" 12 months)
 (weighted distribution)

Purpose of Trip	All Adults Who Took a Trip ¹
Vacation and pleasure travel	<u>64</u>
To visit friends, relatives	25
To attend organized sports events, concert, other special event	2
No further information; other recreation; sightseeing; honeymoon	36
To attend wedding	1
To attend convention (non-business)	1
Business travel	<u>18</u>
For employer (business, government)	8
By self-employed (business or professional man)	7
Convention or meeting	3
Personal affairs	<u>17</u>
Shopping trip	*
Emergency, illness, death, to visit doctor or hospital	7
To and from school	*
Moving to new home	2
Escort or drive someone	3
Other personal affairs	5
Purpose not ascertained	<u>1</u>
Total	100
Number of adults	2,510

¹Detail may not add to total owing to rounding.

* Less than half of one per cent.

Table 4

**LISTING OF ADULTS WHO TOOK 100 OR MORE TRIPS IN
THE "LAST TWELVE MONTHS"**

Occupation	Family Income	Age	Sex	Travel	Total No. of Trips
Sergeant in Air Corps	\$2000-2999	25	M	Took 102 business trips by auto. Establishes ground observation posts.	107
Asphalt salesman, Petroleum Refinery Company	\$6000-9999	42	M	Took 120 auto and 20 air trips for business purposes	170
Oil field worker, derrick man	\$4000-5999	27	M	Took 250 business trips by auto. Drives 101 miles to work every day.	251
Sales manager, aluminum storm windows and screens	\$6000-9999	47	M	Took 150 business trips by auto.	150
Sales manager, steel company	\$10,000 and over	33	M	Took 104 business trips by auto.	116
District drilling supt., drilling co.	\$10,000 and over	53	M	Took 300 business trips by auto.	327
Housewife	\$10,000 and over	48	F	Took "100 or more" non-business trips by auto. Wife of the district drilling superintendent on the previous line.	"100 or more"
Physician, public health dept.	\$6000-9999	57	F	Took 74 business trips and 26 non-business trips by auto. Husband lives on farm while wife lives in town. Hence, perhaps, the frequent non-business travel.	100
Sales manager, auto dealer	\$6000-9999	48	M	Took 100 auto and 25 air trips for business purposes. Also 100 auto trips for non-business purposes.	225
Structural worker, building industry	\$10,000 and over	33	M	Took 100 business trips by auto. Jobs are frequently 100 miles or more from home and may travel daily.	100

Table 4 (Continued)

Occupation	Family Income	Age	Sex	Travel	Total No. of Trips
Dock worker, construction	\$10,000 and over	31	M	Took 100 business trips by auto. Jobs are frequently 100 miles or more from home and may travel daily. Brother of man on previous line.	100
Real estate division, chain store. Buys, sells, leases real estate	\$10,000 and over	46	M	Took 208 auto trips and 26 air trips for business purposes.	243
Congressman	\$10,000 and over	54	M	Took 50 air and 40 auto trips for business purposes. Travels between _____ and Washington, D.C. almost weekly.	101
Farm corporation manager and specialist rancher	\$10,000 and over	35	M	Took at least 2 auto trips a week for business purposes.	106
Housewife	\$10,000 and over	34	F	Took at least 2 auto trips a week for non-business purposes. Usually accompanies husband on business trips. Wife of man on previous line.	102
Lubrication engr. salesman of oil company	\$6000-9999	28	M	Took 100 business trips by auto.	104
Traveling salesman, wholesale drug company	\$10,000 and over	58	M	Took 250 business trips by auto. Traveling salesman but comes home every other night, hence frequency of trips.	262
Siding and roofing applicator, construction	\$4000-5999	48	M	Took 195 business trips by auto. Goes from town to town for business, makes from one to three trips a week.	200
Merchandizing mgr. steel and cutting tools	\$10,000 and over	56	M	Took 200 air trips and 20 auto trips for business purposes.	225

Table 4 (Continued)

Occupation	Family Income	Age	Sex	Travel	Total No. of Trips
Investment banker, mgr. of branch office	\$4000-5999	43	M	Took "at least 100" business trips by auto.	"At least 100"
Representative for defense operations corp.	\$10,000 and over	28	M	Took from "100 to 300 or more" air trips for business purposes. Sometimes 10 flights a week. Averages 3,500 air miles a week.	"100 to 300 or more"
Unemployed--wants to do personnel or administrative work	Under \$4000	22	M	Took 50 rail trips for non-business purposes and 30 auto trips for business purposes. Recently discharged from army.	110
Motor Pool Dispatcher, Air Force	Under \$4000	21	M	Took 100 non-business and 50 business trips by auto.	157
Clerk-typist	Under \$4000	21	F	Took 150 non-business trips by auto. Wife of man on previous line.	150

Table 5

INCOME OF ADULTS WHO NEVER HAVE TAKEN ANY TRIP
(Percentage distribution of all adults)

Family Income	All Adults	Adults Who Have Taken at Least One Trip	Adults Who Never Have Taken a Trip
Under \$4000	41	40	65
\$4000-5999	29	30	14
\$6000-9999	19	20	13
\$10,000 and over	8	8	1
Not ascertained	3	2	7
Total	100	100	100
Number of Adults	4261 ¹	3900	278
Per cent of sample	100	92	7

¹ Based on interviews in the spring of 1955 only.

Table 6

AGE OF ADULTS WHO NEVER HAVE TAKEN ANY TRIP
(Percentage distribution of all adults)

Age (in Years)	All Adults	Adults Who Have Taken at Least One Trip	Adults Who Never Have Taken a Trip
20 and under	5	4	9
21-29	18	18	12
30-44	32	34	32
45-64	32	32	25
65 and over	12	11	19
Not ascertained	1	1	*
Total	100	100	100
Number of adults	4261 ¹	3900	278
Per cent of sample	100	92	7

* Less than 0.5 per cent.

¹ Based on interviews in the spring of 1955 only.

Table 7

PLACE OF RESIDENCE OF ADULTS WHO NEVER HAVE TAKEN ANY TRIP
(Percentage distribution of all adults)

Size of Community	All Adults	Adults Who Have Taken at Least One Trip	Adults Who Never Have Taken a Trip
Large metropolitan areas¹			
Central cities	16	15	27
Suburbs—50,000 and over	4	3	5
Suburbs—2,500-50,000	9	10	5
Suburbs—Rural	2	2	1
Other areas			
Cities 50,000 and over	17	17	12
Cities 2,500-50,000	19	19	9
Rural, farm and open country	33	34	41
Total	100	100	100
Number of adults	4261 ²	3900	278
Per cent of sample	100	92	7

¹ The twelve largest metropolitan areas.

² Based on interviews taken in the spring of 1955 only.

Table 8

**SHARES OF ALL TRIPS TAKEN BY ADULTS CLASSIFIED ON THE BASIS OF
TOTAL NUMBER OF TRIPS TAKEN AND FAMILY INCOME**
(Percentage distribution of all trips in the "last" 12 months)

Number of Trips Taken "Last Year"	Income					Not Ascertained
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	
0 - 9 ¹	44	14	13	11	5	1
10 - 19	20	4	7	5	4	*
20 - 39	17	3	5	5	4	*
40 - 59	14	2	5	4	3	*
60 - 99	5	*	2	2	1	1
All trips	100 ²	23	32	27	16	2
Total number of trips	26,564					
Number of adults	8,461 ²					

¹ Includes those whose number of trips was not ascertained and those for whom it was not ascertained whether they took any trip.

² This table excludes 24 adults who took 100 or more trips. Detail may not add to total owing to rounding.

* Less than half of one per cent.

SHARES OF ALL TRIPS TAKEN BY ADULTS CLASSIFIED ON THE BASIS OF OCCUPATION AND INDUSTRY
(Percentage distribution of trips)

Industry	Occupation of This Adult						Not Ascer- tained
	Professional and Managerial Workers	Clerical and Sales Workers	Blue Collar Workers	Farmers	Retired	Housewives, Students, Others not Now Employed	
Agriculture, forestry, fisheries	0.6		0.7	2.5			
Mining	0.2	0.2	0.4				
Manufacturing	4.1	2.8	9.0				0.1
Construction	2.3	0.1	3.0				
Transportation, communication, utilities	1.0	0.8	3.1				
Government	1.5	0.7	3.2				
Wholesale, retail trade	6.7	4.6	2.1				0.1
Repair services	0.5	0.1	0.6				
Business services	0.6	0.1	0.2				
Personal services	1.3	0.1	1.3				
Amusement, recreation, and related services	0.2		0.2				
Finance, insurance, real estate	1.0	1.0	0.1				
Printing, publishing, and allied industries	0.2	0.4	0.2				
Professional and related services	6.4	0.8	0.5				
Other, inapplicable, not ascer- tained	0.5	0.2	0.6		1.4	30.9	0.8
Total ¹	27.2	11.9	25.0	2.5	1.4	30.9	0.8
Number of trips	7230	1500	6640	670	360	8200	290
Number of adults	1110	250	2450	320	320	3400	100

¹ The grand total number of trips is 28,564. Trips by 8461 adults are covered. Detail may not add to totals owing to rounding. In this table entries under 0.05 are shown as blanks.

Table 10

**PROPORTION OF NON-BUSINESS TRIPS IN THE "LAST TWELVE MONTHS"
TAKEN BY ADULTS IN EACH INCOME AND OCCUPATION CLASS¹**

Family Income	Occupation of This Adult							Not Ascertained
	All Occupations	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Farmers	Retired	Not Employed, Students, Housewives	
Under \$4000	26	4	2	8	1	1	10	*
\$4000-5999	32	5	3	11	*	*	13	*
\$6000-9999	27	7	3	6	1	*	9	*
\$10,000 and over	13	4	2	2	*	*	5	*
Not ascertained	2	*	*	*	*	*	1	*
Total	100	20	10	27	2	2	38	1
Number of adults	8461 ²	1102	782	2446	320	317	3397	97
Per cent of adults	100	13	9	29	4	4	40	1
Total Number of trips: 20,963								

¹ Entries for individual cells are subject to large sampling errors. See Table 65 for the proportion of adults in each cell.

² This table excludes 24 adults who took 100 or more trips.

* Less than half of one per cent.

Table 11

**COMPARISON OF THE NUMBER OF NON-BUSINESS TRIPS IN
THE "LAST TWELVE MONTHS" TAKEN BY THE HUSBAND
WITH THE NUMBER TAKEN BY THE WIFE**

	Number of Couples	Number of Adults	Per cent
Married couples for whom the number of non-business trips was the same for both hus- band and wife ¹	2320	4640	73
Married couples whose mem- bers took different numbers of trips	<u>862</u>	<u>1724</u>	<u>27</u>
Total	3182	6364 ²	100

¹Includes couples who took no trips.

²Excludes adults other than married heads and their wives, and those who took over 100 trips or for whom the number of trips was not ascertained.

Table 12

PROPORTION OF BUSINESS TRIPS IN THE "LAST TWELVE MONTHS"
TAKEN BY ADULTS IN EACH INCOME AND OCCUPATION CLASS¹

Family Income	Occupation of This Adult							Not Ascertained
	All Occupations	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Farmers	Retired	Not Employed, Students, Housewives	
Under \$4000	13	5	1	4	2	*	1	*
\$4000-5999	31	13	7	9	*	*	2	*
\$6000-9999	24	15	5	3	1	*	*	*
\$10,000 and over	29	22	5	1	1	*	*	1
Not ascertained	3	1	1	*	*	*	*	*
All incomes	100	56	19	17	4	*	3	1

¹ Entries for individual cells are subject to large sampling errors.

* Less than half of one per cent

TABLE 10
PROPORTION OF BUSINESS TRIPS IN THE "LAST TWELVE MONTHS" TAKEN BY
ADULTS CLASSIFIED ACCORDING TO OCCUPATION AND INDUSTRY¹
(Percentage distribution of all business trips taken in the "last 12 months")

Industry	Per cent of Adults	Per cent of Trips				
		Occupation of Adult Taking Trip				
	Adults Taking One or More Business Trips	All Occupations	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Other ²
Agriculture, forestry, fisheries	10	5	1	*	*	4
Mining	1	2	1	1	1	*
Manufacturing	16	18	9	6	3	*
Construction	8	9	5	*	3	*
Transportation, communication, utilities	7	7	2	1	3	*
Government	10	7	3	*	4	*
Wholesale, retail trade	20	25	15	9	1	*
Repair services	2	2	2	*	1	*
Business services	2	1	1	*	*	*
Personal services	4	3	3	*	1	*
Amusement, recreation	1	1	*	*	*	*
Finance, insurance, real estate	3	3	3	*	*	*
Printing, publishing	1	1	*	1	*	*
Professional and related services	12	10	9	1	*	*
Other	*	*	*	*	*	*
Not ascertained, inapplicable	3	6	2	*	*	4
Total	100	100	58	19	17	8
Number of trips		5546				
Number of adults	652					

¹ This table excludes 24 adults who took 100 or more trips and 35 adults for whom it was not ascertained whether they took any trip.

² Includes farmers, retired, not employed, students, housewives and not ascertained.

Table 14

**AIR TRAVEL HISTORY OF ALL ADULTS WITHIN
FAMILY INCOME TROUPS**
(Percentage distribution of adults)

Travel History	Family Income				
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over
Never had taken a trip by this mode	75	86	74	64	40
Has taken a trip by this mode but none in the "last year"	16	10	19	24	27
Took one or more trips by this mode "last year"	<u>7</u>	<u>2</u>	<u>4</u>	<u>10</u>	<u>30</u>
For business purposes	2	*	1	3	9
For non-business purposes	4	2	3	7	18
Took both business and non-business trips	*	*	*	*	3
Not ascertained whether ever took a trip by this mode, or took such a trip last year	<u>2</u>	<u>2</u>	<u>3</u>	<u>2</u>	<u>3</u>
Total	100	100	100	100	100
Number of adults within each income group	8485	3616	2388	1605	646

* Less than half of one per cent.

Table 15

AIR TRAVEL HISTORY OF ADULTS WITHIN OCCUPATION GROUPS

Air Travel History	Occupation of This Adult					
	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Farmers	Retired	Housewives, Students, Others Not Now Employed
Never has taken a trip by this mode	53	65	76	86	88	81
Has taken a trip by this mode, but not in the "last" year	27	23	18	11	7	12
Took one or more trips by this mode "last" year	18	10	4	2	3	5
For business purposes	10	3	1	1	*	*
For non-business purposes	8	7	3	1	3	5
Took both business and non- business trips	2	*	*	*	*	*
Not ascertained whether ever took a trip by this mode or took such a trip "last" year	2	2	2	1	2	2
Total	100	100	100	100	100	100
Number of Adults	1113	787	2451	320	317	3400

* Less than half of one per cent

Table 16

USE OF AIR "LAST YEAR" BY PLACE OF RESIDENCE
(Percentage distribution of adults)

Used Air "Last Year"	Place of Residence							
	All Adults	Large Metropolitan Areas ¹				Other Areas		
		Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural Farm & Open Country
Used air	7	10	9	12	7	8	6	3
Did not use air	<u>93</u>	<u>90</u>	<u>91</u>	<u>88</u>	<u>93</u>	<u>92</u>	<u>94</u>	<u>97</u>
Total	100	100	100	100	100	100	100	100
Number of adults	8485	1322	294	754	149	1445	1688	2833

¹ The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

Table 17

**SHARES OF AIR TRAVEL CONTRIBUTED BY GROUPS DISTINGUISHED
ACCORDING TO PURPOSE OF TRAVEL AND INCOME¹**
(Percentage distribution of all air trips in the last 12 months)

Purpose of Trips	Family Income					Not Ascertained
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	
Business	55	2	9	10	33	1
Non-business	45	5	10	13	17	*
Total	100	7	19	23	50	1
Total number of air trips	1573	99	295	360	797	22
Number of adults	8461	3612	2385	1600	634	230

¹ This table excludes 24 adults who took 100 or more trips.

* Less than half of one per cent.

Table 18

**DID ADULTS WHO TOOK THEIR FIRST AIR TRIP IN THE "LAST TWELVE MONTHS"
TAKE MORE BUSINESS TRIPS OR MORE NON-BUSINESS TRIPS
DURING THE YEAR?**

Family Income	Total		Took First Air Trip in Last 12 Months			Did Not Take First Air Trip in Last 12 Months		
	Adults	Trips	Number of:			Number of:		
			Adults	Non-Business Air Trips	Business Air Trips	Adults	Non-Business Air Trips	Business Air Trips
Under \$4000	1858	41	10	10	1	1848	23	7
\$4000-5999	1116	146	19	30	3	1097	61	52
\$6000-9999	784	145	17	17	1	767	74	53
\$10,000 & over	297	323	22	31	4	275	112	176
Not ascertained	104	9	1	0	2	103	3	4
Total	4159	664	69	88	11	4090	273	292

Table 19

PROPORTION OF ALL AIR TRIPS BY ADULTS AT DIFFERENT
INCOME LEVELS ACCOUNTED FOR BY THOSE WHO TOOK
THEIR FIRST AIR TRIP IN THE "LAST TWELVE MONTHS"
(Based on the October interviews only)

Family Income	Proportion of Air Trips by Those Whose First Trip Was in Last Twelve Months
Under \$4000	27%
\$4000-5999	23
\$6000-9999	12
\$10,000 and over	<u>11</u>
Average	18%

Table 20

**ADVANTAGES AND DISADVANTAGES OF AIR FOR THE
RESPONDENT'S MOST RECENT TRIP¹**
(Percentage distribution of advantages and disadvantages)

Advantages and Disadvantages of Air	Per Cent of All Advantages and Disadvantages of Air
<u>Advantages of air</u>	
Cheaper	8
Safer	*
Faster	40
Comfortable, restful, good passenger facilities (e.g. meals)	6
Special event (e.g. honeymoon); adventure; wanted to see what it was like	3
Good (better) connections ²	8
<u>Disadvantages of air</u>	
(Too) expensive	9
Respondent or members of his family object to or fear flying	7
Planes are not dependable in bad weather	*
Bad connections ²	7
Hard to get to a plane; terminals are inconveniently located	8
Other advantages and disadvantages	<u>4</u>
Total	100
Number of adults who discussed air	104
Number of adults in sample	1275

¹Includes October survey only.

²Includes responses for which it was unclear whether the respondent's reference was to connections with other planes or to connections with other modes.

* Less than half of one per cent.

The question was: "How did you happen to choose this way of traveling instead of some other?" The question was asked in the context of a series of questions about a recent trip by common carrier.

Table 21

GENERAL ADVANTAGES AND DISADVANTAGES OF AIR TRAVEL^{1,2}
 (Percentage distribution of adults who have ever taken a trip)

	Percentage Distribution of Adults
General Advantages of Air	
Cheap, cheaper, reasonable	6
Safe	2
Speed; saves time	86
Comfortable, less fatiguing	5
Clean (compared to trains)	2
Air minded: loves planes, thrill of flight	8
Convenient: no further information	3
Other	2
General Disadvantages of Air	
Expensive	30
Fear of air sickness (specific)	8
Fear of flying (general)	76
Health (e.g. bad heart) prevents flying	3
Bad connections ³	2
Hard to get to a plane; terminals are inconveniently located	3
Other	2
Number of adults	900

¹ Table does not add to 100 per cent because respondents were permitted to cite more than one advantage and more than one disadvantage.

² This table is based on the fall survey only.

³ Includes responses for which it was unclear whether the respondent's reference was to connections with other planes or to connections with other modes.

The question was: "Why do you think some people travel by plane?"

"What might keep some people from traveling by plane?"

Table 22

PLEASANT RECOLLECTIONS OF THE LAST AIR TRIP
(Percentage distribution of recollections)

Pleasant Recollections	Per Cent of Recollections
Liked speed; saved time	40
Was comfortable, restful, less fatiguing	13
Liked the meals	6
Liked physical arrangements, clean, roomy, cool	12
Liked stewardess or other personnel	8
Enjoyed the scenery	6
Found it an exciting new experience	4
Is air-minded; loves to fly; thrilling	10
Other	1
Total	100
Number of adults who discussed air trip recollections	180

Table 23

UNPLEASANT RECOLLECTIONS OF THE LAST AIR TRIP
 (Percentage distribution of recollections)

	Per Cent of Recollections
<u>Unpleasant Recollections</u>	
Didn't like it because it was too expensive	6
Was afraid during flight; fears flying; felt unsafe	15
Too noisy; plane vibrated too much	4
Was too jarring; hit too many air-pockets	22
Take off or landing was too rough; too rough	8
Became air-sick	14
Was too cramped	6
Couldn't see scenery well	2
Other	4
<u>Bad Connections</u>	
Scheduling was bad for reasons of time (except complaints about coach schedules or night flights)	5
Scheduling was bad for reasons of place	2
Coach flights are badly scheduled	1
Terminal inconveniently located	<u>11</u>
Total	100
Number of adults who discussed air trip recollections	107

Table 24

NUMBER OF NON-BUSINESS AIR TRIPS PER 100 ADULTS FOR
DIFFERENT LEVELS OF INCOME AND EDUCATION¹

Family Income	Education of Head of Family				
	All Levels	None, Grammar School	High School	College	Not Ascertained
Under \$4000	2	1	3	8	0
\$4000-5999	7	3	6	16	5
\$6000-9999	13	6	13	19	0
\$10,000 and over	44	17	40	56	433
Not ascertained	3	1	3	6	0
All incomes	9	3	9	22	12

¹ This table excludes 59 adults, of whom 24 took 100 or more trips of all types and 35 were classified "not ascertained whether took any trip." Entries for individual cells are subject to large sampling error.

Table 25

**SHARES OF NON-BUSINESS AIR TRAVEL CONTRIBUTED BY GROUPS DISTINGUISHED ON THE
BASIS OF TOTAL NUMBER OF TRIPS TAKEN BY ALL MODES AND FAMILY INCOME**
(Percentage distribution of non-business air trips taken in the "last" 12 months)

Total Number of Trips Taken "Last Year"	Income					
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	Not Ascertained
0 - 9 ¹	60	9	14	17	20	1
10 - 19	20	1	5	3	11	*
20 - 39	16	1	3	7	5	*
40 - 59	2	*	*	1	1	*
60 - 99	<u>2</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>2</u>	<u>*</u>
All non-business air trips	100 ²	10	22	28	39	1
Total number of non- business air trips	716					
Number of adults	8461 ²					

¹ Includes those whose total number of trips was not ascertained and those for whom it was not ascertained whether they took any trip.

² This table excludes 24 adults who took 100 or more trips. Detail may not add to totals owing to rounding.

* Less than half of one per cent.

Table 26

**PROPORTION OF BUSINESS AIR TRIPS IN THE "LAST TWELVE MONTHS" TAKEN BY
ADULTS CLASSIFIED ACCORDING TO OCCUPATION AND INDUSTRY¹**
(Percentage distribution of all business air trips taken in the "last 12 months")

Industry	Occupation of Adult Taking Trip				
	All Occupations	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Other ²
Agriculture, forestry, fisheries	2	*	*	*	1
Mining	2	2	*	*	*
Manufacturing	43	26	13	3	*
Construction	3	3	*	*	*
Transportation, communications, utilities	1	1	*	*	*
Government	9	6	*	4	*
Wholesale, retail trade	19	16	3	*	*
Repair services	*	*	*	*	*
Business services	3	3	*	*	*
Personal services	2	*	1	2	*
Amusement, recreation	*	*	*	*	*
Finance, insurance, real estate	2	1	*	*	*
Printing, publishing	*	*	*	*	*
Professional and related services	9	9	*	*	*
Other	*	*	*	*	*
Not ascertained, inapplicable	5	5	*	*	1
All business air trips	100	72	17	9	2
Number of trips	854	618	147	76	13
Number of adults	8426				

¹ This table excludes 24 adults who took 100 or more trips and 35 adults for whom it was not ascertained whether they took any trip.

² Includes farmers, retired heads of families, not employed, students, and housewives.

Table 27

**SHARES OF BUSINESS AIR TRAVEL CONTRIBUTED BY GROUPS DISTINGUISHED ON
THE BASIS OF TOTAL NUMBER OF TRIPS TAKEN AND FAMILY INCOME**
(Percentage distribution of business air trips taken in the "last" 12 months)

Total Number of Trips Taken "Last" Year	Income					
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	Not Ascertained
0 - 9 ¹	23	2	4	7	11	*
10 - 19	20	1	5	7	6	2
20 - 39	20	*	1	1	17	*
40 - 59	25	*	2	4	19	*
60 - 99	12	*	5	*	8	*
All business air trips	100 ²	3	16	18	61	2
Total number of business air trips	857					
Number of adults	8461 ³					

¹ Includes those whose total number of trips was not ascertained and those for whom it was not ascertained whether they took any trips.

² This table excludes 24 adults who took 100 or more trips. Detail may not add to totals owing to rounding.

* Less than half of one per cent.

Table 28

**RAIL TRAVEL HISTORY OF ALL ADULTS WITHIN
FAMILY INCOME GROUPS**
(Percentage distribution of adults)

Travel History	Family Income				
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over
Never has taken a trip by this mode	30	38	28	21	12
Has taken a trip by this mode but none in the "last year"	58	53	61	63	59
Took one or more trips by this mode "last year"	10	7	9	14	26
For business purposes	2	*	1	3	8
For non-business purposes	8	7	8	11	17
Took both business and non-business trips	*	*	*	*	1
Not ascertained whether ever took a trip by this mode, or took such a trip last year	2	2	2	2	3
Total	100	100	100	100	100
Number of adults within each income group	8485	3616	2388	1605	646

* Less than half of one per cent.

Table 29.

RAIL TRAVEL HISTORY OF ADULTS WITHIN OCCUPATION GROUPS

Rail Travel History	Occupation of This Adult					
	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Farmers	Retired	Housewives, Students, Others Not Now Employed
Never has taken a trip by this mode	15	21	30	38	34	35
Has taken a trip by this mode, but not in the "last" year	65	65	59	56	59	52
Took one or more trips by this mode "last" year	<u>19</u>	<u>12</u>	<u>9</u>	<u>4</u>	<u>6</u>	<u>10</u>
For business purposes	9	2	1	1	*	*
For non-business purposes	9	10	8	3	6	10
Took both business and non-business trips	1	*	*	*	*	*
Not ascertained whether ever took a trip by this mode or took such a trip "last" year	<u>1</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>3</u>
Total	100	100	100	100	100	100
Number of adults	1113	787	2451	320	317	3400

* Less than half of one per cent.

Table 30

**SHARES OF RAIL TRAVEL CONTRIBUTED BY GROUPS DISTINGUISHED
ACCORDING TO PURPOSE OF TRAVEL AND INCOME¹**
(Percentage distribution of all rail trips in the last 12 months)

Purpose of Trips	Family Income					Not Ascertained
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	
Business	28	4	5	7	12	*
Non-Business	72	24	20	14	10	4
Total	100	28	25	21	22	4
Total number of rail trips	1930	514	498	400	442	76
Number of adults	8461	3612	2385	1600	634	230

¹ This table excludes 24 adults who took 100 or more trips

* Less than half of one per cent.

Table 31

**ADVANTAGES AND DISADVANTAGES OF RAIL FOR THE
RESPONDENT'S MOST RECENT TRIP¹**
(Percentage distribution of advantages and disadvantages)

Advantages and Disadvantages of Rail	Per Cent of All Advantages and Disadvantages of Rail
<u>Advantages of rail</u>	
Cheaper	10
Free pass	4
Safer	5
Faster	8
Comfortable, restful; good passenger facilities (e.g. rest rooms, diner, club car)	18
Enjoy the scenery; sightseeing	3
Good (better) connections ²	14
<u>Disadvantages of rail</u>	
Trains are slow	*
Bad connections ²	29
Hard to get to a train; stations are inconveniently located	6
Other advantages and disadvantages	3
Total	100
Number of adults who discussed rail	200
Number of adults in sample	1275

¹Includes October survey only.

²Includes responses for which it was unclear whether the respondent's reference was to connections with other trains or to connections with other modes.

* Less than half of one per cent.

The question was: "How did you happen to choose this way of traveling instead of some other?" The question was asked in the context of a series of questions about a recent trip by a common carrier.

Table 32

**GENERAL ADVANTAGES AND DISADVANTAGES OF
RAIL TRAVEL^{1,2}**
(Percentage distribution of adults)

	Percentage Distribution of Adults
General Advantages of Rail	
Cheap, cheaper, reasonable	9
Safer (better in bad weather)	19
Faster	11
Comfortable, restful; good passenger facilities; enjoys meeting people (likes club car)	38
Enjoys seeing the scenery	4
Avoids strain of driving car; can't drive; doesn't own car	21
Good connections	4
Convenient: no further information	12
Other	2
General Disadvantages of Rail	
Expensive	27
Dangerous (fear of train wrecks)	5
Slow (compared to air)	19
Uncomfortable (noise, sudden stops), fatiguing, monotonous	5
Train sickness	5
Trains are dirty	3
See less scenery	6
Inconvenient not to have car on arrival	2
Bad connections ³	15
Hard to get to a train; stations are inconven- iently located	6
Number of adults: 900	

¹ Table does not add to 100 per cent because respondents were permitted to cite more than one advantage and more than one disadvantage.

² This table is based on the fall survey only.

³ Includes responses for which it was unclear whether the respondent's reference was to connections with other trains or to connections with other modes.

The question was: "Why do you think some people travel by train?"
"What might keep some people from traveling by train?"

Table 33

PLEASANT RECOLLECTIONS OF THE LAST RAIL TRIP
 (Percentage distribution of recollections)

Pleasant Recollections	Per Cent of Recollections
Liked it because it was cheap (cheaper)	1
Liked feeling of security or safety	3
Liked it because it was fast (faster)	4
Was comfortable, restful	26
Liked dining car, meals	14
Liked physical arrangements, clean, roomy, cool	20
Liked the service	4
Liked meeting people (club car)	5
Found it exciting; change from routine	3
Enjoyed the scenery	11
Enjoyed avoiding strain of driving car	4
Convenient: no other information	5
Total	100
Number of adults who discussed rail trip recollections	576

Table 34

UNPLEASANT RECOLLECTIONS OF THE LAST RAIL TRIP
(Percentage distribution of recollections)

Unpleasant Recollections	Per Cent of Recollections
Didn't like it because it was too expensive	2
Too slow	17
Uncomfortable (noise, sudden stops), fatiguing	28
Train was dirty, unsanitary (e.g. rest rooms)	18
Dining car was too expensive	3
(Air conditioning) too cold	2
Service was poor	4
"It was crowded"	4
Didn't see enough scenery	4
Other	4
Bad connections ¹	<u>14</u>
Total	100
Number of adults who discussed rail trip recollections	438

¹Includes responses for which it was unclear whether the respondent's reference was to connections with other trains or to connections with other modes.

Table 35

USE OF RAIL "LAST YEAR" BY PLACE OF RESIDENCE
(Percentage distribution of adults)

Used Rail "Last Year"	All Adults	Place of Residence						
		Large Metropolitan Areas ¹				Other Areas		
		Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural Farm & Open Country
Used rail	10	14	11	12	8	13	11	7
Did not use rail	90	86	89	88	92	87	89	93
Total	100	100	100	100	100	100	100	100
Number of adults	8485	1322	294	754	149	1445	1688	2833

¹The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

Table 36

NUMBER OF NON-BUSINESS RAIL TRIPS PER 100 ADULTS FOR
DIFFERENT LEVELS OF INCOME AND EDUCATION¹

Family Income	Education of Head of Family				
	All Levels	None, Grammar School	High School	College	Not Ascertained
Under \$4000	13	11	18	12	7
\$4000-5999	17	9	21	19	0
\$6000-9999	17	16	14	22	9
\$10,000 & over	32	10	31	44	0
Not ascertained	32	11	9	165	0
All incomes	17	11	19	27	4

¹ This table excludes 59 adults, of whom 24 took 100 or more trips of all types and 35 were classified "not ascertained whether took any trip." Entries for individual cells are subject to large sampling errors.

Table 37

**SHARES OF BUSINESS RAIL TRAVEL CONTRIBUTED BY GROUPS DISTINGUISHED ON THE
BASIS OF TOTAL NUMBER OF TRIPS TAKEN BY ALL MODES AND FAMILY INCOME**
(Percentage distribution of business rail trips taken in the "last" 12 months)

Total Number of Trips Taken "Last" Year	Income					Not Ascertained
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	
0 - 9 ¹	28	2	6	8	11	*
11 - 19	22	4	6	6	6	*
20 - 39	22	1	5	2	14	*
40 - 59	10	*	1	1	9	*
60 - 99	<u>18</u>	<u>*</u>	<u>2</u>	<u>10</u>	<u>6</u>	<u>*</u>
All business rail trips	100 ²	7	19	27	47	*
Total number of business rail trips	510					
Number of adults	8461 ³					

¹Includes those whose total number of trips was not ascertained and those for whom it was not ascertained whether they took any trips.

²This table excludes 24 adults who took 100 or more trips. Detail may not add to totals owing to rounding.

* Less than half of one per cent.

Table 38

**PROPORTION OF BUSINESS RAIL TRIPS IN THE "LAST 12 MONTHS" TAKEN BY ADULTS
CLASSIFIED ACCORDING TO OCCUPATION AND INDUSTRY¹**
(Percentage distribution of all business rail trips taken in the "last 12 months")

Industry	Occupation of Adult Taking Trip				
	All Occupations	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Other ²
Agriculture, forestry, fisheries	2	*	*	*	2
Mining	*	*	*	*	*
Manufacturing	19	13	2	5	*
Construction	4	3	*	*	*
Transportation, communication, utilities	3	3	*	*	*
Government	7	4	1	3	*
Wholesale, retail trade	22	19	3	*	*
Repair services	2	2	*	*	*
Business services	5	4	*	*	*
Personal services	14	14	*	1	*
Amusement, recreation	2	2	*	*	*
Finance, insurance, real estate	2	2	*	*	*
Printing, publishing	*	*	*	*	*
Professional and related services	14	13	*	*	*
Other	*	*	*	*	*
Not ascertained, inapplicable	4	2	*	*	2
All business rail trips	100	81	6	9	4
Number of trips	510				
Number of adults	8426				

¹ This table excludes 24 adults who took 100 or more trips and 35 adults for whom it was not ascertained whether they took any trip.

² Includes farmers, retired heads of families, not employed, students and housewives.

Table 39

**BUS TRAVEL HISTORY OF ALL ADULTS WITHIN
FAMILY INCOME GROUPS**
(Percentage distribution of adults)

Travel History	Family Income				
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over
Never has taken a trip by this mode	51	53	47	52	53
Has taken a trip by this mode, but none in the "last year"	39	37	44	40	36
Took one or more trips by this mode "last year"	<u>7</u>	<u>7</u>	<u>6</u>	<u>6</u>	<u>5</u>
For business purposes	1	*	1	1	1
For non-business purposes	6	7	5	5	4
Took both business and non-business trips	*	*	*	*	*
Not ascertained whether ever took a trip by this mode, or took such a trip last year	<u>3</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>6</u>
Total	100	100	100	100	100
Number of adults within each income group	8485	3616	2388	1605	646

* Less than half of one per cent.

Table 40

BUS TRAVEL HISTORY OF ADULTS WITHIN OCCUPATION GROUPS

Bus Travel History	Occupation of This Adult					
	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Farmers	Retired	Housewives, Students, Others Not Now Employed
Never has taken a trip by this mode	48	49	49	55	57	54
Has taken a trip by this mode, but not in the "last" year	41	41	42	40	33	37
Took one or more trips by this mode "last" year	<u>8</u>	<u>7</u>	<u>6</u>	<u>3</u>	<u>7</u>	<u>6</u>
For business purposes	3	1	*	1	1	*
For non-business purposes	5	6	6	2	6	6
Took both business and non- business trips	*	*	*	*	*	*
Not ascertained whether ever took a trip by this mode or took such a trip "last" year	<u>3</u>	<u>3</u>	<u>3</u>	<u>2</u>	<u>3</u>	<u>3</u>
Total	100	100	100	100	100	100
Number of adults	1113	787	2451	320	317	3400

* Less than half of one per cent.

Table 41

USE OF BUSES "LAST YEAR" BY PLACE OF RESIDENCE
(Percentage distribution of adults)

Used Bus "Last Year"	Place of Residence							
	All Adults	Large Metropolitan Areas ¹				Other Areas		
		Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural Farm & Open Country
Used bus	7	6	3	4	7	8	9	6
Did not use bus	93	94	97	96	93	92	91	94
Total	100	100	100	100	100	100	100	100
Number of adults	8485	1322	294	754	149	1445	1688	2833

¹ The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

Table 42

**ADVANTAGES AND DISADVANTAGES OF BUS FOR THE
RESPONDENT'S MOST RECENT TRIP¹**
(Percentage distribution of advantages and disadvantages)

Advantages and Disadvantages of Bus	Per Cent of All Advantages and Disadvantages of Bus
<u>Advantages of bus</u>	
Cheaper	15
Safer	3
Faster	4
See the scenery	5
More flexible schedule: stop when and where you want, stay longer	1
Better (good) connections ²	20
<u>Disadvantages of bus</u>	
Slow	5
Fatigue; lack of comfort	4
Bad connections ²	21
Hard to get to a bus; terminals are incon- veniently located	3
Other advantages and disadvantages of bus	<u>19</u>
Total	100
Number of adults who discussed bus	156
Number of adults in sample	1275

¹ Includes October survey only.

² Includes responses for which it was unclear whether the respondent's reference was to connections with other buses or to connections with other modes.

The question was: "How did you happen to choose this way of traveling instead of some other?" The question was asked in the context of a series of questions about a recent trip by common carrier.

Table 43

**AUTO TRAVEL HISTORY OF ALL ADULTS WITHIN
FAMILY INCOME GROUPS**
(Percentage distribution of adults)

Travel History	Family Income				
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over
Never has taken a trip by this mode	11	17	7	5	3
Has taken a trip by this mode, but none in the "last year"	32	39	30	23	22
Took one or more trips by this mode "last year"	<u>55</u>	<u>42</u>	<u>62</u>	<u>70</u>	<u>72</u>
For business purposes	2	2	2	2	3
For non-business purposes	48	37	55	61	57
Took both business and non-business trips	5	3	5	7	12
Not ascertained whether ever took a trip by this mode, or took such a trip last year	<u>2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>3</u>
Total	100	100	100	100	100
Number of adults within each income group	8485	3616	2388	1605	646

Table 44

AUTO TRAVEL HISTORY OF ADULTS WITHIN OCCUPATION GROUPS

Auto Travel History	Occupation of This Adult					
	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Farmers	Retired	Housewives, Students, Others Not Now Employed
Never has taken a trip by this mode	4	7	13	12	17	13
Has taken a trip by this mode, but not in the "last" year	25	28	32	36	46	34
Took one or more trips by this mode "last" year	<u>70</u>	<u>63</u>	<u>54</u>	<u>50</u>	<u>36</u>	<u>51</u>
For business purposes	6	3	2	5	*	*
For non-business purposes	48	54	48	35	35	50
Took both business and non- business trips	16	6	4	10	1	1
Not ascertained whether ever took a trip by this mode or took such a trip "last" year	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>1</u>	<u>2</u>
Total	100	100	100	100	100	100
Number of adults	1113	787	2451	320	317	3400

* Less than half of one per cent.

Table 45

USE OF AUTOS "LAST YEAR" BY PLACE OF RESIDENCE
(Percentage distribution of adults)

Used Auto "Last Year"	Place of Residence							
	All Adults	Large Metropolitan Areas ¹				Other Areas		
		Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural Farm & Open Country
Used auto	55	43	52	55	64	60	60	55
Did not use auto	<u>45</u>	<u>57</u>	<u>48</u>	<u>45</u>	<u>36</u>	<u>40</u>	<u>40</u>	<u>45</u>
Total	100	100	100	100	100	100	100	100
Number of adults	8485	1322	294	754	149	1445	1688	2833

¹ The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

Table 46

**ADVANTAGES AND DISADVANTAGES OF AUTO FOR
THE RESPONDENT'S MOST RECENT TRIP¹**
(Percentage distribution of advantages and disadvantages)

Advantages and disadvantages of Auto	Per Cent of All Advantages and Disadvantages of Auto
<u>Advantages of auto</u>	
"More of us could go"; "free ride at some- one else's expense"; chose auto for reasons of companionship	7
Cheaper	24
Faster	5
No schedule; one can time one's trip as one pleases (can start and stop when one wishes); can choose one's own route	19
Easier with children (babies) or with old (sick) people	4
Car is available upon arrival	5
Car goes door-to-door, avoid changing modes or going to and from terminals; personal belongings more easily carried	5
Enjoy the scenery	7
No good connections by other modes; "only way you could get there"; car is better for short distances	5
Convenient	11
<u>Disadvantages of auto</u>	
Fatigue ("it's hard to drive so far"); doesn't like to drive; can't drive; didn't have car; roads may be bad (ice, snow, construction)	1
Other advantages and disadvantages of auto	7
Total	100
Number of adults who discussed auto	1044

¹ Includes October survey only.

The question was: "How did you happen to choose this way of traveling in-
stead of some other?" The question was asked in the
context of a series of questions about a recent trip.

Table 47

TRAVEL HISTORY OF ADULTS FOR EACH MODE
(Percentage distribution of all adults)

Travel History	Modes Used			
	Air	Rail	Bus	Auto
Never has taken a trip by this mode	75	30	51	11
Has taken a trip by this mode, but not in the "last" year	16	58	39	32
Took one or more trips by this mode last year	<u>7</u>	<u>10</u>	<u>7</u>	<u>55</u>
For business purposes	2	2	1	2
For non-business purposes	4	8	6	48
Took both business and non-business trips	*	*	*	5
Not ascertained whether ever took a trip by this mode or took such a trip last year	<u>2</u>	<u>2</u>	<u>3</u>	<u>2</u>
Total	100	100	100	100
Number of adults: 8485				

* Less than half of one per cent.

Table 48

SHARES OF ALL TRIPS BY MODE, PURPOSE OF TRAVEL AND FAMILY INCOME
(Percentage distribution of all trips in the last 12 months)

Mode & Purpose of Trips	Family Income					
	All Incomes	Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over	Not Ascertained
<u>Air</u>	<u>6</u>	<u>*</u>	<u>1</u>	<u>1</u>	<u>3</u>	<u>*</u>
Business	3	*	1	1	2	*
Non-business	3	*	1	1	1	*
<u>Rail</u>	<u>8</u>	<u>2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>*</u>
Business	2	*	*	1	1	*
Non-business	6	2	2	1	1	*
<u>Bus</u>	<u>5</u>	<u>2</u>	<u>1</u>	<u>1</u>	<u>*</u>	<u>*</u>
Business	1	*	*	*	*	*
Non-business	4	2	1	1	*	*
<u>Auto</u>	<u>81</u>	<u>20</u>	<u>28</u>	<u>23</u>	<u>12</u>	<u>2</u>
Business	16	3	5	4	3	1
Non-business	65	17	23	19	9	1
<u>All Modes</u>	<u>100</u>	<u>23</u>	<u>32</u>	<u>27</u>	<u>16</u>	<u>2</u>
Business	22	3	7	5	6	1
Non-business	78	20	25	22	10	1
Number of adults	8,461					
Total number of trips	26,564					

¹ This table excludes 24 adults who took 100 or more trips.

* Less than half of one per cent.

Table 49

NUMBER OF MODES USED "LAST YEAR" WITHIN FAMILY INCOME GROUPS
(Percentage distribution of adults)

Number of Modes Used	Family Income				
	All Adults	Under \$4000	\$4000-5999	\$6000-9999	\$10,000 & Over
<u>Took a Trip</u>	<u>61</u>	<u>47</u>	<u>67</u>	<u>75</u>	<u>83</u>
Auto only	42	33	50	51	39
One common carrier only	5	5	4	4	8
Two modes	11	7	10	15	23
Three or four modes	4	2	3	5	13
<u>Took no trip¹</u>	<u>39</u>	<u>53</u>	<u>33</u>	<u>25</u>	<u>17</u>
Total	100	100	100	100	100
Number of adults	8485	3616	2388	1605	646

¹Includes those for whom the modes used were not ascertained.

Table 50

**NON-BUSINESS AIR AND RAIL TRIPS BY ADULTS IN EACH INCOME
AND OCCUPATION CLASS^{1,2}**

Family Income	Occupation of This Adult							Not Ascertained
	All Occupations	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Farmers	Retired	Not Employed, Students, Housewives	
Under \$3000	74 (481)	9 (20)	16 (47)	21 (232)	1 (5)	7 (16)	19 (157)	1 (4)
\$4000-5999	155 (399)	37 (43)	15 (27)	55 (139)	0 (2)	1 (9)	47 (176)	0 (3)
\$6000-9999	203 (264)	38 (53)	31 (29)	62 (76)	0 (0)	2 (5)	69 (98)	1 (5)
\$10,000 and over	278 (203)	90 (56)	29 (22)	32 (8)	7 (2)	2 (2)	106 (111)	12 (2)
Not ascertained	6 (73)	1 (26)	0 (6)	0 (1)	0 (0)	0 (1)	5 (39)	0 (0)
Total number of trips	716 (1420)	175 (198)	91 (131)	170 (456)	8 (9)	12 (33)	246 (579)	14 (14)
Number of adults	8461	1102	782	2446	320	317	3397	97
Per cent of adults	100	13	9	29	4	4	40	1

¹ The first entry in each cell in this table is the total number of non-business air trips taken by adults in each income and occupation class. The second entry, the one in parenthesis, is the total number of non-business rail trips taken by the adults in this cell. Entries for individual cells are subject to large sampling errors.

² This table excludes 24 adults who took 100 or more trips.

Table 51

**MODES USED "LAST YEAR" BY ADULTS CLASSIFIED ACCORDING
TO PLACE OF RESIDENCE
(Percentage Distribution of Adults)**

Modes Used "Last Year"	Place of Residence							
	All Adults	Large Metropolitan Areas ¹				Other Areas		
		Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural Farm & Open Country
Air	7	10	9	12	7	8	6	3
Rail	10	14	11	12	8	13	11	7
Auto	55	43	52	55	64	60	60	55
Bus	7	6	3	4	7	8	9	6
None	39	47	40	38	32	34	38	42
Total	2	2	2	2	2	2	2	2
Number of adults	8485	1322	294	754	149	1445	1688	2833

¹ The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

² Detail will add to more than 100 because more than one mode may be used by the same person.

Table 52

NUMBER OF MODES USED "LAST YEAR," BY PLACE OF RESIDENCE
(Percentage distribution of adults)

Modes Used "Last Year"	All Adults	Place of Residence						
		Large Metropolitan Areas ¹				Other Areas		
		Central Cities	Suburbs 50,000 & Over	Suburbs 2,500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural Farm & Open Country
<u>Took trip</u>	<u>61</u>	<u>53</u>	<u>60</u>	<u>62</u>	<u>69</u>	<u>66</u>	<u>65</u>	<u>58</u>
One common carrier only	4	9	7	6	3	6	4	3
Auto only	42	28	40	41	52	43	45	45
Two modes	11	12	10	11	11	13	12	8
Three or four modes	4	4	3	4	3	4	4	2
<u>Took no trip²</u>	<u>39</u>	<u>47</u>	<u>40</u>	<u>39</u>	<u>31</u>	<u>34</u>	<u>35</u>	<u>42</u>
Total	100	100	100	100	100	100	100	100
Number of adults	8474	1321	294	754	149	1442	1685	2829

¹ The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

² Includes those for whom the modes used were not ascertained.

Table 53

**PROPORTION OF NON-BUSINESS TRIPS IN THE "LAST TWELVE MONTHS" BY
DIFFERENT MODES TAKEN BY ADULTS IN EACH INCOME CLASS
(Percentage Distribution)**

Family Income	All Adults	Per Cent of Trips					
		Total Travel (All Modes, Business and Non-Business)	Total Non- Business Travel (All Modes)	Non- Business Air Trips	Non- Business Rail Trips	Non- Business Bus Trips	Non- Business Auto Trips
Under \$4000	43	23	26	10	34	51	26
\$4000-5999	28	32	32	22	28	25	36
\$6000-9999	19	27	27	28	19	17	23
\$10,000 and over	7	16	13	39	14	5	13
Not ascertained	3	2	2	1	5	2	2
Total ¹	100	100	100	100	100	100	100
Number of trips by adults in the sample in the "last 12 months"		26,564	20,963	716	1,420	1,001	17,175

¹ This table excludes 24 adults who took 100 or more trips. The sum of the number of trips by each mode is not exactly equal to the total number of trips owing to trips involving mixed modes. Some minor clerical errors may also remain in the counts of trips.

Table 54

**NUMBER OF NON-BUSINESS TRIPS BY EACH MODE PER 100 ADULTS
FOR DIFFERENT LEVELS OF INCOME¹**

Family Income	All Modes ²	Air	Rail	Bus	Auto
Under \$4000	151	2	13	9	127
\$4000-5999	294	7	17	11	259
\$6000-9999	362	13	17	11	321
\$10,000 and over	403	44	32	8	319
Not ascertained	167	3	32	7	125
All incomes	251	9	17	10	215

¹ This table excludes 59 adults of whom 24 took 100 or more trips of all types and 35 were classified "not ascertained whether took any trip." Entries for individual cells are subject to large sampling errors.

² This column is the sum of the other four columns shown.

Table 55

**SHARE OF BUSINESS TRIPS IN THE "LAST TWELVE MONTHS" BY DIFFERENT MODES
TAKEN BY ADULTS IN EACH INCOME CLASS¹
(Percentage Distribution)**

Family Income	All Adults	Per Cent of Trips					
		Total Travel, All Modes Business and Non-Business	Total Business Travel (All Modes)	Business Air	Business Rail	Business Bus	Business Auto
Under \$4000	43	23	13	3	6	24	16
\$4000-5999	28	32	30	16	19	40	34
\$6000-9999	19	27	25	18	27	18	26
\$10,000 and over	7	18	29	61	47	14	21
Not ascertained	3	2	3	2	1	4	3
Total	100	100	100	100	100	100	100
Number of trips by adults in the sample in the "last 12 months"		26,564	5,639	857	510	154	4,196

¹ The sum of the number of business trips by each mode is not exactly equal to the total number of business trips owing to trips involving mixed modes. Some minor clerical errors may also remain in the counts of trips.

Table 56

**NUMBER OF COMPANIONS ON "MOST RECENT" TRIP,
BY MODE OF TRAVEL¹**
(Percentage distribution of adults who took a trip in the last 12 months)
(weighted distribution)

Number of Companions	Mode of Travel ²				
	All Adults Who Took a Trip	Air	Rail	Bus	Auto
Went alone	19	53	41	48	14
One companion	31	33	27	35	31
Two companions	17	5	9	6	19
Three companions	15	7	8	4	16
Four companions	8	*	5	3	9
Five or more companions	8	2	10	3	9
Not ascertained	<u>2</u>	<u>*</u>	<u>*</u>	<u>1</u>	<u>2</u>
Total	100	100	100	100	100
Number of adults	2510				

¹ Table includes most recent trip by common carrier for those whose most recent trip of all was by auto. Thus some travelers appear under auto and also under rail, bus, or air.

² Multiple mode trips, i.e., trips involving more than one mode, are not included in this table.

* Less than half of one per cent.

The questions were: "Did anyone go with you? How many went besides yourself?"

Table 57

**WHETHER TRAVELED COACH OR FIRST CLASS, BY MODE OF TRAVEL
ON "MOST RECENT" TRIP BY RAIL OR AIR**
(Percentage distribution of adults who took a trip in the last 12 months)
(weighted distribution)

Accommodations	All Adults Who Took a Trip	Mode of Travel ¹	
		Air	Rail
Coach	45	20	61
First class	49	70	36
Both	1	2	*
Not ascertained	5	8	3
Total	100	100	100
Number of adults	337		

¹ Multiple mode trips, i.e., trips involving more than one mode, are not included in this table.

* Less than half of one per cent.

Table 58

**PLACE OF TICKET PURCHASE BY MODE OF TRAVEL, IF
MOST RECENT TRIP WAS BY COMMON CARRIER**
(Percentage distribution of adults whose most
recent trip was by common carrier)
(weighted distribution)

Place of Ticket Purchase	All Adults Whose Most Recent Trip Was By Common Carrier	Mode of Travel		
		Air	Rail	Bus
Travel agent	19	22	20	11
Directly from common carrier	73	69	74	80
Other (military, free pass)	6	8	5	2
Not ascertained	3	*	1	7
Total ¹	100	100	100	100
Number of adults	474			

¹ Details may not add to total owing to rounding.

* Less than half of one per cent.

Table 59

ALL-EXPENSE TOUR PACKAGES
 (Percentage distribution of adults who took a trip by common
 carrier in the "last" 12 months)
 (weighted distribution)

Whether All-Expense Tour Package	All Adults Who Took Trip	Mode of Travel ¹		
		Air	Rail	Bus
Was an all-expense tour package	2	3	2	2
Was not an all-expense tour package	92	95	94	88
Not ascertained	6	2	4	12
Total	100	100	100	100
Number of adults	2259			

¹ Multiple mode trips, i.e., trips involving more than one mode, are not included in this table.

The question was: "Was it one of these all-expense tour packages?"

Table 60

**NUMBER OF NON-BUSINESS AIR TRIPS PER 100 ADULTS IN THE
 "LAST TWELVE MONTHS," SHOWING ADULTS CLASSIFIED ACCORDING
 TO FAMILY INCOME AND WHETHER THEY HAD A PAID VACATION**

Whether Had Paid Vacation "Last" Year	Family Income				
	All Incomes	Under \$3000	\$3000- 4999	\$5000- 7499	\$7500 & Over
Did have paid vacation	8	2	6	6	16
Did not have paid vacation ¹	4	2	1	9	16
Total ²	6	2	5	6	16

¹ Includes 15 adults for whom it was not ascertained whether they had a paid vacation.

² This table excludes all those who are self-employed or not employed.

Table 61

DO PEOPLE TAKE THEIR VACATIONS ALL AT ONE TIME?

(Percentage distribution of adults who had
vacations with pay: "B" sample only)

Number of Vacations Taken	All Adults With Paid Vacations
Took vacation at one time	73
Took 2 vacations	14
Took 3 vacations	1
Took 4 or more vacations	1
Took more than 1 vacation but number not ascertained	7
Not ascertained whether took more than 1 vacation	4
Total	100
Number of adults	1147
Proportion of all adults who had a vacation with pay ¹	27

¹ Adults who are self-employed or are not employed are counted as not having a vacation with pay.

Table 62

DISTANCE OF VACATION TRIP BY LENGTH OF
MOST RECENT VACATION(Percentage distribution of adults who had
vacations with pay: "B" sample only)

Distance of trip	Length of Most Recent Vacation			
	All Adults With Paid Vacations	Week to 10 Days	11 Days- 2 Weeks	3 Weeks or Longer
100 to 500 miles away	28	28	27	34
500 to 900 miles away	7	6	7	10
1000 miles or more away	7	3	8	18
Distance not ascertained	7	4	8	4
Took no trip ¹	51	59	50	34
Total	100	100	100	100
Number of cases	1147	357	500	126

¹ Includes adults for whom it was not ascertained whether they took a trip.

Table 63

DISTANCE OF TRIP, BY FAMILY INCOME
(Percentage distribution of adults who had vacations with pay)

Distance of Trip	All Adults With Paid Vacations	Family Income			
		Under \$4000	\$4000- 5999	\$6000- 9999	\$10,000 & Over
100 - 500 miles away	28	18	31	34	19
500 - 999 miles away	7	4	8	9	12
1000 miles or more away	7	6	5	8	18
Distance of trip not ascertained	8	6	7	7	13
Took no trip ¹	<u>50</u>	<u>66</u>	<u>49</u>	<u>42</u>	<u>38</u>
Total	100	100	100	100	100
Number of adults	1147	297	399	342	94

¹Includes adults for whom it was not ascertained whether they took a trip.

Table 64

**LENGTH OF MOST RECENT VACATION, BY WHETHER
TOOK A TRIP AND DISTANCE OF TRIP TAKEN**
(Percentage distribution of adults who had vacations with pay: "B" sample only)

Length of Most Recent Vacation	All Adults With Paid Vacations	Took a Trip			Took No Trip ¹
		100-500 Miles Away	500-999 Miles Away	1000 Miles or More Away	
Week to 10 days	31	31	26	13	37
11 days to 2 weeks	44	43	45	47	43
3 weeks or more	11	13	16	27	7
Not ascertained	14	13	13	13	13
Total	100	100	100	100	100
Number of cases	1147	320	83	83	577

¹Includes adults for whom it was not ascertained whether a trip was taken.

Table 65

PROPORTION OF ALL ADULTS IN EACH INCOME AND OCCUPATION CLASS¹

Family Income	Occupation of This Adult							Not Ascer- tained
	All Occupations	Professional & Managerial Workers	Clerical & Sales Workers	Blue Collar Workers	Farmers	Retired	Not Employed, Students, Housewives	
Under \$4000	43	3	2	13	2	3	19	1
\$4000-5999	28	4	3	9	1	1	11	*
\$6000-9999	19	4	3	5	1	*	6	*
\$10,000 and over	7	2	1	1	*	*	3	*
Not ascertained	<u>3</u>	<u>*</u>	<u>*</u>	<u>1</u>	<u>*</u>	<u>*</u>	<u>1</u>	<u>*</u>
All incomes	100	13	9	29	4	4	40	1

¹ Entries for individual cells are subject to large sampling errors. This table excludes 24 adults who took 100 or more trips.

* Less than half of one per cent.

Table 66

**COMPARISON BETWEEN ESTIMATES OF THE PROPORTION OF
BUSINESS AIR TRIPS TAKEN BY ADULTS EMPLOYED
IN DIFFERENT INDUSTRIES**

Industry	Estimate from "New York's Air Travelers" ¹		Estimate from this Survey ²
	Number	Per Cent	Per Cent
Agriculture	900	1	2
Mining	1,300	1	2
Construction	5,400	5	3
Manufacturing	43,100	39	42
Transport, utilities	6,700	6	1
Government	4,400	4	9
Entertainment	2,800	2	
Wholesale—retail	16,700	15	20
Business and personal services	10,100	9	5
Finance, insurance, real estate	8,500	8	2
Professional and related services	8,200	7	8
Other			1
Not reported ³	3,500	3	5
Total	111,600	100	100

¹ From Table 23, p. 74, of "New York's Air Travelers." That table shows the first column of the present table under the caption "passengers on business trips." In other words, of 111,600 seats in that sample occupied by persons traveling on business, 900 were occupied by persons in agriculture, and so forth.

² The estimate from the present survey is taken from Table 26 which shows a distribution based on 854 business air trips by adults in the sample over the "last twelve months." There are conceptual differences between the two sets of data:

- a) one body of data refers to New York only, while the other refers to the whole country
- b) the time periods involved are different
- c) the national survey data exclude 24 travelers who took 100 or more trips by all modes. However, the national survey data probably include trips by company plane, especially by these same very high frequency travelers.

³ Of all business air trips in the national survey 0.6 per cent were taken by adults whose occupation was classified as "not employed, students, or housewives." These trips are shown here under "industry not reported," on the assumption that these adults were employed in an industry at the time they took the trip. In "New York's Air Travelers" all trips by persons in these groups were excluded since occupation, industry, and reason for taking the trip all were asked as of the time of interview.

Table 67

**COMPARISON BETWEEN ESTIMATES OF THE PROPORTION OF
AIR TRIPS ACCOUNTED FOR BY PASSENGERS AT
DIFFERENT INCOME LEVELS**

Family Income	Estimate from "New York's Air Travelers" ¹ Occupied Seats On Flights Out of New York		Estimate from this Survey ² Proportion of All Air Trips	
	Number	Per Cent	Number	Per Cent
Under \$3000	7,700	4.0	39	2.5
\$3000-5999	27,900	14.4	355	22.6
\$6000-9999	43,300	22.3	360	22.9
\$10,000-19,999	55,800	28.7	465	29.5
\$20,000 and over	40,300	20.8	332	21.1
Unknown income	19,100	9.8	22	1.4
Total	194,100	100.0	1,573	100.0

¹ From Table 15, p. 54, of "New York's Air Travelers." That table shows the first column of the present table under the caption "number of passengers." In other words, of 194,100 occupied seats on flights in that sample, 7,700 were occupied by persons from families with incomes under \$3000.

² The estimate from the present survey is the number of air trips, business and non-business, in the "last twelve months," by adults in the sample. There are conceptual differences between the two sets of data:

- a) One body of data refers to passengers out of New York only, while the other refers to the whole country.
- b) The time periods involved are different.
- c) The national survey data are limited to adults (18 years or over), while the New York survey included individuals from 12-17 years of age.
- d) The national survey data exclude 24 travelers who took 100 or more trips by all modes. However, the national survey data probably include trips by company plane, especially by these same very high frequency travelers.

Table 68

DATE OF MOST RECENT TRIP
(Percentage distribution of adults who took a trip in the last 12 months)

Date of Most Recent Trip	All Adults Who Took a Trip	
	Spring Survey	Fall Survey
June 1954	5	
July 1954	10	
August 1954	9	
September 1954	6	
October 1954	5	
		↓
November 1954	4	2
December 1954	5	1
January 1955	4	1
February 1955	3	1
March 1955	8	3
April 1955	12	3
May 1955	20	5
June 1955	8	7
	↓	
July 1955		17
August 1955		20
September 1955		22
October 1955		17
November 1955		*
	↓	
Month not ascertained	1	1
Total	100	100
Number of adults	1232	1272

* Less than half of one per cent.

The question was: "When did you last take a trip to a place 100 miles or more away?"

(Where a trip involved more than one month, the month of completion is the month shown.)

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THE TRAVEL MARKET

1956

**Survey Research Center
Institute for Social Research
University of Michigan**

May 1957

FOREWORD

The Port of New York Authority and the New York Central System sponsored the first National Travel Market Survey in 1955. In 1956 they sponsored its successor, the 1956 National Travel Market Survey. Both Surveys have been carried out by the Survey Research Center of the University of Michigan. A report on the first survey was made to the sponsors in "The Travel Market 1955", March 1956. A revised and abridged report under the same title is to be released generally in the late spring of 1957. The present report has been prepared as a report to the sponsors of the 1956 Survey.

Purposes of the 1956 Survey

Plans for the 1956 Survey were made at a meeting early in March of that year. At that time the results of the 1955 Survey were just becoming available. The discussion at that meeting visualized the 1956 Survey as part of a continuing program of National Travel Market Surveys. The plan was proposed of conducting intensive surveys at intervals of more than one year, with less elaborate surveys in the intervening years. The 1956 Survey was envisioned as one of the less elaborate and less expensive surveys. This strategy seemed reasonable because of the short time which had elapsed since results of the 1955 Survey had been available. A period of digestion seemed to be appropriate.

Nevertheless the decision was reached to go forward with a survey in 1957. The reasons for that decision were not reduced to writing in a single document; but an attempt can be made to state them here. First, it was important to repeat the investigation in 1956 in order to increase the

size of the sample. The two years can be combined in order to increase the number of interviews available for analysis. Thus, the present report contains a chapter on frequency of travel by region which relies on data from both years. In the same way special tabulations are being prepared from the 1956 Survey for the Port Authority for purposes of its forecast of air travel. These tabulations, in effect, increase the size of the sample for the tabulations prepared from the 1955 Survey. The forecast is built on a breakdown of the sample into small cells. Other similar possibilities exist for other types of special analysis, and these opportunities will expand as the total number of interviews in the series of surveys increases.

A second purpose of the 1956 Survey is to some extent in conflict with the first. It is to study trends in the market between the two years. To the extent that rapid shifts are taking place, it is difficult to combine the samples from the two years for analysis. Slow shifts from year to year make the study of trends uninteresting in the short run but permit the years to be treated together for purposes of detailed study.

A third purpose of the 1956 Survey was to maintain the momentum developed in 1955. This objective refers to the gradual building up both of knowledge of the travel market and of knowledge of the best ways to study it. Each successive survey has contributed to both types of information. As the sophistication of the investigators gradually increases, it becomes possible to evaluate more accurately the body of data already in existence and to study new problems more efficiently as they arise.

A fourth objective was to broaden knowledge of the market by a preliminary investigation of a subject on which little data existed. This subject is people's attitudes toward travel itself. Previous work in the

1955 Survey had concerned the choice people may make between different modes, but not the choice between taking a trip and staying home.

Topics Investigated in 1956

The 1956 Survey contained four types of questions:

- (1) Questions about the frequency of travel by the person interviewed in the twelve month period prior to interview. Each respondent was asked how many trips he took by air, rail, bus, and auto in that period. He was asked to distinguish between business trips and non-business trips.
- (2) Detailed questions about the respondent's most recent trip by common carrier. Each respondent who had taken a trip by common carrier during the year was asked to discuss it in detail.
- (3) Questions about the choice between traveling and not traveling. Each respondent was asked about any trips he had thought he would like to take but had not been able to. Reasons for not taking these trips were investigated.
- (4) Socio-economic data. Questions were included about age, sex, occupation, education, income, marital status, and place of residence.

The Sample

As in 1955 the sample used was a probability sample. That is, every member of the population studied had a known chance of being designated for interview. For a discussion of the procedure, see the 1955 report (revised edition).

In the 1955 Survey information was collected about trips by each adult

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in the family. Investigation of the sampling errors of the findings shows that this procedure is of limited usefulness. Members of a family commonly travel together on non-business trips, and little new information is obtained by asking about trips by each adult. Accordingly, as a measure of economy in 1956 questions were asked only about travel by the respondent.

This procedure presented a problem in connection with "extra" adults other than the head of family and his wife. Interviews are taken with husband and wives, one or the other being designated on a random basis, but not with any additional "extra" adults in the family. Comparisons between 1955 and 1956 required some allowance for the omission of data about these adults in 1956. The solution was devised of reproducing data for "extra" adults interviewed in 1955 and treating them as if they had been interviewed in 1956 and had given the same answers. This arrangement protects the comparability of the two surveys. (In 1957 new information will be obtained about travel by extra adults from the respondents in the 1957 Survey.) The ideal arrangement would be a sample especially designed for collecting data about travel, but an interview devoted entirely to travel has remained financially out of the question.

The number of interviews taken in the 1956 Survey was as follows:

<u>Interviewing Period</u>	<u>Number of Interviews</u>	<u>Response Rate</u>
May - June	1731	87.5%
August - September	1350	88.2%
November-December	<u>1147</u>	<u>1/</u>
Total	4528	

A series of special calculations of sampling error has been carried

^{1/}Not available at time of writing. The sample for the fall wave was combined in part with a reinterview study, and estimation of the response rate is complex.

out by the Sampling Section of the Survey Research Center. The results have been consolidated into tables of sampling error which have been presented to the sponsors and appear both in the revised report on the 1955 Survey and in Appendix A of this report. These calculations have shown that statistics of travel have an unusually high sampling error. The reason for this result is not known with certainty. The most plausible hypothesis is that it arises from a tendency for patterns of travel to be similar for people living in the same geographical area. For example, if people living in county A are provided with a good road network and poor service by air and rail, the people in that county may tend to travel by auto. For county B the reverse may be true. If differences between counties tend to be large relative to differences within counties, the effect will be to increase the sampling error of the results.

Definition of a Trip

A trip was defined in 1956 as in 1955 as a round trip to a point 100 miles or more away. Moving to a new home 100 miles away is considered a trip. Trips taken by employees of a common carrier in connection with their work are excluded. In the 1955 Survey trips by private plane, military plane, and company-owned plane were excluded in principle, but the questionnaire was not explicit on the point. In the 1956 questionnaire a special question was introduced to exclude these trips.

Outline of This Report

The first section of the report is a summary of the major findings of the 1956 Survey. Chapter II concerns the frequency of travel by the different modes in the 1955 and 1956 Surveys. It includes a discussion of the

proportion of adults using each mode. The latter sections of the chapter report the relation between the use of each mode in 1957 and the major socio-economic variables. Chapter III presents comparisons among three regions, the New York area, other parts of the New York Central Territory, and the rest of the United States. Comparisons are made both of the socio-economic characteristics of these areas and of the frequency of travel. Chapter IV reports on the investigation of attitudes toward travel, with special emphasis on people's reasons for not taking trips they would like to take. Chapter V is concerned with the most recent trip by common carrier of those who took a common carrier trip during the year prior to interview. It contains an analysis of people's choice of mode and of the reasons for their choice of mode.

Staff on the 1956 Survey

This study was carried out by the staff of the Survey Research Center, a division of the Institute for Social Research of the University of Michigan. The Institute is under the direction of Rensis Likert, while the director of the Center is Angus Campbell. This study was carried out in the Economic Behavior Program of the Center, George Katona, Director. The Center's Field Staff is directed by Charles Cannell, the Sampling Section by Leslie Kish. Study design, analysis, and report writing were the responsibility of John B. Lansing. He was assisted at different stages of the undertaking by Ernest Lilienstein, Sandra Cohan, and Donald Marsh.

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I. Summary of Major Findings

The main findings of the 1956 National Travel Market Survey may be summarized as follows:

Frequency of Travel by Different Modes, 1955 and 1956

1. Proportion of adults taking one or more trips by each mode. Little or no change took place between 1955 and 1956 in the proportion of all adults who took one or more trips by each of four major modes. About seven per cent took an air trip, if anything a higher proportion in 1956 than in 1955. About one adult in sixteen took a bus trip, one in ten, a rail trip, and one out of two, an auto trip.
2. Importance of different income groups in the travel market. No large changes took place in the proportion of trips of different types accounted for by people in the different income groups. People with family income over \$10,000 include 7.8 per cent of all adults. They account for 38 per cent of all non-business air trips, 13 per cent of non-business rail trips, seven per cent of non-business bus trips and 14 per cent of non-business auto trips.

Air Travel

3. Young, single people are most likely to travel by air. Eleven per cent of young, single adults take an air trip in a year, compared to six per cent of married adults with young children.
4. People living in large suburbs of large cities are likely to travel by air. About 15 per cent of all adults living in suburbs of large metropolitan areas take an air trip in a year. At the other extreme only four per cent of residents of rural areas take an air trip.
5. Both distance from the nearest air terminal and frequency of service influence use of air. The farther a person lives from an airport, the less likely he is to take an air trip. Frequency of service is also important, except that people living far enough away are unlikely to take an air trip regardless of the service.

Rail Travel

6. Young, single people and older people are likely to travel by rail. Of all young, single adults 13 per cent take a rail trip in a year compared to six per cent of young people with young children. Twelve per cent of older married people with no children at home take a rail trip in a year.
7. People living in the large suburbs of large cities and in other cities and towns are likely to travel by rail. About 13 per cent of adults living in the larger suburbs of large cities take a rail trip in a year.

For other cities over 50,000 in population, the finding is 12 per cent. Only six per cent of those in rural areas take a rail trip.

8. Users of rail come from all occupations. About 17 per cent of adults from families of professional and technical workers take a rail trip in a year, in contrast to only four per cent for farmers. For the self-employed and managerial workers, clerical workers, sales workers, and retired people, the proportion is about 10-12 per cent.

Bus Travel

9. Low income people are the most likely to travel by bus. Nine per cent of all adults from families with income below \$1000 take a bus trip in a year. Of those with incomes over \$2000, six per cent take a bus trip.
10. Both young, single people and older single people are frequent bus travelers. About one single person in ten takes a bus trip in a year. Of all adults, only one in 16 takes a bus trip.
11. Bus travel enjoys its greatest relative advantage in small towns. The proportion taking a bus trip is highest among residents of places 2500 to 50,000 population. These people are less likely to travel by rail or air than those living in larger centers.

Auto Travel

12. Of those adults with incomes over \$6000, 60 to 70 per cent take an auto trip in a year. Even in the lower income groups, more people travel by auto than use any other mode.
13. Young, married people with no children are the most likely to travel by auto. When they marry, young people tend to leave the common carriers for the auto. After they have children, they tend to stay at home.
14. Use of auto is most common in cities and towns other than the large metropolitan centers. Only a third of those in the central cities of large metropolitan areas take an auto trip in a year, compared to over half of those living in towns and cities other than the twelve largest metropolitan areas.

Frequency of Travel by Region

15. Distribution of income by region. The proportion of people with family incomes over \$20,000 is about six per cent in the New York area, two per cent in other parts of the New York Central Territory, and one per cent in the rest of the United States. At the other extreme about two per cent of adults in the New York area report family incomes under \$1000 compared to three per cent in the other parts of the Central Territory and ten per cent in the rest of the United States.

16. People in the New York area are more likely to travel by air than those living elsewhere. Of all adults in the New York area about 12 per cent take an air trip in a year compared to about eight per cent of those living in other parts of the Central Territory and six per cent of adults in the rest of the United States.
17. People living in the New York area are slightly less likely to take one or more rail trips in a year than those living in other parts of the Central Territory. About 10 to 11 per cent of adults in the New York area report taking a rail trip in a year, compared to 12 per cent of those in other parts of the Central Territory.

Attitudes Toward Travel

18. One third of all adults do not wish to travel. The desire to travel is not universal. One adult in three reports there are no trips he would like to take which he has not been able to. Two out of three, however, do report there are trips they would like to take.
19. There are five main obstacles to travel. They are: (1) lack of money; (2) lack of time, which may refer to lack of vacation or to other claims on vacation time; (3) children and other dependents; (4) poor health; and (5) lack of desire to travel by another member of the family. Many people in the two-thirds who want to travel are married to people in the group who prefer to stay home.

Choice of Mode for the Most Recent Trip by Common Carrier

20. Four factors influence choice of common carrier. Distance, the purpose of the trip, the income of the traveler, and the number of people traveling together influence choice of mode.
21. Distance. The farther a person is going, the more likely he will prefer air to rail or bus. The preference for rail declines gradually as distance increases. Bus travel is popular only for trips of 100-199 miles.
22. Purpose. Whether a trip is on business or not makes a difference in choice of mode. Bus travel is most popular for non-business trips under 500 miles. Air travel is most popular for business trips over 1000 miles away. Rail seems to be considered for any type of trip by common carrier except the business trips to places over 1000 miles away.
23. Income. The larger a person's income, the greater the probability that he will travel by air and the smaller the probability that he will go by bus. Rail occupies an intermediate position.
24. Number of companions. Whether a person is alone is a major factor in the choice between travel by auto and by common carrier. Those traveling alone are more likely to use a common carrier. The number of

people traveling together makes little difference in the choice among the common carriers. People are more likely to travel alone if the trip is short and if it is on business. On vacation and pleasure trips people in the upper income groups rarely travel alone.

25. Advantages and disadvantages of air. The most frequently mentioned advantage of air is speed, followed by comfort and service. On the negative side people mention fear of flying, expense, the distance to the terminal, and problems of scheduling.
26. Speed is especially important for business trips and for long trips. Expense is mentioned less often in connection with business than non-business trips.
27. Advantages and disadvantages of rail. The most frequently mentioned advantages of rail are comfort and good passenger facilities. Speed, price, and safety are also mentioned. Problems of connections and scheduling are likely to be mentioned as disadvantages of rail.
28. Advantages and disadvantages of bus. The greatest advantage of bus travel is that it is cheap. People complain of lack of comfort in bus travel, but the bus is often, "the only way you could get there."

II. Frequency of Travel by Different Modes, 1955-1956

Patterns of travel in the United States are known to have changed gradually in recent decades. The growing relative importance of air and auto travel are examples of such long-range shifts. Sample surveys, however, do not yield exact results and can reveal year-to-year changes only when the changes are large or when they are continued long enough so that they can be confirmed by successive surveys. This chapter includes for each mode an estimate of year-to-year changes and an analysis of the effect of income, stage in the life cycle, place of residence, and occupation on the use of that mode.

Air Travel

Use of air "last year," 1955 and 1956 Surveys: The proportion of all adults who took one or more air trips in 1956 was within sampling error of the proportion reported in the 1955 Survey. Judging from the Survey alone, if anything, an increase took place in the proportion traveling by air. (Table II-1) The proportion who took only a business trip by air plus those who took both business and non-business trips remained between two and three per cent. About five per cent took a non-business trip by air. Of these results perhaps the most striking is the small proportion of all adults who took both air trips on business and air trips for non-business reasons. Only half of one per cent of all adults fell in this category in either year.

In the summer and fall interviews in the 1956 Survey questions were asked about travel by air by company, private, and military planes. Trips by these types of planes were not counted as air trips and do not enter any of the tables in this report except for the following tabulation:

Special Types
of Air Travel

Proportion of All Adults Taking
Trips of Types Shown

Took one or more trips by company plane	0.3%
Took one or more trips by private plane	0.4
Took one or more trips by military plane	0.4
Took trips by two or more of the above types of plane	*
Did not take any special type of air trip	<u>89.9</u>
Total	100.0
Number of adults	2796

* Less than 0.05 per cent

Thus, about one per cent of all adults take a trip in a year by company plane, private plane, or military plane. These estimates are based on interviews with adults not living on military reservations. If persons living on military reservations were included, no doubt the proportion taking a trip by military plane would be higher.

Table II-1

Use of Air "Last Year"

(Percentage distribution of all adults)

<u>Use of Air</u>	<u>1955</u>	<u>1956</u>
Took one or more air trips "last year"	<u>6.7</u>	<u>7.2</u>
For business purposes	1.9	2.3
For non-business purposes	4.4	4.4
For both business and non-business purposes	0.4	0.5
Did not take an air trip	<u>91.0</u>	<u>92.4</u>
Not ascertained	<u>2.3</u>	<u>0.4</u>
Total	100.0	100.0
Number of adults	8485	5255

Use of air by income groups: One of the basic questions in estimating the future growth of air travel is, How far and how rapidly will air travel penetrate into the middle and lower income groups? Whatever year-to-year movement may be taking place at the present time seems to be too small to be detected in this survey. The proportion of those in each income group who took an air trip in a one-year period did not shift appreciably from the 1955 to the 1956 Survey. (Table II-2)

Similarly, the proportion of all air trips in the "last twelve months" accounted for by people in each income class did not shift appreciably between the 1955 and 1956 Surveys. (Table II-3) This statement is true for business trips, for non-business trips and for the two combined. For example, those with family incomes of \$20,000 or more accounted for 13.1 per cent of non-business air-trips according to the 1955 Survey, and 12.8 per cent according to the 1956 Survey.

Table II-2

Use of Air "Last Year" by Income Groups
(Per cent of all adults)

<u>Use of Air</u>	<u>All Incomes</u>		<u>Under \$1000</u>		<u>\$1000-1999</u>		<u>\$2000-2999</u>		<u>\$3000-3999</u>		<u>\$4000-4999</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Took one or more air trips "last year"	<u>6.7</u>	<u>7.2</u>	<u>0.9</u>	<u>1.3</u>	<u>1.1</u>	<u>1.5</u>	<u>2.4</u>	<u>1.9</u>	<u>3.2</u>	<u>3.5</u>	<u>3.9</u>	<u>2.3</u>
For business purposes	1.9	2.3	*	.3	.1	*	.3	*	.9	1.0	.8	.4
For non-business purposes	4.4	4.4	.9	.7	1.0	1.5	2.0	1.9	2.2	2.4	2.9	1.8
For both business and non-business purposes	.4	.5	*	.3	*	*	.1	*	.1	.1	.2	.1
Did not take an air trip	<u>91.0</u>	<u>92.4</u>	<u>96.8</u>	<u>98.7</u>	<u>97.0</u>	<u>97.9</u>	<u>95.2</u>	<u>97.9</u>	<u>95.2</u>	<u>96.4</u>	<u>93.6</u>	<u>96.8</u>
Not ascertained	<u>2.3</u>	<u>0.4</u>	<u>2.3</u>	<u>*</u>	<u>1.9</u>	<u>0.6</u>	<u>2.4</u>	<u>0.2</u>	<u>1.6</u>	<u>0.1</u>	<u>2.5</u>	<u>0.9</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	8485	5255	439	398	832	470	981	582	1364	709	1294	740

Table II-2, Continued

Use of Air	<u>\$5000-5999</u>		<u>\$6000-7499</u>		<u>\$7500-9999</u>		<u>\$10,000-14,999</u>		<u>\$15,000-19,999</u>		<u>\$20,000 and over</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Took one or more air trips "last year"	<u>5.6</u>	<u>5.5</u>	<u>9.8</u>	<u>10.2</u>	<u>12.0</u>	<u>14.8</u>	<u>23.1</u>	<u>29.2</u>	<u>30.2</u>	<u>34.9</u>	<u>52.1</u>	<u>41.8</u>
For business purposes	1.9	1.5	2.3	3.9	4.1	5.8	7.4	12.3	6.6	9.3	16.6	10.4
For non-business purposes	3.4	3.7	7.0	6.1	7.1	8.0	14.4	14.2	22.1	23.3	25.6	25.4
For both business and non business purposes	.3	.3	.5	.2	.8	1.0	1.3	2.7	1.5	2.3	9.9	6.0
Did not take an air trip	<u>92.5</u>	<u>94.1</u>	<u>88.0</u>	<u>89.6</u>	<u>86.4</u>	<u>84.6</u>	<u>72.8</u>	<u>70.0</u>	<u>68.3</u>	<u>65.1</u>	<u>45.4</u>	<u>58.2</u>
Not ascertained	<u>1.9</u>	<u>.4</u>	<u>2.2</u>	<u>.2</u>	<u>1.6</u>	<u>.6</u>	<u>4.1</u>	<u>.8</u>	<u>1.5</u>	<u>*</u>	<u>2.5</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1094	671	896	559	709	500	389	260	136	86	121	67

* Less than .05 per cent.

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Table II-3

Proportion of Air Trips in the "Last Twelve Months"
Taken by Adults in Each Income Class^{1/}
(Percentage distribution)

<u>Family Income</u>	<u>Per Cent of Trips</u>					
	<u>Per Cent of</u>		<u>Business</u>		<u>Non-business</u>	
	<u>All Adults</u>		<u>Air Trips</u>		<u>Air Trips</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Under \$1000	5.2	7.6	*	.3	.4	1.7
\$1000 - 1999	9.8	8.9	.1	*	1.1	1.7
\$2000 - 2999	11.6	11.1	.5	*	3.2	3.5
\$3000 - 3999	16.1	13.5	2.3	1.3	5.6	5.3
\$4000 - 4999	15.3	14.1	3.7	1.3	11.3	6.3
\$5000 - 5999	12.9	12.8	12.6	7.0	10.3	9.8
\$6000 - 7499	10.6	10.6	7.9	10.3	17.2	16.3
\$7500 - 9999	8.3	9.5	10.4	13.8	11.2	14.5
\$10,000 - 14,999	4.5	4.9	28.8	30.5	14.9	13.8
\$15,000 - 19,999	1.6	1.6	4.0	8.0	10.8	11.8
\$20,000 and over	1.3	1.3	27.8	26.6	13.1	12.8
Not ascertained	<u>2.7</u>	<u>4.1</u>	<u>1.2</u>	<u>.9</u>	<u>.8</u>	<u>2.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of air trips by adults in the sample in the "last 12 months"			857	855	716	399
Number of adults	8461	5255				

^{1/} This table excludes trips by those who took 100 or more air trips in a year.

* Less than .05 per cent.

Use of air by stage in the life cycle: The remaining cross-tabulations in this section present the relation between certain basic demographic factors and the use of air travel "last year." The proportion of adults who take a business trip by air in a year rises steadily from two per cent of young, single people to about four to four and a half per cent of adults with older children. (Table II-4) In the later stages, with retirement, the proportion falls. Less than half of one per cent of older single people (widows and widowers, primarily) take a business trip by air.

The proportion of adults who take a non-business trip by air is about nine per cent for young, single adults. For young married adults with young children, the proportion is only about three per cent. However, in the later stages of the life cycle this proportion rises again, and it reaches about six per cent for older married couples who have no children at home.

Table II-4

Use of Air "Last Year" by Stage in The Life Cycle

(per cent of all adults, 1956 Survey)

Use of Air	Stage in the Life Cycle									
	All Stages	Young, Single	Young, Married, No Children	Married, Children, Under 2	Married, Children, Youngest 2 - 4½	Married, Children, Youngest 5 - 14½	Married, Children, Youngest 15 - 17	Older, Married, No Children Under 18	Older Single	Other
Took one or more air trips "last year"	<u>7.2</u>	<u>10.6</u>	<u>7.2</u>	<u>6.2</u>	<u>6.4</u>	<u>8.6</u>	<u>7.9</u>	<u>7.9</u>	<u>4.5</u>	<u>3.8</u>
For business purposes	2.3	1.6	2.9	3.0	3.3	3.9	3.7	2.1	.1	.6
For non-business purposes	4.4	8.6	4.0	2.8	2.9	4.0	3.7	4.9	4.1	2.6
For both business and non-business purposes	.5	.4	.3	.4	.2	.7	.5	.9	.3	.6
Did not take an air trip	<u>92.4</u>	<u>87.8</u>	<u>92.8</u>	<u>93.4</u>	<u>93.6</u>	<u>90.7</u>	<u>92.1</u>	<u>92.0</u>	<u>95.4</u>	<u>96.2</u>
Not ascertained	<u>.4</u>	<u>1.6</u>	<u>*</u>	<u>.4</u>	<u>*</u>	<u>.7</u>	<u>*</u>	<u>.1</u>	<u>.1</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	556	346	561	611	874	190	1089	796	156

* Less than .05 per cent

Use of air by place of residence: Another variable closely related to the use of air is the type of community in which a person lives. (Table II-5) People living in large metropolitan areas are more likely to take an air trip than those living elsewhere. In particular residents of the suburbs of very large cities seem to be likely to take an air trip. On the other hand only about six per cent of those living in cities and towns of 2,500 to 50,000 population take an air trip in a year, and only about four per cent of those living in places with population under 2,500 or in the country.

These differences, it is reasonable to suppose, are related to some extent to differences in income but also to differences in the availability of air travel. The following section reports an attempt to investigate directly the effect of the availability of air travel.

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Table II-5

Use of Air "Last Year" by Place of Residence
(Per cent of all adults, 1956 Survey)

	Place of Residence							
	Large Metropolitan Areas ^{1/}					Other Areas		
	All Adults	Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural Farm & Open Country
Used Air "Last Year"								
Took one or more air trips "last year"	<u>7.2</u>	<u>8.1</u>	<u>18.4</u>	<u>12.8</u>	<u>10.0</u>	<u>10.5</u>	<u>6.4</u>	<u>4.0</u>
For business purposes	2.3	1.8	3.5	3.6	6.0	3.1	1.1	1.5
For non-business purposes	4.4	6.2	14.9	7.6	4.0	7.1	4.8	2.2
For both business and non-business purposes	.5	.3	*	1.6	*	.3	.5	.3
Did not take an air trip	<u>92.4</u>	<u>91.5</u>	<u>81.6</u>	<u>86.9</u>	<u>90.0</u>	<u>89.3</u>	<u>92.7</u>	<u>95.2</u>
Not ascertained	<u>.4</u>	<u>.2</u>	<u>*</u>	<u>.3</u>	<u>*</u>	<u>.2</u>	<u>.2</u>	<u>.8</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	562	114	306	50	609	757	1410

1/ The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

Use of air by distance from air terminal and rating of air terminal:

Availability of air transport may be conceived to have two dimensions: the distance to the nearest airport, and the frequency of service at that airport. In this study no attempt was made to estimate for each individual respondent the distance to the nearest airport. The labor involved would have been considerable. But a rough estimate was made of the distance to the nearest airport from the approximate center of the primary sampling unit, (county or pair of counties) in which each respondent lives. Furthermore, the airports in question were classified according to the number of air carrier aircraft departures in fiscal 1954. The results appear in Table II-6.

This table excludes adults living in a few counties for which information was not readily available. For those included, an average of 7.4 per cent took one or more air trips. Of those living within "eight miles" of an airport, including those living in all of the twelve largest metropolitan areas except Detroit, 10.3 per cent took a trip. As the distance increases, the proportion falls. Of those living in areas where the distance to the terminal averages 31-60 miles, 3.7 per cent took an air trip. Of those living in areas where the distance is typically 61-124 miles, only 2.8 per cent took an air trip.

Similarly, the rating of the terminal has an effect. Of those for whom the nearest airport is rated 1-3, 2.5 per cent took an air trip, compared to 7.9 per cent of those for whom the nearest airport is rated 15-24, and 10.5 per cent of those for whom it is rated 100-137. This relationship is not absolutely regular - only 4.6 per cent took a trip of those for whom the nearest airport is rated 35-49 - but the general statement that the rating of the airport makes a difference is reasonably well substantiated.

Table II-6

Use of Air by Distance from Air Terminal and Rating of Air Terminal
(Per cent of all adults in each cell who took an air trip, 1956 Survey)

Average Distance from Center of Sampling Unit to Air Terminal in Miles	Rating of Air Terminal ^{1/}								
	All Ratings	1-3	4-7	8-14	15-24	25-34	35-49	50-99	100- 137
Under 8 ^{2/}	10.3	-	9.7	20.3	10.5	15.4	6.0	9.9	11.0
9 - 19	7.5	3.7	5.3	5.4	11.5	12.4	-	-	-
20 - 30	7.9	2.6	12.8	5.0	9.0	10.9	*	17.0	-
31 - 60	3.7	*	-	3.0	3.9	-	3.0	6.5	8.5
61 - 124	2.8	4.8	*	1.9	3.7	1.6	-	-	-
All distances	7.4	2.5	7.7	5.8	7.9	9.3	4.6	10.7	10.5
Number of adults ^{3/}	4980	636	704	626	954	399	454	561	646

1/ Numerical ratings signify thousands of Air Carrier Aircraft departures in fiscal 1954.

2/ Includes all of the twelve largest metropolitan areas except Detroit.

3/ This table excludes adults for whom information was not available on distance from air terminal or rating of the terminal.

- No respondents fell into these categories; e.g., no respondents lived within eight miles of an air terminal with only one to three thousand Air Carrier Aircraft departures in fiscal 1954.

* Less than .05 per cent.

Distance from the terminal and the rating of the terminal tend to be associated. People in cities tend to live close to busy terminals. The data, however, permit study of the question - does distance from the terminal make a difference if rating is held constant? Estimates for individual cells in this table are subject to large sampling errors and in fact, certain cells contain no respondents. Hence it is possible only to make such statements as that in general distance does indeed make a difference. Thus, in the column which refers to terminals rated 15-24, as one proceeds down the column the numbers fall fairly regularly from 10.5 to 3.7. In some of the columns the pattern is less neat, but the general tendency is clear.

Does the rating of the terminal make a difference if distance is held constant? If it does, as one proceeds to the right in each row the numbers should increase. In the first row, there is no such increase, and in the last row, also, the numbers are erratic. The second, third, and fourth rows, however, all show an increase as one moves to the right. It seems reasonable to conclude that the rating of the nearest terminal does make a difference, but that there are complicating factors. The random behavior of the numbers in the last row, for a distance of 61-124 miles, suggests that if the terminal is far enough away even frequent service will not attract many passengers. The random behavior of the numbers in the first row is harder to interpret. It may arise because this row includes eleven of the twelve largest cities and thus lumps together situations which may actually be more diverse. And the simple hypothesis that sampling error is the explanation should not be ignored! But it can be stated that both the distance to the nearest airport and the rating of that airport make a difference in the probability that an individual will take an air trip.

Use of air by occupation: Members of certain occupation groups are much more likely to take air trips than representatives of other groups. It is no surprise to find that few adults in farm families take air trips on business. (Table II-7) Adults in families headed by professional and technical workers, self-employed and managerial workers, and sales workers are most likely to travel on business. These same groups are also most likely to take non-business trips. Of the adults in families of professional and technical workers, one in four took an air trip "last year."

Table II-7

Use of Air "Last Year" within Occupation Groups
 (Per cent of all adults, 1956 Survey)

<u>Use of Air "Last Year"</u>	<u>Occupation of Head of Family</u>					
	<u>All Occupations</u>	<u>Professional, Technical</u>	<u>Self-employed, Managerial</u>	<u>Clerical</u>	<u>Sales</u>	<u>Craftsmen, Foremen, Operatives Armed Forces</u>
Took one or more trips by air "last year"	<u>7.2</u>	<u>24.7</u>	<u>16.9</u>	<u>6.4</u>	<u>10.6</u>	<u>3.3</u>
For business purposes	2.3	12.2	5.9	.4	5.3	.9
For non-business purposes	4.4	10.7	8.6	5.6	4.8	2.4
Took both business and non-business trips	.5	1.8	2.4	.4	.5	*
Did not take an air trip	<u>92.4</u>	<u>75.0</u>	<u>83.1</u>	<u>93.6</u>	<u>89.4</u>	<u>96.6</u>
Not ascertained	<u>.4</u>	<u>.3</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>.1</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of Adults	5255	392	614	267	189	1326

Table II-7, Continued

<u>Use of Air "Last Year"</u>	<u>Occupation of Head of Family</u>				
	<u>Laborers Service Workers</u>	<u>Farmers</u>	<u>Retired Heads of Families</u>	<u>Not Employed</u>	<u>Housewives</u>
Took one or more trips by air "last year"	<u>3.0</u>	<u>1.1</u>	<u>4.2</u>	<u>*</u>	<u>2.4</u>
For business purposes	1.0	.5	*	*	*
For non-business purposes	2.0	.6	3.9	*	2.4
Took both business and non-business trips	*	*	.3	*	*
Did not take an air trip	<u>97.0</u>	<u>98.9</u>	<u>95.8</u>	<u>100.0</u>	<u>97.6</u>
Not ascertained	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0
Number of adults	668	359	361	65	211

* Less than half of one per cent.

Rail Travel

Use of rail "last year," 1955 and 1956 Surveys: The observed difference between the 1955 and 1956 Surveys in the proportion taking a rail trip is small enough to be attributed to sampling error. It is certainly small enough to be attributed to errors of observation if both sampling error and response error are considered. In 1955 and in 1956 about one adult in ten took a rail trip. About two per cent of all adults took a rail trip for business reasons, and about eight per cent, a trip for non-business reasons. Very few people took both types of rail trip. (Table II-8)

Table II-8

Use of Rail "Last Year"

(Percentage distribution of all adults)

<u>Use of Rail</u>	<u>1955</u>	<u>1956</u>
Took one or more rail trips "last year"	<u>10.5</u>	<u>9.1</u>
For business purposes	1.7	1.8
For non-business purposes	8.5	7.0
For both business and non-business purposes	.3	.3
Did not take a rail trip	<u>87.2</u>	<u>90.4</u>
Not ascertained	<u>2.3</u>	<u>.5</u>
Total	100.0	100.0
Number of adults	8485	5255

Use of rail by income groups, 1955 and 1956 Surveys: Is the appeal of rail travel to different income groups changing from year to year? It might be true, for example, that people in the upper income groups were taking fewer rail trips and those in the lower income groups, more rail trips. Or the facts might be the reverse.

The data support neither hypothesis. Table II-9 shows that the proportion of those in each income group taking a rail trip in one year did not shift appreciably between the 1955 and 1956 Surveys. Table II-10 shows the per cent of all rail trips accounted for by each income group was unchanged between the two years. If changes are taking place, they do not appear to be rapid.

Table II-9

Use of Rail "Last Year" by Income Groups
(Per cent of all adults)

<u>Use of Rail</u>	<u>All Incomes</u>		<u>Under \$1000</u>		<u>\$1000-1999</u>		<u>\$2000-2999</u>		<u>\$3000-3999</u>		<u>\$4000-4999</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Took one or more rail trips "last year"	<u>10.5</u>	<u>9.1</u>	<u>5.0</u>	<u>5.5</u>	<u>7.1</u>	<u>6.4</u>	<u>7.2</u>	<u>8.4</u>	<u>7.7</u>	<u>7.1</u>	<u>2.2</u>	<u>6.8</u>
For business purposes	1.7	1.8	*	*	*	.2	.4	.3	.6	1.0	.8	.5
For non-business purposes	8.5	7.0	5.0	5.5	7.1	6.0	6.6	8.1	7.0	5.8	9.0	6.2
For both business and non-business purposes	.3	.3	*	*	*	.2	.2	*	.1	.3	.1	.1
Did not take a rail trip	<u>87.2</u>	<u>90.4</u>	<u>91.8</u>	<u>94.5</u>	<u>90.7</u>	<u>93.2</u>	<u>90.8</u>	<u>91.2</u>	<u>90.7</u>	<u>92.6</u>	<u>87.5</u>	<u>92.2</u>
Not ascertained	<u>2.3</u>	<u>.5</u>	<u>3.2</u>	<u>*</u>	<u>2.2</u>	<u>.4</u>	<u>2.0</u>	<u>.4</u>	<u>1.6</u>	<u>.3</u>	<u>2.6</u>	<u>1.0</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	8485	5255	439	398	832	470	981	582	1364	709	1294	740

Table II-9, Continued

<u>Use of Rail</u>	<u>\$5000-5999</u>		<u>\$6000-7499</u>		<u>\$7500-9999</u>		<u>\$10,000- 14,999</u>		<u>\$15,000- 19,999</u>		<u>\$20,000 and over</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Took one or more rail trip "last year"	<u>8.8</u>	<u>7.3</u>	<u>12.5</u>	<u>9.1</u>	<u>15.7</u>	<u>13.6</u>	<u>20.8</u>	<u>17.3</u>	<u>27.2</u>	<u>18.6</u>	<u>40.5</u>	<u>38.8</u>
For business purposes	2.1	1.2	1.9	1.9	3.7	4.2	5.9	10.0	5.1	6.9	15.7	10.4
For non-business purposes	6.0	6.0	10.4	7.0	11.3	8.6	14.1	6.2	21.3	10.5	23.1	23.9
For both business and non-business purposes	.7	.1	.2	.2	.7	.8	.8	1.1	1.5	1.2	1.7	4.5
Did not take a rail trip	<u>89.2</u>	<u>92.0</u>	<u>85.0</u>	<u>90.5</u>	<u>82.2</u>	<u>85.4</u>	<u>75.9</u>	<u>81.9</u>	<u>70.6</u>	<u>81.4</u>	<u>58.7</u>	<u>61.2</u>
Not ascertained	<u>2.0</u>	<u>.7</u>	<u>2.5</u>	<u>.4</u>	<u>2.1</u>	<u>1.0</u>	<u>3.3</u>	<u>.8</u>	<u>1.5</u>	<u>*</u>	<u>.8</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1094	671	896	559	709	500	389	260	136	86	121	67

* Less than .05 per cent

Table II - 10

Proportion of Rail Trips in the "Last Twelve Months"
Taken by Adults in Each Income Class^{1/}
(Percentage distribution)

Family Income	Per Cent of Trips					
	Per Cent of All Adults		Business Rail Trips		Non-business Rail Trips	
	1955	1956	1955	1956	1955	1956
Under \$1000	5.2	7.6	*	*	2.5	3.7
\$1000 - 1999	9.8	8.9	*	.7	10.6	6.8
\$2000 - 2999	11.6	11.1	2.0	1.8	12.2	12.3
\$3000 - 3999	16.1	13.5	4.5	8.8	8.7	10.7
\$4000 - 4999	15.3	14.1	2.9	1.3	20.6	13.8
\$5000 - 5999	12.9	12.8	16.5	8.5	7.5	14.4
\$6000 - 7499	10.6	10.6	7.5	19.1	10.4	9.0
\$7500 - 9999	8.3	9.5	19.2	15.7	8.2	10.7
\$10,000 - 14,999	4.5	4.9	21.0	24.5	6.6	5.6
\$15,000 - 19,999	1.6	1.6	5.3	8.8	3.9	2.3
\$20,000 and over	1.3	1.3	20.6	8.8	3.8	4.0
Not ascertained	<u>2.7</u>	<u>4.1</u>	<u>.6</u>	<u>2.0</u>	<u>5.1</u>	<u>6.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of rail trips by adults in the sample in "last 12 months"			510	388	1420	644
Number of adults	8461	5255				

^{1/} This table excludes trips by those who took 100 or more rail trips in a year.

* Less than .05 per cent.

Use of rail by stage in the life cycle: The proportion of people who take rail trips varies at different stages in the life cycle. (Table II-11) The proportion taking a business trip by rail rises from 1.4 per cent of the young, single adults to about three per cent in the subsequent stages, declining to less than one per cent for the older single people. The proportion taking a trip for non-business reasons is about 12 per cent for the young, single adults. It falls to four to seven per cent for the middle stages, rising again to nine per cent for the last two stages. Older people who have no children at home are much more likely to take non-business trips by rail than young couples with young children.

Use of Rail "Last Year" by Stage in the Life Cycle
 (Per cent of all adults, 1956 Survey)

<u>Use of Rail "Last Year"</u>	<u>Stage in the Life Cycle</u>								
	<u>All</u> <u>Stages</u>	<u>Young</u> <u>Single</u>	<u>Young</u> <u>Married</u> <u>No</u> <u>Children</u>	<u>Married</u> <u>Children</u> <u>Youngest</u> <u>Under 2</u>	<u>Married</u> <u>Children</u> <u>Youngest</u> <u>2 - 4$\frac{1}{2}$</u>	<u>Married</u> <u>Children</u> <u>Youngest</u> <u>5 - 11$\frac{1}{2}$</u>	<u>Married</u> <u>Children</u> <u>Youngest</u> <u>15 - 17</u>	<u>Older</u> <u>Married</u> <u>No Children</u> <u>Under 18</u>	<u>Older</u> <u>Single</u>
Took one or more rail trips "last year"	9.1	13.3	9.3	6.1	7.2	7.0	5.8	11.5	9.6
For business purposes	1.8	1.2	2.6	1.4	2.8	2.8	1.6	2.4	
For non-business purposes	7.0	11.9	6.1	4.3	4.1	4.1	4.2	8.5	9.2
For both business and non-business purposes	.3	.2	.6	.4	.3	.1	*	.6	.1
Did not take a rail trip	<u>90.4</u>	<u>84.2</u>	<u>90.7</u>	<u>93.0</u>	<u>92.8</u>	<u>92.3</u>	<u>94.2</u>	<u>88.5</u>	<u>90.3</u>
Not ascertained	<u>.5</u>	<u>2.5</u>	<u>*</u>	<u>.9</u>	<u>*</u>	<u>.7</u>	<u>*</u>	<u>*</u>	<u>.1</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	556	346	561	611	874	190	1089	796

* Less than .05 per cent

Use of rail by place of residence: People who live in large metropolitan areas are more likely to take rail trips than those living in rural areas. (Table II-12) The proportion taking a rail trip is highest for people living in the suburbs of the large cities. These people also are the group most likely to travel by air. Of those in the middle group of cities of population of 50,000 and over, about 12 per cent took an air trip compared to nine per cent for the country as a whole. The proportion falls to nine per cent for the cities and towns of 2,500 to 50,000 population and six per cent for the rural areas.

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Table II-12

Use of Rail "Last Year" by Place of Residence
(Per cent of all adults, 1956 Survey)

Used Rail "Last Year"	Place of Residence							
	Large Metropolitan Areas ^{1/}					Other Areas		
	All Adults	Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural, Farm & Open Country
Took one or more rail trips "last year"	<u>9.1</u>	<u>10.2</u>	<u>14.1</u>	<u>12.8</u>	<u>4.0</u>	<u>11.9</u>	<u>9.3</u>	<u>5.8</u>
For business purposes	1.8	1.4	1.8	3.9	2.0	2.5	1.8	1.1
For non-business purposes	7.0	8.4	12.3	8.2	2.0	9.2	7.0	4.6
For both business and non-business purposes	.3	.4	*	.7	*	.2	.5	.1
Did not take a rail trip	<u>90.4</u>	<u>89.5</u>	<u>85.9</u>	<u>86.9</u>	<u>96.0</u>	<u>87.8</u>	<u>89.3</u>	<u>93.4</u>
Not ascertained	<u>.5</u>	<u>.3</u>	<u>*</u>	<u>.3</u>	<u>*</u>	<u>.3</u>	<u>1.4</u>	<u>.8</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	562	114	306	50	609	873	1294

^{1/} The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

Use of rail by occupation: People living in families headed by professional or technical workers are most likely to take a rail trip. (Table II-13) Members of farm families are least likely to take a rail trip. Retired people are about as likely to take a rail trip as the average for all adults. Blue collar workers and their families are less likely to travel by rail than other adults in the population.

Table II-13

Use of Rail Within Occupation Groups
(per cent of all adults, 1956 Survey)

Use of Rail "Last Year"	Occupation of Head of Family										House- wives
	All Occu- pations	Profes- sional, Tech- nical	Self-Em- ployed, Mana- gerial	Cler- ical	Sales	Crafts- men Fore- men Oper- atives Armed Forces	Laborers, Service Workers	Farm- ers	Retired Heads of Families	Unemployed	
Took one or more trips by rail "last year"	<u>9.1</u>	<u>17.3</u>	<u>12.7</u>	<u>12.0</u>	<u>11.6</u>	<u>6.0</u>	<u>7.3</u>	<u>3.6</u>	<u>9.7</u>	<u>4.6</u>	<u>10.4</u>
For business purposes	1.8	9.7	4.4	.8	4.2	.5	.4	1.4	.3	*	.5
For non-business purposes	7.0	6.6	7.2	11.2	6.9	5.4	6.6	2.2	9.4	4.6	9.9
Took both business and non-business trips	.3	1.0	1.1	*	.5	.1	.3	*	*	*	*
Did not take a rail trip	<u>90.4</u>	<u>82.7</u>	<u>87.1</u>	<u>87.6</u>	<u>87.9</u>	<u>93.9</u>	<u>92.7</u>	<u>96.4</u>	<u>90.3</u>	<u>95.4</u>	<u>89.6</u>
Not ascertained	<u>.5</u>	<u>*</u>	<u>.2</u>	<u>.4</u>	<u>.5</u>	<u>.1</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	392	614	267	189	1326	668	359	361	65	211

* Less than .05 per cent.

Bus Travel

Use of bus "last year," 1955 and 1956 Surveys: The proportion of all adults who took a bus trip did not change between the 1955 and 1956 Surveys. (Table II-14). About six per cent of all adults take a bus trip in a year, including about five per cent who take a trip for non-business reasons and about one per cent who take a business trip.

Table II-14

Use of Bus "Last Year"

(Percentage distribution of all adults)

<u>Use of Bus</u>	<u>1955</u>	<u>1956</u>
Took one or more bus trips "last year"	<u>6.6</u>	<u>6.0</u>
For business purposes	.6	.7
For non-business purposes	5.9	5.2
For both business and non-business purposes	.1	.1
Did not take a bus trip	<u>90.2</u>	<u>93.4</u>
Not ascertained	<u>3.2</u>	<u>.6</u>
Total	100.0	100.0
Number of adults	8485	5255

Use of bus by income groups, 1955 and 1956 Surveys: Between the 1955 and 1956 Surveys little or no change took place in the proportion of people in different income groups who took a bus trip. (Table II-15) The proportion of adults who are bus travelers continued to be highest in the lowest income groups. About nine per cent of all adults from families with incomes below \$1000 take a bus trip in a year, and about eight per cent of those with incomes from \$1000-1999. Of those with family incomes at any level over \$2000, about six per cent take a bus trip.

The proportion of all bus trips taken by adults at different income levels remained stable from 1955 to 1956. (Table II-16) As a first approximation the per cent of bus trips taken by those in any given income group is the same as the per cent of all adults in that group.

Table II-15

Use of Bus "Last Year" by Income Groups
(Per cent of all adults)

<u>Use of Bus</u>	<u>All Incomes</u>		<u>Under \$1000</u>		<u>\$1000-1999</u>		<u>\$2000-2999</u>		<u>\$3000-3999</u>		<u>\$4000-4999</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Took one or more bus trips "last year"	<u>6.6</u>	<u>6.1</u>	<u>9.1</u>	<u>9.0</u>	<u>8.2</u>	<u>8.3</u>	<u>6.9</u>	<u>6.2</u>	<u>7.3</u>	<u>6.5</u>	<u>6.2</u>	<u>4.1</u>
For business purposes	.6	.7	.5	1.5	.7	.4	.1	.2	.4	1.0	.5	.1
For non-business purposes	5.9	5.2	8.6	7.5	7.5	7.7	6.6	6.0	6.9	5.4	5.6	3.9
For both business and non-business purposes	.1	.2	*	*	*	.2	.2	*	*	.1	.1	.1
Did not take a bus trip	<u>90.2</u>	<u>93.4</u>	<u>86.1</u>	<u>91.0</u>	<u>89.7</u>	<u>91.3</u>	<u>90.4</u>	<u>93.5</u>	<u>89.5</u>	<u>93.2</u>	<u>90.6</u>	<u>94.5</u>
Not ascertained	<u>3.2</u>	<u>.5</u>	<u>4.8</u>	<u>*</u>	<u>2.1</u>	<u>.4</u>	<u>2.7</u>	<u>.3</u>	<u>3.2</u>	<u>.3</u>	<u>3.2</u>	<u>1.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	8485	5255	439	67	832	470	981	582	1364	709	1294	740

Table II-15, Continued

Use of Bus	\$5,000-5,999		\$6,000-7,499		\$7,500-9,999		\$10,000-14,999		\$15,000-19,999		\$20,000 & Over	
	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956
Took one or more bus trips "last year"	<u>6.1</u>	<u>6.3</u>	<u>5.1</u>	<u>5.7</u>	<u>6.5</u>	<u>4.6</u>	<u>5.7</u>	<u>4.6</u>	<u>5.2</u>	<u>5.8</u>	<u>5.8</u>	<u>9.0</u>
For business purposes	1.1	.9	.4	1.1	1.1	1.0	1.6	1.5	*	*	2.5	1.5
For non-business purposes	4.8	5.1	4.7	4.4	5.1	3.6	4.1	3.1	5.1	4.6	3.3	7.5
For both business and non-business purposes	.2	.3	*	.2	.3	*	*	*	.8	1.2	*	*
Did not take a bus trip	<u>91.5</u>	<u>93.1</u>	<u>92.0</u>	<u>94.1</u>	<u>91.4</u>	<u>94.4</u>	<u>87.4</u>	<u>94.6</u>	<u>89.0</u>	<u>94.2</u>	<u>90.1</u>	<u>91.0</u>
Not ascertained	<u>2.4</u>	<u>.6</u>	<u>2.9</u>	<u>.2</u>	<u>2.1</u>	<u>1.0</u>	<u>6.9</u>	<u>.8</u>	<u>5.1</u>	<u>*</u>	<u>4.1</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1094	671	896	559	709	500	389	260	136	86	121	67

* Less than .05 per cent.

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Table II-16

**Proportion of Bus Trips in the "Last Twelve Months"
Taken by Adults in Each Income Class¹**
(Percentage distribution)

<u>Family Income</u>	<u>Per Cent of Trips</u>					
	<u>Per Cent of All Adults</u>		<u>Business Bus Trips</u>		<u>Non-business Bus Trips</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Under \$1000	5.2	7.6	1.3	.7	4.5	7.7
\$1000 - 1999	9.8	8.9	16.2	2.8	10.7	15.9
\$2000 - 2999	11.6	11.1	2.6	8.5	16.6	10.5
\$3000 - 3999	16.1	13.5	3.9	12.9	18.9	13.1
\$4000 - 4999	15.3	14.1	17.5	1.4	11.9	9.8
\$5000 - 5999	12.9	12.8	22.1	12.1	13.0	13.6
\$6000 - 7499	10.6	10.6	7.8	39.7	8.3	6.1
\$7500 - 9999	8.3	9.5	10.4	7.1	8.6	11.1
\$10,000 - 14,999	4.5	4.9	12.3	7.8	3.4	4.8
\$15,000 - 19,999	1.6	1.6	.6	2.1	.9	1.1
\$20,000 and over	1.3	1.3	1.3	.7	.8	2.0
Not ascertained	<u>2.7</u>	<u>4.1</u>	<u>3.2</u>	<u>4.2</u>	<u>2.5</u>	<u>4.3</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of bus trips by adults in the sample in "Last 12 months"			154	141	1001	440
Number of adults	8461	5255				

¹/ This table excludes trips by those who took 100 or more bus trips in a year.

Use of bus by stage in the life cycle: Single people are more likely than married people to take a bus trip. (Table II-17) Of all young, single adults, about one in ten takes a bus trip in a year. For older single people the proportion is almost as large. Married people are less likely to take a bus trip.

Table II-17

Use of Bus "Last Year" by Stage in the Life Cycle
(Per cent of all adults, 1956 Survey)

Use of Bus	Stage in the Life Cycle									
	All Stages	Young, Single	Young, Married, No Children	Married Children, Youngest Under 2	Married, Children, Youngest 2 - 4½	Married Children, Youngest 5 - 14½	Married, Children, Youngest 15 - 17	Older, Mar- ried, No Children Under 18	Older Single	Other
Took one or more bus trips "last year"	<u>6.1</u>	<u>10.2</u>	<u>5.5</u>	<u>5.5</u>	<u>4.4</u>	<u>3.7</u>	<u>5.8</u>	<u>5.0</u>	<u>8.7</u>	<u>6.4</u>
For business purposes	.7	1.2	.3	.7	1.0	.9	1.6	.4	.3	*
For non-business purposes	5.2	8.8	5.2	4.6	3.4	2.5	4.2	4.4	8.3	6.4
For both business and non-business purposes	.2	.2	*	.2	*	.3	*	.2	.1	*
Did not take a bus trip	<u>93.4</u>	<u>86.9</u>	<u>94.5</u>	<u>93.8</u>	<u>95.6</u>	<u>95.7</u>	<u>94.2</u>	<u>94.9</u>	<u>91.2</u>	<u>93.6</u>
Not ascertained	<u>.5</u>	<u>2.9</u>	<u>*</u>	<u>.7</u>	<u>*</u>	<u>.6</u>	<u>*</u>	<u>.1</u>	<u>.1</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	556	346	561	611	874	190	1089	796	156

* Less than .05 per cent

Use of bus by place of residence: The bus is less popular in the large metropolitan centers than in other cities and towns. (Table II-18) Of those living in cities of 2500 to 50,000, about nine per cent take a bus trip, compared to about six per cent of those living in rural areas and three to four per cent of those living in central cities of large metropolitan areas and large suburbs of the metropolitan areas.

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Table II-18

Use of Bus "Last Year" by Place of Residence
(Per cent of all adults, 1956 Survey)

Used Bus "Last Year"	Place of Residence							
	Large Metropolitan Areas ^{1/}					Other Areas		
	All Adults	Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural Farm & Open Country
Took one or more bus trips "last year"	<u>6.1</u>	<u>3.4</u>	<u>3.5</u>	<u>7.2</u>	<u>4.0</u>	<u>8.4</u>	<u>9.1</u>	<u>5.5</u>
For business purposes	.7	*	*	1.0	*	.7	1.6	.7
For non-business purposes	5.2	3.4	3.5	5.5	4.0	7.5	7.4	4.6
For both business and non-business purposes	.2	*	*	.7	*	.2	.1	.2
Did not take a bus trip	<u>93.4</u>	<u>96.1</u>	<u>96.5</u>	<u>91.5</u>	<u>96.0</u>	<u>91.3</u>	<u>90.0</u>	<u>93.6</u>
Not ascertained	<u>.5</u>	<u>.5</u>	<u>*</u>	<u>1.3</u>	<u>*</u>	<u>.3</u>	<u>.9</u>	<u>.2</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	562	114	306	50	609	757	1410

^{1/} The "large metropolitan areas" are the twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

Use of bus by occupation: Of the several occupation groups, the most likely to take a bus trip are the clerical workers and their families. (Table II-19) The least likely to use the bus for a trip to a place 100 miles away are the farmers, and craftsmen, foremen, and operators. Laborers and service workers seem to be slightly more likely to take a bus trip than the rest of the population. Adults from families whose heads are self-employed or managerial workers are less likely to travel by bus than other adults.

Table II-19

Use of Bus Within Occupation Groups
(Per cent of all adults, 1956 Survey)

Use of Bus "Last Year"	Occupation of Head of Family										House- Wives
	All Occu- pations	Profes- sional, Tech- nical	Self-Em- ployed, Mana- gerial	Cler- ical	Sales	Crafts- men Fore- men Oper- atives Armed Forces	Laborers, Service Workers	Farm- ers	Retired Heads of Families	Unemployed	
Took one or more trips by bus "last year"	<u>6.1</u>	<u>5.6</u>	<u>4.4</u>	<u>8.6</u>	<u>6.9</u>	<u>3.2</u>	<u>7.3</u>	<u>3.9</u>	<u>6.6</u>	<u>6.2</u>	<u>8.1</u>
For business purposes	.7	1.8	1.1	*	1.6	.2	1.0	.6	*	*	*
For non-business purposes	5.2	3.3	3.1	8.6	5.3	3.5	6.3	3.3	6.6	6.2	8.1
For both business and non- business pur- poses	.2	.5	.2	*	*	.2	*	*	*	*	*
Did not take a bus trip	<u>93.4</u>	<u>94.4</u>	<u>95.4</u>	<u>91.0</u>	<u>93.1</u>	<u>95.9</u>	<u>92.7</u>	<u>96.1</u>	<u>93.4</u>	<u>93.8</u>	<u>91.9</u>
Not ascertained	<u>.5</u>	<u>*</u>	<u>.2</u>	<u>.4</u>	<u>*</u>	<u>.2</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	392	614	267	189	1326	668	359	361	65	211

* Less than .05 per cent.

Auto Travel

Use of auto "last year," 1955 and 1956 Surveys: The data presented in Table II-20 suggest a decline of seven percentage points in the proportion of all adults who took an auto trip between the 1955 and 1956 Surveys. The questions asked about automobile travel in the 1956 Survey were less extensive than those asked in 1955. It is possible that no actual decline took place and that the apparent decline is an artifact of the methods used in the study. It may be worth noting that the proportion of all adults who took a business trip by auto is shown to have increased from 6.8 to 7.5 in the table. This change, however, is within sampling error. That is, it may be the result only of chance fluctuations in the sample.

Table II-20

Use of Auto "Last Year"

(Percentage distribution of all adults)

<u>Use of Auto</u>	<u>1955</u>	<u>1956</u>
Took one or more auto trips "last year"	<u>54.9</u>	<u>48.2</u>
For business purposes	2.0	3.0
For non-business purposes	48.1	40.7
For both business and non-business purposes	4.8	4.5
Did not take an auto trip	<u>43.2</u>	<u>51.2</u>
Not ascertained	<u>1.9</u>	<u>.6</u>
Total	100.0	100.0
Number of adults	8185	5255

Very frequent travelers: The 1956 Survey turned up a total of 11 very frequent travelers, people who took 100 or more trips in the "last twelve months." This number is to be compared with 24 in the 1955 Survey, which covered nearly twice as many adults. The main fact about the 11 are shown in Table II-21. Of the 11, ten took large numbers of trips by auto on business, while the eleventh commuted by auto during the summer.

Table II-21

Listing of Adults Who Took 100 or More Trips in the "Last Twelve Months"

<u>Occupation</u>	<u>Family Income</u>	<u>Age</u>	<u>Sex</u>	<u>Travel</u>	<u>Total No. of Trips</u>
Chief switchman, telephone business	\$10,000 and over	45-49	M	Took "about" 100 non-business trips by auto "to the lake" in the summer.	100
Traveling district manager-salesman, tool company	\$10,000 and over	55-59	M	Took five air trips, two rail trips and "100 or more" auto trips for business purposes.	107 or more
Lumber dealer	\$7500-9999	35-39	M	Took 95 auto trips for business purposes and five non-business trips.	100
Saw milling and logging	\$4,000-4999	25-29	M	Took "more than" 150 auto trips. Purpose not clear, but presumably business.	More than 150
Truck service man (truck manufacturing company)	\$4,000-4999	45-49	M	Took "about" 100 auto trips and one rail trip for business purposes.	101
Milk tester (U.S. Department of Agriculture)	\$3000-3999	21-24	M	Took 130 auto trips for business purposes and six non-business auto trips.	136
Salesman, feeds and serum	\$4,000-4999	34	M	Took 105 auto trips for business purposes and seven non-business auto trips.	112
Sales manager, advertising company	\$10,000 and over	60	M	Took 35 business air trips and "about" 156 auto trips, "mostly for business purposes" (three per week).	191
Owner and operator of cemeteries (landscaping, etc.)	\$10,000 and over	52	M	Took 52 air trips, six rail trips, two bus trips and 100 auto trips for business purposes.	160
Liquor salesman	\$6000-7499	44	M	Took two air trips, three rail trips and 100 auto trips for business purposes.	105
Manufacturing sales agent (wood products, veneers)	\$10,000 and over	52	M	Took 12 air trips and "about" 100 auto trips for business purposes.	112

Use of auto "last year" by income groups, 1955 and 1956 Surveys: The proportion of those in different income groups who took an auto trip on business was about the same in the 1956 Survey as in the 1955 Survey.

(Table II-22) This proportion is under one per cent for the income group below \$1000. It is about two to three per cent for the broad range of incomes from \$1000 to \$10,000, but rises to about seven per cent of those adults who are members of families with incomes over \$20,000. As noted above, the small group of very frequent travelers who take 100 or more trips a year are primarily traveling by auto on business.

The 1956 Survey confirms the results of the 1955 Survey with respect to the shape of the relationship between income and the probability that a person will take an auto trip for non-business reasons. In both years this probability rises with income to an income level of about \$5000 to \$6000, but is approximately constant for higher incomes. Of those with incomes over \$6000, about 60 to 70 per cent take an auto trip for non-business reasons.

The proportion of all auto trips accounted for by the adults from each income level is shown in Table 23. The data do not indicate that any important changes took place between the periods covered by the two surveys.

Table II-22

Use of Auto "Last Year" by Income Groups
(Per cent of all adults)

<u>Use of Auto</u>	<u>All Incomes</u>		<u>Under \$1000</u>		<u>\$1000-1999</u>		<u>\$2000-2999</u>		<u>\$3000-3999</u>		<u>\$4000-4999</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Took one or more auto trips "last year"	<u>54.9</u>	<u>48.3</u>	<u>23.5</u>	<u>20.1</u>	<u>34.6</u>	<u>29.0</u>	<u>42.3</u>	<u>36.1</u>	<u>51.3</u>	<u>42.0</u>	<u>56.3</u>	<u>47.5</u>
For business purposes	2.0	3.0	.7	.8	2.4	2.6	2.1	2.4	1.2	2.8	1.6	3.7
For non-business purposes	<u>48.1</u>	<u>40.8</u>	<u>22.6</u>	<u>17.8</u>	<u>29.8</u>	<u>25.1</u>	<u>37.7</u>	<u>30.9</u>	<u>46.5</u>	<u>36.0</u>	<u>51.3</u>	<u>40.1</u>
For both business and non-business purposes	<u>4.8</u>	<u>4.5</u>	<u>.2</u>	<u>1.5</u>	<u>2.4</u>	<u>1.3</u>	<u>2.5</u>	<u>2.8</u>	<u>3.6</u>	<u>3.2</u>	<u>3.4</u>	<u>3.7</u>
Did not take an auto trip	<u>43.2</u>	<u>51.2</u>	<u>74.5</u>	<u>79.6</u>	<u>62.8</u>	<u>70.6</u>	<u>55.8</u>	<u>63.4</u>	<u>47.2</u>	<u>57.7</u>	<u>42.5</u>	<u>51.6</u>
Not ascertained	<u>1.9</u>	<u>.5</u>	<u>2.0</u>	<u>.3</u>	<u>2.6</u>	<u>.4</u>	<u>1.9</u>	<u>.5</u>	<u>1.5</u>	<u>.3</u>	<u>1.2</u>	<u>.2</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	8485	5255	439	398	832	470	981	582	1364	709	1294	740

Table II-22, Continued

Use of Auto	\$5000-5999		\$6000-7499		\$7500-9999		\$10,000-14,999		\$15,000-19,999		\$20,000 & Over	
	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956
Took one or more auto trips "last year"	67.9	55.8	66.3	62.4	73.6	68.2	69.9	75.4	71.3	67.4	80.2	73.1
For business purposes	2.4	2.4	3.0	3.2	1.3	3.8	2.6	5.0	2.9	3.5	6.6	7.5
For non-business purposes	58.8	48.0	58.7	54.6	63.3	56.2	56.5	57.3	58.8	54.6	57.9	56.7
For both business and non-business purposes	6.7	5.4	4.6	4.6	9.0	8.2	10.8	13.1	9.6	9.3	15.7	8.9
Did not take an auto trip	30.5	43.5	31.8	37.2	25.1	31.0	26.0	23.8	26.5	32.6	19.0	26.9
Not ascertained	1.6	.7	1.9	.4	1.3	.8	4.1	.8	2.2	*	.8	*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1094	671	896	559	709	500	389	260	136	86	121	67

* Less than .05 per cent.

Table II -23

Proportion of Auto Trips in the "Last Twelve Months"
 Taken by Adults in Each Income Class^{1/}
 (Percentage distribution)

Family Income	Per Cent. of All Adults		Business Auto Trips		Non-business Auto Trips	
	1955	1956	1955	1956	1955	1956
Under \$1000	5.2	7.6	.2	.6	1.2	1.9
\$1000 - 1999	9.8	8.9	3.1	2.3	4.6	3.6
\$2000 - 2999	11.6	11.1	4.1	3.2	8.5	6.7
\$3000 - 3999	16.1	13.5	8.6	7.0	12.5	11.7
\$4000 - 4999	15.3	14.1	8.9	10.5	16.0	11.8
\$5000 - 5999	12.9	12.8	24.9	13.1	19.8	16.3
\$6000 - 7499	10.6	10.6	11.7	11.8	6.2	13.7
\$7500 - 9999	8.3	9.5	14.4	25.0	16.4	17.1
\$10,000 - 14,999	4.5	4.9	11.6	17.4	8.0	9.7
\$15,000 - 19,999	1.6	1.6	3.0	3.9	2.6	3.0
\$20,000 and over	1.3	1.3	6.4	1.9	2.7	1.7
Not ascertained	<u>2.7</u>	<u>4.1</u>	<u>3.3</u>	<u>3.3</u>	<u>1.7</u>	<u>2.8</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of auto trips by adults in the sample in "last 12 months"			4196	2152	17,175	7927
Number of adults	8461	5255				

^{1/} This table excludes trips by those who took 100 or more auto trips in a year.

Use of auto by stage in the life cycle: The young, single people are more likely to travel by air, rail, or bus than the young married people. But they are less likely to take a trip by auto. (Table II-24) The adults most likely to take an auto trip are the young married people without children. The arrival of the first child makes a difference. Only about 47 per cent of the young married people with a child under two took an auto trip, compared to 67 per cent of the young people with no children.

As the children grow older, auto travel evidently becomes easier and the proportion who take an auto trip rises a few points. However, older married people whose children (if any) have left home are only about as likely to take an auto trip as the couples with babies. Of the older single people only three out of ten report taking one or more auto trips.

Table II-24

Use of Auto "Last Year" by Stage in the Life Cycle
(Per cent of all adults, 1956 Survey)

Use of Auto	Stage in the Life Cycle									
	All Stages	Young, Single	Young, Married, No Children	Married, Children, Under 2	Married, Children, 2 - 4	Married, Children, 5 - 14	Married, Children, 15 - 17	Older, Married, No Children Under 18	Older, Single	Other
Took one or more auto trips "last year"	<u>48.3</u>	<u>54.7</u>	<u>66.8</u>	<u>46.7</u>	<u>51.2</u>	<u>57.2</u>	<u>52.1</u>	<u>46.3</u>	<u>28.7</u>	<u>36.5</u>
For business purposes	3.0	2.0	3.8	2.2	3.9	4.3	2.6	3.4	1.8	1.3
For non-business purposes	40.8	49.3	57.5	40.8	40.9	47.3	44.8	37.6	25.6	30.7
For both business and non-business purposes	4.5	3.4	5.5	3.7	7.1	5.6	4.7	5.3	1.3	4.5
Did not take an auto trip	<u>51.2</u>	<u>43.2</u>	<u>33.2</u>	<u>52.8</u>	<u>47.8</u>	<u>42.2</u>	<u>47.9</u>	<u>53.5</u>	<u>71.1</u>	<u>63.5</u>
Not ascertained	<u>.5</u>	<u>2.1</u>	<u>*</u>	<u>.5</u>	<u>.3</u>	<u>.6</u>	<u>*</u>	<u>.2</u>	<u>.2</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	556	346	561	611	874	190	1089	796	156

* Less than .05 per cent.

Use of auto by place of residence: People who live in the central cities of large metropolitan areas are less likely to travel by auto than those living elsewhere. (Table II-25) Only one third of them report taking an auto trip. Use of auto is most common among adults in cities and towns other than the large metropolitan areas. Over half of these adults take an auto trip in a year. About as large a proportion of the people in the rural areas as of the population as a whole take an auto trip. These people, as noted earlier, are not likely to use any of the common carriers. If they do travel, they travel by auto.

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Table II-25

Use of Auto "Last Year" by Place of Residence
(Per cent of all adults, 1956 Survey)

Used Auto "Last Year"	Place of Residence							
	Large Metropolitan Areas ^{1/}					Other Areas		
	All Adults	Central Cities	Suburbs 50,000 & Over	Suburbs 2500- 50,000	Suburbs Rural	Cities 50,000 & Over	Cities 2500- 50,000	Rural, Farm & Open Country
Took one or more auto trips "last year"	48.3	34.0	43.2	48.7	56.0	53.6	50.2	46.8
For business purposes	3.0	1.4	.9	1.3	*	2.3	3.8	3.5
For non-business purposes	40.8	30.6	40.4	45.8	50.0	46.5	42.6	37.5
For both business and non-business purposes	44.5	2.0	2.6	1.6	6.0	4.8	4.5	5.8
Did not take an auto trip	51.2	65.8	56.1	50.7	44.0	46.1	48.2	52.3
Not ascertained	.5	.2	*	.6	*	.3	.2	.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	562	114	306	50	609	757	1410

^{1/} The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

Use of auto by occupation: If people are classified according to the occupation of the head of the family, in general, the higher the socio-economic status of his occupation the more likely they are to take at least one trip a year by auto. The rank of the occupations in order of this probability is as follows:

- professional and technical
- self-employed and managerial
- sales
- craftsmen, foremen, operatives, etc.
- clerical
- farmers
- laborers, service workers

Retired people, the unemployed, and members of households headed by a housewife are least likely to take an auto trip. Retired people seem to have a stronger relative preference for travel by common carrier than members of the younger age groups. They are, if anything, more likely to take a trip by rail or bus than the rest of the population, but they are less likely to travel by air. (Table II-26)

Table II-26

Use of Auto Within Occupation Groups

(per cent of all adults, 1956 Survey)

Use of auto "last year"	Occupation of Head of Family										House- wives
	All Occu- pations	Profes- sional, Tech- nical	Self-Em- ployed, Mana- gerial	Cler- ical	Sales	Oper- atives Armed Forces	Laborers, Service Workers	Farm- ers	Retired Heads of Families	Unemployed	
Took one or more auto trips "last year"	<u>48.3</u>	<u>70.4</u>	<u>63.7</u>	<u>50.2</u>	<u>59.3</u>	<u>52.0</u>	<u>34.1</u>	<u>42.1</u>	<u>29.4</u>	<u>21.5</u>	<u>26.1</u>
For business purposes	3.0	5.6	7.2	1.1	5.8	2.0	2.4	4.5	1.7	1.5	.5
For non-business purposes	40.8	51.0	46.2	44.6	46.6	47.4	30.1	30.9	26.3	18.5	23.7
For both business and non-business purposes	4.5	13.8	10.3	4.5	6.9	2.6	1.6	6.7	1.4	1.5	1.9
Did not take an auto trip	<u>51.2</u>	<u>29.3</u>	<u>36.0</u>	<u>49.4</u>	<u>40.2</u>	<u>48.0</u>	<u>65.7</u>	<u>57.9</u>	<u>70.6</u>	<u>78.5</u>	<u>73.5</u>
Not ascertained	<u>.5</u>	<u>.3</u>	<u>.3</u>	<u>.4</u>	<u>.5</u>	<u>*</u>	<u>.2</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	5255	392	614	267	189	1326	668	359	361	65	211

* Less than .05 per cent

III. Frequency of Travel by Region

In the first preliminary report on the 1955 National Travel Market Survey a limited number of tables were included analyzing regional differences in travel. The only region separately analyzed was the New York Central Territory.

This present chapter reports on regional differences found in the second wave of interviews in 1955 and in the 1956 Survey. In this chapter two regions of special interest to the sponsors of the survey are discussed, the New York metropolitan area and the New York Central Territory. Since the New York area is an important and in some ways unique part of the Central Territory, the tables show separately the New York area and other parts of the Central Territory in contrast to the rest of the United States.

The New York Central Territory includes New England, New York City and State, Pittsburgh metropolitan area, Ohio, Louisville, Ky., Michigan, Indiana, Illinois and the St. Louis metropolitan area. The New York metropolitan area extends beyond the city limits to include parts of the adjoining counties. The exact area covered is defined in a Note at the end of this chapter.

The chapter is divided into two sections which consider, first, the socio-economic characteristics of the population of the three regions. The characteristics discussed are place of residence (size of city), income, occupation, and age. The second section reports on the frequency of travel by the four modes by region.

Socio-Economic Characteristics of the Regions

Place of residence: The New York metropolitan area is, of course, entirely urban. (Table III-1) About 60 per cent of the adult population of the area as defined for this project live in the central city itself, and the remainder in the surrounding suburbs. Most of the suburban population lives in suburbs of 2,500 to 50,000 inhabitants.

The remainder of the New York Central Territory is also primarily urban. Only about one adult in four in this area lives in a town with population under 2,500 or in a rural area. The population of the New York Central Territory outside of New York falls into four groups of approximately equal size who live respectively in large metropolitan areas, other cities with population of 50,000 or more, smaller cities and towns with population of 2,500 to 50,000, and towns with population under 2,500 and rural areas. These four groups are only approximately equal in size, since slightly more than a quarter of the population live in the large metropolitan areas outside of New York, and slightly less than a quarter live in the other large cities. If the New York area is added to the rest of the New York Central Territory, 40 per cent of the adults in the Territory live in one of the twelve largest metropolitan areas in the country.

The rest of the United States is less urban. About 44 per cent of the population of the rest of the country lives in small towns and rural areas, and only about 18 per cent in the largest metropolitan areas.

The New York Central clearly has a territory which is more urban than the rest of the United States even if New York City is not taken into account. As noted elsewhere in this report, people in urban areas are more likely than those in rural areas to travel by common carrier.

Table III-1

Distribution of Place of Residence by Region
(Percentage distribution of adults)

<u>Place of Residence</u>	<u>Region</u>							
	<u>All Regions</u>		<u>New York Area</u>		<u>Other Parts of Central Territory</u>		<u>Rest of the United States</u>	
	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>
<u>Large metropolitan areas^{1/}</u>								
Central cities	15.5	14.6	61.0	58.5	15.4	15.4	9.0	7.9
Suburbs - 50,000 plus	3.3	3.0	12.9	14.8	3.5	2.1	1.8	1.9
Suburbs - 2,500 - 50,000	8.4	8.3	25.5	26.5	9.5	9.6	5.3	5.0
Suburbs - rural	1.6	1.4	.6	*	.3	.3	2.6	2.2
<u>Other areas</u>								
Cities - 50,000 plus	17.5	15.8	*	*	21.9	20.1	17.0	15.5
Cities - 2,500 - 50,000 (including also urban fringes ^{2/})	20.8	22.1	*	.2	25.9	24.5	20.4	23.7
Towns under 2,500 and rural areas	<u>32.9</u>	<u>34.8</u>	<u>*</u>	<u>*</u>	<u>23.5</u>	<u>28.0</u>	<u>43.9</u>	<u>43.8</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	333	426	1548	1813	2329	3016

^{1/} The twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

Income: In the country as a whole between 1955 and 1956 there was a slight upward shift in the distribution of income. (Table III-2) The data from this survey as well as other evidence indicate that such a shift took place. The differences between years, however, are smaller than the differences among the three regions.

Family income in the New York area is higher than in the rest of the Central Territory. Family income in the other parts of the Central Territory is higher than in the rest of the United States. The differences are especially noticeable at the extremes. In the New York area about one family in twenty has an income of \$20,000 or over. In the other parts of the Central Territory about two per cent of all families fall in this fortunate group, and in the rest of the United States the proportion is only about one per cent.

At the bottom of the distribution, five per cent of families in New York report income below \$2,000, compared to about ten per cent in the other parts of the Central Territory and over 20 per cent in the rest of the United States.

Table III-2

Distribution of Income by Region
(Percentage distribution of adults)

<u>Family Income</u>	<u>Region</u>							
	<u>All Regions</u>		<u>New York Area</u>		<u>Other Parts of Central Territory</u>		<u>Rest of the United States</u>	
	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>
Under \$1000	5.7	7.6	1.2	1.9	2.2	4.2	8.8	10.5
\$1000-1999	10.1	8.9	4.2	3.8	6.3	6.0	13.5	11.4
\$2000-2999	11.5	11.1	6.9	11.7	9.2	7.4	13.7	13.2
\$3000-3999	17.2	13.5	19.8	17.6	15.2	12.1	17.9	13.7
\$4000-4999	14.6	14.1	15.3	15.7	16.8	14.5	13.0	13.6
\$5000-5999	12.3	12.8	10.6	13.8	14.1	15.8	11.3	10.8
\$6000-7499	9.7	10.6	11.7	9.4	12.1	13.2	7.8	9.3
\$7500-9999	9.1	9.5	14.1	10.6	12.0	12.1	6.4	7.8
\$10,000-14,999	4.1	4.9	2.7	5.4	6.7	6.7	2.6	3.8
\$15,000-19,999	1.5	1.6	1.5	2.8	2.1	2.3	1.2	1.1
\$20,000 and over	1.7	1.3	7.5	4.5	1.6	1.6	1.0	.6
Not ascertained	<u>2.5</u>	<u>4.1</u>	<u>4.5</u>	<u>2.8</u>	<u>1.7</u>	<u>4.1</u>	<u>2.8</u>	<u>4.2</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	333	426	1548	1813	2329	3016

Occupation: The differences in income and in type of community among the three regions are associated with differences in occupation. (Table III-3) There are very few farmers in New York! Even in the other parts of the Central Territory only about two per cent of all adults are farmers, compared to roughly six per cent elsewhere in the United States.

On the other hand, the proportion who are professional or managerial workers or self-employed is slightly higher in New York than elsewhere. It is primarily members of these groups who receive the high incomes at the upper end of the income distribution in New York.

Housewives and others not gainfully employed make up about 40 per cent of the adult population in New York as well as elsewhere.

Table III-3

Distribution of Occupation by Region
 (Percentage distribution of adults)

<u>Occupation</u>	<u>Region</u>							
	<u>All Regions</u>		<u>New York Area</u>		<u>Other Parts of Central Territory</u>		<u>Rest of the United States</u>	
	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>
Professional, technical, managers, officials proprietors, self-employed businessmen and artisans	12.4	13.5	15.9	15.0	12.6	14.2	11.8	12.9
Clerical workers, sales personnel, craftsmen, foremen, operators, members of Armed Forces, laborers, service workers, farm laborers	39.1	36.9	42.1	35.5	42.7	40.3	36.3	35.1
Unemployed, students, not employed housewives	39.9	38.8	36.9	44.1	39.8	37.3	40.4	38.9
Farm operators, farm managers, farm foremen,	3.9	4.2	*	*	1.2	1.6	6.2	6.3
Retired (heads of households only)	3.7	5.0	3.3	4.2	3.2	5.2	4.1	5.1
Not ascertained	<u>1.0</u>	<u>1.6</u>	<u>1.8</u>	<u>1.2</u>	<u>.5</u>	<u>1.4</u>	<u>1.2</u>	<u>1.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	333	426	1548	1813	2329	3016

* Less than .05 per cent

Age: Some differences exist in the age distribution of the adult population between New York and the other regions. (Table III-4) The largest difference is in the age range 18-24. Adults in this range make up about eight per cent of all adults in New York compared to eleven to twelve per cent of the adults in other parts of the Central Territory and in the rest of the United States.

Table III-4

Distribution of Age by Region
(Percentage distribution of adults)

<u>Age</u>	<u>Region</u>							
	<u>All Regions</u>		<u>New York Area</u>		<u>Other Parts of Central Territory</u>		<u>Rest of the United States</u>	
	<u>Fall</u>		<u>Fall</u>		<u>Fall</u>		<u>Fall</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
18 - 24	12.0	11.4	7.8	8.5	11.4	11.2	13.1	12.0
25 - 44	43.5	42.2	41.4	46.7	45.7	42.5	42.4	41.4
45 - 64	31.9	30.9	37.9	30.5	30.4	31.3	32.0	30.7
65 and over	11.8	14.4	12.0	13.6	11.9	13.9	11.7	14.8
Not ascertained	<u>.8</u>	<u>1.1</u>	<u>.9</u>	<u>.7</u>	<u>.6</u>	<u>1.1</u>	<u>.8</u>	<u>1.1</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	333	426	1548	1813	2329	3016

Use of the Four Modes by Region

Air: People living in the New York area are more likely to take an air trip than those living in other parts of the Central Territory; and they, in turn, seem to be slightly more likely to take an air trip than people living elsewhere in the United States. (Table III-5) About six per cent of those adults living in the rest of the United States take an air trip in a year compared to roughly 12 per cent of those in the New York metropolitan area.

These differences arise because of differences in the proportion who take non-business trips. Two per cent to three per cent of the adults in each region take one or more business trips by air in a year. But only about four per cent of those adults living in the rest of the United States take a non-business air trip, compared to 10 per cent of those in the New York metropolitan area. In parts of the Central Territory outside of New York about five to six per cent of adults take an air trip.

Table III-5

Use of Air "Last Year" by Region^{1/}

(Percentage distribution of all adults)

<u>Use of Air</u>	Region							
	All Regions		New York Area		Other parts of Central Territory		Rest of the United States	
	Fall 1955	1956	Fall 1955	1956	Fall 1955	1956	Fall 1955	1956
Took one or more air trips "last year"	<u>7.0</u>	<u>7.2</u>	<u>12.0</u>	<u>11.3</u>	<u>7.0</u>	<u>8.2</u>	<u>5.9</u>	<u>6.1</u>
For business purposes	1.9	2.3	2.1	2.1	1.5	2.7	1.9	2.1
For non-business purposes	4.6	4.4	9.0	8.7	5.0	4.7	3.5	3.7
For both business and non-business purposes	.5	.5	.9	.5	.5	.8	.5	.3
Did not take an air trip	<u>92.4</u>	<u>92.4</u>	<u>87.7</u>	<u>88.5</u>	<u>92.2</u>	<u>91.4</u>	<u>93.1</u>	<u>93.5</u>
Not ascertained	<u>.6</u>	<u>.4</u>	<u>.3</u>	<u>.2</u>	<u>.8</u>	<u>.4</u>	<u>1.0</u>	<u>.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	333	426	1548	1813	2329	3016

^{1/} The regions have been defined as follows:

New York Area - entire metropolitan area of New York City

Other parts of New York Central Territory: New Eng., remainder of New York State, Erie, Pa., plus Pittsburg and its metropolitan area, Ohio, Louisville, Kentucky, Michigan, Illinois and St. Louis metropolitan area.

Rail: There is less variation from region to region in the proportion who travel by rail than in the proportion who travel by air. (Table III-6) Very roughly ten per cent of those in each region took a rail trip. The proportion is about 12 per cent for "other parts of the Central Territory" and about 8 per cent for the rest of the United States. This difference is not surprising in view of the urban character of the Central Territory.

These differences in total rail travel seem to arise partly from differences in business travel and partly, non-business travel. A smaller proportion of the population take business trips in the rest of the United States than in the Central Territory, and a smaller proportion take non-business rail trips.

Table III-6

Use of Rail "Last Year" by Region
(Percentage distribution of all adults)

Use of Rail	Region							
	All Regions		New York Area		Other parts of Central Territory		Rest of the United States	
	Fall 1955	1956	Fall 1955	1956	Fall 1955	1956	Fall 1955	1956
Took one or more rail trips "last year"	<u>10.5</u>	<u>9.1</u>	<u>10.9</u>	<u>9.9</u>	<u>13.3</u>	<u>11.2</u>	<u>8.6</u>	<u>7.8</u>
For business purposes	1.5	1.8	2.1	2.1	1.9	2.5	1.0	1.4
For non-business purposes	8.6	7.0	8.5	7.3	10.8	8.2	7.2	6.1
For both business and non-business purposes	.5	.3	.3	.5	.7	.5	.4	.2
Did not take a rail trip	<u>88.4</u>	<u>90.4</u>	<u>88.8</u>	<u>89.9</u>	<u>85.6</u>	<u>88.1</u>	<u>90.3</u>	<u>91.8</u>
Not ascertained	<u>1.0</u>	<u>.5</u>	<u>.3</u>	<u>.2</u>	<u>1.0</u>	<u>.7</u>	<u>1.1</u>	<u>.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	333	426	1548	1813	2329	3016

Bus: Bus travel is more frequent in small towns and rural areas than in the large metropolitan centers, as noted earlier. It is not surprising, then, that the proportion of the population who take a bus trip is smaller in New York than in the other parts of the Central Territory. (Table III-7) Bus travel is most common in the rest of the United States.

Roughly four per cent of the adults in the New York area take a trip by bus to a point 100 miles away in a year, compared to about six per cent of those in the other parts of the Central Territory and seven to eight per cent of those adults living in the rest of the United States.

Table III-7

Use of Bus "Last Year" by Region

(Percentage distribution of all adults)

Use of Bus	Region							
	All Regions		New York Area		Other Parts of Central Territory		Rest of the United States	
	Fall 1955	1956	Fall 1955	1956	Fall 1955	1956	Fall 1955	1956
Took one or more bus trips "last year"	<u>7.3</u>	<u>6.0</u>	<u>5.4</u>	<u>3.3</u>	<u>6.1</u>	<u>5.5</u>	<u>8.4</u>	<u>6.9</u>
For business purposes	.8	.7	.6	.2	.9	.7	.8	.8
For non-business purposes	6.3	5.2	4.8	3.1	4.9	4.7	7.5	5.9
For both business and non-business purposes	.2	.1	*	*	.3	.1	.1	.2
Did not take a bus trip	<u>90.8</u>	<u>93.4</u>	<u>93.1</u>	<u>96.5</u>	<u>92.3</u>	<u>94.0</u>	<u>89.5</u>	<u>92.5</u>
Not ascertained	<u>1.9</u>	<u>.6</u>	<u>1.5</u>	<u>.2</u>	<u>1.6</u>	<u>.5</u>	<u>2.1</u>	<u>.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	333	426	1548	1813	2329	3016

* Less than .05 per cent.

Auto: Travel by auto is less common among people living in the New York area than those living elsewhere. (Table III-8) Whichever year is considered, the proportion who took an auto trip is about 15 per cent lower for those living in New York than for those living in other parts of the Central Territory. In this respect there are no major differences between the other parts of the Central Territory and the rest of the United States. However, the data do suggest that those living in the rest of the United States are more likely to take an auto trip on business than those living in the "other parts of the Central Territory."

Table III-8

Use of Auto Last Year by Region
(Percentage distribution of all adults)

	Region							
	All Regions		New York Area		Other Parts of N.Y.C. Territory		Rest of the United States	
	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>	<u>Fall 1955</u>	<u>1956</u>
<u>Use of Auto</u>								
Took one or more auto trips "last year"	<u>57.2</u>	<u>48.2</u>	<u>41.1</u>	<u>33.0</u>	<u>56.3</u>	<u>48.2</u>	<u>60.1</u>	<u>50.4</u>
For business purposes	2.0	3.0	.6	.9	1.1	2.2	2.7	3.8
For non-business purposes	50.5	40.8	39.0	30.8	51.7	43.0	51.2	40.8
For both business and non-business purposes	4.8	4.5	1.5	1.4	3.5	3.0	6.2	5.8
Did not take an auto trip	<u>41.8</u>	<u>51.2</u>	<u>58.0</u>	<u>66.4</u>	<u>42.7</u>	<u>51.3</u>	<u>39.0</u>	<u>49.0</u>
Not ascertained	<u>.9</u>	<u>.5</u>	<u>.9</u>	<u>.5</u>	<u>1.0</u>	<u>.5</u>	<u>.9</u>	<u>.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	333	426	1548	1813	2329	3016

Comparison of the four modes: To facilitate comparisons among the four modes, the data from the 1956 Survey on the proportion who used each mode are summarized in Table III-9. People in the New York metropolitan area compared to those elsewhere are more likely to take an air trip but less likely to take a trip by bus or auto. They are more likely to travel by rail than those living outside the New York Central Territory. People in the "rest of the United States," conversely, are more likely to travel by bus or auto than those living in New York. People in the "other parts of the Central Territory" tend to be intermediate between those in the other two regions, sometimes resembling the one and sometimes the other. They fall between the other groups as far as air travel and bus travel are concerned. In the probability that they will travel by rail they resemble the people living in New York more than those in the rest of the United States. In the probability that they will take an auto trip they are similar to those living in the rest of the United States rather than to those who live in New York.

Table III-9

Use of Different Modes "Last Year" by Region
 (Per cent of adults in each region who took one or more
 trips by each mode for business and for non-business reasons)

<u>Mode and Purpose</u>	<u>Region</u>			
	<u>All Regions</u>	<u>New York Area</u>	<u>Other Parts of Central Territory</u>	<u>Rest of the United States</u>
Air				
Business	2.8	2.6	3.5	2.4
Non-business	4.9	9.2	5.5	4.0
Rail				
Business	2.1	2.6	3.0	1.6
Non-business	7.3	7.8	8.7	6.3
Bus				
Business	.8	.2	.8	1.0
Non-business	5.3	3.1	4.8	6.1
Auto				
Business	7.5	2.3	5.2	9.6
Non-business	45.3	32.2	46.0	46.6
Number of adults	5255	426	1813	3016

Analysis of frequency of travel within income groups: The preceding discussion has shown that differences exist among regions both in the level of income and in the frequency of travel. One may ask are the differences from region to region the result of income differences among the regions? Tables III-10 and III-11, covering non-business and business travel, respectively, have been designed to permit an answer to that question. These tables show the relation between frequency of travel and region within income groups.

The main conclusion is that the differences among regions persist even when income is taken into account. For example, people living in New York are more likely to take a non-business air trip than people living elsewhere who have the same income. (Table III-10) Similarly, people living in New York and the other parts of the Central Territory are more likely to take a non-business rail trip than those living elsewhere who have the same income.

Business travel by auto is most common in the rest of the United States (Region III) even when income is taken into account. (Table III-11) The proportion of all adults who take business trips by air is, if anything, lower in New York than in the remainder of the country.

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Table III-10

Frequency of Non-Business Travel by Region Within Income Groups^{1/}

	Income Under \$3000							
	Non-Business Air				Non-Business Rail			
	Region				Region			
	<u>All</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>All</u>	<u>I</u>	<u>II</u>	<u>III</u>
Took a non-business trip by this mode	<u>1.4</u>	<u>2.9</u>	<u>2.1</u>	<u>1.1</u>	<u>6.7</u>	<u>7.4</u>	<u>7.5</u>	<u>6.5</u>
No. of trips								
1 trip	1.0	2.9	1.0	.9	5.3	7.4	6.0	5.0
2 trips	.2	*	.7	.1	.7	*	.4	.9
3 trips	.1	*	.4	*	.4	*	.4	.4
4-9 trips	.1	*	*	.1	.2	*	.7	.1
10 or more trips	*	*	*	*	.1	*	*	.1
Did not take a non-business trip by this mode	<u>98.6</u>	<u>97.1</u>	<u>97.9</u>	<u>98.8</u>	<u>93.1</u>	<u>92.6</u>	<u>92.5</u>	<u>93.3</u>
Not ascertained	<u>*</u>	<u>*</u>	<u>*</u>	<u>.1</u>	<u>.2</u>	<u>*</u>	<u>*</u>	<u>.2</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1278	68	282	928	1278	68	282	928

	Non-Business Bus				Non-Business Auto			
	Region				Region			
	<u>All</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>All</u>	<u>I</u>	<u>II</u>	<u>III</u>
Took a non-business trip by this mode	<u>7.3</u>	<u>1.5</u>	<u>7.8</u>	<u>7.5</u>	<u>26.3</u>	<u>13.2</u>	<u>22.7</u>	<u>28.3</u>
No. of trips								
1 trip	5.5	1.5	5.7	5.7	14.4	10.3	9.9	16.0
2 trips	1.3	*	1.4	1.3	5.4	1.5	5.3	5.7
3 trips	.3	*	*	.4	2.4	*	2.5	2.6
4-9 trips	.1	*	.4	*	3.3	1.4	3.6	3.4
10 or more trips	.1	*	.3	.1	.8	*	1.4	.6
Did not take a non-business trip by this mode	<u>92.5</u>	<u>98.5</u>	<u>92.2</u>	<u>92.2</u>	<u>72.8</u>	<u>86.8</u>	<u>76.6</u>	<u>70.7</u>
Not ascertained	<u>.2</u>	<u>*</u>	<u>*</u>	<u>.3</u>	<u>.2</u>	<u>*</u>	<u>.7</u>	<u>1.0</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1278	68	282	928	1278	68	282	928

^{1/} Region I is the New York metropolitan area; Region II, other parts of the New York Central Territory; Region III, the rest of the United States.

Table III-10
Continued

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Income \$3000 - \$5999

	Non-Business Air				Non-Business Rail			
	Region				Region			
	All	I	II	III	All	I	II	III
Took a non-business trip by this mode	<u>2.7</u>	<u>4.2</u>	<u>2.1</u>	<u>2.9</u>	<u>5.8</u>	<u>6.0</u>	<u>6.9</u>	<u>5.2</u>
No. of trips:								
1 trip	2.0	3.6	1.5	2.1	4.0	3.6	4.4	3.9
2 trips	.5	.6	.4	.5	1.0	.6	1.5	.8
3 trips	.2	*	.2	.2	.2	.6	.3	*
4-9 trips	*	*	*	.1	.5	.6	.6	.4
10 or more trips	*	*	*	*	.1	.6	.1	.1
Did not take a non-business trip by this mode	<u>97.2</u>	<u>95.8</u>	<u>97.8</u>	<u>97.0</u>	<u>94.0</u>	<u>94.0</u>	<u>92.7</u>	<u>94.8</u>
Not ascertained	<u>.1</u>	<u>*</u>	<u>.1</u>	<u>.1</u>	<u>.2</u>	<u>*</u>	<u>.4</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1854	165	680	1009	1854	165	680	1009

	Non-Business Bus				Non-Business Auto			
	Region				Region			
	All	I	II	III	All	I	II	III
Took a non-business trip by this mode	<u>4.1</u>	<u>1.2</u>	<u>3.7</u>	<u>5.0</u>	<u>44.8</u>	<u>28.5</u>	<u>42.4</u>	<u>48.9</u>
No. of trips:								
1 trip	2.6	1.2	2.5	2.9	19.4	13.9	17.5	21.5
2 trips	.9	*	.7	1.2	8.4	6.8	8.5	8.5
3 trips	.3	*	.2	.5	6.1	1.2	6.2	6.9
4-9 trips	.3	*	.3	.4	7.8	4.2	7.1	8.8
10 or more trips	*	*	*	*	3.1	2.4	3.1	3.2
Did not take a non-business trip by this mode	<u>95.7</u>	<u>98.8</u>	<u>95.9</u>	<u>94.9</u>	<u>54.1</u>	<u>71.5</u>	<u>56.9</u>	<u>49.5</u>
Not ascertained	<u>.2</u>	<u>*</u>	<u>.4</u>	<u>.1</u>	<u>1.1</u>	<u>*</u>	<u>.7</u>	<u>1.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1854	165	680	1009	1854	165	680	1009

Table III-10
Continued

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Income \$6000 - \$9999

	Non-Business Air				Non-Business Rail			
	Region				Region			
	All	I	II	III	All	I	II	III
Took a non-business trip by this mode	<u>7.3</u>	<u>11.4</u>	<u>5.9</u>	<u>8.0</u>	<u>7.4</u>	<u>5.6</u>	<u>8.1</u>	<u>7.1</u>
No. of trips:								
1 trip	5.2	7.1	4.5	5.6	5.4	1.4	5.8	5.7
2 trips	1.2	2.9	.8	1.3	1.0	1.4	1.3	.7
3 trips	.5	*	.3	.7	.7	1.4	.5	.7
4-9 trips	.3	1.4	*	.4	.3	1.4	.5	*
10 or more trips	.1	*	.3	*	*	*	*	*
Did not take a non-business trip by this mode	<u>92.2</u>	<u>88.6</u>	<u>93.6</u>	<u>91.6</u>	<u>92.0</u>	<u>94.4</u>	<u>91.6</u>	<u>92.0</u>
Not ascertained	<u>.5</u>	<u>*</u>	<u>.5</u>	<u>.4</u>	<u>.6</u>	<u>*</u>	<u>.3</u>	<u>.2</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	898	70	377	451	898	70	377	451

	Non-Business Bus				Non-Business Auto			
	Region				Region			
	All	I	II	III	All	I	II	III
Took a non-business trip by this mode	<u>3.2</u>	<u>4.3</u>	<u>2.9</u>	<u>3.3</u>	<u>61.9</u>	<u>50.0</u>	<u>58.9</u>	<u>66.2</u>
No. of trips:								
1 trip	2.7	2.9	2.4	2.9	22.4	24.3	24.2	20.6
2 trips	.4	1.4	.3	.4	13.3	12.9	12.2	14.2
3 trips	*	*	*	*	7.9	4.3	6.6	9.5
4-9 trips	*	*	*	*	12.1	7.1	10.1	14.6
10 or more trips	.1	*	.2	*	6.2	1.4	5.8	7.3
Did not take a non-business trip by this mode	<u>96.6</u>	<u>95.7</u>	<u>97.1</u>	<u>96.2</u>	<u>36.8</u>	<u>50.0</u>	<u>39.8</u>	<u>32.2</u>
Not ascertained	<u>.2</u>	<u>*</u>	<u>*</u>	<u>.5</u>	<u>1.3</u>	<u>*</u>	<u>1.3</u>	<u>1.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	898	70	377	451	898	70	377	451

Table III-10
Continued

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Income \$10,000 and Over

	Non-Business Air				Non-Business Rail			
	Region				Region			
	<u>All</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>All</u>	<u>I</u>	<u>II</u>	<u>III</u>
Took a non-business trip by this mode	<u>20.5</u>	<u>31.8</u>	<u>23.3</u>	<u>14.1</u>	<u>10.1</u>	<u>13.6</u>	<u>10.9</u>	<u>8.1</u>
No. of trips:								
1 trip	13.0	20.5	12.4	11.1	7.2	9.1	10.1	3.7
2 trips	5.2	4.5	7.7	3.0	2.3	4.5	*	3.7
3 trips	1.3	4.5	1.6	*	*	*	*	*
4-9 trips	1.0	2.3	1.6	*	.6	*	.8	.7
10 or more trips	*	*	*	*	*	*	*	*
Did not take a non-business trip by this mode	<u>79.2</u>	<u>68.2</u>	<u>76.7</u>	<u>85.2</u>	<u>89.6</u>	<u>86.4</u>	<u>88.4</u>	<u>91.9</u>
Not ascertained	<u>.3</u>	<u>*</u>	<u>*</u>	<u>.7</u>	<u>.3</u>	<u>*</u>	<u>.7</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	308	44	129	135	308	44	129	135

	Non-Business Bus				Non-Business Auto			
	Region				Region			
	<u>All</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>All</u>	<u>I</u>	<u>II</u>	<u>III</u>
Took a non-business trip by this mode	<u>2.6</u>	<u>4.5</u>	<u>3.1</u>	<u>1.5</u>	<u>68.8</u>	<u>45.4</u>	<u>76.0</u>	<u>69.6</u>
No. of trips:								
1 trip	2.3	4.5	2.3	1.5	18.2	18.2	17.8	18.5
2 trips	.3	*	.8	*	14.3	6.8	19.4	11.9
3 trips	*	*	*	*	9.7	11.3	9.3	9.6
4-9 trips	*	*	*	*	20.1	9.1	20.2	23.7
10 or more trips	*	*	*	*	6.5	*	9.3	5.9
Did not take a non-business trip by this mode	<u>97.4</u>	<u>95.5</u>	<u>96.9</u>	<u>98.5</u>	<u>29.9</u>	<u>54.6</u>	<u>24.0</u>	<u>27.4</u>
Not ascertained	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>1.3</u>	<u>*</u>	<u>*</u>	<u>3.0</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	308	44	129	135	308	44	129	135

* Less than .05 per cent

Table III-11

Frequency of Business Travel by Region Within Income Groups^{1/}

	Income Under \$3000							
	Business Air				Business Rail			
	Region				Region			
	All	I	II	III	All	I	II	III
Took business trip by this mode	.2	*	.4	.1	.3	1.5	*	.2
No. of trips								
1 trip	.1	*	*	.1	.1	*	*	.1
2 trips	.1	*	.4	*	*	*	*	*
3 trips	*	*	*	*	.1	*	*	.1
4-9 trips	*	*	*	*	.1	1.5	*	*
10 or more trips	*	*	*	*	*	*	*	*
Did not take a business trip by this mode	99.8	100.0	99.6	99.9	99.6	98.5	99.6	99.9
Not ascertained	*	*	*	*	.1	*	.4	*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1278	68	282	928	1278	68	282	928

	Business Bus				Business Auto			
	Region				Region			
	All	I	II	III	All	I	II	III
	All	I	II	III	All	I	II	III
Took a business trip by this mode	.4	*	*	.5	3.6	*	1.8	4.4
No. of trips								
1 trip	.2	*	*	.3	1.9	*	.7	2.4
2 trips	.1	*	*	.1	.7	*	.4	.9
3 trips	*	*	*	*	.4	*	.4	.4
4-9 trips	*	*	*	*	.5	*	*	.7
10 or more trips	.1	*	*	.1	.1	*	.3	*
Did not take a business trip by this mode	99.6	100.0	100.0	99.5	96.2	100.0	97.9	95.4
Not ascertained	*	*	*	*	.2	*	.3	.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1278	68	282	928	1278	68	282	928

^{1/} Region I is the New York metropolitan area; Region II, other parts of the New York Central Territory; Region III, the rest of the United States.

Table III-11
Continued

Income \$3000-65999

	Business Air				Business Rail			
	Region				Region			
	All	I	II	III	All	I	II	III
Took a business trip by this mode	1.2	.6	.7	1.6	1.2	1.2	1.1	1.2
No. of trips								
1 trip	.5	*	.4	.7	.7	1.2	.7	.7
2 trips	.3	*	*	.5	.2	*	.2	.2
3 trips	.1	*	.2	.1	.1	*	.1	*
4-9 trips	.2	.6	*	.2	*	*	*	*
10 or more trips	.1	*	.1	.1	.2	*	.1	.3
Did not take a business trip by this mode	98.8	99.4	99.3	98.4	98.8	98.8	98.9	98.8
Not ascertained	*	*	*	*	*	*	*	*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1854	165	680	1009	1854	165	680	1009

	Business Bus				Business Auto			
	Region				Region			
	All	I	II	III	All	I	II	III
Took a business trip by this mode	.8	.6	.7	.2	7.7	1.2	4.8	10.7
No. of trips								
1 trip	.5	.6	.5	.6	2.8	.6	1.5	3.9
2 trips	.1	*	*	.1	1.8	*	1.9	2.1
3 trips	*	*	*	*	.7	*	.6	.9
4-9 trips	.1	*	.2	.1	1.2	.6	.4	1.9
10 or more trips	.1	*	*	.1	1.2	*	.4	1.9
Did not take a business trip by this mode	99.1	99.4	99.3	99.0	92.0	98.8	95.2	88.8
Not ascertained	.1	*	*	.1	.3	*	*	.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1854	165	680	1009	1854	165	680	1009

Table III-11
Continued

Income \$6000-\$9999

	Business Air				Business Rail			
	Region				Region			
	All	I	II	III	All	I	II	III
Took a business trip by this mode	<u>6.1</u>	<u>2.8</u>	<u>6.6</u>	<u>6.2</u>	<u>3.8</u>	<u>1.4</u>	<u>4.8</u>	<u>3.3</u>
No. of trips								
1 trip	3.2	1.4	2.6	4.0	1.8	*	2.1	1.8
2 trips	1.2	*	1.9	.9	.7	1.4	.8	.4
3 trips	.3	*	*	.7	.4	*	.8	.2
4-9 trips	.9	*	1.3	.6	.6	*	.3	.9
10 or more trips	.5	1.4	.8	*	.3	*	.8	*
Did not take a business trip by this mode	<u>93.9</u>	<u>97.2</u>	<u>93.4</u>	<u>93.8</u>	<u>96.1</u>	<u>98.6</u>	<u>95.2</u>	<u>96.5</u>
Not ascertained	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>.1</u>	<u>*</u>	<u>*</u>	<u>.2</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	898	70	377	451	898	70	377	451

	Business Bus				Business Auto			
	Region				Region			
	All	I	II	III	All	I	II	III
Took a business trip by this mode	<u>1.1</u>	<u>*</u>	<u>1.1</u>	<u>1.3</u>	<u>10.3</u>	<u>4.3</u>	<u>5.6</u>	<u>15.3</u>
No. of trips								
1 trip	.8	*	.5	1.1	2.6	*	1.6	3.8
2 trips	.1	*	.3	*	1.4	*	1.1	2.0
3 trips	*	*	*	*	1.7	2.9	.5	2.4
4-9 trips	.1	*	*	.2	2.3	*	.8	4.0
10 or more trips	.1	*	.3	*	2.3	1.4	1.6	3.1
Did not take a business trip by this mode	<u>98.9</u>	<u>100.0</u>	<u>98.9</u>	<u>98.7</u>	<u>89.0</u>	<u>95.7</u>	<u>93.6</u>	<u>84.0</u>
Not ascertained	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>.7</u>	<u>*</u>	<u>.8</u>	<u>.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	898	70	377	451	898	70	377	451

Table III-11
Continued

Income \$10,000 and Over

	Business Air				Business Rail			
	Region				Region			
	<u>ALL</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>ALL</u>	<u>I</u>	<u>II</u>	<u>III</u>
Took a business trip by this mode	<u>18.6</u>	<u>18.2</u>	<u>19.4</u>	<u>17.8</u>	<u>14.6</u>	<u>15.9</u>	<u>18.6</u>	<u>10.4</u>
No. of trips								
1 trip	5.9	4.6	3.1	8.9	5.2	6.8	6.2	3.7
2 trips	1.3	4.5	1.6	*	2.6	2.3	3.9	1.5
3 trips	1.3	2.3	1.5	.8	1.0	*	1.6	.8
4-9 trips	5.5	*	7.0	5.9	4.5	6.8	4.6	3.7
10 or more trips	4.6	6.8	6.2	2.2	1.3	*	2.3	.7
Did not take a business trip by this mode	<u>80.8</u>	<u>81.8</u>	<u>79.8</u>	<u>81.5</u>	<u>85.4</u>	<u>84.1</u>	<u>81.4</u>	<u>89.6</u>
Not ascertained	<u>.6</u>	<u>*</u>	<u>.8</u>	<u>.7</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	308	44	129	135	308	44	129	135

	Business Bus				Business Auto			
	Region				Region			
	<u>ALL</u>	<u>I</u>	<u>II</u>	<u>III</u>	<u>ALL</u>	<u>I</u>	<u>II</u>	<u>III</u>
Took a business trip by this mode	<u>1.6</u>	<u>*</u>	<u>2.3</u>	<u>1.5</u>	<u>20.2</u>	<u>6.8</u>	<u>16.3</u>	<u>28.1</u>
No. of trips								
1 trip	.7	*	1.5	*	3.6	*	.8	7.4
2 trips	.3	*	*	.8	3.3	*	3.1	4.4
3 trips	.3	*	.8	*	1.3	*	1.5	1.5
4-9 trips	.3	*	*	.7	5.8	2.3	4.7	8.1
10 or more trips	*	*	*	*	6.2	4.5	6.2	6.7
Did not take a business trip by this mode	<u>98.4</u>	<u>100.0</u>	<u>97.7</u>	<u>98.5</u>	<u>79.2</u>	<u>93.2</u>	<u>83.7</u>	<u>70.4</u>
Not ascertained	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>.6</u>	<u>*</u>	<u>*</u>	<u>1.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	308	44	129	135	308	44	129	135

* Less than .05 per cent.

Note on the Definition of the New York Metropolitan Area

The area referred to in this survey as the New York Metropolitan Area exceeds the boundaries of the City of New York but does not coincide with the Bureau of the Census' Standard Metropolitan Area. Accordingly, the area used must be defined exactly. Unfortunately an exact definition must be detailed. The following list shows the counties and minor civil divisions included and their population according to the 1950 Census:

<u>Area</u>	<u>Population in</u> <u>1950</u>
<u>New York City (proper)</u>	
Bronx County (Bronx)	1,451,277
Kings County (Brooklyn)	2,738,175
New York County (Manhattan)	1,960,101
Queens County (Queens)	1,550,849
Richmond County (Richmond)	191,555
Total	<u>7,891,957</u>
<u>Suburbs in New York State (included in New York</u> <u>for sampling purposes in all surveys by the</u> <u>Center)</u>	
Nassau (entire)	672,765
Rockland exclusive of	
Haverstraw	12,979
Stony Point	5,485
Suffolk exclusive of	70,812
Brookhaven	44,522
East Hampton	6,325
Islip	71,465
Riverhead	9,973
Shelter Island	1,144
Smithtown	20,993
Southampton	16,830
Southold	11,632
Shinnecock	183
Westchester (entire)	93,062
	<u>625,816</u>

New Jersey suburbs (included in New York
for sampling purposes in all surveys by
the Center)

Bergen (entire)		539,139
Essex (entire)		905,949
Hudson (entire)		647,437
Middlesex exclusive of		
Cranbury	1,797	
E. Brunswick	5,699	
Helmetta	580	
Jamesburg	2,307	
Madison	7,366	
Milltown	3,786	
Monroe	4,082	
North Brunswick	6,450	
Plainsboro	1,112	
South Brunswick	4,001	
Spotswood	2,325	225,367
Passaic exclusive of		
Bloomingdale	3,251	
Pompton Lakes	4,654	
Ringwood	1,752	
Wanaque	4,222	
West Milford	3,650	319,564
Union		398,138

Connecticut

Fairfield including		
Greenwich	40,835	
Stamford	74,293	115,128

Total New York suburbs plus New Jersey suburbs 4,613,177

Areas adjoining New York included in the
New York area in tabulations reported in
this survey.

Fairfield County (part)		
Bethel Town (including		
Bethel uninc.)		5,104
Bridgeport City		158,709
Brookfield Town		1,688
Danbury Town (including Danbury City,		
Beckettsville, Germantown, Hayestown)		30,337
Darien Town		11,467
Easton Town		2,165
Fairfield Town		30,489
Monroe Town		2,892

New Canaan Town	8,001
New Fairfield Town	1,236
Newtown Town (incl. Newtown Borough)	7,448
Norwalk City	49,460
Redding Town	2,037
Ridgefield Town	4,356
Shelton City	12,694
Sherman Town	549
Stratford Town	33,428
Trumbull Town (incl. Nichols uninc.)	8,641
Weston Town	1,988
Westport Town	11,667
Wilton Town	4,558

Total for the selected parts of Fairfield County 389,214

Somerset, New Jersey

99,052

IV. Attitudes Toward Travel

In the 1955 National Travel Market Survey a number of questions were asked concerning the attitudes which people have toward different modes of travel. The analysis was directed to the question, what determines the choices which people make among the different modes? This topic has been pursued also in the 1956 Survey. In 1955 no attempt was made to explore the topic, why do people travel? Do people have unsatisfied desires to travel? What is the nature of these yearnings? What prevents their satisfaction? In the 1956 Survey a start has been made on this topic.

In interviews taken in the spring of 1956, respondents were asked the following questions:

"Are there any trips that you have thought you would like to take but that you haven't been able to?

(If YES) (a) What sort of trip were you thinking about?

(b) Are there any special reasons why you don't go?

Anything else?"

These questions are of the open-ended or free answer type, in which the respondent is invited to discuss in his own words the topic suggested by the question.

The answers to these questions are highly revealing. They have been quantified and the answers are summarized below. Much is lost in the process of quantification, however, and to bring to the reader the flavor of individual answers the actual replies of a number of individuals are shown below. These answers were selected to illustrate the range of different answers people give to the questions. For an estimate of the frequency of different types of answer, see the tables which follow. The occupation, age, and family income of each respondent are shown, and the state where he lives.

The selected answers are the following:

Wife of airplane mechanic, 30-34, \$4000-4999. Ohio

"I'd like to go somewhere - no special place - just for a rest...but we don't have a car."

Widow, over 65, \$2000-2999. South Carolina

"I'd like to take a trip to see my grandson graduate up in Maryland...but I can't leave my chickens."

Electrician, 35-39, \$3000-3999. Pennsylvania

"I'd like to visit relations. We have a new car but no money to travel - it's so hard to get any ahead."

Wife of dock foreman, 50-54, \$7500-9999. Chicago.

"We'd like to go to California. My husband won't go that far by car and as a family we don't feel we can afford it...would have gone a long time ago if we could."

Student, 25-29, Male, \$4000-4999. Minnesota

"We'd like to go to Europe some time and to the NE corner of the U.S. -- we'd just like to travel...but we only get one vacation a year...you can only do so much... and I'm still in school."

Cook, 45-49, Male, \$2000-2999. Los Angeles

"I'd like a trip around the world to see other countries but I haven't the money...I'd travel all the time if I did."

Widow, 60-64, \$4000-4999. Georgia

"Well, my boys would like me to go to Florida, but I don't like to ride on these highways."

Wife of grocery store clerk, 50-59, \$1000-1999. New York City

"I'd like to go to Europe. If my husband would give me \$2000, I'd go today."

Retired practical nurse, over 65, \$1000-1999. Texas

"I've seen the Atlantic, the Pacific and the Gulf and now I'd like to see the Great Lakes...but I don't have the money to spare."

Farmer, 50-54, \$6000-7499. Nebraska

"We'd like to take a good vacation thru the Southern states sometime...but we always got kids in school and it seems to take all the money for them...then, too, we're always tied down with milking cows and other farm responsibilities."

Wife of inspector, 21-24, \$5000-5999. Indiana

"We'd like to go to Wisconsin but my teeth need fixing so the money has to go there."

Bartender, 50-54, \$6000-7499. New York

"This year we'll go the Adirondacks. I like the cold mountain air...I'd like to retire there."

Farmer's wife, over 65, under \$1000. Texas

"I'd like to see my nieces and nephews in California but I don't trust my husband's driving and I don't drive."

Wife of railroad conductor, 55-59, \$6000-7499. Pennsylvania

"Last time we took a trip we had an accident 75 miles from home. I broke both legs and haven't wanted to go very far in the car since."

Glass worker, 35-39, \$5000-5999. Ohio

"We've been planning to go to California so my wife could meet my brothers and sisters but we haven't been able to...been married 10 years and she still hasn't met them. Now, I guess they're coming here."

Truck driver, 45-49, \$7500-9999. New York State

"We'd love to go to Florida but when we do have time off there's always painting or something around home to do."

Blast hole driller, 60-64, \$7500-9999. New York State

"I'd like to go to North Bay in Canada, but it's about a thousand miles...takes more than a weekend."

Wife of farmer, over 65, under \$1000. North Carolina

"I'd like to go on a trip but we haven't any means and I won't walk."

Baker, 82 yrs. old, \$6000-7499. Chicago

"The Mrs. and I would like to go to Alaska before we get too old...just too lazy to get going I expect...maybe we'll go this year."

Wife of clerical worker, 45-49, \$4000-4999. New York City

"We're thinking of taking a one way trip to the West Indies or California. I'm serious...but my husband's position holds him here...has to do with the pension system."

College student, working wife, 35-39, \$3000-3999. New York City

"I'd like to go to Spain. I have relatives there and I'd like to see for myself what a country under a dictator is like."

Wife of farmer, 25-29, \$4000-4999. Ohio

"We'd like to go to Florida but in the winter it's school and in the summer it's crops...just can't get away."

Wife of timekeeper, 45-49, \$4000-4999. Ohio

"I'd like to take a sightseeing trip to Washington, but my husband likes to fish...whenever he has a vacation that's where we head."

Executive, 50-54, over \$20,000.

"I'd like a nice lazy trip to Europe but I just don't have the time."

Wife of dairyman, 55-60, \$5000-5999. California

"I'd like to visit relatives all over the country but I kind of hate to turn loose of the money and go."

Machinist, 35-39, \$2000-2999. Connecticut

"I had a reservation to go to South America but the sailing was cancelled...can't afford to go except on a minimum deal...but there's no place on the map I wouldn't like to see."

President of manufacturing concern, 50-54, over \$20,000. New York

"We'd have been in Europe this year if our daughter and her children hadn't returned home to live."

Widow, over 65, under \$1000. Connecticut

"I'd like to go lots of places...went to Florida a few years ago. I'd rather travel than eat, if I don't get too hungry."

Houseboy, 35-39, \$2000-2999. New York City

"I'd like to go to Japan to see my family but it's a long trip...I'd need at least three months."

Clerk, 45-49, Female, \$2000-2999. New York

"I'd sure like to go to Europe. I have a pen pal who lives there...but it takes so much time and money."

Truck driver, 45-49, \$4000-4999. New York State

"I'd like to take a slow boat to any place where I wouldn't have to drive."

Widow, 55-59, \$2000-2999. New York State.

"I'd like to see Niagara Falls but people drive so, and have so many accidents - I'd rather stay to home."

Housewife, salesman husband, 35-39, \$6000-7499. Kentucky

"I'd like to go to Florida and New York but I've got these three boys." (The boys were all sick with measles at the time of interview.)

Retired teamster, over 65, Male, \$1000-1999. New Mexico

"I'd like to go to Carlsbad Caverns in New Mexico but you take when you've got a horse, dog, goats and rabbits, you just can't get away much."

Housewife, husband an oiler, 21-24. New Mexico

"I'd like to go to Texas, if I had the money, to see my sister. She got married and we didn't go, and she had a baby and we didn't go. The baby is two years old already."

Farmer (Spanish speaking), over 65, under \$1000. New Mexico

"I'd like to go to see my nephew in Illinois, but I'd be lost when I got there... don't know how to speak English...haven't got enough money." (Interview was taken in Spanish.)

Laborer on railroad, 55-59, \$1000-1999. New Mexico

"Want to go to California...have a pass but still can't afford it. Just like to see the country that's all."

Housewife, salesman husband, 35-39, \$7500-9999. Los Angeles

"I'd like to take a sea trip but I don't go for financial reasons."

Widow in her 80's, under \$1000. Los Angeles

"I'd like to think up a new place that would interest me. I've been to Alaska and to China and to Hawaii twice. Every year I take a bus to Yosemite for two weeks. I'm looking for a place to go...don't see any reason to save money any more! My home is paid for, my funeral is paid for, so why save?"

Widow, does some writing, 55-59, \$1000-1999. New York City

"I'm planning to go to Bermuda to cruise the Carribean on a boat. It will help me gather experiences for writing. I'll go one of these years...I don't mind the heat."

Unemployed buffer in factory, over 65, \$1000-1999. Connecticut

Has trouble walking because of an accident. "I'd sure like to go to Florida... been dreaming about it...maybe it would help my legs...just can't afford it though."

Housekeeper, over 65, \$5000-5999. Massachusetts

"I'd like to go to California but it takes money. You don't know whether you should use the money...you might need it for something else."

Wife of farmer, 45-49, \$4000-4999. Nebraska

"Would like to visit my husband's sister in Oregon...see the Rockies on the way...but living on a farm it's hard to get someone to take over while you're gone."

Wife of grocery store owner, 40-44, \$7500-9999. South Carolina

"We were thinking of a trip west where my son was. Then he was transferred to Washington, D.C. so I suppose we won't go...we just can't afford pleasure trips alone...we just go on vacations to see him."

Wife of treasurer of a company, 35-39, \$10,000-14,999. Detroit

"Wanted to go south this winter...husband couldn't get away...nobody to take care of the children."

Wife of advertising executive, 40-44, over \$20,000. Detroit

"We'd like to go to Florida, but the children didn't want to be taken out of school."

Typist, 35-39, Single Females, \$3000-3999. San Francisco

"Been wanting to go to Los Angeles and Arizona and Texas where I was born, but all my relatives are up north now - in Canada and Oregon. Went to Canada year before last - but fares are so high I hesitate to go just for a trip with no family business to transact."

Wife of railroad man, 35-39, \$4000-4999. Philadelphia

"I just want to go all over the U.S. but the thing that holds us back is money...and my husband only gets three weeks vacation."

Promotion Art Director, 35-39, Male, \$10,000-14,999. Philadelphia

"I would like to go to the West Coast and Mexico and back to England and Europe. I was there during the war...but my vacation time is limited."

Secretary - wife of proof reader for publisher, 60-64, \$7500-9999. Philadelphia

"We would like to see the U.S. but don't have the time. If you only have two weeks you can't go far...guess you can't have your cake and eat it too."

Farmer, 25-29, \$1000-1999. South Dakota

"We'd like to go to the Black Hills but the kids are too small, we don't have enough money, car won't run, I can't get away from the farm...guess that's enough reasons!"

Farmer, 40-44, \$4000-4999. South Dakota

"I'd like to go on some tour. Go to Washington D.C. and take one of the all arranged trips so you get to see everything...but farming has kept me to home."

Wife of a storekeeper, 35-39, \$6000-7499. New York City

"I'd still like to have a honeymoon - go to Florida by automobile...but we're in business and there's no one to take over the store."

Cutter on women's garments, 60-64, \$5000-5999. New York City

"We'd like to go to Florida, California and Virginia just to see the country but I only have two weeks vacation. After I retire we can get about more. Of course, there's the question of money...but I think we will manage it even on a reduced income."

Wife of pharmacist, 50-54, \$7500-9999. Texas

"I'd like to go somewhere, maybe travel from coast to coast and find a place where I could just sit down for a week. There just never is time."

Cafeteria worker, 50-54, \$5000-5999. St. Louis

"I'd like to fly to California. We may go this summer. I suppose we'll take the car, but I prefer to fly...it's such a long drive."

Supply clerk, 60-64, Male, \$2000-2999. San Francisco

"I'd like to tour Disneyland, Reno, Tahoe, Yosemite, San Diego. I'd like to return to Nice, France, but we have so many grandchildren. I'd like to leave them the money instead and besides I think we can help more here. Each of my two daughters has five children."

Widow, over 65, \$1000-1999. San Francisco

"I'd love to go to the Hawaiian Islands. I've never been on a boat trip. My husband and I planned that trip, but he died."

Retail salesman, 25-29, \$5000-5999. Minnesota

"We love to take pleasure trips. They are our fondest dream...but there just hasn't been enough time."

Wife of insurance man, 45-49, \$10,000-14,999. Minnesota

"I'd like to see the West...but we always had too many kids to take. It's no fun to travel with young children."

Farmer, 50-54, under \$1000. Iowa

"I'd like to see what our country looks like from end to end. Money is the biggest reason I don't go."

Civilian, 40-44, over \$20,000. New York City

"I'd like to go to Hawaii. We're expecting a new member of the family but I think we'll take the trip eventually."

Wife of foreman, 40-44, \$5000-5999. Iowa

"I love to travel. I'd like to go all over - sight seeing and just traveling...but the sad tale is...if we had all the money in the world, my husband would be bored to death with traveling."

Bookkeeper in bank, 30-34, Female, \$2000-2999. Minnesota

"I'd like to go to Europe. I think traveling is educational as well as pleasant but I just can't afford it right now."

Most of the individuals quoted above would like to take trips. In fact, many of the answers suggest that they want very badly to travel. Phrases like "we'd love to go" occur frequently. But not everyone feels that way. One respondent in three said that there were no trips which he would like to take. (Table IV-1) These negative answers were not pursued further in the interviews. A few respondents commented that they do not like to travel or that there is no place they want to go. Presumably the others feel the same way. To them either there is little attraction in faraway places or the process of travelling is not pleasant. It is also possible that some people have taken the trips they wanted to take and do not wish to take more trips.

There are individual interviews which contain hints of the reasons why people do not like to travel. There is the feeling that travel is dangerous--mentioned by the woman who broke both her legs in an accident last time she tried. These comments seem to refer especially to automobile travel. There is the sense of strangeness and inability to cope with the situation in remote places--the extreme case is the respondent who spoke only Spanish. But for the most part the reasons why people do not want to travel must be left for later exploration.

Two-thirds of the population do have in mind trips that they would like to take. It is possible to classify two-thirds of these trips by purpose. Most of the trips would be vacation or pleasure trips with no special objective. People speak of touring, or visiting a part of the country. Mentions of particular events are rare--only two percent of those who specify the purpose of the trip have in mind a particular event. (Table IV-2) Similarly, only about two percent mention a particular resort.

One large group of people do have in mind a specific objective. About 35 percent of those who would like to take a trip would like to visit friends or relatives. Thus, visits to friends and relatives bulk large in trips people would like to take. This finding is consistent with the finding that visits to friends

Table IV-1

ARE THERE ANY TRIPS THAT YOU HAVE THOUGHT
YOU WOULD LIKE TO TAKE BUT THAT YOU HAVEN'T BEEN ABLE TO?^{1/}

<u>Attitude Toward Taking Trips</u>	<u>Percent of All Adults</u>
Yes, there are trips I would like to take	65.9
No, there are no trips I would like to take	33.4
Not ascertained	<u>0.7</u>
Total	100.0 %
Number of adults	1,732

^{1/} This question was asked in April 1956 only.

Table IV-2

TRIPS PEOPLE WOULD LIKE TO TAKE
- by Purpose ^{1/}

<u>Purposes of Trips People Would Like to Take</u>	<u>Percent of Adults Who Report Trips They Would Like to Take</u>	<u>Percent of Adults Who Specify Purpose of Trip</u>
<u>Vacation and Pleasure</u>	<u>62.0</u>	<u>99.7</u>
To visit friends or relatives	22.1	35.5
To attend a special event	1.3	2.1
Sightseeing, touring	19.0	30.6
To visit a resort	1.2	2.0
Vacation, no further purpose	18.4	29.6
<u>Personal Affairs</u>	<u>1.1</u>	<u>1.4</u>
<u>Business</u>	<u>0.2</u>	<u>0.3</u>
<u>No purpose mentioned</u>	<u>36.6</u>	-
<u>Not ascertained</u>	<u>1.2</u>	-
Total	101.1 ^{2/}	101.4 ^{2/}
Number of adults	1,142	710

^{1/} People were asked: "Are there any trips that you have thought you would like to take but that you haven't been able to?" "What sort of trip were you thinking about?"

^{2/} A few people specified more than one purpose.

and relatives are important purposes of actual trips.

Very few people speak of trips on personal business or in connection with their work which they have not been able to take. It is reasonable that business trips would not be mentioned as trips one would especially like to take. Trips on personal affairs often have an emergency character and may be undertaken because of an illness or death. Such trips, also, are not trips one "would like to take".

In one sense people are highly specific about the places they would like to visit. About nine out of ten mention a destination. People do not just hope to travel. They hope to travel to some particular area.

In another sense, however, many people are not specific about the places they wish to visit. Of course, those who wish to visit friends or relatives have in mind exact destinations. Others, however, may mention only a region of the country. Many speak of a state. Further questioning would be needed to remove any uncertainty, but the phrases used suggest that frequently the goal is an area, not a specific locale.

The destinations mentioned are shown in Table IV-3. In this table any point within a state is coded as a mention of the state. As noted above, about nine people out of ten mention a destination. Of the nine, six refer to a state or part of a state. The states most frequently mentioned are the following:

<u>State</u>	<u>Percent of Adults Mentioning</u>
Florida	15.1
California	13.2
New York	4.1
Illinois	2.1
Other states	29.1
Total who mention a state	<hr/> 60.6

Table IV-3

DESTINATIONS PEOPLE WOULD LIKE TO VISIT
BUT HAVE NOT BEEN ABLE TO

Percent of Adults Who Report Trips		Percent of Adults Who Report Trips	
Destination	They Would Like to Take	Destination	They Would Like to Take
<u>Specific Destina-</u> <u>tions in the U.S.</u>	<u>60.6</u>	Utah	*
Alabama	0.8	Vermont	*
Arizona	0.4	Virginia	0.6
Arkansas	0.4	Washington	1.5
California	13.2	West Virginia	0.2
Colorado	1.7	Wisconsin	0.4
Connecticut	0.5	Wyoming	0.8
Delaware	*	District of Columbia	1.3
Florida	15.1	General	
Georgia	0.7	<u>Destinations in the U.S.</u>	<u>10.5</u>
Idaho	*	New England	0.4
Illinois	2.1	East	1.0
Indiana	0.2	North	0.6
Iowa	0.6	South	1.3
Kansas	0.3	West	2.7
Kentucky	0.4	Pacific Northwest	0.4
Louisiana	1.0	Pacific coast	1.6
Maine	0.3	A tour of the country	2.5
Maryland	0.4		
Massachusetts	0.4	<u>Foreign Destinations</u>	<u>16.6</u>
Michigan	1.6	Canada	2.3
Minnesota	0.4	Alaska	0.7
Mississippi	0.4	Mexico	1.8
Missouri	0.8	Europe	6.9
Montana	0.6	Asia	0.4
Nebraska	0.2	Africa	0.1
Nevada	0.5	Australia	0.1
New Hampshire	0.1	South America	0.4
New Jersey	0.6	Central America (ex-	
New Mexico	0.4	cept Mexico)	*
New York	4.1	Cuba	0.1
North Carolina	0.9	Hawaii	1.8
North Dakota	0.1	Caribbean	1.4
Ohio	1.4	World tour	0.6
Oklahoma	0.4	Other ("to the country")	0.5
Oregon	0.5	Does not mention des-	
Pennsylvania	0.4	tination	9.8
Rhode Island	*	Not ascertained	2.0
South Carolina	0.5	Total	100.0
South Dakota	0.5	Number of adults	1,142
Tennessee	1.1		
Texas	1.8		

* Less than .05 percent

The score for New York includes 0.9 percent who mentioned Niagara Falls.

The high scores for Florida and California are not likely to surprise students of the travel market. The position of New York State in third place is perhaps of more interest. It is also important to keep in mind that nearly every state is mentioned as a destination by some respondents.

Instead of mentioning a specific state, about ten percent of respondents refer to a region of the country. Of this group nearly half mention the West, the Pacific Northwest, or the Pacific coast. A few speak of a tour of the country.

The frequency of this type of answer raises the question of the difference between these people and those who say "California". For people living in the East, "a tour of the country" and "a trip to California" may mean the same thing. It is also possible that they want to visit California itself and not all the states between. The choice among air, rail, auto and bus travel may well depend on which it is that people really want. Further questioning would be necessary to determine how many people just want to visit California and how many want to tour the United States as far as California.

People who mention Florida, similarly, may possibly have in mind a tour covering the country between their homes and Florida. For most of the population, however, Florida is not the most distant state. And relatively few people mention the South as a general destination. It may well be that the attraction of Florida is more specifically an attraction to the state itself than is true of California.

Why is it that people do not take the trips they have in mind? The reason most frequently mentioned is money. More than six out of ten say, "Travel is too expensive." (Table IV-4) Expense is the greatest single obstacle to travel.

Although the cost of travel is important as a deterrent, people do spend money on all kinds of goods and services. Is there any special reason why they should not spend money on travel? The interviews did not pursue this point. They

Table IV-4

REASONS WHY PEOPLE DON'T GO ON THE TRIPS THEY WOULD LIKE TO TAKE

<u>Reason</u>	<u>Percent of Adults Who Report Trips They Would Like to Take</u>
Too expensive	62.1
Can't leave business or job	18.4
Lacks time; too busy; refers to activity other than his job	7.3
Too busy, not clear whether refers to job or other activities	6.0
Children or other dependents	12.1
Respondent or other member of family doesn't like to travel	16.6
Health reasons	7.4
Our car is too old	1.7
We are too old	1.5
Other	<u>7.1</u>
Total	140.2 ^{1/}
Number of adults	1,142

^{1/} Some respondents mentioned more than one reason

do contain some hints. For some people, travel certainly is prohibitively expensive. For example, there is the farmer with a cash income under \$1000 who reports that money is the biggest reason why he does not satisfy his desire to see our country from end to end. For others, the problem may be one of accumulating a large enough sum of money at one time. Once accumulated, savings may be kept for special purposes. They may constitute a reserve for emergencies, for the education of the children, and so forth. Thus, the problem for the travel industry is to encourage people to accumulate substantial sums in such a way that the money is set aside for travel. Of course, it also helps if the total cost can be kept down. This problem is similar to the problem met by retailers of consumer durables with a proliferation of all kinds of credit from the 30 day charge account to the revolving credit account.

After money, the second obstacle to travel is lack of time. Eighteen percent of the adults report that they can't leave their business or job. They have no vacation, or only a short one, or there is nobody to look after the store or the farm while they are away. People may lack time, also, because of their personal affairs. Seven percent refer to such problems as needing to spend their vacation painting the house. Six percent say they lack time but do not make it clear whether they refer to the demands of their business or of their personal affairs. Altogether, half as many people say they lack time as say they lack money.

The lack of time is relevant to the choice of destination. The trips people hope to take but do not take are likely to be trips to remote points like California and Florida. The trips they actually take are likely to be to points nearer home.

A third obstacle to travel is the presence of children and other dependents. Respondents comment that, "It's no fun to travel with young children." Anyone who has had the experience will be able to sympathize with this feeling. It is not obvious, however, that this situation is inevitable. Why is it difficult to

travel with children? Could it be made easier? The answers lie beyond the scope of this report, but it would be possible to interview mothers on the subject. Simply making women feel that they and their children were welcome on a common carrier might make a difference.

About one respondent in six who would like to take a trip mentions that some member of the family does not like to travel. A frequent observation is that the person's husband or wife would rather stay at home. It was noted above that one person out of three does not have any trip he would like to take. The people who do not want to travel may be married to people who do want to take trips. The result may be that neither one travels.

The fifth major reason people give for not taking trips is their health. They do not feel able to travel, or someone in the immediate family is unable to travel because of poor health. Pregnancy, similarly, may be mentioned as a reason for not taking a trip.

The five reasons for not travelling which people mention most often, thus, are money, time, dependents, health, and lack of desire to travel by some member of the family. Other reasons are mentioned, but only by a few people. Some comment that their car is too old, thus showing a tendency to think only in terms of travel by auto as well as suggesting that they find travel too expensive. Others say they are "too old", which may mean that their health is poor, or that they have lost interest in distant places. Other comments, made infrequently and not tabulated, refer to such points as safety, or to not having a driver's license.

The preceding analysis of reasons why people travel and do not travel can hardly be regarded as definitive. It was intended only to sketch out the area and suggest some of the points which might repay further investigation. Each of the five obstacles to travel could be studied more intensively. The question of why people do not want to travel, in particular, has hardly been touched.

V. The Most Recent Trip by Common Carrier

Both in the 1955 and the 1956 National Travel Market Surveys a series of questions were asked about respondents' most recent trips. In the 1955 Survey a trip by automobile was included if the most recent trip was by that mode. In the 1956 Survey only the most recent trip by common carrier was investigated. Trips by automobile were excluded except in a few instances in which a respondent traveled by auto and also by common carrier in the course of his most recent trip.

The discussion of the most recent trip by common carrier in this chapter is divided into three sections which concern, respectively, a description of some of the main facts about the most recent trip by common carrier, four factors which influence people's choice of mode, and what people say about their choice of mode.

Description of the Most Recent Trip by Common Carrier

Date: In 1956 the interviews were taken in three waves. This arrangement helped to spread through the year the date of the most recent trip. As shown in Table V-1, a large proportion of the trips covered in the spring survey were taken in the three months prior to and including the survey period, February, March, and April 1956. Similarly, a large proportion of the trips in the summer survey were taken in June, July, and August. For the fall survey, the peak months included October and November. The dates also reflect the fact that more people travel in the summer than in the winter. Thus, in the spring survey in early 1956 more people reported that their most recent trip had been in July or August 1955 than reported that their most recent trip had been in September or October 1955. It seems reasonable to assume that the trips covered in the survey as a whole are spread through the year well enough so that seasonal factors do not seriously distort the results.

Table V-1

Date of Most Recent Trip
(Percentage distribution of adults
who took a trip in the last 12 months)

<u>Date of Most Recent Trip</u>	<u>All Adults Who Took a Trip</u>				
	<u>1955</u>		<u>1956</u>		
	<u>Spring Survey</u>	<u>Fall Survey</u>	<u>Spring Survey</u>	<u>Summer Survey</u>	<u>Fall Survey</u>
June 1954	5.5				
July 1954	9.8				
August 1954	9.5				
September 1954	5.6				
October 1954	5.1				
November 1954	4.4	2.0			
December 1954	5.0	0.9			
January 1955	3.7	1.0			
February 1955	3.5	1.2			
March 1955	7.6	2.5			
April 1955	11.9	3.4	2.7		
May 1955	19.6	4.7	5.1		
June 1955	7.9	7.2	5.1		
July 1955		17.2	8.5		
August 1955		20.3	8.9	4.6	
September 1955		21.4	6.1	3.3	
October 1955		16.7	4.4	3.3	
November 1955		0.4	9.9	4.6	3.8
December 1955			7.2	6.2	3.8
January 1956			7.8	3.8	3.0
February 1956			13.0	8.7	4.2
March 1956			9.2	4.6	6.3
April 1956			9.6	10.8	3.8
May 1956			0.7	7.9	3.8
June 1956				15.8	11.9
July 1956				15.8	9.7
August 1956				9.2	13.1
September 1956				0.4	8.9
October 1956					10.6
November 1956					14.8
December 1956					0.8
Month not ascertained	0.9	1.1	1.7	0.8	1.3
Total	100.0	100.0	100.0	100.0	100.0
Number of adults	1232	1272	293	240	236

The question was: "When did you last take a trip to a place 100 or more miles away?"

(Where a trip involved more than one month, the month of completion is the month shown)

Purpose: Of all trips by common carrier, about two out of five are business trips. (See Table V-2) Slightly more than two out of five are trips whose purpose is vacation or pleasure. Only 16 per cent are in connection with people's personal affairs. (These estimates are weighted estimates, in which each respondent's most recent trip by common carrier is taken to represent all of his trips in the previous twelve months.)

These estimates are not to be confused with estimates in earlier sections of this report and in the 1955 report of the proportion of all trips which are taken in connection with people's businesses, vacations, and personal affairs. The statistics for all trips are heavily influenced by the large number of trips by auto, about four out of five of which are non-business trips. As noted above, only about three out of five trips by common carrier are non-business.

Table V-2

Purpose of Most Recent Trip by Common Carrier
(Percentage distribution of adults who took
a trip in the "last" 12 months)

(weighted distribution)

<u>Purpose of Trip ^{1/}</u>	<u>All Adults Who Took a Trip 1956</u>
<u>Vacation and pleasure travel</u>	<u>43.7</u>
To visit friends, relatives	21.0
To attend organized sports event, concert, other special event	2.1
No further information; other recreation; sightseeing; honeymoon	19.1
To attend convention (non-business)	1.5
<u>Business travel</u>	<u>40.5</u>
For employer (business, government)	17.2
By self-employed (business or professional man)	5.1
Not ascertained whether for employer or by self- employed	12.9
Convention or meeting	5.3
<u>Personal affairs</u>	<u>15.8</u>
Shopping trip	.2
Emergency, illness, death, to visit doctor or hospital	6.4
To and from school	.2
Moving to new home	.6
Escort or drive someone	.5
Other personal affairs	4.8
<u>Purpose not ascertained</u>	<u>3.1</u>
<u>Total</u>	<u>100.0</u>
<u>Number of adults</u>	<u>771</u>

^{1/} Includes only most important purpose of the trip even if there was also a secondary purpose.

Number of companions, by mode: About half of those who travel by common carrier travel alone. (See Table V-3) Of those who travel by auto, only 14 per cent travel alone. The data do not suggest any substantial changes between 1955 and 1956 in the proportion of those using each common carrier who travel alone. The variation between years shown in the table is small enough to be attributed to sampling error. About half of all air travelers travel without any companion, while about thirty per cent have a single companion. Somewhat less than half of the rail travelers are alone. Again, about thirty per cent have one companion. Finally, half of the travelers by bus on trips to points 100 miles away are alone. The 1956 Survey, in contrast to 1955, picked up a number of respondents whose last trip by bus was in a party of five or more. This difference between years may reasonably be attributed to random fluctuation rather than to a shift in bus patronage.

Table V-3

Number of Companions on "Most Recent"
Trip, by Mode of Travel ^{2/}
(Percentage distribution of adults who
took a trip in the last 12 months)

(weighted distribution)

Number of Companions	All Adults Who ^{3/} Took a Trip		Mode of Travel ^{1/}							
			Air		Rail		Bus		Auto	
	1955	1956	1955	1956	1955	1956	1955	1956	1955	1956
Went alone	18.9	50.7	53.0	51.5	41.0	45.4	47.8	57.6	11.0	
One companion	30.6	28.1	33.1	28.0	26.7	36.0	34.6	15.5	30.6	
Two companions	17.4	7.7	5.0	7.7	8.8	8.8	6.4	6.0	19.5	
Three companions	14.5	3.3	6.5	2.8	8.2	4.0	4.4	3.0	16.0	
Four companions	8.0	2.1		3.6	5.2	1.7	2.7	.2	8.9	
Five companions	3.9	2.0		.1	0.7	.5		7.4	4.6	
Six companions	1.6	.1	0.5	.1	8.8	.2	0.3	*	1.0	
Seven companions	1.5								1.8	
Eight companions	0.3								0.3	
Nine or more	1.1	3.5	1.4	2.0	0.2	1.2	2.4	9.7	1.0	
Not ascertained	2.2	2.5	0.5	4.2	0.4	2.2	1.4	.6	2.3	
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	
Number of adults	2510 ^{3/}									
Number of trips	823		274		337		212			

- 1/ Multiple mode trips, i.e., trips involving more than one mode, are not included in the statistics in this table for 1955.
 - 2/ Tables for 1955 include most recent trip by common carrier for those whose most recent trip of all was by auto. Thus some travelers appear under auto and also under rail, bus, or air. Tables for 1956 are for most recent trip by common carrier only. The question was: "Did anyone go with you? How many went besides yourself?"
 - 3/ The column for all adults who took a trip includes auto trips in 1955 but not in 1956.
- * Less than .05 per cent

Coach or first class, by mode: Of all air passengers about one out of five traveled by air coach in 1956 as in 1955. (See Table V-4)
About three out of five rail passengers traveled by coach.

Table V-4

Whether Traveled Coach or First Class, by Mode of Travel
on "Most Recent" Trip by Rail or Air
(Percentage distribution of adults who took
a trip in the last 12 months)

(weighted distribution)

<u>Accommodations</u>	All Adults Who Took a Trip		<u>Mode of Travel</u> ^{1/}			
			<u>Air</u>		<u>Rail</u>	
	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Coach	44.7	37.2	20.1	21.4	60.9	53.1
First class	49.3	57.5	69.9	74.0	36.3	40.8
Both	1.2	3.0	2.4	.8	0.1	5.2
Not ascertained	<u>4.8</u>	<u>2.3</u>	<u>7.6</u>	<u>3.8</u>	<u>2.7</u>	<u>.9</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	337					
Number of trips		612		272		340

Multiple mode trips, i.e., trips involving more than one mode, are not included in the statistics in this table for 1955

Place of ticket purchase: Both in 1955 and 1956 about one air traveler in five purchased his ticket from a travel agent. (See Table V-5) There seems to have been a decline, however, in the proportion of rail travelers who bought their tickets from a travel agent. Roughly seven per cent of rail passengers reported in 1956 that they bought their ticket from a travel agent. In 1955 the proportion was about 20 per cent. Only from five to 10 per cent of bus travelers report purchase from a travel agent.

Table V-5

Place of Ticket Purchase, by Mode of Travel If
"Most Recent" Trip Was by Common Carrier
 (Percentage distribution of adults whose most
 recent trip was by common carrier)

(weighted distribution)

<u>Place of Ticket Purchase</u>	All Adults Whose Most Recent Trip Was by Common Carrier		<u>Mode of Travel</u>					
			<u>Air</u>		<u>Rail</u>		<u>Bus</u>	
			<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Travel agent	18.9	10.6	22.3	18.2	19.7	6.5	10.6	4.8
Directly from common carrier	72.7	78.7	69.2	73.6	73.9	84.9	79.9	77.2
Other (military free pass)	5.7	6.7	8.1	5.5	4.9	8.1	2.3	6.5
Not ascertained	<u>2.7</u>	<u>4.0</u>	<u>0.4</u>	<u>2.7</u>	<u>1.5</u>	<u>.5</u>	<u>7.2</u>	<u>11.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	474							
Number of trips	822		275		339		208	

Frequency of all-expense tour packages: Both in 1955 and 1956 about two to three per cent of the trips by common carrier were all-expense tour packages. (See Table V-6) These proportions are about the same for each of the three modes as well as approximately constant from year to year.

Table V-6

Frequency of All Expense Tour Packages, by Mode of Travel
(Percentage distribution of adults who took a trip
by common carrier in the "last" 12 months)

(weighted distribution)

<u>Whether All Expense Tour Package</u>	<u>All Adults Who Took Trip</u>		<u>Mode of Travel^{1/}</u>					
			<u>Air</u>		<u>Rail</u>		<u>Bus</u>	
			<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>	<u>1955</u>	<u>1956</u>
Was all expense tour package	2.3	2.6	3.5	2.9	2.3	1.6	2.3	3.8
Was not all expense tour package	92.2	90.5	94.8	94.1	93.6	95.4	85.6	76.6
Not ascertained	<u>5.5</u>	<u>6.9</u>	<u>1.7</u>	<u>3.0</u>	<u>4.1</u>	<u>3.0</u>	<u>12.1</u>	<u>19.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	2259							
Number of trips	823		274		340		209	

^{1/} Multiple mode trips, i.e., trips involving more than one mode, are not included in the tables for 1955. The question was: "Was it one of these all expense tour packages?"

Four Factors Influencing Choice of Mode

While the purpose of the first part of this chapter was to describe certain aspects of common carrier travel, the purpose of this section is to attempt to answer a question: what determines whether an individual will travel by air, rail or bus? The factors whose influence is discussed are the distance of the trip, its purpose, the income of the traveler, and the number of people traveling together. A later section considers the advantages and disadvantages of the different modes as people see them.

Distance: The common carrier which a person will select for a given trip depends in part on how far away is his destination. (See Table V-7) The farther he is going, the more likely the traveler is to fly. For trips to a destination 1000 or more miles away, nearly two out of three travelers took a plane. For trips to a destination under 500 miles away, only about one in four took a plane.

The proportions in Table V-7 and the following tables are unweighted. Thus, the most recent trip by a frequent traveler is counted once, just like the most recent trip by a person who took only one trip last year. The reason for this approach is the shift to emphasis on causes. We are not primarily concerned here with the number of observations we have of trips over 1000 miles, nor with the proportion of all trips which are of that length. We are concerned with the probability that a common carrier trip of that length will be by a given mode.

The probability that a given trip will be by rail also varies with its length. Of trips from 100-499 miles, 47 per cent are by rail; of

trips from 500-999 miles, 43 per cent; and of trips of 1000 miles or more, 37 per cent. Thus, the likelihood that rail will be used declines somewhat with distance.

For bus travel the effect is much stronger. The probability that a given trip will be entirely by bus (or partly by bus) is .36 if the trip is under 500 miles, but only .13 if the trip is over 1000 miles.

Trips of any distance, and especially longer trips, may involve more than one mode. Auto trips are included in Table V-7 if the most recent trip by common carrier also involved some travel by auto. Questions were not asked about the nature of the use of auto, but presumably in some instances an auto was used to reach a terminal while in others a person made one leg of a journey as a member of a party traveling by car.

Table V-7

Determinants of Choice of Mode: Distance
(Unweighted percentage distribution based
on most recent trip by common carrier)

<u>Mode Used</u>	<u>All Distances</u>	<u>Distance of Trip</u>		
		<u>100-499 Miles</u>	<u>500-999 Miles</u>	<u>1000 or more Miles</u>
Air	35.9	23.8	41.6	62.6
Rail	44.3	46.9	42.9	37.4
Bus	27.7	36.3	20.5	12.9
Auto ^{1/}	9.9	10.1	7.5	11.7
Other	<u>1.7</u>	<u>.5</u>	<u>-</u>	<u>6.7</u>
Total	119.5	117.6	112.5	131.3
Number of Adults	766	424	161	163

^{1/} Auto may be used in addition to common carrier.

Purpose: The choice of common carrier depends on the purpose of the trip as well as on the distance to be covered. In Table V-8 trips are classified both by purpose and distance. If only trips under 500 miles are considered, the probability that a trip will be by air is .47 for business travel and only .16 or .17 for vacation and pleasure travel or travel on personal affairs. Business trips also are more likely to be by air than trips for other purposes if the trip is to a point 500-999 miles away, or if it is to a point 100 miles or more away.

For rail travel the findings are quite different. The probability that a trip will be by rail does not depend to any appreciable extent on the purpose of the trip if the distance is under 1000 miles. Over 1000 miles, however, the probability that a trip will be by rail is much smaller if the trip is on business than if it is for non-business reasons. The relative advantage of air travel seems to be at its greatest for business trips to points 1000 miles away and more.

For bus travel the pattern is different from that for either rail or air. Of trips under 500 miles on business, only about 14 per cent are by bus. Of trips under 500 miles for non-business reasons, however, almost half are by bus. The popularity of bus travel falls sharply with distance. Of the trips of 500-999 miles for non-business reasons, only about 25 per cent involve a bus. Of the trips 500-999 miles for business reasons, less than one in ten involves bus travel. Of trips of 1000 miles or over, relatively few are by bus regardless of purpose.

The data indicate little difference between travel on vacation and pleasure and travel on personal affairs as far as the choice of mode is concerned. The major difference is between business and non-business

travel. This result is reassuring, since the first part of this report makes much of the differences between business and non-business travel but draws no further distinctions based on the purpose of the trip.

Table V-8

Determinants of Choice of Mode: Distance and Purpose
 (Unweighted percentage distribution based
 on most recent trip by common carrier)

<u>Mode Used</u>	<u>All Trips</u>	<u>100-499 Miles</u>			<u>500-999 Miles</u>			<u>1000 Miles or More</u>		
		<u>Vacation & Personal Pleasure</u>	<u>Affairs</u>	<u>Business Travel</u>	<u>Vacation & Personal Pleasure</u>	<u>Affairs</u>	<u>Business Travel</u>	<u>Vacation & Personal Pleasure</u>	<u>Affairs</u>	<u>Business Travel</u>
Air	35.9	16.7	17.6	46.9	35.4	39.3	59.5	62.3	46.4	82.1
Rail	44.3	46.4	51.3	44.9	42.7	46.4	40.5	45.3	35.7	10.7
Bus	27.7	42.1	45.9	14.3	24.0	25.0	8.1	14.2	14.3	3.6
Auto	9.9	9.9	10.8	10.2	5.2	10.7	10.8	10.4	14.3	10.7
Not ascertained	<u>1.7</u>	<u>.8</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>.7</u>	<u>3.6</u>	<u>10.7</u>
Total	119.5	115.9	125.6	116.3	107.3	121.4	118.9	132.9	114.3	117.8
Number of adults	766	252	74	98	96	28	37	106	28	28

Income: Since both distance and purpose have been shown to influence choice of mode, the effect of income on choice of mode can be isolated only if the effects of distance and purpose are somehow held constant. The size of the sample, however, is limited. In Table V-9 only trips for vacation and pleasure are considered. Thus, the purpose of travel is the same for all trips in the table. The trips are divided according to the distance covered and the family income of the traveler.

The individual proportions in this table considered separately are of doubtful meaning because of the small size of the numbers on which the columns are based. But, considered as a whole, the table demonstrates unequivocally the importance of income in determining choice of mode. For trips under 500 miles by common carrier, the probability that air will be used rises from one per cent for those travelers with incomes below \$3000 to 61 per cent for those with incomes over \$10,000. At any income level, the proportion who use air rises with distance. At any distance, the proportion who use air rises with income. At distances of 1000 miles or more, four out of five common carrier trips by those with incomes over \$6,000 include air travel.

For rail travel on vacation or pleasure the findings are more complex. For trips under 500 miles, it appears that the probability of using rail rises slightly as income increases from under \$3,000 to the range from \$3,000 to \$9,999, and then declines slightly as income rises over \$10,000. The exact shape of this relationship is not certain, however, because of the limited number of observations. Similar uncertainty attaches to the effect of income for trips of 500-999 miles, where the most probable pattern seems to be that for incomes up to about \$6,000 the

Table V-9

Determinants of Choice of Mode: Distance and Income, for Vacation and Pleasure Trips Only
 (Unweighted percentage distribution based on most recent trip by common carrier)

Mode Used	All Distances ^{2/}	100-499 Mile Trip					500-999 Mile Trip					1000 Mile Trip or More				
		Family Income					Family Income					Family Income				
		Under \$3000	\$3000-5999	\$6000-9999	\$10,000 & Over	All Incomes	Under \$3000	\$3000-5999	\$6000-9999	\$10,000 & Over	All Incomes	Under \$3000	\$3000-5999	\$6000-9999	\$10,000 & Over	All Incomes
Air	31.2	1.4	14.4	25.0	60.9	16.7	10.7	31.2	52.6	*	35.4	41.7	48.0	75.0	85.7	62.3
Rail	45.8	41.4	49.5	46.2	39.1	46.4	50.0	50.0	36.8	*	42.7	66.7	48.0	34.4	23.8	45.3
Bus	31.6	62.9	43.3	33.8	4.3	42.1	42.9	18.8	10.5	*	24.0	33.3	8.0	3.1	9.5	14.2
Auto ^{1/}	9.4	7.1	11.3	11.5	13.0	9.9	3.6	3.1	10.5	*	5.2	12.5	4.0	6.2	23.8	10.4
N.A.	2.0	-	1.0	-	4.3	.8	-	-	-	*	-	12.5	-	-	9.5	.5
Total	120.0	112.8	119.5	113.5	121.6	115.9	107.2	103.1	110.4	*	107.3	166.7	108.0	118.7	152.3	132.7
Number of Adults	459	70	97	52	23	252	28	32	19	11	96	24	25	32	21	106

* Too few cases to be percentagised.

^{1/} Auto may be used in addition to common carrier.

^{2/} Distance not ascertained

probability that an individual will use rail appears constant at around 50 per cent. Over that income level, there seems to be a decline in the probability of using rail. For trips of 1000 miles or more, however, the results again show a powerful income effect. The higher a person's income, the smaller the chance that he will travel by rail to a destination 1000 miles or more away.

For bus travel the effects of income and distance are clearcut. At any distance, the larger a person's income the smaller the chance he will go by bus. At any income, the greater the distance the smaller the chance a person will go by bus.

All of the above findings, it should be remembered, refer to vacation and pleasure trips by common carrier. The choice between auto and common carrier is not under study here.

Another way to "hold constant" the effects of both distance and purpose so as to reveal the income effect is to restrict consideration to trips under 500 miles. This method is used in Table V-10, and it permits study of the effect of income on choice of mode for trips on personal affairs and on business. The results are consistent with those just described. The higher one's income, the more likely he is to travel by air and the less likely he is to travel by bus for any purpose (for distances under 500 miles). For rail travel the effect of income is minor for trips under 500 miles. That is, the probability that a person will choose to travel by rail instead of by one of the other common carriers is not strongly influenced by his income.

Table V-10

Determinants of Choice of Mode: Purpose and Income, for Trips Under 500 Miles Only

(Unweighted percentage distribution based on most recent trip by common carrier)

<u>Trips Under 500 Miles Only</u>										
<u>Mode Used</u>	<u>Total</u>	<u>Purpose of Trip</u>								
		<u>Vacation & Pleasure Travel</u>			<u>Personal Affairs</u>			<u>Business Travel</u>		
		<u>Income</u>			<u>Income</u>			<u>Income</u>		
		<u>Under \$6000</u>	<u>\$6000- 9999</u>	<u>\$10,000 & over</u>	<u>Under \$6000</u>	<u>\$6000- 9999</u>	<u>\$10,000 & over</u>	<u>Under \$6000</u>	<u>\$6000- 9999</u>	<u>\$10,000 & over</u>
Air	23.8	9.0	25.0	60.9	11.5	37.5	*	20.0	57.9	54.3
Rail	46.9	46.1	46.2	39.1	48.1	68.8	*	52.0	34.2	51.4
Bus	36.3	51.5	30.8	4.3	53.8	18.8	*	40.0	10.5	-
Auto	10.1	9.6	11.5	13.0	13.5	6.2	*	12.0	7.9	11.4
N. A.	.5	.6	-	4.3	-	-	*	-	-	-
Total	117.6	116.8	123.5	121.6	126.9	131.3	*	124.0	110.5	117.1
Number of Adults	424	167	52	23	52	16	3	25	38	35

* Number of cases is too small to be significant

Number of Companions: The 1955 National Travel Market Survey showed that when two or more people go on a trip, the overwhelming probability is that they will travel by car. The contrast between travel by auto and by common carrier is shown in Table V-3 above. But is there any difference in the probability that a person will select one common carrier rather than another depending on whether he is traveling alone?

Table V-11 shows the influence of income, distance, and whether a person is traveling alone on his choice of mode. Income and distance are important, as previously discussed. Whether a person is alone, however, does not seem to influence his choice of common carrier.

Interest in the number of people who travel together, therefore, stems from interest in the choice between auto and common carrier rather than the choice among common carriers. It is of interest, also, because of its relation to the success of the family plan as a device for increasing travel and because the total number of passengers may be influenced by the number of people who go along on a trip. The succeeding three tables, V-12, V-13, and V-14, analyze the factors which determine how many companions a traveler has.

People are more likely to have company on long trips than on short ones. (Table V-12) About half of those traveling to points under 500 miles away have a companion. Over sixty per cent of those traveling to points more than 500 miles away have company.

The purpose of the trip also makes a difference. (See Table V-13) Six out of ten traveling on business are alone. Those traveling on their personal affairs are somewhat more likely to have company. Two people out of three who are traveling for pleasure have company. These similar

statements apply when distance is taken into account. For example, for trips to points under 500 miles away, only 40 per cent of those traveling for pleasure are alone, compared to 54 per cent of those traveling on their personal affairs, and about 62 per cent of those traveling on business.

Income also is related to how many people travel together on trips for pleasure. (See Table V-14) If only vacation and pleasure travel is considered, the proportion of travelers who are alone falls from 51 per cent of those in the income group under \$3000 to 14 per cent of those in the income group over \$10,000. Many of the solitary travelers in the low income groups may be single people. These results suggest that family plan rates may be of special interest to people with substantial incomes.

Table V-11

**Trends in Determinants of Choice of Mode:
Income, Distance, and Number of Companions¹**
(Percentage distribution of adults)

Family Income
Distance of Trip
Number of Companions

Mode	All Incomes							
	Under 500 miles				500 miles or over			
	Alone		Not alone		Alone		Not alone	
	1955	1956	1955	1956	1955	1956	1955	1956
Air	19.0	27.0	13.5	18.5	46.3	36.9	43.7	54.5
Rail	41.7	38.4	48.2	48.0	37.2	41.8	42.0	35.6
Bus	39.3	34.6	38.3	33.5	16.5	21.3	14.3	9.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of trips	242	211	251	221	121	122	181	202

Mode	Under \$3000							
	Under 500 miles				500 miles or over			
	Alone		Not alone		Alone		Not alone	
	1955	1956	1955	1956	1955	1956	1955	1956
Air	2.5	2.0	6.2	*	(2)	(2)	(2)	25.0
Rail	29.6	33.3	36.9	48.1	(2)	(2)	(2)	47.5
Bus	67.9	64.7	56.9	51.9	(2)	(2)	(2)	27.5
Total	100.0	100.0	100.0	100.0	(2)	(2)	(2)	100.0
Number of trips	81	51	65	52	36	37	24	40

Mode	\$3000 - \$999							
	Under 500 miles				500 miles or over			
	Alone		Not alone		Alone		Not alone	
	1955	1956	1955	1956	1955	1956	1955	1956
Air	15.9	23.6	11.6	9.3	51.1	(2)	29.2	48.9
Rail	50.0	40.3	49.0	48.8	31.9	(2)	52.3	42.6
Bus	34.1	36.1	39.4	41.9	17.0	(2)	18.5	8.5
Total	100.0	100.0	100.0	100.0	100.0	(2)	100.0	100.0
Number of trips	88	72	104	86	47	37	65	47

Table V-11
Continued

Family Income
Distance of Trip
Number of Companions

Mode	\$6000 - 9999							
	Under 500 miles				500 miles or over			
	Alone		Not alone		Alone		Not alone	
	1955	1956	1955	1956	1955	1956	1955	1956
Air	32.6	39.3	18.0	33.3	(2)	(2)	50.0	66.1
Rail	47.8	37.5	56.0	48.2	(2)	(2)	40.5	29.0
Bus	19.6	23.2	26.0	18.5	(2)	(2)	9.5	4.9
Total	100.0	100.0	100.0	100.0	(2)	(2)	100.0	100.0
Number of trips	46	56	50	54	22	27	42	62

Mode	\$10,000 and over							
	Under 500 miles				500 miles and over			
	Alone		Not alone		Alone		Not alone	
	1955	1956	1955	1956	1955	1956	1955	1956
Air	(2)	(2)	(2)	(2)	(2)	(2)	70.0	67.9
Rail	(2)	(2)	(2)	(2)	(2)	(2)	26.0	28.3
Bus	(2)	(2)	(2)	(2)	(2)	(2)	4.0	3.8
Total	(2)	(2)	(2)	(2)	(2)	(2)	100.0	100.0
Number of trips	27	32	26	29	16	28	50	53

1/ Based on the most recent trip by common carrier.

2/ Columns totaling less than 40 trips not percentagised.

* Less than .05 per cent.

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Table V-12

Determinants of Number of Companions: Distance of Trip
(Unweighted percentage distribution based on
most recent trip by common carrier)

<u>Number of Companions</u>	<u>Distance of Trip</u>			
	<u>All Distances</u>	<u>Under 500 Miles</u>	<u>500-999 Miles</u>	<u>1000 Miles or More</u>
Went alone	42.7	47.6	37.3	33.7
One	34.0	30.9	40.4	40.5
Two	9.7	8.7	13.0	9.2
Three	3.6	2.4	3.7	7.4
Four	2.9	2.6	2.5	4.3
Five	.8	.9	.6	*
Six	.3	.5	*	**
Seven	*	*	*	*
Eight	*	*	*	*
Nine or more	2.6	4.2	*	1.2
N. A.	<u>3.4</u>	<u>2.2</u>	<u>2.5</u>	<u>3.7</u>
Total	100.0	100.0	100.0	100.0
Number of cases	770	424	161	163

* Less than .05 per cent.

Table V-13

Determinants of Number of Companions: Purpose of Trip and Distance
 (Unweighted percentage distribution based on
 most recent trip by common carrier)

Number of Compan- ions	All Distances			100-499 Miles			500-999 Miles			1000 Miles and over		
	Vacation and Pleasure Travel	Per- sonal Affairs Travel	Bus- iness Travel	Vacation and Pleasure Travel	Per- sonal Affairs Travel	Bus- iness Travel	Vacation and Pleasure Travel	Per- sonal Affairs Travel	Bus- iness Travel	Vacation and Pleasure Travel	Per- sonal Affairs Travel	Bus- iness Travel
Went Alone	35.4	50.0	58.5	40.0	54.0	62.3	29.2	46.4	51.4	28.3	39.3	50.0
One	38.8	33.2	22.4	33.7	37.8	18.4	50.0	25.0	27.0	43.4	32.1	35.6
Two	11.0	9.1	6.5	10.3	5.4	7.1	15.6	10.7	8.1	8.5	17.9	3.6
Three	4.7	2.3	1.8	3.6	1.4	*	1.0	7.1	8.1	11.3	*	*
Four	2.9	3.0	2.4	3.2	1.4	2.0	2.1	3.6	2.7	3.8	7.1	3.6
Five	1.3	.8	*	1.6	*	*	*	3.6	*	*	*	*
Six	.2	*	.6	.4	*	1.0	*	*	*	*	*	*
Seven	*	*	*	*	*	*	*	*	*	*	*	*
Eight	*	*	*	*	*	*	*	*	*	*	*	*
Nine or More	3.1	*	3.0	5.6	*	4.1	*	*	*	.9	*	3.6
N. A.	<u>2.6</u>	<u>1.6</u>	<u>4.8</u>	<u>1.6</u>	<u>*</u>	<u>5.1</u>	<u>2.1</u>	<u>3.6</u>	<u>2.7</u>	<u>3.8</u>	<u>3.6</u>	<u>3.6</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of cases	447	132	169	252	74	98	96	28	37	106	28	28

* Less than .05 per cent

-135-
Table VII

Determinants of Number of Companions: Income (for Vacation
and Pleasure Travel) for all Distances Combined.
(Unweighted percentage distribution based on
most recent trip by common carrier)

Vacation and Pleasure Travel (all Distances)

<u>Number of Companions</u>	<u>Family Income</u>				
	<u>All Incomes</u>	<u>Under 3000</u>	<u>3000- 5999</u>	<u>6000- 9999</u>	<u>10,000 & Over</u>
Went alone	35.5	51.2	35.1	29.8	14.3
One	38.7	31.2	36.4	48.0	44.6
Two	11.0	8.8	12.3	7.7	16.1
Three	4.7	2.4	3.2	7.7	8.9
Four	2.9	1.6	2.6	2.9	7.1
Five	1.3	*	2.6	1.0	*
Six	.2	*	.7	*	*
Seven	*	*	*	*	
Eight	*	*	*	*	*
Nine or more	3.1	1.6	4.5	1.9	5.4
N. A.	<u>2.6</u>	<u>3.2</u>	<u>2.6</u>	<u>1.0</u>	<u>3.6</u>
Total	100.0	100.0	100.0	100.0	100.0
Number of cases	447	125	154	104	56

* Less than .05 per cent.

What People Say About Their Choice of Mode

People were asked how they happened to choose the way of traveling which they used instead of some other. This question was identical in phrasing with a question in the 1955 Survey. This year, as last, it is possible to tabulate the spontaneous mentions of modes people thought of but did not use. This year, however, only the most recent trip by common carrier was investigated. Hence, a tabulation of modes spontaneously mentioned but not used refers to modes discussed but given up in favor of a common carrier.

Of those who mentioned air but did not travel by air, 82 per cent went by rail (See Table V-15). Of those who mentioned rail but used another mode, twice as many went by bus as by air. Of those who mentioned bus but did not use the bus, 85 per cent went by rail. These results suggest that rail is "in the middle" between air and bus. People ordinarily choose between air and rail or between rail and bus, not between air and bus.

Of special interest are the results for auto, since by far the largest proportion of all trips are by auto. Which of the common carriers most successfully draws people from auto travel? Of those who mentioned auto but actually went by common carrier, 53 per cent went by rail.

An alternative approach to the problem of why people select one mode in preference to another is to study the reasons they give for their selection. This method is used in the following sections of this report, which take up air, rail, bus, and auto in that order.

Table V-15

Modes Spontaneously Mentioned by Adults in Discussing
Their Choice of Mode for Their Most Recent Trip

<u>Mode Used</u>	<u>Modes Spontaneously Mentioned, But Not Used</u>			
	<u>Air</u>	<u>Rail</u>	<u>Bus</u>	<u>Auto</u> ^{1/}
Air		36.8	15.1	19.4
Rail	82.4		84.9	53.2
Bus	17.6	63.2		27.4
Total	100.0	100.0	100.0	100.0
Number of trips	136	106	86	139

^{1/} Respondents in this column mentioned auto but used a common carrier.

Advantages and disadvantages of air: Although the questions about choice of mode were identical in the fall of 1955 and 1956, the context of the questions was changed, as noted above. In 1956 the advantages and disadvantages of air were discussed in a context of a trip which actually was by common carrier. For air travel this shift in context proved to make some difference in the results. (See Table V-16) For other modes, as noted below, this change in context was even more important.

In 1956 as in 1955 the great advantage of air travel was its speed. Comfort and service also are mentioned frequently. Fear of flying and expense remain as two disadvantages frequently mentioned. Problems of the location of the terminal and of scheduling are mentioned less often in 1956 than in 1955. The reason, presumably, is the shift in context noted above. In 1955 the plane often was being compared to an auto, whereas in 1956 it was being compared to other common carriers. Difficulties of scheduling and of reaching terminals exist of course for all common carriers. The plane does not compare to other carriers as unfavorably in these respects as to the auto.

Whether people mention air at all and which advantages and disadvantages they discuss depend on the factors which influence whether they travel by air. About 70 per cent of those who took a business trip discuss air as a possible mode compared to roughly 40 per cent of those who traveled for other purposes. The advantage mentioned most often by business travelers was speed. (Table V-17) Fewer travelers for other purposes discuss air, but those who do mention speed more than any other advantage. As distance increases, the proportion mentioning air and the

Table V-16

**Advantages and Disadvantages of Air for the Most
Recent Trip**

(Percentage distribution of advantages and disadvantages)

<u>Advantages and Disadvantages of Air</u>	<u>Per cent of All Advantages and Disadvantages of Air</u>	
	<u>Fall 1955^{2/}</u>	<u>1956^{3/}</u>
<u>Advantages of Air</u>		
Cheaper	8.0	6.2
Safer	0.7	1.5
Faster	39.9	45.2
Comfortable, restful, good passenger facilities (e.g. meals)	6.5	12.6
Special event (e.g. honeymoon); adventure; wanted to see what it was like	2.9	2.8
Good (better) connections:		
Planes go more places	0.7	1.3
Planes go at the right times	0.7	0.4
Planes connect well with one another ^{2/}	*	0.9
Planes connect well with other modes	*	*
Good connections: no further information	*	0.9
Convenient (no further information)	6.5	7.0
<u>Disadvantages of Air</u>		
(Too) expensive	8.7	4.4
Respondent or members of his family object to or fear flying	7.3	7.2
Planes are not dependable in bad weather	*	1.1
Bad connections:		
Planes don't go to right places, enough places; are badly scheduled for reasons of destination	3.6	0.4
Planes don't go at right times; are badly scheduled for reasons of timing	*	1.3
Planes connect badly with one another ^{1/}	0.7	0.4
Planes connect badly with other modes	*	0.2
Hard to get to a plane; terminals are inconveniently located	8.0	3.1
Bad connections: no further information	2.2	0.9
<u>Other advantages and disadvantages</u>	<u>3.6</u>	<u>2.2</u>
Total	100.0	100.0
Number of adults who discussed air	104	370

- ^{1/} Includes responses for which it was unclear whether the respondent's reference was to connections with other planes or to connections with other modes.
- ^{2/} All advantages and disadvantages in this column were mentioned by respondents in discussing their most recent trip, whether common carrier or auto. The question was: "How did you happen to choose this way of traveling instead of some other?"
- ^{3/} All advantages and disadvantages in this column were mentioned by respondents in discussing their most recent trip by common carrier only.
- * Less than .05 per cent.

Table V17

Advantages and Disadvantages of Air for the Most Recent Trip by Common Carrier by Distance and Purpose 1/

	All Distances				100 - 499 Miles			
	Vacation & Pleasure	Personal Affairs	Business	Total	Vacation & Pleasure	Personal Affairs	Business	Total
<u>Discussed air</u>	<u>42.3</u>	<u>40.9</u>	<u>69.8</u>	<u>47.9</u>	<u>25.0</u>	<u>27.0</u>	<u>64.3</u>	<u>34.4</u>
<u>Advantages</u>								
Expense	3.7	3.8	7.1	4.4	2.8	1.4	5.1	3.1
Safety	.9	-	2.4	1.0	-	-	2.0	.5
Convenience								
Speed	25.9	22.0	52.7	30.8	9.9	10.8	44.9	18.2
Good connections	.4	2.3	-	.6	-	-	-	-
Comfortable, restful, good facilities	8.9	5.3	12.4	9.0	4.8	2.7	11.2	5.9
Convenient	3.7	4.5	8.9	4.9	1.2	-	8.2	2.6
Miscellaneous	2.6	.8	1.2	1.9	1.2	-	2.0	1.2
<u>Disadvantages</u>								
Too expensive	4.4	1.5	1.8	3.2	2.4	1.4	1.0	1.9
Bad connections	-	-	1.8	.5	-	-	2.0	.5
Afraid of flying	5.0	7.6	2.4	5.1	4.4	8.1	3.1	4.7
<u>Other advantages and disadvantages</u>	<u>7.0</u>	<u>9.1</u>	<u>15.4</u>	<u>8.8</u>	<u>5.2</u>	<u>8.1</u>	<u>17.3</u>	<u>8.5</u>
<u>No discussion of air</u>	<u>57.7</u>	<u>59.1</u>	<u>30.2</u>	<u>52.1</u>	<u>75.0</u>	<u>73.0</u>	<u>35.7</u>	<u>65.6</u>
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of respondents	459	132	169	770	252	74	98	424

1/ Detail will not add to sub-totals because respondents might make several comments.

Table VI7 Advantages and Disadvantages of Air for the Most Recent Trip by Common Carrier by Distance and Purpose^{1/}

	<u>500-999 Miles</u>				<u>1000 Miles & Over</u>			
	<u>Vacation & Pleasure</u>	<u>Personal Affairs</u>	<u>Business</u>	<u>Total</u>	<u>Vacation & Pleasure</u>	<u>Personal Affairs</u>	<u>Business</u>	<u>Total</u>
<u>Discussed air</u>	<u>50.0</u>	<u>60.7</u>	<u>70.3</u>	<u>56.5</u>	<u>75.5</u>	<u>60.7</u>	<u>89.3</u>	<u>74.8</u>
<u>Advantages-</u>								
Expense	3.1	-	10.8	4.3	6.6	14.3	10.7	8.6
Safety	-	-	-	-	3.8	-	7.1	3.7
Convenience								
Speed	33.3	32.1	51.4	37.3	56.6	42.9	82.1	58.3
Good connections	1.0	7.1	-	1.9	.9	3.6	-	1.2
Comfortable, restful, good facilities	10.4	3.6	8.1	8.7	17.9	14.3	25.0	18.4
Convenient	8.3	14.3	10.8	9.9	5.7	7.1	10.7	6.7
Miscellaneous	4.2	-	-	2.5	4.7	3.6	-	3.7
<u>Disadvantages</u>								
Too expensive	4.2	-	2.7	3.1	7.5	3.6	3.6	6.1
Bad connections	-	-	2.7	.6	-	-	-	-
Afraid of flying	6.2	10.7	2.7	6.2	5.7	3.6	-	4.3
<u>Other advantages and disadvantages</u>	<u>9.4</u>	<u>10.7</u>	<u>13.5</u>	<u>10.6</u>	<u>8.5</u>	<u>10.7</u>	<u>10.7</u>	<u>9.2</u>
<u>No discussion of air</u>	<u>50.0</u>	<u>39.3</u>	<u>29.7</u>	<u>43.5</u>	<u>24.5</u>	<u>39.3</u>	<u>10.7</u>	<u>25.2</u>
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>Number of respondents</u>	<u>96</u>	<u>28</u>	<u>37</u>	<u>161</u>	<u>106</u>	<u>28</u>	<u>28</u>	<u>163</u>

^{1/} Detail will not add to sub-totals because respondents might make several comments.

proportion mentioning speed both tend to increase.

Fear of flying seems to be less important in business travel than in non-business travel. It is mentioned less frequently in that context, though the results are not firm from a statistical point of view. But it is tempting to speculate that business travelers tend to be frequent travelers, and hence, to have lost their fear of flying through familiarity. Or, if the fear persists, they have pushed it below the surface of their minds.

Expense, naturally enough, seems to be mentioned more often in connection with vacation or pleasure travel than in connection with trips on business or on personal affairs.

Income influences whether people discuss air travel for vacation and pleasure trips. The higher the income and the longer the pleasure trip the more likely people are to mention speed, and also, the more likely they are to mention comfort. (See Table V-18) People in the lower income groups are unlikely to mention air travel as a possibility, especially for short trips.

Table V-18

**Advantages and Disadvantages of Air for the Most Recent
Trip by Common Carrier: Vacation and Pleasure Trips Under 1000 Miles ^{1/}**
(by family income)

	Vacation & Pleasure Travel 100-499 Miles				Vacation & Pleasure Travel 500-999 Miles			
	Under \$3000- \$3000	\$3000- 5999	\$6000 & over	All Incomes	Under \$3000- \$3000	\$3000- 5999	\$6000 & over	All Incomes
<u>Discuss air</u>	11.4	20.6	46.7	25.0	25.0	43.8	76.7	50.0
<u>Advantages</u>								
Cheaper by air	1.4	*	6.7	2.8	*	6.2	3.3	3.1
Safety	*	*	*	*	*	*	*	*
Speed	2.9	10.3	30.7	9.9	10.7	28.1	56.7	33.3
Good connections	*	*	*	*	*	*	3.3	1.0
Comfortable, restful, good facilities	1.4	3.1	10.7	4.8	3.6	6.2	20.0	10.4
Convenient	*	2.1	1.3	1.2	7.1	3.1	13.3	8.3
Miscellaneous	*	1.0	2.7	1.2	*	6.2	6.7	4.2
<u>Disadvantages</u>								
Too expensive	1.4	4.1	*	2.4	*	9.4	3.3	4.2
Bad connections	*	*	1.3	*	*	*	*	*
Afraid of flying	4.3	3.1	6.7	4.4	10.7	*	10.0	6.2
<u>Other advantages and disadvantages</u>	2.9	1.0	13.3	5.2	*	3.1	20.0	9.4
<u>No discussion of air</u>	88.6	79.4	53.3	75.0	75.0	56.2	23.3	50.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	70	97	75	252	28	32	30	96

^{1/} Detail will not add to subtotals because respondents might make several comments

* Less than .05 per cent.

Advantages and disadvantages of rail: In 1956 as in 1955 the advantage of rail most often mentioned was comfort and good passenger facilities. (See Table V-19) Speed, low price, and safety also received favorable mentions.

Problems of trains not going to the right destinations at the right times and of stations being inconveniently located were mentioned less often in 1956 than in 1955. The explanation is similar to that mentioned in the discussion of air travel. In 1956 rail travel was discussed by people all of whom went by common carrier on the trip in question, while in 1955 some of the respondents answering this question had chosen to travel by auto.

About half of all respondents discuss rail in connection with common carrier trips under 1000 miles regardless of purpose. (See Table V-20) For trips over 1000 miles, people are more likely to mention rail if the trip is not on business. These results are consistent with the actual pattern of choices shown in Table V-8. It seems to be true that the advantages and disadvantages of rail which people mention do not shift depending on length of trip or purpose of trip.

The probability that people will discuss rail in connection with a pleasure trip is influenced by their income. (See Table V-21) In this table all distances are considered together, an arrangement which seems justified in the light of the absence of any pronounced effect of distance in Table V-20. All advantages and disadvantages are mentioned less frequently by high income people, since fewer of them discuss rail.

Table V-19

Advantages and Disadvantages of Rail for the Most Recent Trip

(Percentage distribution of advantages and disadvantages)

<u>Advantages and Disadvantages of Rail</u>	<u>Per Cent of All Advantages and Disadvantages of Rail</u>	
	<u>Fall 1952^{1/}</u>	<u>1956^{3/}</u>
<u>Advantages of Rail</u>		
Cheaper	9.6	9.8
Free pass	4.2	6.2
Safer	4.6	8.6
Faster	7.9	12.5
Comfortable, restful; good passenger facilities (e.g. rest rooms, diner, club car)	17.9	23.8
Enjoy the scenery; sightseeing	3.3	3.0
Good (better) connections:		
Trains go to more places	3.3	3.0
Trains go at the right times	0.8	3.4
Trains connect well with one another ^{2/}	1.2	0.4
Trains connect well with other modes		0.2
Trains are easy (easier) to reach; stations are conveniently located	0.8	3.0
Good connections: no further information	1.2	2.8
Convenient (no further information)	6.3	9.9
<u>Disadvantages of Rail</u>		
Trains are slow		
Bad connections: trains don't go to right places, enough places; are badly scheduled for reasons of destination	16.7	3.4
Trains don't go at right times; are badly scheduled for reasons of timing	5.0	2.8
Trains connect badly with one another ^{1/}	3.3	0.4
Trains connect badly with other modes		*
Bad connections: no further information	4.2	2.0
Hard to get to a train; stations are incon- veniently located	6.3	1.0
<u>Other advantages and disadvantages</u>	<u>3.4</u>	<u>3.8</u>
Total	100.0	100.0
Number of adults who discussed rail	200	364
Number of adults in sample	1275	4528

1/ Includes responses for which it was unclear whether the respondent's reference was to connections with other trains or to connections with other modes.

2/ All advantages and disadvantages in this column were mentioned by respondents in discussing their most recent trip, whether common carrier or auto. The question was: "How did you happen to choose this way of traveling instead of some other?"

3/ All advantages and disadvantages in this column were mentioned by respondents in discussing their most recent trip by common carrier only.

* Less than .05 per cent.

Table V20

Advantages and Disadvantages of Rail for the Most Recent Trip by Common Carrier by Distance and Purpose^{1/}

	<u>All Distances</u>				<u>100-499 Miles</u>			
	<u>Vacation & Pleasure</u>	<u>Personal Affairs</u>	<u>Business</u>	<u>Total</u>	<u>Vacation & Pleasure</u>	<u>Personal Affairs</u>	<u>Business</u>	<u>Total</u>
<u>Discussed rail</u>	<u>47.7</u>	<u>56.8</u>	<u>40.2</u>	<u>47.4</u>	<u>51.2</u>	<u>60.8</u>	<u>50.0</u>	<u>52.6</u>
<u>Advantages</u>								
Expense - cheaper by rail	7.0	7.6	3.0	6.2	5.6	8.1	2.0	5.2
Free pass	5.7	2.3	1.2	4.2	6.3	2.7	1.0	4.7
Safety - safer by rail	7.0	3.8	3.0	5.6	7.1	2.7	2.0	5.2
Convenience & service								
Fast - faster by rail	8.5	9.1	6.5	8.1	7.1	10.8	7.1	7.8
Comfortable, restful, good facilities, enjoys meeting people	16.8	14.4	13.0	15.3	16.3	17.6	16.3	16.5
Convenient	4.4	6.1	11.2	6.1	6.0	5.4	16.3	8.3
Good connections	.7	2.3	4.7	1.8	.4	1.4	6.1	1.9
Miscellaneous								
Enjoy the scenery, sight-seeing	3.1	.6	.6	2.1	2.4	1.4	1.0	1.9
<u>Disadvantages</u>								
Connections bad	1.3	*	1.2	1.0	2.0	*	2.0	1.7
<u>Other advantages and disadvantages</u>	<u>12.0</u>	<u>24.2</u>	<u>14.8</u>	<u>17.1</u>	<u>19.4</u>	<u>28.4</u>	<u>17.3</u>	<u>20.5</u>
<u>No discussion of rail</u>	<u>52.3</u>	<u>43.2</u>	<u>59.8</u>	<u>52.6</u>	<u>48.8</u>	<u>39.2</u>	<u>50.0</u>	<u>47.4</u>
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of respondents	459	132	169	770	252	74	98	424

Table V20
Continued

	500-999 Miles				1000 and Over			
	Vacation & Pleasure	Personal Affairs	Business	Total	Vacation & Pleasure	Personal Affairs	Business	Total
<u>Discussed rail</u>	<u>46.9</u>	<u>67.9</u>	<u>40.5</u>	<u>49.1</u>	<u>39.6</u>	<u>32.1</u>	<u>10.7</u>	<u>33.1</u>
<u>Advantages</u>								
Expense - cheaper by rail	8.3	10.7	8.1	8.7	7.6	3.6	*	5.5
Free pass	5.2	3.6	2.7	4.3	4.7	*	*	3.1
Safety	5.2	3.6	5.4	5.0	7.6	7.1	*	6.1
Convenience & service								
Fast, faster by rail	8.3	10.7	10.8	9.3	10.4	3.6	*	7.4
Comfortable, restful, good facilities, enjoys meeting people	20.8	3.6	13.5	16.1	15.1	17.9	3.6	13.5
Convenient	3.1	10.7	8.1	5.6	.9	*	*	.6
Good connections	1.0	7.1	5.4	3.1	.9	*	*	.6
Miscellaneous								
Enjoy the scenery, sight-seeing	*	*	*	*	6.0	*	*	3.7
<u>Disadvantages</u>								
Connections bad	*	*	*	*	.9	*	*	.6
<u>Other advantages and disadvantages</u>	<u>16.7</u>	<u>25.0</u>	<u>16.2</u>	<u>18.0</u>	<u>6.0</u>	<u>10.7</u>	<u>7.1</u>	<u>6.7</u>
<u>No discussion of rail</u>	<u>53.1</u>	<u>32.1</u>	<u>59.5</u>	<u>50.9</u>	<u>60.4</u>	<u>67.9</u>	<u>89.3</u>	<u>66.9</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents	96	28	37	164	106	28	28	163

1/ Detail will not add to subtotals because respondents might make several comments.

* Less than .05 per cent.

Table V-21

Advantages and Disadvantages of Rail for the Most Recent
Trip by Common Carrier: Vacation and Pleasure Trips, by Income ^{1/}

	Vacation and Pleasure Travel (All Trips)				
	Under \$3000	\$3000- 5999	\$6000- 9999	\$10,000 & over	All Incomes
<u>Discuss rail</u>	<u>60.7</u>	<u>49.4</u>	<u>40.8</u>	<u>20.0</u>	<u>46.8</u>
<u>Advantages</u>					
Cheaper by rail	6.6	9.1	5.8	1.8	6.7
Free pass	8.2	7.1	1.0	3.6	5.5
Safer by rail	9.8	6.5	3.9	3.6	6.5
Fast, faster by rail	6.6	10.4	9.7	3.6	8.3
Comfortable, restful, good facilities, enjoys meeting people	20.5	18.8	16.5	5.5	17.0
Convenient	5.7	3.2	2.9	3.6	3.9
Good connections	.8	1.3	*	*	.7
Enjoy the scenery, sight-seeing	3.3	3.2	1.0	*	2.3
<u>Disadvantages</u>					
Connections bad	3.3	1.9	1.0	*	1.8
<u>Other advantages and disadvantages</u>	<u>23.8</u>	<u>11.7</u>	<u>16.5</u>	<u>7.3</u>	<u>15.7</u>
<u>No discussion of rail</u>	<u>39.3</u>	<u>50.6</u>	<u>59.2</u>	<u>80.0</u>	<u>53.2</u>
<u>Total</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
<u>Number of respondents</u>	<u>122</u>	<u>154</u>	<u>103</u>	<u>55</u>	<u>434</u>

^{1/} Detail will not add to subtotals because respondents might make several comments.

* Less than .05 per cent.

Advantages and disadvantages of bus: The leading advantage of bus travel is cheapness. The change in context in the questions about choice of mode in 1956 compared to 1955 served only to emphasize that, compared to other common carriers, the bus is cheaper. People also continue to mention that buses "go to more places," that they enable one to see the scenery, and that they are relatively fast.

The shift in context of the question meant a decline from most important disadvantage to least important disadvantage of the comment that buses do not go to the right places. Compared to automobiles buses do not do very well in this respect, but compared to other common carriers, they do very well indeed.

Table 4-22

Advantages and Disadvantages of Bus for the Most Recent Trip

(Percentage distribution of advantages and disadvantages)

<u>Advantages and Disadvantages of Bus</u>	<u>Per Cent of All Advantages and Disadvantages of Bus</u>	
	<u>Fall 1955^{2/}</u>	<u>1956^{3/}</u>
<u>Advantages of bus</u>		
Cheaper	15.3	23.3
Safer	2.9	2.4
Faster	4.3	5.2
See the scenery	4.8	7.0
More flexible schedule: stop when and where you want, stay longer	1.4	2.7
Better (good) connections:		
Buses go to more places; "only way you could get there"	4.8	9.2
Buses go at right times	3.4	4.2
Buses connect well with one another ^{2/}	1.4	1.9
Buses connect well with other modes	0.5	*
Good connections: no further information	2.4	4.2
Buses are easy (easier) to reach; terminals are conveniently located	2.4	1.9
Convenient (no further information)	4.8	6.8
<u>Disadvantages of bus</u>		
Slow	4.8	5.1
Fatigue; lack of comfort	3.8	9.2
Bad connections:		
Buses don't go to right places, enough places; are badly scheduled for reasons of destination	13.4	*
Buses don't go at right times; are badly scheduled for reasons of timing	3.8	0.5
Buses connect badly with one another ^{1/}	1.9	0.5
Buses connect badly with other modes		*
Bad connections; no further information	1.9	0.5
Hard to get to a bus; terminals are inconveniently located	2.9	0.5
<u>Other advantages and disadvantages of bus</u>	<u>19.1</u>	<u>14.9</u>
Total	100.0	100.0
Number of adults who discussed bus	156	249
Number of adults in sample	1275	4528

- 1/ Includes responses for which it was unclear whether the respondent's reference was to connections with other buses or to connections with other modes.
- 2/ All advantages and disadvantages in this column were mentioned by respondents in discussing their most recent trip, whether common carrier or auto. The question was "How did you happen to choose this way of traveling instead of some other?"
- 3/ All advantages and disadvantages in this column were mentioned by respondents in discussing their most recent trip by common carrier only.
- * Less than .05 per cent.

Advantages and disadvantages of auto: The advantages and disadvantages of auto mentioned in the 1956 Survey are mentioned by people who actually traveled by common carrier. It is not surprising that few of these people mentioned any advantages of auto. Those who mentioned disadvantages spoke in terms of fatigue and the difficulty of driving. A few mentioned that they did not have a car.

Table V-23

Advantages and Disadvantages of Auto for the Most Recent Trip
(Percentage distribution of advantages and disadvantages)

<u>Advantages and disadvantages of auto</u>	<u>Per Cent of All Advantages and Disadvantages of Auto</u>	
	<u>Fall 1955¹/</u>	<u>1956²/</u>
<u>Advantages of auto</u>		
"More of us could go;" "free ride at someone else's expense;" chose auto for reasons of companionship (specific)	7.2	1.4
Cheaper	23.6	3.4
Faster	4.9	1.4
Likes to drive; roads are good, safer	1.9	*
More privacy	0.8	*
More comfortable; relaxing; less tiresome	1.1	2.0
No schedule; one can time one's trip as one pleases (can start and stop when one wishes); can choose one's own route	18.5	1.4
Easier with children (babies) or with old (sick) people	3.7	*
Car is available upon arrival	5.5	1.4
Car goes door-to-door; avoid changing modes or going to and from terminals; personal belongings more easily carried	5.5	1.4
Enjoy the scenery	6.9	2.0
No good connections by other modes; "only way you could get there;" car is better for short distances	5.1	2.0
Convenient	10.8	2.7
<u>Disadvantages of auto</u>		
Fatigue ("it's hard to drive so far"); doesn't like to drive; can't drive; didn't have car; roads may be bad (ice, snow, construction)	1.1	49.0
<u>Other advantages and disadvantages of auto</u>	<u>3.4</u>	<u>31.9</u>
Total	100.0	100.0
Number of adults who discussed auto	1044	136
Number of adults in sample	1275	4528

1/ All advantages and disadvantages in this column were mentioned by respondents in discussing their most recent trip, whether common carrier or auto.

2/ This distribution is based on comments about auto travel made in connection with a decision to use a common carrier. All advantages and disadvantages in this column were mentioned by respondents in discussing their most recent trip, whether by common carrier or auto. The question was: "How did you happen to choose this way of traveling instead of some other?"

* Less than .05 per cent.

Summary of factors which influence choice of mode: It may be

helpful to summarize the main facts about choice of mode which have emerged from the 1955 and 1956 Surveys considered as a unit. The automobile dominates the travel market. Its strength lies in its cheapness and its flexibility. Cheapness, in this context, seems to concern the additional outlay which people must make to take a trip assuming they own a car. People have in mind in particular the cost of travel by several people at a time. Flexibility refers to freedom to time one's trip as one pleases and to select one's own route. The auto is relatively weak in large cities and strong in small towns. It is also relatively weak for people too poor to afford cars of their own or rich enough to travel freely by common carrier. Finally, it is relatively strong at the stages of the life cycle at which people have young children.

Among the common carriers, people's choice depends on their income, the purpose of the trip, and how far they are going. Rail travel stands between bus and air on all three of these dimensions. High income people travel by plane, and low income people by bus, but people from any income level may choose rail. People comment freely on the cheapness of bus travel, and mention that rich people travel by air. People traveling on business are likely to fly and unlikely to go by bus. They may travel by rail. The speed of air travel undoubtedly is important for business trips, especially trips of 1000 miles away or more. Bus travel is most commonly chosen for short trips, and air travel for long trips, but rail frequently is chosen for any length of trip except very long trips on business. Buses are often seen as uncomfortable, but useful even to upper income people because of their scheduling and because of the

places which can be reached by bus.

There is some evidence that air is at a disadvantage because of a widespread nervousness about flying. People who have been initiated into air travel seem to be more likely to fly than the uninitiated. One reason may be that familiarity reduces nervousness.

THE TRAVEL MARKET

1957

**Survey Research Center
Institute for Social Research
University of Michigan**

May 1958

F O R W A R D

This report describes the findings of the 1957 National Travel Market Survey conducted by the Survey Research Center of the University of Michigan and sponsored by the Boeing Airplane Company, the New York Central System, and the Pennsylvania Railroad Company. This Survey is the third in a series of National Travel Market Surveys begun in 1955 and continued in 1956 by the Survey Research Center. The 1955 and 1956 Surveys were sponsored by the New York Central System and the Port of New York Authority.

Purposes of the 1957 Survey

The 1957 Survey covered three main topics: First, a series of questions was asked about frequency of travel by air, rail, bus and auto. Questions were also asked about whether people had ever taken an air trip and the approximate date of their first air trip. Similarly, people were asked whether they had ever taken a rail trip and the date of their most recent rail trip. The replies are reported in Chapter II and III of this report. Second, detailed information was collected about the most recent trip of the respondent. Tables based on this information appear in Chapter IV. Finally, the 1957 Survey included a short sequence of questions about attitudes toward jet travel. Answers to these questions are reported in Chapter V.

Reports on the 1957 Survey

An interim report on the 1957 National Travel Market Survey was prepared and circulated to the sponsors of the Survey in August, 1957. A note on attitudes toward travel by jet plane was circulated in the winter of 1958. The present report includes all of the findings of the Survey and no further reference need be made to these earlier reports.

The Sample

The sample used in the 1957 Survey was a probability sample similar to that used in the 1956 Survey and the 1955 Survey. In the 1957 Survey, as in the 1956 Survey, one interview was taken in every family in the sample. Within the family, the respondent was either the husband or the wife, with the selection between the two on a random basis. No interviews were taken with any additional "extra" adults in the family. In one-half of the interviews, however, the respondent was asked to report information about the number of trips by different modes of travel taken by the "extra" adults in his family. In this way information was obtained which makes it possible to include the "extra" adults in the tables about the frequency of travel. For a more detailed discussion of the sampling procedure see "The Travel Market, 1955", Appendix A.

The number of interviews taken in the 1957 Survey was as follows:

<u>Interview Period</u>	<u>Number of Interviews</u>	<u>Response Rate</u>
May - June 1957	1356	87%
November - December 1957	1493	85%
Total	<u>2849</u>	

Additional information was collected about 300 extra adults so that the total number of adults covered was 3149.

Definition of a Trip

In the National Travel Market Surveys a "trip" is defined as a round trip to a point 100 miles or more away. Moving to a new home 100 miles away is also considered a trip. Trips taken by employees of a common carrier in connection with their work are excluded. In estimates of the frequency of air travel, trips by private plane, military plane and company-owned plane are also excluded.

Staff on the 1957 Survey

This study was carried out by the staff of the Survey Research Center, a division of the Institute for Social Research of the University of Michigan. The Institute is under the direction of Rensis Likert, while the director of the Center is Angus Campbell. This study was carried out in the Economic Behavior Program of the Center, George Katona, director. The Center's field staff is directed by Charles Cannell, and the sampling section by Leslie Kish. For this survey, study design, analysis and report writing were the responsibility of John B. Lansing, assisted by Ernest Lillienstein.

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I. Summary of Major Findings

Frequency of Travel by Different Modes

Between the 1955 Travel Survey and the 1957 Survey the proportion of the population taking at least one trip a year by auto, bus, and air increased. The proportion taking a trip by rail showed little or no change.

The proportion of the adult population using each mode in a year as of the 1957 survey is air, 9 per cent; rail, 11 per cent; bus, 10 per cent; and auto, 61 per cent. Altogether, 23 per cent of the adult population use one or more of the common carriers in one year, if people who used more than one mode are only counted once.

Air Travel

Whether an adult takes an air trip depends on his income, his stage in the family life cycle, and the population of the place where he lives. These factors were shown to be important in earlier surveys, and their importance continues.

About 7 per cent of all adults took one or more first class flights in the year covered by the survey, while about 3 per cent traveled by air coach. Only about 1 per cent of all adults traveled both by first class and by coach flights.

As of 1957, about 28 per cent of all adults had at some time in their lives taken an air trip. This proportion is increasing at the rate of nearly 2 per cent a year. Twelve per cent of all adults living in 1957 took their first air trip in the six years 1950-1955. As of 1957, 36 per cent of all men and 21 per cent of women had taken an air trip.

Rail Travel

Whether an adult takes a trip by rail depends on his income, his stage in the family life cycle, and the population of the place where he lives. These factors are also important for air travel. In comparison to air the appeal of rail travel is relatively strongest for people in the middle and upper middle income groups, for people in the older age groups, and for people living in towns and cities of moderate size.

About 4 per cent of the adult population traveled by pullman in the year covered by the survey, while about 8 per cent traveled by rail coach. Only about 1 per cent traveled both coach and first class in the course of a one year period.

Seven adults out of ten have taken a rail trip to a point 100 miles away at some time in their lives. Two out of ten took a rail trip in the period 1950-1956 but did not take one during the twelve months before they were interviewed.

Bus Travel

The proportion of the population taking a long distance bus trip increased from 7 per cent to 10 per cent from the 1955 Survey to the 1957 Survey. This increase took place in all income groups in the population.

Auto Travel

The proportion of the population owning automobiles and the proportion taking trips by auto both rose in the period from the 1955 to the 1957 Survey. People in the upper income groups and young married couples with no children are especially likely to travel by automobile.

Travel by Region

The travel habits of adults living in New York City contrast with those of people living elsewhere. People living in the New York area are much less likely than those living elsewhere to travel by auto and more likely to travel by common carrier. Fourteen per cent of them take a non-business air trip in a year, about twice as large a proportion as elsewhere. For rail travel the differences are in the same direction but less extreme.

People living in parts of the New York Central Territory other than New York City are slightly more likely to travel by air and by rail than those in the rest of the United States. People in the rest of the United States have been most likely to take a bus trip, but bus travel to points 100 miles or more away is becoming more common in New York City and elsewhere in the Central Territory.

Choice of Mode for Travel by Common Carrier

Of all trips by common carrier to points 100-499 miles away, about four out of ten involve the use of air, four out of ten involve the use of rail, and three out of ten involve the use of bus. People may also travel by car for part of the trip.

Of all trips by common carrier to points 1000 or more miles away, two-thirds involve use of air, and one-third, of rail. Only about one such trip out of ten involves use of bus. People may also travel by auto or by other modes for part of the trip.

People's statements about the reasons for their choice of mode suggest that there are seven main factors involved in the decision: availability of the mode, convenience of arrival and departure, speed, price, safety, comfort, and desire for varied experience. Of these, speed, convenience of arrival and departure, comfort, and price are mentioned most frequently.

II. The Frequency of Travel by Different Modes, 1955-1957

Estimates of the total number of passenger-miles traveled during the year in the United States are available without need for sample surveys. Only from surveys, however, is it possible to estimate the proportion of the population who take a trip during the year by each of the four principal modes of travel. From the 1957 National Travel Market Survey it appears that the proportion of the adult population using each of the four modes was as follows:

Air	8.8%
Rail	11.2%
Bus	9.6%
Auto	61.0%

These estimates refer to the 12 month period prior to interview, which coincides roughly with the calendar year 1957 for interviews taken in November and December, 1957. For interviews taken in May and June, 1957, the 12 month period includes the latter half of 1956 and the first half of 1957.

The main purpose of this chapter is to answer the question, "Who are the users of each of the four modes?" The first section of the chapter considers the three common carriers jointly. The following sections concern air, rail, bus and auto, in that order.

A. Travel by Common Carrier

In 1957 about 23% of the adult population took a trip by air, rail, or bus (Table 1). Of those adults from families with incomes under \$1000 about 16% took a trip by common carrier. Surprisingly, within the range from \$1000-\$7500 income makes little difference in the probability that an individual will take at least one trip by one of the common carriers. In each income class within this range, one individual in five took a trip by common carrier. As income rises over \$7500 the probability that an individual will take a common carrier trip also rises. Of those with incomes of \$15,000 or more, about six out of ten took such a trip.

The second major factor which influences whether an adult will take a trip by common carrier is his stage in the family life cycle. Of young, single heads of families, about four in ten took a trip by common carrier in the year before interview (Table 2). Of young married adults with no children, two out of ten took a trip. Of young adults with a child under two years of age, only a little more than one in ten took a trip by common carrier. As the family grows older and leaves home, the probability that a person will take a trip by common carrier increases. Of the older adults with no children at home, a little more than two in ten took a trip, while of the older single people, about three in ten took a trip by common carrier. For travel by auto, the situation is very different, as is discussed later in this chapter. There were also striking differences from one common carrier to another which are discussed in the sections immediately following.

Table 1

Frequency of Common Carrier Travel, by Income
 (Percentage Distribution of Adults)

<u>Whether Took Common Carrier Trip</u>	<u>All</u> <u>Incomes</u>	<u>Under</u> <u>\$1000</u>	<u>\$1000</u> <u>-1999</u>	<u>\$2000</u> <u>-2999</u>	<u>\$3000</u> <u>-3999</u>	<u>\$4000</u> <u>-4999</u>	<u>\$5000</u> <u>-5999</u>	<u>\$6000</u> <u>-7499</u>	<u>\$7500</u> <u>-9999</u>	<u>\$10,000</u> <u>-14,999</u>	<u>\$15,000</u> <u>and Over</u>
Respondent took one or more common carrier trips in "last 12 months" <u>1/</u>	22.7	16.1	19.5	19.2	20.5	17.2	18.9	21.4	32.0	41.4	62.9
Respondent took no common carrier trip in "last 12 months" <u>1/</u>	77.0	83.9	80.5	80.5	79.2	82.8	80.3	78.3	68.0	58.6	37.1
Not ascertained	.3	*	*	.3	.3	*	.8	.3	*	*	*
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of cases <u>2/</u>	2849	218	287	261	380	383	392	364	256	140	62

* Less than .05 per cent.

1/ The "last 12 months" refers to the 12-month period preceding each survey. Interviews were taken in May-June and in November-December 1957.

2/ This table excludes "extra" adults other than heads of families and their wives.

Table 2

Frequency of Common Carrier Travel, by Stage in the Life Cycle
(Percentage Distribution of Respondents)

<u>Whether took Common Carrier Trip</u>	<u>Stage in the Life Cycle</u>				
	<u>All Stages</u>	<u>Young, Single</u>	<u>Young, Married, No Children</u>	<u>Married, Children Youngest under 2</u>	<u>Married, Children, Youngest 2-4¹</u>
Respondent took one or more common carrier trips in "last 12 months" ^{1/}	22.7	40.1	20.5	12.7	16.0
Respondent took no common carrier trip in "last 12 months" ^{1/}	77.0	59.9	79.5	87.3	84.0
Not ascertained	.3	*	*	*	*
Total	100.0	100.0	100.0	100.0	100.0
Number of cases ^{3/}	2849	137	229	292	331
	<u>Married, Children Youngest, 5-14²</u>	<u>Married, Children Youngest 15-17</u>	<u>Older, Married No children under 18</u>	<u>Older, Single</u>	<u>Other</u>
Respondent took one or more common carrier trips in "last 12 months" ^{1/}	21.1	30.6	22.4	31.4	26.0
Respondent took no common carrier trip in "last 12 months" ^{1/}	78.4	69.4	77.3	68.1	74.0
Not ascertained	.5	*	.3	.5	*
Total	100.0	100.0	100.0	100.0	100.0
Number of cases ^{3/}	559	108	683	395	100

*Less than .05 per cent.

^{1/}The "last 12 months" refers to the 12-month period preceding each survey; interviews were taken in May-June and in November-December 1957.

^{2/}Under 45 years.

^{3/}This table excludes "extra" adults other than heads of families and their wives.

B. Use of Air Last Year

The proportion of the adult population who take an air trip in a period of one year does not change substantially from one year to the next. The best estimate from the Survey is that the proportion of the adult population who took at least one air trip in a year rose from 7% in 1955 to 9% in 1957 (Table 3).

The probability that an individual will take an air trip depends upon his income. Of those adults from families with incomes below \$5000, only about 3-5% took an air trip in 1957. Of those with higher incomes more took an air trip, until more than four out of ten of those in the income class above \$15,000 took an air trip in a year.

Both business and non-business air travel show a relationship to income. About 3% of all adults take an air trip for business purposes in one year. Of those with incomes under \$1000, however, less than 1% take a business air trip, while of those with incomes of \$10,000 - \$20,000 between 10 and 20% take a business air trip. About 6% of all adults take a non-business air trip. Of those with incomes below \$1000 only about 3% take such a trip in contrast to 15% or more of those with incomes above \$10,000.

Has there been a shift in the relation between income and air travel between 1955 and 1957? The data in Table 3 suggest that there has been such a shift. The proportion of adults in the lower income groups who took an air trip has tended to increase while the proportion of adults in the income groups over \$10,000 who took an air trip has not increased. This finding is consistent with experience in connection with other new goods and services purchased by consumers. Television sets, for example, were first purchased by people in the highest income groups and then, as time went on, increasing proportions of those in successively lower income brackets bought sets. It is

Table 3
Use of Air "Last Year" by Income Groups (Percentage distribution of adults)

Use of Air	All Incomes			Under \$1000			\$1000 - 1999		
	1955	1956	1957	1955	1956	1957	1955	1956	1957
Took one or more air trips "last year"	6.7	7.2	8.8	.9	1.3	3.5	1.1	1.5	2.8
For business purposes	1.9	2.3	2.3	*	.3	*	.1	*	.6
For non-business purposes	4.4	4.4	5.7	.9	.7	3.5	1.0	1.5	2.2
For both business and non-business purposes	.4	.5	.8	*	.3	*	*	*	*
Did not take an air trip	91.0	92.4	90.4	96.8	98.7	96.1	97.0	97.9	97.2
Not ascertained	2.3	.4	.8	2.3	*	.4	1.9	.6	*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Adults	8485	5255	3149	439	398	231	832	470	326
	\$2000-2999			\$3000-3999			\$4000-4999		
	1955	1956	1957	1955	1956	1957	1955	1956	1957
Took one or more air trips "last year"	2.4	1.9	4.3	3.2	3.5	4.8	3.9	2.3	4.8
For business purposes	.3	*	1.1	.9	1.0	1.0	.8	.4	.2
For non-business purposes	2.0	1.9	3.2	2.2	2.4	3.8	2.9	1.8	4.6
For both business and non-business purposes	.1	*	*	.1	.1	*	.2	.1	*
Did not take an air trip	95.2	97.9	95.3	95.2	96.4	94.7	93.6	96.8	94.0
Not ascertained	2.4	.2	.4	1.6	.1	.5	2.5	.9	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Adults	981	582	280	1364	709	418	1294	740	418

Table 3 (continued)

Use of Air	\$5000-5999			\$6000-7499			\$7500-9999		
	1955	1956	1957	1955	1956	1957	1955	1956	1957
Took one or more air trips "last year"	5.6	5.5	6.9	9.8	10.2	10.3	12.0	14.8	18.7
For business purposes	1.9	1.5	.5	2.3	3.9	3.5	4.1	5.8	7.0
For non-business purposes	3.4	3.7	5.5	7.0	6.1	6.3	7.1	8.0	9.9
For both business and non-business purposes	.3	.3	.9	.5	.2	.5	.8	1.0	1.8
Did not take an air trip	92.5	94.1	92.2	88.0	89.6	89.4	86.4	84.6	80.9
Not ascertained	1.9	.4	.2	2.2	.2	.3	1.6	.6	.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Adults	1094	671	433	896	559	396	709	500	284
	\$10,000-14,999			\$15,000-19,999			\$20,000 and over		
	1955	1956	1957	1955	1956	1957	1955	1956	1957
Took one or more air trips "last year"	23.1	29.2	22.3	30.2	34.9	42.9	52.4	41.8	48.3
For business purposes	7.4	12.3	6.6	6.6	9.3	16.7	16.6	10.4	6.9
For non-business purposes	14.4	14.2	12.1	22.1	23.3	16.7	25.6	25.4	27.6
For both business and non-business purposes	1.3	2.7	3.6	1.5	2.3	9.5	9.9	6.0	13.8
Did not take an air trip	72.8	70.0	74.1	68.3	65.1	54.7	45.4	58.2	51.7
Not ascertained	4.1	.8	3.6	1.5	*	2.4	2.5	*	*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of Adults	389	260	166	136	86	42	121	67	29

* Less than .05 per cent

1/ Too few adults to percentagize.

reasonable to expect that as the number of people who fly increases, the new travelers will come increasingly from the income brackets below the top of the income distribution.

This line of reasoning is consistent with results shown in Table 4 concerning the proportion of all air trips taken by individuals in different income brackets. In this table, in contrast to Table 3, the number of trips taken by each adult is taken into account. The table shows the percent of all business air trips and all non-business air trips taken by the adults in different income brackets. These estimates are subject to substantial sampling errors since the chance inclusion or exclusion of a few high-frequency travelers can have a noticeable impact on the distributions. It is interesting to note, however, that the proportion of all non-business air trips taken by individuals with incomes over \$10,000 was estimated from the 1955 Survey at 39%, from the 1956 Survey at 38% and from the 1957 Survey at 29%. The decline in the proportion of business air trips accounted for by those with incomes over \$10,000 is even more rapid but here the problem of sampling error is particularly acute, since the very high frequency traveler is likely to be traveling on business. It would be premature to conclude that there has been a noticeable change in the proportion of business trips accounted for by those in the income class over \$10,000.

In spite of the change in the income distribution of non-business air travelers, it remains true that most air travel is by people in the top income groups. Only 8% of all adults are from families with incomes over \$10,000, but this group accounts for about a third of all non-business air trips and perhaps a half or more of the business air trips.

The difference in the proportion of the population who take air trips from one year to the next is small, so that it is not easy to detect

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Table 4

Proportion of Air Trips in the "Last Twelve Months"
Taken by Adults in Each Income Class^{1/}
(Percentage distribution)

Family Income	Per Cent of All Adults			Per Cent of Trips Business Air Trips			Non-business Air Trips		
	1955	1956	1957	1955	1956	1957	1955	1956	1957
Under \$1000	5.2	7.6	7.3	*	.3	*	.4	1.7	3.3
\$1000 - 1999	9.8	8.9	10.4	.1	*	1.3	1.1	1.7	2.3
\$2000 - 2999	11.6	11.1	8.9	.5	*	.8	3.2	3.5	2.5
\$3000 - 3999	16.1	13.5	13.3	2.3	1.3	1.9	5.6	5.3	7.3
\$4000 - 4999	15.3	14.1	13.3	3.7	1.3	*	11.3	6.3	20.0
\$5000 - 5999	12.9	12.8	13.7	12.6	7.0	2.9	10.3	9.8	12.2
\$6000 - 7499	10.6	10.6	12.6	7.9	10.3	13.3	17.2	16.3	8.6
\$7500 - 9999	8.3	9.5	9.0	10.4	13.8	27.5	11.2	14.5	12.4
\$10,000 - 14,999	4.5	4.9	5.3	28.8	30.5	22.1	14.9	13.8	7.9
\$15,000 - 19,999	1.6	1.6	1.3	4.0	8.0	8.0	10.8	11.8	9.6
\$20,000 and over	1.3	1.3	0.9	27.8	26.6	4.3	13.1	12.8	11.1
Not ascertained	2.7	4.1	4.0	1.9	.9	17.9	.8	2.5	2.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of air trips by adults in the sample in the "last 12 months"									
				857	855	375	716	399	394
Number of adults									
	8461	5255	3149						

^{1/} This table excludes trips by those who took 100 or more air trips in a year.

* Less than .05 per cent.

differences in the proportion of air travel in different groups of the population from one year to the next. Apart from the differences in the behavior of different income groups, the observed differences between years are almost all within sampling error. Accordingly the remaining tables in this section showing the percent of adults in different groups of the population who took an air trip show only the data from the 1957 Survey.

The stage in the family life cycle of an individual has a powerful effect on the probability that he will take an air trip. The proportion of young single people who take air trips is higher than the proportion of those in any other stage (Table 5). Of the young, single adults about 15% took an air trip in 1957, compared to about 10% of the young, married adults with no children, and only about 5% of the young adults with young children. Individuals in the later stages of the life cycle are more likely to take air trips than those with young children. About 10% of those with children over 5 years of age take an air trip and nearly as many of the couples with children who have left home take a trip.

The probability that an individual will take an air trip is also affected by the type of community in which he lives. People living in large cities are more likely to travel by air than those living in small towns or rural areas (Table 6). Of adults who live in one of the twelve largest metropolitan areas of the United States, about 12-15% take an air trip in a year. Of those living in cities or towns with a population between 2,500 and 50,000, 7% take an air trip, while of those living in rural areas only 5% take an air trip. These differences seem to be due in part to the differences in income between larger and smaller towns and cities and in part to the lack of frequent air service in the country.

Table 5

Use of Air "Last Year" by Stage in the Life Cycle
(per cent of all adults, 1957 Survey)

	Stage in the Life Cycle									
	All Stages	Young, Single	Young, Married, No Children	Married, Children, Youngest Under 2	Married Children, Youngest 2 - 4 1/2	Married, Children, Youngest 5-14 1/2	Married, Children, Youngest 15-17	Older,Mar- ried, No Children Under 18	Older Single	Other
Use of Air										
Took one or more air trips "last year"	<u>8.8</u>	<u>14.8</u>	<u>9.6</u>	<u>5.5</u>	<u>7.3</u>	<u>10.9</u>	<u>10.2</u>	<u>7.8</u>	<u>6.7</u>	<u>6.9</u>
For business purposes	2.3	3.3	2.5	2.1	2.1	3.4	3.7	1.9	.9	1.0
For non-business purposes	5.7	10.8	6.3	1.7	4.6	6.3	6.5	5.2	4.9	5.9
For both business and non-business purposes	.8	.7	.8	1.7	.5	1.2	*	.7	.9	*
Did not take an air trip	<u>90.4</u>	<u>81.6</u>	<u>90.4</u>	<u>94.5</u>	<u>92.7</u>	<u>88.6</u>	<u>89.8</u>	<u>91.8</u>	<u>92.9</u>	<u>93.1</u>
Not ascertained	<u>.8</u>	<u>3.6</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>.5</u>	<u>*</u>	<u>.4</u>	<u>.4</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	304	240	292	331	559	108	692	464	102

* Less than .05 per cent.

Table 6.

Use of Air "Last Year" by Place of Residence
(Per cent. of all adults, 1957 Survey)

	<u>Place of Residence</u>					<u>Other Areas</u>		
	<u>Large Metropolitan Areas^{1/}</u>							
<u>Used Air</u> <u>"Last Year"</u>	<u>All</u> <u>Adults</u>	<u>Central</u> <u>Cities</u>	<u>Suburbs</u> <u>50,000</u> <u>& Over</u>	<u>Suburbs</u> <u>2500-</u> <u>50,000</u>	<u>Suburbs</u> <u>Rural</u>	<u>Cities</u> <u>50,000</u> <u>& Over</u>	<u>Cities</u> <u>2500-</u> <u>50,000</u>	<u>Rural</u> <u>Farm</u> <u>& Open</u> <u>Country</u>
Took one or more air trips "last year"	<u>8.8</u>	<u>12.8</u>	<u>11.4</u>	<u>15.4</u>	<u>12.9</u>	<u>10.4</u>	<u>7.2</u>	<u>5.3</u>
For business purposes	2.3	1.3	2.8	3.9	*	2.9	3.	1.5
For non-business purposes	5.7	9.9	8.6	10.0	12.9	6.3	3.4	3.5
For both business and non-business purposes	.8	1.6	*	1.5	*	1.2	.8	.3
Did not take an air trip	<u>90.4</u>	<u>86.1</u>	<u>87.6</u>	<u>82.4</u>	<u>87.1</u>	<u>89.2</u>	<u>91.8</u>	<u>94.2</u>
Not ascertained	<u>.8</u>	<u>1.1</u>	<u>1.0</u>	<u>2.2</u>	<u>*</u>	<u>.4</u>	<u>1.0</u>	<u>.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	447	105	279	31	490	729	1068

^{1/} The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

Table 7 presents information concerning the proportion of those in different occupation groups who took air trips in the year before the interview. The evidence seems to indicate that the differences among occupation groups can be explained largely, if not entirely, in terms of variations in income from one occupation to the next. About one-fourth of the adults in families the head of which is a professional or technical worker took a trip in 1957. Of the adults living in families whose head is a self-employed or managerial worker, about 18% took air trips. For other occupation groups, the proportion who took an air trip was much smaller. Only about 5% of the adults in the families of craftsmen, foremen, and operatives in factories took an air trip and only about 3% of the adults in the families of laborers and service workers took an air trip. Retired people are not frequent air travelers. Only about 4-5% of them take an air trip in a 12 month period.

Table 7

Use of Air "Last Year" within Occupation Groups
(Per cent of all adults, 1957 Survey)

<u>Use of Air</u> <u>"Last Year"</u>	<u>Occupation of Head of Family</u>					
	<u>All</u> <u>Occu-</u> <u>pationa</u>	<u>Profes-</u> <u>sional,</u> <u>Tech-</u> <u>nical</u>	<u>Self-</u> <u>emplyed,</u> <u>Manag-</u> <u>erial</u>	<u>Clerical</u>	<u>Sales</u>	<u>Craftsmen, Fore-</u> <u>men, Operatives</u>
Took one or more trips by air "last year"	<u>8.8</u>	<u>24.8</u>	<u>18.3</u>	<u>9.5</u>	<u>13.5</u>	<u>4.7</u>
For business purposes	2.3	8.9	6.2	*	3.4	1.0
For non-business purposes	5.7	12.6	9.1	9.5	8.1	3.7
Took both business and non-business trips	.8	3.3	3.0	*	2.0	*
Did not take an air trip	<u>90.4</u>	<u>73.2</u>	<u>79.9</u>	<u>90.0</u>	<u>85.1</u>	<u>94.6</u>
Not ascertained	<u>.8</u>	<u>*</u>	<u>1.8</u>	<u>.5</u>	<u>1.4</u>	<u>0.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	270	436	190	148	837

<u>Use of Air</u> <u>"Last Year"</u>	<u>Occupation of Head of Family</u>				
	<u>Laborers</u> <u>Service</u> <u>Workers</u>	<u>Farmers</u>	<u>Retired Heads</u> <u>of Families</u>	<u>Students,</u> <u>Not</u> <u>Employed</u>	<u>Housewives</u>
Took one or more trips by air "last year"	<u>2.6</u>	<u>2.4</u>	<u>4.5</u>	<u>11.1</u>	<u>7.1</u>
For business purposes	.2	*	.4	2.8	1.2
For non-business purposes	2.2	2.4	4.1	5.9	5.9
Took both business and non-business trips	.2	*	*	1.4	*
Did not take an air trip	<u>97.2</u>	<u>97.2</u>	<u>95.5</u>	<u>87.5</u>	<u>90.5</u>
Not ascertained	<u>.2</u>	<u>.4</u>	<u>*</u>	<u>1.4</u>	<u>2.4</u>
Total	100.0	100.0	100.0	100.0	100.0
Number of adults	461	246	268	72	168

* Less than .05 per cent

C. Coach and First Class Air Travel

In the fall interviews on the 1957 Survey for the first time information was obtained about whether people who traveled by air during the twelve months prior to interview went by first class flights only or by coach flights only or by both types of flight. As already discussed, 8.8 per cent of the adult population took at least one air trip. The proportion who took coach and first class flights was as follows:

Took one or more first class air trips but no coach trips	5.6%
Took both coach and first class trips	0.6
Took one or more coach trips but no first class trip	1.7
Not ascertained	0.9
Total	<u>8.8%</u>

Thus, about 6.2 per cent of the sample are known to have taken a first class flight and 2.3 per cent are known to have taken a coach flight. Allowing for the interviews where type of flight was not ascertained, roughly 7 per cent of the adult population traveled by first class flight and between 2 and 3 per cent, by coach.

The distribution by number of first class trips was as follows:

<u>Number of First Class Trips</u>	<u>Per Cent of All Adults</u>
<u>Took one or more first class flights</u>	<u>6.22</u>
One first class trip	3.9
Two	0.8
Three	0.3
Four - five	0.1
Six - nine	0.2
Ten - nineteen	0.2
Twenty - twenty-nine	*
Thirty or more	0.1
Not ascertained	0.6
<u>Did not take first class flights</u>	<u>92.9</u>
Not ascertained	0.9
Total	<u>100.0%</u>

* Less than .05 per cent.

Thus, few people take more than three first class trips a year, but there are a handful of very frequent air travelers.

Similarly, the distribution by number of coach flights was as follows:

<u>Number of Coach Flights</u>	<u>Per Cent of All Adults</u>
<u>Took one or more coach flights</u>	<u>2.3%</u>
One coach flight	1.3
Two	0.6
Three	*
Four - five	0.2
Six or more	*
Not ascertained	0.2
<u>Did not take coach flights</u>	<u>96.8</u>
Not ascertained	0.9
Total	<u>100.0%</u>

* Less than .05 per cent.

Thus, few people take more than two coach flights a year.

What are the factors which influence the probability that an individual will travel first class or will travel coach? Tables 8-11 show the proportion of those in different segments of the population using each type of flight.

The per cent of each income class that took at least one trip by first class flight rises steadily with income (Table 8). The same is in general true for coach travel, allowing for random fluctuation in the sample, but the increase is less rapid. In the income groups from \$3000 to \$6000, the proportion of the population traveling by air coach is nearly as large as the proportion traveling first class. A larger proportion of the top groups go first class.

From one stage in the life cycle to the next there are differences in the proportion who travel first class similar to those discussed earlier for air travel as a whole (Table 9). The proportion who travel by air coach is in the range 2-4 per cent at every stage. Thus, the data suggest that coach travelers may be more nearly typical than are first class travelers of the population at all stages of the life cycle.

The proportion of people in large metropolitan areas who travel by air coach is nearly as large as the proportion who travel by first class flights (Table 10). Outside of the largest cities, few people travel by air coach. Roughly 1% of the adult population outside of the largest cities took an air coach trip in the year prior to interview, compared to about 5% of those in the large centers. First class travelers are also less common in the less urban areas, but the differences are less pronounced. No doubt these findings reflect the limited availability of coach flights to people living in medium sized and small cities.

Table 8

Use of Air First-Class and Coach by Family Income
(percentage distribution of adults)

<u>Use of Air First- Class and Coach</u>	<u>All Incomes</u>	<u>Income</u>									
		<u>Under \$1000</u>	<u>\$1000- 1999</u>	<u>\$2000- 2999</u>	<u>\$3000- 3999</u>	<u>\$4000- 4999</u>	<u>\$5000- 5999</u>	<u>\$6000- 7499</u>	<u>\$7500- 9999</u>	<u>\$10,000- 14,999</u>	<u>\$15,000 and over</u>
Took one or more first class air trips ^{1/}	6	2	2	4	3	2	4	6	10	17	33
Took one or more coach air trips ^{1/}	2	*	1	*	2	2	3	2	4	5	3
Number of adults	1638	123	178	142	198	215	252	206	140	33	36

^{1/} Includes those who took both a first class air trip and a coach air trip.

* Less than 0.5 per cent.

Table 9

Frequency of Air Travel, First-Class and Coach, by Stage in Life Cycle
(percentage distribution of adults)

Use of Air, First-Class and Coach	Stage in the Life Cycle									
	All Stages	Young, 1/ Single	Young, Married, 1/ No Children	Married, Children, Youngest Under 2	Married, Children, Youngest 2-4 1/2	Married, Children, Youngest 5-14 1/2	Married, Children, Youngest 15-17	Older, Married, No Children Under 18	Older, Single	Other
Took one or more first- class air trips ^{2/}	6	10	9	1	5	6	11	6	3	7
Took one or more coach air trips ^{2/}	2	4	2	3	2	2	2	2	2	2
Number of adults	1638	164	110	156	167	292	55	363	247	55

^{1/} Under 45 years

^{2/} Includes those who took both a first class air trip and a coach air trip.

* Less than 0.5 per cent.

Table 10

Frequency of Air Travel, First Class and Coach, by Place of Residence
(percentage distribution of adults)

Use of Air, First- Class and Coach	Place of Residence						Other Areas	
	All Adults	Large Metropolitan Areas				Suburbs Rural	Cities	Cities
		Central Cities	Suburban 50,000 and over	2500- 50,000	Suburbs 50,000		50,000 and over	2500- 50,000 Country
Took one or more first- class air trips ^{1/}	6	8	3	9	2/		7	5
Took one or more coach air trips ^{1/}	2	4	9	4	2/		*	2
Number of adults	1638	227	59	149	18		240	382

^{1/} Includes those who took both a first-class air trip and a coach air trip.

^{2/} Too few adults to percentagize.

* Less than 0.5 per cent.

The results for different occupation groups reflect the same factors, at least as far as farmers are concerned (Table 11). Few farmers travel by first class flights, and almost none, by coach. For the other occupation groups, the results are similar: roughly three times as many people travel by first class as travel by air coach. There is one exception: more clerical workers seem to have traveled coach than first class. The sample is small enough so that this result may not be reliable. But it suggests the hypothesis that secretaries and typists in large cities are more likely than other groups in the population to travel by air coach.

Table 11

Use of Air, First-Class and Coach by Occupation of Head
(percentage distribution of adults)

<u>Use of Air, First- Class and Coach</u>	<u>Occupation of Head</u>									
	<u>All</u>	<u>Professional Technical</u>	<u>Self- Employed Artisans</u>	<u>Clerical</u>	<u>Sales</u>	<u>Crafts- men, Armed Forces</u>	<u>Labor- ers, Services</u>	<u>Farm Oper- ators</u>	<u>Retired</u>	<u>Students, Housewives</u>
Took one or more first- class air trips	6	14	15	4	10	3	2	2	2	8
Took one or more coach air trips	2	5	3	5	2	2	1	*	1	2
Number of adults	1638	149	206	105	83	437	250	122	140	92

* Less than 0.5 per cent.

D. Air Travel History

In the 1957 Survey people were asked to recall the year of their first air trip. For certain adults this data now seems in the distant past. But the event was sufficiently memorable so that most people seem to be able to assign it approximately to a year.

As of 1957 about 28% of all adults had at some time taken an air trip (Table 12). Of these, between 2-3% took their first trip in 1956 or in that part of 1957 before they were interviewed. An additional 12% took their first trip in the six-year period from 1950-1955, inclusive. Thus, of the adults who have ever taken an air trip, more than half took their first trip in 1950 or later. At the other extreme, about 2% of all adults living in 1957 took their first air trip before 1940. The proportion of the adult population who have ever taken an air trip is increasing at the rate of 2 per cent a year.

The proportion of all adults who have ever taken an air trip rises with age from the age classification of 18-24 to the group aged 25-44, of whom one third have at some time taken a trip. Only one fourth of those 45-64 have ever taken an air trip and only 15% of those age 65 or over.

Of the young adults aged 18-24 about 5% took their first air trip in 1956 to 1957. Older adults were slightly less likely to be taking their first trip in this period.

More men than women have had the experience of air travel. As of 1957 about 36% of all men and 21% of all women had taken an air trip (Table 13). There are relatively few women who took their first air trip in the period before 1950. Only about 8% of all adult women were initiated to air travel before that year in contrast to 17% of the men.

Table 12

Year of First Air Trip by Age
(Percentage distribution of adults)

<u>Year of First Air Trip</u>	<u>All Adults</u>	<u>Age of Adult</u>			
		<u>18-24</u>	<u>25-44</u>	<u>45-64</u>	<u>65 and over</u>
<u>Has taken an air trip</u>	<u>27.7%</u>	<u>28.9%</u>	<u>31.6%</u>	<u>25.3%</u>	<u>14.8%</u>
Before 1940	2.0	-	2.0	2.5	1.5
1940 - 1945	6.4	1.9	14.3	10.5	7.5
1946 - 1949	3.6	2.3	5.0	3.4	1.4
1950 - 1955	12.1	16.2	10.1	5.0	1.9
1956 - 1957	2.4	4.9	1.4	3.3	2.1
Not ascertained	1.2	3.6	.8	1.1	.4
<u>Never has taken an air trip</u>	<u>72.3</u>	<u>71.1</u>	<u>68.4</u>	<u>74.2</u>	<u>85.2</u>
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Number of cases	3149	308	1317	1022	401

Table 13

Year of First Air Trip by Sex
(percentage distribution of adults)

<u>Year of First Air Trip</u>	<u>All Adults</u>	<u>Sex</u>	
		<u>Men</u>	<u>Women</u>
<u>Has taken an air trip</u>	<u>27.7</u>	<u>35.9</u>	<u>21.2</u>
Before 1940	2.0	2.9	1.3
1940 - 1945	6.4	9.7	3.8
1946 - 1949	3.6	4.5	3.0
1950 - 1955	12.1	14.7	10.0
1956 - 1957	2.4	2.6	2.2
Not ascertained	1.2	1.5	.9
<u>Never has taken an air trip</u>	<u>72.3</u>	<u>64.1</u>	<u>78.8</u>
Total	100.0	100.0	100.0
Number of cases	3149	1391	1756

There are also differences from one income group to the next in the proportion of adults who have ever taken an air trip. Of those in the income group under \$1000, only 11% ever have taken an air trip in contrast to 60% of those in the income group \$10,000 and over (Table 14). Similarly, the high-income adults are those most likely to have taken their first air trip in the earlier years. Of those in the income group \$10,000 and over, 8% took their first air trip before 1940, compared to 4% of those in the income group \$7500-\$9999. On the whole, the proportion of adults taking their first air trip in 1956-57 is highest in the income group from \$6000-9999. About 4% of those in this range took their first air trip in this period compared to an average of 2.4% of the population as a whole. This finding is consistent with the earlier observation that air travel at first was concentrated among people at the very top of the income distribution but is spreading downward through the distribution. Air travel has become quite common in the income group over \$10,000 and is now gradually more frequent in the next lower income classes.

Of adults living in different types of communities those in large cities are most likely to have taken an air trip (Table 15). Only about one adult in five in rural areas ever has taken an air trip compared to nearly two out of five of the adults living in one of the twelve largest cities. The data do not suggest that people living in the country are "catching up" to those in the city. The proportion of adults living in rural areas who have taken their first air trip in recent years is lower than the proportion of adults in large cities taking their first air trip. Recent increases in air travel have resulted from increasing use of air by residents of cities.

Table 14

Air Travel History by Family Income
(percentage distribution of adults)

Year of First Air Trip	All Adults	Family Income								
		Under \$1000	\$1000- 1999	\$2000- 2999	\$3000- 3999	\$4000- 4999	\$5000- 5999	\$6000- 7499	\$7500- 9999	\$10,000 and over
Has taken an air trip	27.7	11.2	18.9	16.1	19.4	26.4	26.1	39.6	45.4	59.5
Before 1940	2.0	.9	.4	*	1.0	1.4	1.6	1.8	3.9	8.4
1940-1945	6.4	1.7	.6	3.6	3.3	5.5	8.1	9.3	9.9	18.1
1946-1949	3.6	1.7	1.5	3.2	4.1	1.2	2.5	5.1	6.7	8.9
1950-1955	12.1	5.2	4.9	8.9	7.9	15.6	10.2	18.4	19.0	18.2
1956-1957	2.4	1.3	1.2	.4	1.9	2.6	1.6	4.0	4.2	2.5
Not ascertained	1.2	.4	.3	*	1.2	.5	2.1	1.0	1.7	3.4
Never has taken an air trip	72.3	88.8	91.1	83.9	80.6	73.2	73.9	60.4	54.6	40.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	231	326	280	413	418	433	396	284	237

* Less than .05 per cent

Table 15

Air Travel History by Type of Community
(percentage distribution of adults)

Year of First Air Trip	All Adults	Type of Community					
		12 Largest Metropolitan Areas					
		Central Cities	Suburbs 50,000 and Over	Suburbs Under 50,000	Other Cities 50,000 and Over	Cities 2500- 49,999	Rural Areas
Has taken an air trip	27.7	33.5	35.2	41.9	32.2	25.5	19.8
Before 1940	2.0	1.8	2.0	3.9	1.0	1.9	2.0
1940-1945	6.4	5.6	6.7	11.6	9.0	6.0	4.2
1946-1949	3.6	4.9	5.7	4.2	5.1	2.0	2.7
1950-1955	12.1	16.1	13.3	16.1	13.7	11.8	8.6
1956-1957	2.4	3.8	4.8	3.2	2.4	1.8	1.7
Not ascertained	1.2	1.3	1.9	2.9	1.0	1.0	.6
Never has taken an air trip	72.3	66.5	64.8	58.1	67.8	74.5	80.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	447	105	310	490	729	1068

* Less than .05 per cent

E. Use of Rail Last Year

The proportion of the adult population who take one or more rail trips does not vary substantially from one year to the next. In the period covered by the 1957 Survey about 11 per cent of all adults took a rail trip. The best estimate from the Survey is that the proportion of adults who took at least one rail trip increased slightly from the period covered by the 1956 Survey to the period covered by the 1957 Survey. The difference observed, however, is small enough so that it may be the result only of random fluctuations in the sample. Of course, the total number of passenger-miles traveled by rail may fluctuate owing to variations in the average number of trips taken per traveler or fluctuations in the average length of trip, as well as owing to fluctuations in the number of people who travel by rail.

The proportion of adults in different income classes who took at least one rail trip remained approximately the same from 1955-1957 (Table 16). Of those with incomes below \$1000 about 7 per cent took rail trips, compared to roughly 40 per cent of those with incomes of \$20,000 or more. Thus, the proportion of adults who take a rail trip does rise from one income class to the next. This proportion, however, is relatively constant in the income range from \$2000-10,000. About one in ten adults takes a rail trip in this income range.

Has there been any change from 1955-1957 in the proportion of all rail trips accounted for by adults in each income class? (Table 17). The data suggest that in this respect, also, no important changes have taken place. About 15 per cent of non-business rail trips are taken by adults with incomes over \$10,000. Roughly one-half of all business rail trips are accounted for by adults in this income level. In view of the small size of the changes from year to year in frequency of rail travel, the remaining tables in this section report only data from the 1957 Survey. Trends in rail travel by region are discussed in Chapter III.

Table 16

Use of Rail "Last Year" by Income Groups
(Per cent of all adults)

<u>Use of Rail</u>	<u>All Incomes</u>			<u>Under \$1000</u>			<u>\$1000 - 1999</u>		
	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
Took one or more rail trips "last year"	<u>10.5</u>	<u>9.1</u>	<u>11.2</u>	<u>5.0</u>	<u>5.5</u>	<u>6.5</u>	<u>7.1</u>	<u>6.4</u>	<u>7.4</u>
For business purposes	1.7	1.8	1.9	*	*	.4	*	.2	1.2
For non-business purposes	8.5	7.0	9.0	5.0	5.5	6.1	7.1	6.0	6.2
For both business and non-business purposes	.3	.3	.3	*	*	*	*	.2	*
Did not take a rail trip	<u>87.2</u>	<u>90.4</u>	<u>88.0</u>	<u>91.8</u>	<u>94.5</u>	<u>93.1</u>	<u>90.7</u>	<u>93.2</u>	<u>92.6</u>
Not ascertained	<u>2.3</u>	<u>.5</u>	<u>.8</u>	<u>3.2</u>	<u>*</u>	<u>.4</u>	<u>2.2</u>	<u>.4</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	8485	5255	3149	439	398	231	832	470	326

<u>Use of Rail</u>	<u>\$2000 - 2999</u>			<u>\$3000 - 3999</u>			<u>\$4000 - 4999</u>		
	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
Took one or more rail trips "last year"	<u>7.2</u>	<u>8.4</u>	<u>8.9</u>	<u>7.7</u>	<u>7.1</u>	<u>12.2</u>	<u>9.9</u>	<u>6.8</u>	<u>8.6</u>
For business purposes	.4	.3	.7	.6	1.0	1.4	.8	.5	.2
For non-business purposes	6.6	8.1	8.2	7.0	5.8	10.6	9.0	6.2	8.2
For both business and non-business purposes	.2	*	*	.1	.3	.2	.1	.1	.2
Did not take a rail trip	<u>90.8</u>	<u>91.2</u>	<u>90.4</u>	<u>90.7</u>	<u>92.6</u>	<u>87.1</u>	<u>87.5</u>	<u>92.2</u>	<u>90.2</u>
Not ascertained	<u>2.0</u>	<u>.4</u>	<u>.7</u>	<u>1.6</u>	<u>.3</u>	<u>.7</u>	<u>2.6</u>	<u>1.0</u>	<u>1.2</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	981	582	280	1364	709	418	1294	740	418

* Less than .05 per cent

Table 16: continued

Use of Rail	<u>\$5000 - 5999</u>			<u>\$6000 - 7499</u>			<u>\$7500 - 9999</u>		
	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
Took one or more rail trips "last year"	<u>8.8</u>	<u>7.3</u>	<u>10.4</u>	<u>12.5</u>	<u>9.1</u>	<u>9.8</u>	<u>15.7</u>	<u>13.6</u>	<u>13.0</u>
For business purposes	<u>2.1</u>	<u>1.2</u>	<u>1.2</u>	<u>1.9</u>	<u>1.9</u>	<u>1.8</u>	<u>3.7</u>	<u>4.2</u>	<u>4.6</u>
For non-business purposes	<u>6.0</u>	<u>6.0</u>	<u>9.0</u>	<u>10.4</u>	<u>7.0</u>	<u>7.8</u>	<u>11.3</u>	<u>8.6</u>	<u>8.1</u>
For both business and non-business purposes	<u>.7</u>	<u>.1</u>	<u>.2</u>	<u>.2</u>	<u>.2</u>	<u>.2</u>	<u>.7</u>	<u>.8</u>	<u>.3</u>
Did not take a rail trip	<u>89.2</u>	<u>92.0</u>	<u>88.7</u>	<u>85.0</u>	<u>90.5</u>	<u>89.9</u>	<u>82.2</u>	<u>85.4</u>	<u>86.6</u>
Not ascertained	<u>2.0</u>	<u>.7</u>	<u>.9</u>	<u>2.5</u>	<u>.4</u>	<u>.3</u>	<u>2.1</u>	<u>1.0</u>	<u>.4</u>
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of adults	1094	671	433	896	559	396	709	500	284

Use of Rail	<u>\$10,000-14,999</u>			<u>\$15,000-19,999</u>			<u>\$20,000 and over</u>		
	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>	<u>1955</u>	<u>1956</u>	<u>1957</u>
Took one or more rail trips "last year"	<u>20.8</u>	<u>17.3</u>	<u>19.9</u>	<u>27.9</u>	<u>18.6</u>	<u>26.2</u>	<u>40.5</u>	<u>38.8</u>	<u>48.3</u>
For business purposes	<u>5.9</u>	<u>10.0</u>	<u>5.4</u>	<u>5.1</u>	<u>6.9</u>	<u>11.9</u>	<u>15.7</u>	<u>10.4</u>	<u>10.4</u>
For non-business purposes	<u>14.1</u>	<u>6.2</u>	<u>13.3</u>	<u>21.3</u>	<u>10.5</u>	<u>11.9</u>	<u>23.1</u>	<u>23.9</u>	<u>34.5</u>
For both business and non-business purposes	<u>.8</u>	<u>1.1</u>	<u>1.2</u>	<u>1.5</u>	<u>1.2</u>	<u>2.4</u>	<u>1.7</u>	<u>4.5</u>	<u>3.4</u>
Did not take a rail trip	<u>75.9</u>	<u>81.9</u>	<u>77.7</u>	<u>70.6</u>	<u>81.4</u>	<u>69.0</u>	<u>58.7</u>	<u>61.2</u>	<u>51.7</u>
Not ascertained	<u>3.3</u>	<u>.8</u>	<u>2.4</u>	<u>1.5</u>	<u>*</u>	<u>4.8</u>	<u>.8</u>	<u>*</u>	<u>*</u>
Total	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
Number of adults	389	260	166	136	86	42	121	67	29

* Less than .05 per cent

Table 17

Proportion of Rail Trips in the "Last Twelve Months"
Taken by Adults in Each Income Class^{1/}
(percentage distribution)

Family Income	Per Cent of			Per Cent of Trips					
	All Adults			Business Rail Trips			Non-business Rail Trips		
	1955	1956	1957	1955	1956	1957	1955	1956	1957
Under \$1000	5.2	7.6	7.3	*	*	.2	2.5	3.7	2.7
\$1000-1999	9.8	8.9	10.4	*	.7	.8	10.6	6.8	4.4
\$2000-2999	11.6	11.1	8.9	2.0	1.8	.4	12.2	12.3	6.1
\$3000-3999	16.1	13.5	13.3	4.5	8.8	2.1	8.7	10.7	12.3
\$4000-4999	15.3	14.1	13.3	2.9	1.3	2.9	20.6	13.8	12.3
\$5000-5999	12.9	12.8	13.7	16.5	8.5	12.2	7.5	14.4	21.3
\$6000-7499	10.6	10.6	12.6	7.5	19.1	4.8	10.4	9.0	11.1
\$7500-9999	8.3	9.5	9.0	19.2	15.7	16.7	8.2	10.7	10.8
\$10,000-14,999	4.5	4.9	5.3	21.0	24.5	26.0	6.6	5.6	8.0
\$15,000-19,999	1.6	1.6	1.3	5.3	8.3	3.3	3.9	2.3	1.2
\$20,000 and over	1.3	1.3	0.9	20.6	8.8	18.8	3.8	4.0	6.0
Not ascertained	<u>2.7</u>	<u>4.1</u>	<u>4.0</u>	<u>.6</u>	<u>2.0</u>	<u>11.8</u>	<u>5.1</u>	<u>6.7</u>	<u>3.8</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of rail trips by adults in the sample in "last 12 months"				510	388	484	1420	644	586
Number of adults				8461	5255	3149			

^{1/} This table excludes trips by those who took 100 or more rail trips in a year.

* Less than .05 per cent.

His stage in the family life cycle continues to be an important influence on whether an adult takes a rail trip. Young, single people were more likely than those at any other stage to take a rail trip (Table 18). Married people with young children are unlikely to travel by rail. Only 6 per cent of the adults in this group took a rail trip. About 12 per cent, however, of the older adults whose children have left home take a rail trip in the course of a year.

People who live in large metropolitan areas or other cities with a population of 50,000 or more are more likely to take rail trips than those who live in rural areas (Table 19). Of all adults who live in cities of at least 50,000 population, 14 per cent took a rail trip. Of adults in rural areas, only 7 per cent took a rail trip. For those living in cities 2500 - 50,000 population, the proportion traveling by rail is roughly 12 per cent. These differences seem to be attributable largely to the differences in the frequency of service available to people in different types of communities and to differences in how far it is to the next railroad station. For people living in cities in the 2500 - 50,000 range, rail travel is almost as important as for those in cities with larger populations. It will be recalled that the proportion of the population traveling by air is lower for cities of this size than for the large urban centers.

There are differences in the proportion of adults taking rail trips which are associated with differences in occupation of the head of the family. These differences, however, seem to be the results primarily of the different incomes associated with different occupations. Adults from families headed by professional or technical workers are more likely to take a rail trip than those from any other occupation group. Members of the families of self-employed and managerial workers rank second in this respect (Table 20). About 15 per cent of them take a rail trip. About 15 per cent of clerical workers

Table 18

Use of Rail "Last Year" by Stage in the Life Cycle
(Per cent of all adults, 1957 survey)

<u>Use of Rail "Last Year"</u>	<u>Stage in the Life Cycle</u>				
	<u>All Stages</u>	<u>Young Single</u>	<u>Young Married No Children</u>	<u>Married Children Youngest Under 2</u>	<u>Married Children Youngest 2 - 4-1/2</u>
Took one or more rail trips "last year"	<u>11.2</u>	<u>16.1</u>	<u>9.6</u>	<u>5.5</u>	<u>8.2</u>
For business purposes	1.9	3.0	.8	1.4	1.5
For non-business purposes	9.0	12.2	8.4	4.1	6.4
For both business and non-business purposes	.3	.9	.4	*	.3
Did not take a rail trip	<u>88.0</u>	<u>80.3</u>	<u>90.4</u>	<u>94.5</u>	<u>91.8</u>
Not ascertained	<u>.8</u>	<u>3.6</u>	<u>*</u>	<u>*</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	304	240	292	331

<u>Use of Rail "Last Year"</u>	<u>Stage in the Life Cycle</u>			
	<u>Married Children Youngest 5-14 1/2</u>	<u>Married Children Youngest 15 - 17</u>	<u>Older Married, No Children Under 18</u>	<u>Older Single</u>
Took one or more rail trips "last year"	<u>8.9</u>	<u>13.9</u>	<u>11.7</u>	<u>15.7</u>
For business purposes	3.0	1.9	2.2	1.1
For non-business purposes	5.9	12.0	9.2	14.4
For both business and non-business purposes	*	*	.3	.2
Did not take a rail trip	<u>90.7</u>	<u>86.1</u>	<u>87.9</u>	<u>83.7</u>
Not ascertained	<u>.4</u>	<u>*</u>	<u>.4</u>	<u>.6</u>
Total	100.0	100.0	100.0	100.0
Number of cases	559	108	692	464

Less than .05 per cent

Table 19

Use of Rail "Last Year" by Place of Residence
(per cent of all adults, 1957 Survey)

	<u>Place of Residence</u>					<u>Other Areas</u>		
	<u>Large Metropolitan Areas^{1/}</u>							
<u>Used Rail "Last Year"</u>	<u>All Adults</u>	<u>Central Cities</u>	<u>Suburbs 50,000 & Over</u>	<u>Suburbs 2500-50,000</u>	<u>Suburbs Rural</u>	<u>Cities 50,000 & Over</u>	<u>Cities 2500-50,000</u>	<u>Rural, Farm & Open Country</u>
Took one or more rail trips "last year"	<u>11.2</u>	<u>14.1</u>	<u>14.3</u>	<u>14.0</u>	<u>6.5</u>	<u>13.9</u>	<u>12.2</u>	<u>7.1</u>
For business purposes	1.9	1.3	1.0	4.0	*	3.1	2.3	1.0
For non-business purposes	9.0	12.3	13.3	10.0	6.5	10.6	9.6	5.7
For both business and non-business purposes	.3	.5	*	*	*	.2	.3	.4
Did not take a rail trip	<u>88.0</u>	<u>84.8</u>	<u>84.0</u>	<u>84.6</u>	<u>93.5</u>	<u>85.3</u>	<u>86.7</u>	<u>92.4</u>
Not ascertained	<u>.8</u>	<u>1.1</u>	<u>.9</u>	<u>1.4</u>	<u>*</u>	<u>.8</u>	<u>1.1</u>	<u>.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	447	105	279	31	490	729	1068

^{1/} The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

Table 20

Use of Rail Within Occupation Groups
(percentage distribution of adults)

Use of Rail "Last Year"	Occupation of Head of Family										
	All Occu- pations	Profes- Tech- nical	Self-Em- ployed, Manag- erial	Cler- ical	Sales	Crafts- men, Fore- men, Oper- atives Armed Forces	Laborers, Service Workers	Farm- ers	Retired Heads of Families	Unemployed	Houswives
Took one or more trips by rail "last year"	<u>11.2</u>	<u>23.7</u>	<u>14.9</u>	<u>14.7</u>	<u>12.1</u>	<u>7.7</u>	<u>8.0</u>	<u>2.4</u>	<u>8.6</u>	<u>15.3</u>	<u>18.4</u>
For business purposes	1.9	5.6	3.7	2.1	4.1	.9	1.3	.4	.7	1.4	.6
For non-business purposes	9.0	17.0	10.5	12.6	7.4	6.6	6.7	2.0	7.9	13.9	17.8
Took both business and non-business trips	.3	1.1	.7	*	.6	.2	*	*	*	*	*
Did not take a rail trip	<u>89.0</u>	<u>76.3</u>	<u>83.5</u>	<u>84.8</u>	<u>86.5</u>	<u>91.6</u>	<u>91.6</u>	<u>97.2</u>	<u>91.0</u>	<u>83.3</u>	<u>79.2</u>
Not ascertained	<u>.8</u>	<u>*</u>	<u>1.6</u>	<u>.3</u>	<u>1.4</u>	<u>.7</u>	<u>.4</u>	<u>.4</u>	<u>.4</u>	<u>1.4</u>	<u>2.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	270	436	190	148	837	461	246	268	72	168

* Less than .05 per cent.

also take a rail trip. It seems probable that many of the latter are single girls working as secretaries. People from families of blue collar workers are less likely to take a rail trip, and only 2 per cent of adults from farm families took a rail trip in the twelve month period covered by the Survey.

F. Coach and First Class Rail Travel

In the fall interviews on the 1957 Survey, for the first time information was obtained about the proportion of all adults who took one or more trips by rail coach and the proportion who took one or more trips by rail first class during the year prior to interview. As indicated in the preceding discussion, 11.2 per cent of all adults took a rail trip. The proportion who took coach and first class rail trips was as follows:

Took one or more first class rail trips bus no coach trip	3.3%
Took both coach and first class rail trips	0.9
Took one or more coach trips but no first class trip	6.7
Not ascertained	0.3
Total	<u>11.2%</u>

Altogether about 4 per cent traveled by rail first class, and about 7-8 per cent by rail coach. Only about 1 per cent used both classes of accomodation.

The distribution by number of first class trips was as follows:

<u>Number of First Class Rail Trips</u>	<u>Per cent of All Adults</u>
<u>Took one or more first class trips</u>	<u>4.0%</u>
One	2.2
Two	0.8
Three	0.3
Four-five	0.2
Six-nine	0.1
Ten-nineteen	0.2
Twenty-twenty-nine	0.1
Thirty or more	*
Not ascertained	0.1
<u>Did not take a first class trip by rail</u>	<u>96.0</u>
Total	<u>100.0</u>

* Less than .05 per cent.

Thus, there is a small group of adults who take large numbers of first class rail trips. Of the adults who use this method of travel in a year, however, half take only one trip. The number of coach trips by rail was as follows:

<u>Number of Coach Trips by Rail</u>	<u>Per Cent of All Adults</u>
<u>Took one or more coach trips</u>	<u>7.6%</u>
One	5.0
Two	1.0
Three	0.5
Four-five	0.3
Six-nine	0.3
Ten-nineteen	*
Twenty or more	0.2
Not ascertained	0.3
<u>Did not take any coach trip</u>	<u>92.4</u>
Total	<u>100.0</u>

* Less than .05 per cent.

Roughly two-thirds of those who took any coach trips took only one such trip. Of those who took more than one, most took only two or three trips. A few people, however, traveled frequently by rail coach.

Travel by rail first class is not frequent for people in the lower and middle income groups (Table 21). Of those adults in the income groups below \$10,000, about 2 to 4 per cent took one or more first class rail trips. Of those in the income class \$10,000-\$14,999, 8 per cent took such a trip, and of those in the income class over \$15,000 approximately 28 per cent took a first class rail trip. Thus, only among people at the top of the income distribution is it at all common to take a rail trip by pullman.

A larger proportion of those in the lower and middle income groups traveled by coach than by pullman. Up to about \$7500 income, people are

Table 21

Use of Rail First Class and Coach by Family Income
(Percentage distribution of adults)

Use of Rail First Class and Coach	All Incomes	Income									
		Under \$1000	\$1000 -1999	\$2000 -2999	\$3000 -3999	\$4000 -4999	\$5000 -5999	\$6000 -7499	\$7500 -9999	\$10,000 -14,999	\$15,000 & Over
Took one or more first class rail trips ^{1/}	4	2	2	4	4	3	4	3	3	8	28
Took one or more coach rail trips ^{1/}	7	6	6	6	10	8	8	7	4	7	14
Number of adults	1638	123	178	142	198	215	252	206	140	83	36

^{1/} Includes those who took both a first class rail trip and a coach rail trip.

two or three times as likely to take at least one coach trip as a first class trip during a year. This pattern is reversed for the highest income groups. Of those with income over about \$10,000, more travel first class than coach. This table, and others in this section, refer to travel on business as well as travel for non-business reasons.

There are few differences from one stage in the family life cycle to the next in the relative frequency of use of coach and first class (Table 22). The general tendency to travel more often by rail at certain stages of the family life cycle than at other stages has been discussed in Chapter II. At all of the earlier stages people are more likely to travel by coach than first class. There does seem to be a different pattern for older married people, however. This group seems to be about as likely to travel first class as by coach. This finding is consistent with other information about this group of people. Their financial position is likely to be better than that of, say, young couples with young children. Also, they may not respond enthusiastically to air travel. (See the discussion of jet travel in Chapter V.) Older, single people are likely to be retired men or widows, whose income tends to be low. They may prefer coach travel for reasons of economy.

The relative importance of first class and coach travel is about the same in different types of communities (Table 23). In every size of town or city more people travel by coach than by pullman in the course of a period of twelve months.

Table 22

Use of Rail First Class and Coach by Stage in the Life Cycle
 (Percentage distribution of adults)

<u>Use of Rail First Class and Coach</u>	<u>All Stages</u>	<u>Young, Single</u> ^{2/}	<u>Young, Married, No Children</u>	<u>Married, Children Youngest Under 2</u>	<u>Married, Children, Youngest 2-4</u>	<u>Married, Children, Youngest 5-14</u>	<u>Married, Children, Youngest 15-17</u>	<u>Older, Married, No Children Under 18</u>	<u>Older, Single</u>	<u>Other</u>
Took one or more first class rail trips ^{1/}	4	5	3	2	2	2	5	7	4	9
Took one or more coach rail trips ^{1/}	7	13	7	5	4	6	4	6	10	15
Number of adults	1638	164	110	156	167	292	55	363	247	55

^{1/} Includes those who took both a first class rail trip and a coach rail trip.

^{2/} Under 45 years.

Table 23

Use of Rail First Class and Coach by Place of Residence
(Percentage distribution of adults)

<u>Use of Rail First Class and Coach</u>	<u>All Adults</u>	<u>Large Metropolitan Areas</u>				<u>Other Areas</u>		
		<u>Central Cities</u>	<u>Suburbs 50,000 & Over</u>	<u>Suburbs 2500- 50,000</u>	<u>Suburbs, Rural</u>	<u>Cities 50,000 & Over</u>	<u>Cities 2500- 50,000</u>	<u>Rural, Farm and Open Country</u>
Took one or more first class rail trips ^{1/}	4	7	2	5	2/	5	4	2
Took one or more coach rail trips ^{1/}	7	9	14	7	2/	8	7	6
Number of adults	1638	227	59	149	18	240	382	563

^{1/}Includes those who took both a first class rail trip and a coach rail trip.

^{2/}Too few adults to percentagize.

G. Rail Travel History

In the 1957 National Travel Survey people were asked for the first time in these surveys for the year of their most recent rail trip. From this question and questions about rail travel in the year prior to the interview the rail travel history of each adult in the sample was constructed. The history consists of information as to whether each individual ever has taken a rail trip to a point 100 miles or more away and, for those who have taken a rail trip, the year of their most recent trip. Preliminary tables based on the interviews taken in the spring of 1957 were included in the Interim report of August, 1957. This analysis now has been repeated for the entire sample.

Seven adults out of ten have taken a rail trip at some time in their lives (Table 24). One in ten took a rail trip in the year prior to the interview. An additional one in ten took his last trip in the period 1954-56. Another group of about the same size took their last rail trip in the four years 1950-1953. Thus, in a period of seven years, about three times as many took a rail trip as in a one year period. There is a large group of people who travel occasionally by rail, less often than once a year.

The number of people who took their last trip by rail in any year tends to decrease as years farther into the past are considered. Roughly one adult in ten took his most recent rail trip during World War II. A similar group took their last rail trip in 1939 or earlier. (Seven per cent of all adults state specifically that their last rail trip was in 1939 or before, and many of those who cannot remember the date of their last rail trip must have taken it in 1939 or before.)

Of adults of different ages, different proportions have taken a rail trip at some time in their lives. The differences among age groups, however, are not large. Roughly speaking, three-fourths of those aged over 24 have taken a rail trip. Of those aged 18-24, about 55 per cent have taken a rail

Table 24

Rail Travel History by Age
(percentage distribution of adults)^{1/}

<u>Rail Travel History</u>	<u>All Adults</u>	<u>Age of Adult</u>			
		<u>18-24</u>	<u>25-44</u>	<u>45-64</u>	<u>65 & Over</u>
Took a rail trip "last year"	10.9	12.7	8.9	13.0	11.0
Last rail trip was: 1954-1956	10.8	16.9	9.0	11.7	10.0
Last rail trip: 1950-1953	11.7	7.1	15.0	10.1	9.4
Last rail trip: 1946-1949	9.4	4.5	12.8	7.2	8.1
Last rail trip: 1940-1945	8.8	2.6	11.2	8.7	6.0
Last rail trip: 1939 or earlier	6.7	1.0	3.3	10.0	12.7
Year of last trip not known; can't remember; not ascertained	12.4	10.1	10.9	13.0	16.2
Never took a rail trip	<u>29.3</u>	<u>45.1</u>	<u>28.9</u>	<u>26.3</u>	<u>26.6</u>
Total	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	308	1317	1022	481

trip. Since those under 25 have had fewer years in which to take trips, the difference between these age groups is not surprising. It does not appear to be true that a generation is growing up which has no knowledge of travel by rail.

Differences do appear from one age group to the next in the proportion of adults in the age group who took their most recent rail trip before 1939. Eighteen years have elapsed since 1939. While it is possible for a person now aged 18-24 to have taken his most recent rail trip in 1939 or earlier, it is reasonable to find only 1 per cent of this age group reporting such a date.

In a preceding section it was pointed out that more men than women have taken an air trip. It is also true that more men than women have taken a rail trip. About 75 per cent of all men have taken a rail trip, compared to about 66 per cent of all women (Table 25). There seems to be little difference between the sexes in the year of their most recent rail trip. About the same proportion of men as of women took a rail trip in the year prior to the interview. Men are more likely than women to travel on business, but women seem to be more likely than men to take a non-business rail trip.

Adults from different income groups differ in their rail travel history. About six out of ten from families with incomes below \$1000 have experienced rail travel, compared to nearly nine out of ten from families with incomes of \$10,000 and above (Table 26). The proportion who took a rail trip last year also rises steadily with income, as discussed above.

Is there any evidence in the data that particular income groups are abandoning travel by rail? One must proceed cautiously in drawing any inferences on this point. One approach would be to look at those who last took a rail trip in a period some years in the past, say 1946-1949, or 1950-1953. The probability that an individual took his last trip in this

Table 25

Rail Travel History by Sex
(Percentage distribution of adults)

<u>Rail Travel History</u>	<u>All Adults</u>	<u>Men</u>	<u>Women</u>
<u>Has taken a rail trip</u>	<u>70.7</u>	<u>75.5</u>	<u>66.9</u>
Took a rail trip "last year"	10.9	11.0	10.9
Last trip 1954 - June 1956	10.8	11.1	10.6
Last trip 1950-53	11.7	12.1	11.4
Last trip 1946-49	9.4	11.0	8.1
Last trip 1940-45	8.8	9.8	8.0
Last trip 1939 or earlier	6.7	7.8	5.8
Year of last trip not known; can't remember; not ascertained	12.4	12.7	12.1
<u>Never took a rail trip</u>	<u>29.3</u>	<u>24.5</u>	<u>33.1</u>
Total	100.0	100.0	100.0
Number of adults	3149	1391	1756

Table 26

Rail Travel History by Family Income
 (Percentage distribution of adults)

<u>Rail Travel History.</u>	<u>All Adults</u>	<u>Family Income</u>								
		<u>Under \$1000</u>	<u>\$1000- 1999</u>	<u>\$2000- 2999</u>	<u>\$3000- 3999</u>	<u>\$4000- 4999</u>	<u>\$5000- 5999</u>	<u>\$6000- 7499</u>	<u>\$7500- 9999</u>	<u>\$10,000 and Over</u>
<u>Has taken a rail trip</u>	<u>70.7</u>	<u>59.3</u>	<u>64.7</u>	<u>65.4</u>	<u>67.7</u>	<u>71.0</u>	<u>68.8</u>	<u>77.1</u>	<u>77.8</u>	<u>86.5</u>
Took a rail trip "last year"	10.9	6.5	7.0	8.6	12.2	8.6	10.4	9.6	13.0	24.0
Last trip 1954-June 1956	10.8	8.7	8.3	9.3	11.7	9.8	9.9	12.9	10.2	16.9
Last trip 1950-53	11.7	5.2	6.7	13.9	11.5	13.9	14.1	13.4	11.6	13.9
Last trip 1946-49	9.4	6.0	8.9	7.5	5.3	10.5	10.8	12.4	14.1	9.3
Last trip 1940-45	8.8	5.6	7.4	5.0	8.6	12.0	9.7	10.1	10.9	8.0
Last trip 1939 or earlier	6.7	11.7	11.7	9.3	6.7	3.8	5.1	4.8	6.0	3.4
Year of last trip not known; can't remember; not ascertained	12.4	15.6	14.7	11.8	11.7	12.4	8.8	13.9	12.0	11.0
<u>Never took a rail trip</u>	<u>29.3</u>	<u>40.7</u>	<u>35.3</u>	<u>34.6</u>	<u>32.3</u>	<u>29.0</u>	<u>31.2</u>	<u>22.9</u>	<u>22.2</u>	<u>13.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	231	326	280	418	418	433	396	284	237

period does not seem to be closely associated with his income. The results do not indicate strongly that any particular income group rather than another is being lost to rail travel.

Another factor in the choice of mode of travel is the type of community in which a traveler lives. As noted above, people living in rural areas are less likely than people living in cities to take a rail trip in any one year. It is reasonable to find that people in rural areas also are slightly less likely than people living in towns and cities to have experienced rail travel at any time in their lives (Table 27). About two-thirds of the population of rural areas have taken a rail trip, compared to nearly three-fourths of those living in urban areas. There are no major differences among types of communities in the date of the most recent rail trip. If anything, those living in smaller towns and rural areas took their most recent trip at a date further in the past than those who live in the major cities.

Table 27

Rail Travel History by Type of Community
(Percentage distribution of adults)

Rail Travel History	Type of Community						
	12 Largest Metropolitan Areas						
	All Adults	Central Cities	Suburbs 50,000 and Over	Suburbs Under 50,000	Other Cities 50,000 and Over	Cities 2500-49,999	Rural Areas
<u>Has taken a rail trip</u>	<u>70.7</u>	<u>72.0</u>	<u>79.1</u>	<u>72.2</u>	<u>74.7</u>	<u>74.1</u>	<u>64.7</u>
Took a rail trip "last year"	10.9	13.4	14.3	13.2	13.7	12.1	6.9
Last trip 1954-June 1956	10.8	15.7	17.1	8.1	11.0	12.5	7.7
Last trip 1950-53	11.7	13.2	18.1	15.2	13.9	12.1	8.1
Last trip 1946-49	9.4	5.8	10.5	8.4	10.2	9.0	11.1
Last trip 1940-45	8.8	8.0	10.5	9.0	7.8	8.9	9.2
Last trip 1939 or earlier	6.7	3.8	3.8	4.8	5.9	7.4	8.5
Year of last trip not known; can't remember; not ascertained	12.4	12.1	4.8	13.5	12.2	12.1	13.2
<u>Never took a rail trip</u>	<u>29.3</u>	<u>28.0</u>	<u>20.9</u>	<u>27.8</u>	<u>25.3</u>	<u>25.9</u>	<u>35.3</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	447	105	310	490	729	1068

H. Use of Bus Last Year

The proportion of the population who took a bus trip to a point 100 or more miles away increased in 1957. The estimate from the 1955 Survey was that 6.6 per cent of all adults took a bus "trip" last year, the estimate from the 1956 Survey was 6.1 per cent, but the estimate from the 1957 Survey is 9.6 per cent. This increase is too large to be attributed merely to random fluctuations in the sample. More people took at least one long bus trip in 1957 than in earlier years. This finding is perhaps not surprising in view of the new highways which were becoming available to buses during this period.

The proportion of adults who take a bus trip does not vary from one income group to the next (Table 28). About one adult in ten taken a bus trip regardless of family income.

There were no striking changes from 1955-1957 in the proportion of all bus trips accounted for by adults at different income levels. Roughly speaking, the proportion of bus trips accounted for by those at each income level is the same as the proportion of all adults in the population who are at the income level (Table 29). For example, about 13 per cent of all adults fall in the income class \$3000 - 3999. These adults account for about 7 per cent of all bus trips on business and 12 per cent of all bus trips for non-business reasons.

Use of bus, like use of other common carriers, depends on an individual's stage in the family life cycle (Table 30). Young, single people are frequent users of the bus for trips 100 miles away, just as they are frequent users of trains and planes. Married adults with young children are less likely than other adults to take a bus trip, just as they are less likely than other adults to travel by train or plane. The proportion who take a bus trip rises in the later stages of the life cycle. Older, single people are only slightly less likely than young adults to take a trip by bus.

Table 28

Use of Bus "Last Year" by Income Groups
(Percentage distribution of adults)

Use of Bus	All Incomes			Under \$1000			\$1000-1999			\$2000-2999			\$3000-3999			\$4000-4999		
	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957
Took one or more bus trips "last year"	6.6	6.1	9.6	9.1	9.0	9.1	8.2	8.3	12.6	6.9	6.2	11.4	7.3	6.5	9.1	6.2	4.1	10.3
For business purposes	.6	.7	1.2	.5	1.5	.4	.7	.4	.6	.1	.2	.4	.4	1.0	1.2	.5	.1	1.4
For non-business purposes	5.9	5.2	8.2	8.6	7.5	8.7	7.5	7.7	12.0	6.6	6.0	11.0	6.9	5.4	7.7	5.6	3.9	8.9
For both business and non-business purposes	.1	.2	.2	*	*	*	*	.2	*	.2	*	*	*	.1	.2	.1	.1	*
Did not take a bus trip	90.2	93.4	89.4	86.1	91.0	90.5	89.7	91.3	87.4	90.4	93.5	87.5	89.5	93.2	90.2	90.6	94.5	88.5
Not ascertained	3.2	.5	1.0	4.8	*	.4	2.1	.4	*	2.7	.3	1.1	3.2	.3	.7	3.2	1.4	1.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	8185	5255	3149	439	67	231	832	470	326	981	582	280	1364	709	418	1294	740	418

Table 28, Continued

Use of Bus	85000-5999			66000-7499			37500-9999			10,000-14,999			15,000-19,999			20,000 and Over		
	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957
Took one or more bus trips "last year"	6.1	6.3	8.0	5.1	5.7	9.0	6.5	4.6	8.5	5.7	1.6	7.8	5.2	5.8	7.1	5.8	9.0	*
For business purposes	1.1	.9	1.1	.4	1.1	1.2	1.1	1.0	2.5	1.6	1.5	1.8	*	*	2.3	2.5	1.5	*
For non-business purposes	4.8	5.1	6.9	4.7	4.4	7.8	5.1	3.6	5.6	4.1	3.1	5.4	5.1	4.6	2.4	3.3	7.5	*
For both business and non-business purposes	.2	.3	*	*	.2	*	.3	*	.4	*	*	.6	.3	1.2	2.4	*	*	*
Did not take a bus trip	51.5	23.1	90.8	92.0	94.1	90.7	91.4	94.4	90.8	87.4	94.6	89.2	89.0	94.2	88.1	90.1	91.0	100.0
Not ascertained	2.4	.6	1.2	2.9	.2	.3	2.1	1.0	.7	6.9	.8	3.0	5.1	*	4.8	4.1	*	*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1094	671	433	896	559	396	709	500	284	389	260	166	136	86	42	121	67	29

* Less than .05 per cent.

Table 29

Proportion of Bus Trips in the "Last Twelve Months"
Taken by Adults in Each Income Class^{1/}
(Percentage distribution of adults)

Family Income	Per Cent of All Adults			Per Cent of Trips					
				Business Bus Trips			Non-business Bus Trips		
	1955	1956	1957	1955	1956	1957	1955	1956	1957
Under \$1000	5.2	7.6	7.3	1.3	.7	1.1	4.5	7.7	6.2
\$1000-1999	9.8	8.9	10.4	16.2	2.8	8.5	10.7	15.9	11.2
\$2000-2999	11.6	11.1	8.9	2.6	8.5	.5	15.6	10.5	16.1
\$3000-3999	16.1	13.5	13.3	3.9	12.9	6.8	18.9	13.1	11.8
\$4000-4999	15.3	14.1	13.3	17.5	1.4	11.3	11.9	9.8	15.4
\$5000-5999	12.9	12.8	13.7	22.1	12.1	7.9	13.0	13.6	16.9
\$6000-7499	10.6	10.6	12.6	7.8	39.7	5.1	8.3	6.1	8.5
\$7500-9999	8.3	9.5	9.0	10.4	7.1	13.0	8.6	11.1	4.3
\$10,000-14,999	4.5	4.9	5.3	12.3	7.8	13.0	3.4	4.8	4.9
\$15,000-19,999	1.6	1.6	1.3	.6	2.1	8.5	.9	1.1	.4
\$20,000 and over	1.3	1.3	.9	1.3	.7	*	.8	2.0	*
Not ascertained	2.7	4.1	4.0	3.9	4.2	24.3	2.5	4.3	4.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of bus trips by adults in the sample in "last 12 months"				154	141		1001	440	
Number of adults	8461	5255	3149						

^{1/} This table excludes trips by those who took 100 or more bus trips in a year.

Table 30

Use of Bus "Last Year" by Stage in the Life Cycle
 (Per cent of all adults, 1957 Survey)

Use of Bus	Stage in the Life Cycle									
	All Stages	Young, Single	Young, Married, No Children	Youngest Children Under 2	Youngest Children 2 - 4½	Youngest Children 5 - 14½	Youngest Children 15 - 17	Older, Married, No Children Under 18	Older, Single	Other
<u>Took one or more bus trips</u> <u>"Last year"</u>	<u>9.6</u>	<u>18.4</u>	<u>7.5</u>	<u>5.8</u>	<u>5.1</u>	<u>6.8</u>	<u>14.8</u>	<u>8.1</u>	<u>14.4</u>	<u>13.7</u>
For business purposes	1.2	2.3	.8	1.0	1.2	1.4	.9	1.6	.6	*
For non-business purposes	8.2	16.1	6.3	4.8	3.9	5.2	12.0	6.5	13.6	13.7
For both business and non-business purposes	.2	*	.4	*	*	.2	1.9	*	.2	*
<u>Did not take a bus trip</u>	<u>89.4</u>	<u>77.7</u>	<u>92.5</u>	<u>94.2</u>	<u>94.6</u>	<u>92.3</u>	<u>85.2</u>	<u>91.3</u>	<u>84.9</u>	<u>86.3</u>
<u>Not ascertained</u>	<u>1.0</u>	<u>3.9</u>	<u>*</u>	<u>*</u>	<u>.3</u>	<u>.9</u>	<u>*</u>	<u>.6</u>	<u>.7</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	304	240	292	331	559	108	692	164	102

* Less than .05 per cent.

Use of bus travel varies from one type of community to another.

Adults who live in towns and small cities with a population of 2500 - 50,000 or in cities of 50,000 to 600,000 are those most likely to take a bus trip (Table 31). About 12 per cent of these adults took a bus trip in the period covered in the 1957 Survey. The proportion using the bus in 1956 was only about 4 per cent of those living in large metropolitan areas. In 1957 this fraction increased to about 9 per cent. In the rural areas about 8 per cent of all adults took bus trips in 1957, an increase of about 3 per cent over 1956.

The data suggest that there was a change between 1956-1957 in the occupation groups taking long trips by bus. The evidence is inconclusive but the most likely interpretation is that there was a relatively large increase from 1956-1957 in the proportion of adults from high-status occupations who took a bus trip (Table 32). Thus, the proportion of those from families of professional and technical workers who took a bus trip rose from 6 per cent to 16 per cent. The proportion of those from families of self-employed and managerial workers who took a bus trip rose from 4 per cent to 8 per cent. Increases in the proportion who travel by bus took place, however, in every occupation group.

Table 31

Use of Bus "Last Year" by Place of Residence
 (Per cent of all adults, 1957 Survey)

<u>Used Bus "Last Year"</u>	<u>All Adults</u>	<u>Large Metropolitan Areas^{1/}</u>				<u>Other Areas</u>		
		<u>Central Cities</u>	<u>Suburbs 50,000 & Over</u>	<u>Suburbs 2500- 50,000</u>	<u>Suburbs, Rural</u>	<u>Cities 50,000 & Over</u>	<u>Cities 2500- 50,000</u>	<u>Rural, Farm & Open Country</u>
<u>Took one or more bus trips "last year"</u>	<u>9.6</u>	<u>9.2</u>	<u>10.5</u>	<u>6.8</u>	<u>3.2</u>	<u>11.6</u>	<u>11.4</u>	<u>8.4</u>
For business purposes	1.2	.9	*	.4	*	1.2	1.9	1.3
For non-business purposes	8.2	8.3	10.5	6.4	3.2	10.4	9.1	6.9
For both business and non-business purposes	.2	*	*	*	*	*	.4	.2
<u>Did not take a bus trip</u>	<u>89.4</u>	<u>89.5</u>	<u>88.5</u>	<u>91.4</u>	<u>96.8</u>	<u>87.4</u>	<u>87.4</u>	<u>90.9</u>
<u>Not ascertained</u>	<u>1.0</u>	<u>1.3</u>	<u>1.0</u>	<u>1.8</u>	<u>*</u>	<u>1.0</u>	<u>1.2</u>	<u>.7</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	447	105	279	31	490	729	1068

^{1/} The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

Table 32

Use of Bus Within Occupation Groups
 (Per cent of all adults, 1957 Survey)

Use of Bus "Last Year"	Occupation of Head of Family										
	All Occu- pations	Profes- sional, Tech- nical	Self- Employed, Manag- erial	Cleri- cal	Sales	Crafts- men, Fore- men, Opera- tives, Armed Forces	Laborers, Service Workers	Farm- ers	Retired Heads of Families	Students and Unemployed	House- wives
Took one or more trips by bus "last year"	<u>9.6</u>	<u>15.9</u>	<u>8.5</u>	<u>10.5</u>	<u>8.1</u>	<u>7.4</u>	<u>10.6</u>	<u>6.9</u>	<u>9.3</u>	<u>13.9</u>	<u>14.3</u>
For business purposes	1.2	4.8	2.3	.5	1.4	.5	.4	.8	.4	2.8	*
For non-business purposes	8.2	10.4	5.7	9.5	6.7	6.9	10.2	6.1	8.9	11.1	14.3
For both business and non-business purposes	.2	.7	.5	.5	*	*	*	*	*	*	*
Did not take a bus trip	<u>89.4</u>	<u>84.1</u>	<u>89.2</u>	<u>89.0</u>	<u>89.9</u>	<u>91.9</u>	<u>88.9</u>	<u>92.3</u>	<u>89.9</u>	<u>84.7</u>	<u>83.3</u>
Not ascertained	<u>1.0</u>	<u>*</u>	<u>2.3</u>	<u>.5</u>	<u>2.0</u>	<u>.7</u>	<u>.5</u>	<u>.8</u>	<u>.8</u>	<u>1.4</u>	<u>2.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	270	436	190	148	837	461	246	268	72	168

* Less than .05 per cent.

I. Use of Auto Last Year

The 1956 Survey showed a decline in the proportion of the adult population who took an auto trip, compared to the results of the 1955 Survey. This decline, however, may have been the result partly of sampling error and partly of changes in the questionnaire between 1955 and 1956. In the 1957 Survey the questions were restored to the form used in 1955. The results show that 61 per cent of all adults took an auto trip. There is no reason to doubt that this proportion was higher than that in the period covered by the earlier surveys. (It should be recalled that the 1957 Survey covers, not calendar 1957, but the 12 months prior to interview, which was June 1956 to June 1957 for the spring interviews and December 1956 to December 1957 for the fall interviews.) The increase took place both in business and non-business travel. About 10 per cent of the adult population took at least one auto trip for business purposes in 1957 while about 58 per cent took one or more non-business trips by auto (Table 33). The proportion taking an auto trip increased in every income group from 1955 to 1957.

The proportion of adults taking an auto trip rises with income to an income level of approximately \$6000 or so. Nearly 80 per cent of those in every income group over \$6000 take at least one auto trip a year.

The proportion of all auto trips accounted for by adults in the upper income groups is larger than the proportion which they represent of the population (Table 34). Those with incomes of \$6000 or over represent about 29 per cent of the adult population, they accounted for 70 per cent of the business auto trips and 43 per cent of the non-business auto trips. Those with incomes of \$20,000 or over, comprising 1 per cent all adults, accounted for about 5 per cent of the business auto trips and about 2 per cent of the non-business auto trips.

Table 33

Use of Auto "Last Year" by Income Groups
(Percentage distribution of adults)

Use of Auto	All Incomes			Under \$1000			\$1000-1999			\$2000-2999			\$3000-3999			\$4000-4999		
	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957
Took one or more auto trips "last year"	<u>54.9</u>	<u>48.3</u>	<u>61.0</u>	<u>23.5</u>	<u>20.1</u>	<u>30.3</u>	<u>34.6</u>	<u>29.0</u>	<u>31.0</u>	<u>42.3</u>	<u>36.1</u>	<u>51.4</u>	<u>51.3</u>	<u>42.0</u>	<u>57.4</u>	<u>56.3</u>	<u>47.5</u>	<u>63.6</u>
For business purposes	2.0	3.0	3.2	.7	.8	.9	2.4	2.6	1.8	2.1	2.4	3.6	1.2	2.8	1.4	1.6	3.7	2.4
For non-business purposes	<u>48.1</u>	<u>40.8</u>	<u>50.8</u>	<u>22.6</u>	<u>17.8</u>	<u>27.3</u>	<u>29.8</u>	<u>25.1</u>	<u>28.2</u>	<u>37.7</u>	<u>30.9</u>	<u>45.0</u>	<u>46.5</u>	<u>36.0</u>	<u>50.5</u>	<u>51.3</u>	<u>40.1</u>	<u>56.9</u>
For both business and non-business purposes	<u>4.8</u>	<u>4.5</u>	<u>7.0</u>	<u>.2</u>	<u>1.5</u>	<u>2.1</u>	<u>2.4</u>	<u>1.3</u>	<u>1.0</u>	<u>2.5</u>	<u>2.8</u>	<u>2.8</u>	<u>3.6</u>	<u>3.2</u>	<u>5.5</u>	<u>3.4</u>	<u>3.7</u>	<u>4.3</u>
Did not take an auto trip	<u>43.2</u>	<u>51.2</u>	<u>38.0</u>	<u>74.5</u>	<u>79.6</u>	<u>69.3</u>	<u>62.8</u>	<u>70.6</u>	<u>69.0</u>	<u>55.8</u>	<u>63.4</u>	<u>48.2</u>	<u>47.2</u>	<u>57.7</u>	<u>41.6</u>	<u>42.5</u>	<u>51.6</u>	<u>35.2</u>
Not ascertained	<u>1.9</u>	<u>.5</u>	<u>1.0</u>	<u>2.0</u>	<u>.3</u>	<u>.4</u>	<u>2.6</u>	<u>.4</u>	<u>*</u>	<u>1.9</u>	<u>.5</u>	<u>.4</u>	<u>1.5</u>	<u>.3</u>	<u>1.0</u>	<u>1.2</u>	<u>.9</u>	<u>1.2</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	8485	5255	3149	439	398	231	832	470	326	981	582	280	1364	709	418	1294	740	418

Table 33, Continued

Use of Auto	55000-5999			60000-7499			7500-9999			10,000-14,999			15,000-19,999			20,000 and Over		
	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957	1955	1956	1957
Took one or more auto trips "last year"	67.9	55.8	71.8	66.3	62.4	78.7	73.6	68.2	76.8	69.9	75.4	75.3	71.3	67.4	85.7	80.2	73.1	86.2
For business purposes	2.4	2.4	3.0	3.0	3.2	4.5	1.3	3.8	5.3	2.6	5.0	5.4	2.9	3.5	7.1	6.6	7.5	13.8
For non-business purposes	58.8	48.0	62.8	58.7	54.6	64.9	63.3	56.2	57.8	56.5	57.3	51.2	58.8	54.6	50.0	57.9	56.7	48.3
For both business and non-business purposes	6.7	5.4	6.0	4.6	4.6	9.3	9.0	8.2	13.7	10.8	13.1	18.7	9.6	9.3	28.6	15.7	8.9	24.1
Did not take an auto trip	30.5	43.5	26.8	31.8	37.2	21.0	25.1	31.0	22.5	26.0	23.8	22.3	26.5	32.6	9.5	19.0	26.9	13.6
Not ascertained	1.6	.7	1.4	1.9	.4	.3	1.3	.8	.7	4.1	.8	2.4	2.2	*	4.8	.8	*	*
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	1094	671	433	896	559	396	709	500	284	389	260	166	136	86	42	121	67	29

*Less than .05 per cent.

Table 34

**Proportion of Auto Trips in the "Last Twelve Months"
Taken by Adults in Each Income Class^{1/}**
(percentage distribution)

Family Income	Per Cent of All Adults			Per Cent of Trips					
				Business Auto Trips			Non-business Auto Trips		
	1955	1956	1957	1955	1956	1957	1955	1956	1957
Under \$1000	5.2	7.6	7.3	.2	.6	3.1	1.2	1.9	2.4
\$1000-1999	9.8	8.9	10.4	3.1	2.3	1.3	4.6	3.6	3.9
\$2000-2999	11.6	11.1	8.9	4.1	3.2	2.7	8.5	6.7	6.1
\$3000-3999	16.1	13.5	13.3	3.6	7.0	3.5	12.5	11.7	9.5
\$4000-4999	15.3	14.1	13.3	8.9	10.5	8.9	16.0	11.8	14.7
\$5000-5999	12.9	12.8	13.7	24.9	13.1	8.0	19.8	16.3	14.0
\$6000-7499	10.6	10.6	12.6	11.7	11.8	15.7	6.2	13.7	16.7
\$7500-9999	8.3	9.5	9.0	14.4	25.0	23.0	16.4	17.1	14.2
\$10,000-14,999	4.5	4.9	5.3	11.6	17.4	15.1	8.0	9.7	9.0
\$15,000-19,999	1.6	1.6	1.3	3.0	3.9	4.6	2.6	3.0	3.0
\$20,000 and over	1.3	1.3	0.9	6.4	1.9	4.9	2.7	1.7	1.7
Not ascertained	2.7	4.1	4.0	3.3	3.3	9.2	1.7	2.8	4.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of auto trips by adults in the sample in "last 12 months"									
				4196	2152		17,175	7927	
Number of adults 8461 5255 3149									

^{1/} This table excludes trips by those who took 100 or more auto trips in a year.

As discussed earlier, single people are the most frequent users of each of the common carriers. They are not usually likely to travel by auto. About the same proportion of young, single people as of all adults took one or more auto trips last year (Table 35). On the other hand, young, married people with no children are more likely than any other group in the population to take at least one auto trip a year. The arrival of the first child makes a difference. Only about the same proportion of adults in this stage as of the population as a whole take an auto trip. Since young couples with young children are unlikely to travel by common carrier, it is obvious that the arrival of children tends to reduce people's propensity to travel.

As the children grow up, auto travel becomes easier and the proportion taking auto trips rises up to a point and then declines once more. Older, married adults whose children have left home are less likely to travel by auto than those with teen-age children. Finally, only about one out of ten of the older single adults takes an auto trip in a year. People in this stage in the life cycle are less likely to travel by auto than those at any other stage.

People who live in large metropolitan areas are less likely to travel by auto than those living elsewhere (Table 36). Less than half of them took an auto trip in the year prior to the interview. This statement does not appear to apply to those in the smaller suburbs of large cities. These people are about as likely to take an auto trip as the rest of the population. People living in other cities of 50,000 and over and people living in cities of 2500 - 50,000 population are those most likely to take an auto trip. About two-thirds of those in this group took an auto trip in the year prior to the interview. About as large a proportion of the people in the rural areas as of the population as a whole, take an auto trip. These people, as noted earlier, are not likely to use any of the common carriers. In general, they seem less likely to travel than the rest of the population.

Table 35

Use of Auto "Last Year" by Stage in the Life Cycle
 (Per cent of all adults, 1957 Survey)

Use of Auto	Stage in the Life Cycle									
	All Stages	Young, No Single	Young, Married, No Children	Youngest Under 2	Youngest 2 - 4 ¹ / ₂	Youngest 5 - 14 ¹ / ₂	Youngest 15 - 17	Youngest 18 - 24	Older, Married, No Children	Other
<u>Took one or more auto trips</u> <u>"last year"</u>	<u>61.0</u>	<u>61.2</u>	<u>75.4</u>	<u>62.0</u>	<u>67.7</u>	<u>71.4</u>	<u>73.1</u>	<u>59.8</u>	<u>39.9</u>	<u>48.0</u>
For business purposes	3.2	2.6	4.6	4.1	3.3	3.4	4.6	2.3	2.4	2.9
For non-business purposes	50.8	51.6	63.3	49.3	56.2	57.6	59.3	51.3	34.7	41.2
For both business and non-business purposes	7.0	7.0	7.5	8.6	8.2	10.4	9.2	6.2	2.8	3.9
<u>Did not take an auto trip</u>	<u>38.0</u>	<u>34.9</u>	<u>24.6</u>	<u>38.0</u>	<u>32.3</u>	<u>28.1</u>	<u>26.9</u>	<u>39.7</u>	<u>59.5</u>	<u>52.0</u>
Not ascertained	<u>1.0</u>	<u>3.9</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>.5</u>	<u>*</u>	<u>.5</u>	<u>.6</u>	<u>*</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	304	240	292	331	559	108	692	464	102

* Less than .05 per cent.

Table 36

Use of Auto "Last Year" by Place of Residence
(Per cent of all adults, 1957 Survey)

<u>Used Auto "Last Year"</u>	<u>All Adults</u>	<u>Large Metropolitan Areas^{1/}</u>				<u>Other Areas</u>		
		<u>Central Cities</u>	<u>Suburbs 50,000 & Over</u>	<u>Suburbs 2500- 50,000</u>	<u>Suburbs Rural</u>	<u>Cities 50,000 & Over</u>	<u>Cities 2500- 50,000</u>	<u>Rural, Farm & Open Country</u>
<u>Took one or more auto trips "last year"</u>	<u>61.0</u>	<u>47.0</u>	<u>44.7</u>	<u>58.7</u>	<u>74.2</u>	<u>66.1</u>	<u>68.1</u>	<u>61.5</u>
For business purposes	3.2	2.5	1.9	2.5	*	3.1	2.9	4.2
For non-business purposes	50.8	41.4	40.9	51.2	61.3	57.3	54.3	50.0
For both business and non-business purposes	7.0	3.1	1.9	5.0	12.9	5.7	10.9	7.3
<u>Did not take an auto trip</u>	<u>38.0</u>	<u>51.7</u>	<u>54.3</u>	<u>39.9</u>	<u>25.8</u>	<u>33.1</u>	<u>30.5</u>	<u>38.0</u>
<u>Not ascertained</u>	<u>1.0</u>	<u>1.3</u>	<u>1.0</u>	<u>1.4</u>	<u>*</u>	<u>.8</u>	<u>1.4</u>	<u>.5</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	447	105	279	31	490	729	1068

^{1/} The "large" metropolitan areas are the twelve largest metropolitan areas in the United States.

* Less than .05 per cent.

The differences among income groups in the proportion of the population who take one or more auto trips imply differences among occupation groups. The occupation groups which enjoy the highest incomes also are those most likely to take auto trips. About 84 per cent of the adults in the families of professional and technical workers took an auto trip "last year", and about 74 per cent of the adults in families of self-employed and managerial workers (Table 37). Sales workers also are likely to travel by auto. At the other extreme adults from families where the head is retired or is a housewife are least likely to take an auto trip. The blue collar workers tend to fall between these extremes.

Table 37

Use of Auto Within Occupation Groups
 (Per cent of all adults, 1957 Survey)

Use of Auto "Last Year"	Occupation of Head of Family										
	All Occu- pations	Profes- sional, Tech- nical	Self- Employed, Man- gerial	Cleri- cal	Sales	Crafts- men, Fore- men, Opera- tives, Armed Forces	Laborers, Service Workers	Farm- ers	Retired Heads of Families	Students and Unemployed	House- wives
<u>Took one or more auto trips "last year"</u>	<u>61.0</u>	<u>84.1</u>	<u>74.1</u>	<u>61.6</u>	<u>79.0</u>	<u>67.1</u>	<u>45.4</u>	<u>51.2</u>	<u>41.4</u>	<u>50.0</u>	<u>36.9</u>
For business purposes	3.2	5.6	6.0	2.6	8.1	2.0	2.2	3.2	1.5	4.2	.6
For non-business purposes	50.8	62.2	50.2	56.4	54.7	61.4	41.9	41.5	37.7	38.9	33.9
For both business and non-business purposes	7.0	16.3	17.9	2.6	16.2	3.7	1.3	6.5	2.2	6.9	2.4
<u>Did not take an auto trip</u>	<u>38.0</u>	<u>15.9</u>	<u>23.8</u>	<u>37.9</u>	<u>19.6</u>	<u>32.0</u>	<u>54.2</u>	<u>48.4</u>	<u>58.2</u>	<u>48.6</u>	<u>60.7</u>
<u>Not ascertained</u>	<u>1.0</u>	<u>*</u>	<u>2.1</u>	<u>.5</u>	<u>1.4</u>	<u>.9</u>	<u>.4</u>	<u>.4</u>	<u>.4</u>	<u>1.4</u>	<u>2.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	3149	270	436	190	148	837	461	246	268	72	168

* Less than .05 per cent.

III. Frequency of Travel by Region

In the reports on the 1955 and 1956 Surveys tables were included which showed a breakdown of frequency of travel by region. The regions used were three: the metropolitan New York area, other parts of the New York Central Territory, and the rest of the United States. As it was defined for these purposes, the New York Central Territory coincided roughly with the area north of the Ohio River and east of the Mississippi, although some parts of Pennsylvania and New Jersey were omitted.^{1/} The present report continues this classification by region in the interests of building up the size of the sample in each area and in an attempt to detect any major shifts in the pattern of people's travel behavior which may have developed in one of the regions.

The proportion of the population who took one or more trips by air in the year prior to interview has been found in each of the three Surveys to be higher in New York City than in other parts of the Central territory (Table 38). People living in the rest of the United States are least likely to take an air trip.

It has been found, also, in each of the three years that these differences arise because of differences in the proportion who take non-business trips. About 3 per cent of the adults in each region take one or more business trips by air in a year. But only about 6 per cent of the adults in the "rest of the United States" and in "other parts of the Central territory" take one or more non-business air trips. Of the adult population of the New York area, however, about 14 per cent took at least one non-business air trip in the year prior to interview.

^{1/} The Territory was defined to include New England; New York State; New York City including suburbs in Connecticut and New Jersey; Ohio; Michigan; Indiana; Illinois; and the metropolitan areas of Pittsburgh, Pa.; Louisville, Ky., and St. Louis, Missouri.

Table 38

Use of Air "Last Year" by Region^{1/}
 (Percentage distribution of adults)

Use of Air	<u>All Regions</u>			<u>New York Area</u>			<u>Other Parts of Central Territory</u>			<u>Rest of the United States</u>		
	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>
Took one or more air trips "last year"	<u>7.0</u>	<u>7.2</u>	<u>8.8</u>	<u>12.0</u>	<u>11.3</u>	<u>15.2</u>	<u>7.0</u>	<u>8.2</u>	<u>9.0</u>	<u>5.9</u>	<u>6.1</u>	<u>7.7</u>
For business purposes	1.9	2.3	2.3	2.1	2.1	1.4	1.5	2.7	2.6	1.9	2.1	2.2
For non-business purposes	4.6	4.4	5.7	9.0	8.7	11.7	5.0	4.7	5.5	3.5	3.7	4.8
For both business and non-business purposes	.5	.5	.8	.9	.5	2.1	.5	.8	.9	.5	.3	.7
Did not take an air trip	<u>92.4</u>	<u>92.4</u>	<u>90.4</u>	<u>87.7</u>	<u>86.5</u>	<u>84.4</u>	<u>92.2</u>	<u>91.4</u>	<u>90.2</u>	<u>93.1</u>	<u>93.5</u>	<u>91.4</u>
Not ascertained	<u>.6</u>	<u>.4</u>	<u>.8</u>	<u>.3</u>	<u>.2</u>	<u>.4</u>	<u>.8</u>	<u>.4</u>	<u>.8</u>	<u>1.0</u>	<u>.4</u>	<u>.9</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	3149	333	426	282	1548	1813	1054	2329	3016	1813

^{1/} The regions have been defined as follows:

New York Area - entire metropolitan area of New York City.

Other parts of New York Central Territory: New England, remainder of New York State, Erie, Pa., plus Pittsburgh and its metropolitan area, Ohio, Louisville, Kentucky, Michigan, Illinois and St. Louis metropolitan area.

Is the trend toward an increase in the spread between the statistics for New York and those for the other areas, or is the discrepancy being reduced? The sample for New York City is too small to permit an accurate answer to this question, but, if anything, use of air seems to be expanding faster in New York than elsewhere.

Is the difference between New York and other areas in coach or first class travel? On this point the evidence seems clear (Table 39). Of the population of New York 7 per cent took a trip by air coach, compared to 2 per cent of the population of the other two regions. The availability of air coach service seems to be a major factor in the transportation market in New York City. Another factor may be the difficulty and expense of automobile travel for people in that area. Auto travel by region is further discussed below. As far as air travel is concerned, the general conclusion which emerges from the data is that New York City has special characteristics which distinguish it from other areas. Other parts of the northeast are more urban than the rest of the United States, and, accordingly, generate somewhat more air travel in relation to their population.

The differences from region to region in rail travel seem to be smaller than those found for air travel (Table 40). In the period covered by the 1957 Survey, 10 per cent of those in the "rest of the United States" took a rail trip, while for those in New York City and other parts of the Central Territory the proportion was slightly larger, as it has been in each of the three years. This difference is consistent with the fact that, as previously mentioned, the population of the northeastern United States is more concentrated in urban areas than the population of the areas to the south and west. People living in rural areas are relatively less likely to travel by train.

Table 39

Use of Air, First Class and Coach, by Region
(Percentage distribution of adults)

<u>Use of Air, First Class and Coach</u>	<u>All Regions</u>	<u>New York Area</u>	<u>Other Parts of Central Territory</u>	<u>Rest of the United States</u>
Took first class air trip but not coach	6	7	5	5
Took coach air trip but not first class	2	6	1	1
Took both first class and coach air trip	1	1	1	1
Took neither first class nor coach air trip	90	86	92	92
Not ascertained	1	*	1	1
	<hr/>	<hr/>	<hr/>	<hr/>
Total	100	100	100	100
Number of adults	1638	116	547	945

* Less than 0.5 per cent.

Table 40

Use of Rail "Last Year" by Region
(Percentage distribution of adults)

Use of Rail	All Regions			New York Area			Other Parts of Central Territory			Rest of the United States		
	Fall 1955	1956	1957	Fall 1955	1956	1957	Fall 1955	1956	1957	Fall 1955	1956	1957
Took one or more rail trips "last year"	10.5	9.1	11.2	10.9	9.9	16.0	13.3	11.2	12.7	8.6	7.8	9.6
For business purposes	1.5	1.8	1.9	2.1	2.1	1.1	1.9	2.5	3.1	1.0	1.4	1.4
For non-business purposes	8.6	7.0	9.0	8.5	7.3	14.2	10.8	8.2	9.4	7.2	6.1	7.9
For both business and non-business purposes	.5	.3	.3	.3	.5	.7	.7	.5	.2	.4	.2	.3
Did not take a rail trip	88.4	90.4	88.0	88.8	89.9	83.7	85.6	88.1	86.4	90.3	91.8	89.5
Not ascertained	1.0	.5	.8	.3	.2	.3	1.0	.7	.9	1.1	.5	.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	3149	333	426	282	1548	1813	1054	2329	3016	1813

On the face of the data the proportion of the adult population who took a non-business rail trip increased in the New York area from 1956 to 1957, or, strictly speaking, from the period covered by the 1956 Survey to the period covered by the 1957 Survey. This increase is on the margin of statistical significance; it may be the result only of random fluctuation in the sample.

The data on coach and pullman travel from the fall interviews in 1957 do not suggest that there are major regional differences in the relative importance of these two types of rail travel (Table 41). Counting both those who traveled only first class and those who went both coach and first class, about 6 per cent of those in New York took a first class trip, 4 per cent of those living elsewhere in the Central territory, and 4 per cent of those in the rest of the United States. For coach, the corresponding figures are about 11 per cent, 9 per cent, and 6 per cent.

These results are consistent with the fact that in general both coach and first class service are available to persons to whom either is accessible. Even if a trip must be begun by coach, a person traveling a long distance ordinarily can connect with a train carrying pullman cars. Air coach is not as readily accessible as first class air service to persons living away from the large metropolitan centers, and, as previously noted, people living in these centers are much more likely than those living elsewhere to travel by air coach.

In the United States as a whole the proportion of the population who took at least one bus trip increased from 1956 to 1957, as discussed in Chapter II. This increase took place in New York City and other parts of the Central territory as well as in the "rest of the United States" (Table 42). If anything, the increase in New York was more marked than elsewhere. The proportion of the population who took at least one bus trip continued to be

Table 41

Use of Rail First Class and Coach, by Region.
(Percentage distribution of adults)

<u>Use of Rail First Class and Coach</u>	<u>All Regions</u>	<u>New York Area</u>	<u>Other Parts of Central Territory</u>	<u>Rest of the United States</u>
Took first class rail trip but not coach ^{1/}	3	3	3	3
Took coach rail trip, but not first class ^{2/}	7	9	8	6
Took both first class and coach rail trip	1	2	1	1
Took neither first class nor coach rail trip	89	86	88	89
Not ascertained	*	*	*	1
	—	—	—	—
Total	100	100	100	100
Number of adults	1630	146	547	945

1/ Includes adults for whom it was not ascertained whether they took a coach rail trip.

2/ Includes adults for whom it was not ascertained whether they took a first class rail trip.

* Less than 0.5 per cent.

Table 42

Use of Bus "Last Year" by Region
(Percentage distribution of adults)

	<u>All Regions</u>			<u>New York Area</u>			<u>Other Parts of Central Territory</u>			<u>Rest of the United States</u>		
	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>
<u>Use of Bus</u>												
Took one or more bus trips "last year"	<u>7.3</u>	<u>6.0</u>	<u>9.6</u>	<u>5.4</u>	<u>3.3</u>	<u>8.2</u>	<u>6.1</u>	<u>5.5</u>	<u>8.2</u>	<u>8.4</u>	<u>6.9</u>	<u>10.6</u>
For business purposes	.8	.7	1.2	.6	.2	.4	.9	.7	1.0	.8	.8	1.5
For non-business purposes	6.3	5.2	8.2	4.8	3.1	7.8	4.9	4.7	7.1	7.5	5.9	8.9
For both business and non-business purposes	.2	.1	.2	*	*	*	.3	.1	.1	.1	.2	.2
Did not take a bus trip	<u>90.8</u>	<u>93.4</u>	<u>89.4</u>	<u>93.1</u>	<u>96.5</u>	<u>91.4</u>	<u>92.3</u>	<u>94.0</u>	<u>90.6</u>	<u>89.5</u>	<u>92.5</u>	<u>88.3</u>
Not ascertained	<u>1.9</u>	<u>.6</u>	<u>1.0</u>	<u>1.5</u>	<u>.2</u>	<u>.4</u>	<u>1.6</u>	<u>.5</u>	<u>1.2</u>	<u>2.1</u>	<u>.6</u>	<u>1.1</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	3149	333	426	282	1548	1813	1054	2329	3016	1813

* Less than .05 per cent.

highest in the "rest of the United States." In all regions the gain in bus travel was primarily in non-business travel.

Automobile travel is not as popular for people in New York City as for those living elsewhere (Table 43). In each of the three years studied the proportion of all adults in the New York area who took at least one trip by auto has been substantially lower than the proportion for those living elsewhere (Table 43). From 1955 to 1957 there was little or no change in the proportion of people living in New York who took an auto trip. The proportion traveling by other modes, however, increased. In the other two regions the proportion taking an auto trip did increase over the two year period. This increase seems to have been most important in the Central territory.

Table 43

Use of Auto "Last Year" by Region
(Percentage distribution of adults)

Use of Auto	<u>All Regions</u>			<u>New York Area</u>			<u>Other Parts of Central Territory</u>			<u>Rest of the United States</u>		
	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>	<u>Fall 1955</u>	<u>1956</u>	<u>1957</u>
Took one or more auto trips "last year"	<u>57.2</u>	<u>48.2</u>	<u>61.0</u>	<u>41.1</u>	<u>33.0</u>	<u>40.1</u>	<u>56.3</u>	<u>48.2</u>	<u>64.1</u>	<u>60.1</u>	<u>50.4</u>	<u>62.5</u>
For business purposes	2.0	3.0	3.2	.6	.9	1.6	1.1	2.2	2.5	2.7	3.8	3.9
For non-business purposes	50.5	40.8	50.8	39.0	30.8	36.9	51.7	43.0	55.3	51.2	40.8	50.4
For both business and non-business purposes	4.8	4.5	7.0	1.5	1.4	1.4	3.5	3.0	6.3	6.2	5.8	8.2
Did not take an auto trip	<u>41.8</u>	<u>51.2</u>	<u>38.0</u>	<u>58.0</u>	<u>66.4</u>	<u>59.5</u>	<u>42.7</u>	<u>51.3</u>	<u>34.9</u>	<u>39.0</u>	<u>49.0</u>	<u>36.5</u>
Not ascertained	<u>.9</u>	<u>.5</u>	<u>1.0</u>	<u>.9</u>	<u>.5</u>	<u>.4</u>	<u>1.0</u>	<u>.5</u>	<u>1.0</u>	<u>.0</u>	<u>.6</u>	<u>1.0</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of adults	4210	5255	3149	333	426	282	1548	1813	1054	2329	3016	1813

IV. The Most Recent Trip by Common Carrier

In the 1957 National Travel Market Survey, as in earlier Surveys, those respondents who had taken at least one trip by common carrier in the year prior to interview were asked a series of detailed questions about their most recent trip by common carrier. Of the 2849 respondents in the 1957 Survey, 647 or 23 per cent had taken a common carrier trip. This chapter reports the results of these questions.

There are two technical problems which arise in analyzing this material. First, some people traveled both by common carrier and by auto on their most recent trip by common carrier. Others considered the use of an automobile but decided against it. For this reason travel by auto is discussed at a number of points in this chapter. Second, some people took only one trip by common carrier, while others took two, three, or more trips, including a few with fifty or more trips. Some tables in this chapter, therefore, are on a weighted basis. The most recent trip of a traveler is given a weight equal to the total number of common carrier trips which he took during the year.

The first section of this chapter concerns various characteristics of the most recent trip by common carrier. The second section is concerned with the reasons people give for their choice of mode of travel for their most recent trip by common carrier.

A. Characteristics of the Most Recent Trip

In the 1956 Survey it was found that of all trips by common carrier, about two out of five were primarily business trips. In 1957 about 35 per cent of the trips were described by the respondents as primarily business trips (Table 44). This difference is small enough to be attributable entirely to sampling error rather than to any change in the actual character of travel by common carrier.

About one common carrier trip out of five is in connection with people's personal affairs. These trips are in connection with an illness or death, moving to a new home, going back and forth to school, and the like. The relative importance of personal affairs compared to other purposes of travel did not change in 1957.

Finally, about two trips out of five are for pleasure. Nearly half of the vacation and pleasure trips involve visits to relatives or friends.

People frequently travel for more than one purpose. Twelve per cent of the trips covered in Table 44 were for more than one purpose. The last column in the table shows the proportion of the trips for which each reason for travel was either the most important or a secondary purpose. About 41 per cent of all trips were primarily pleasure trips, but 48 per cent of the trips were at least partly pleasure trips. Thus, 7 per cent of the trips were primarily on business or personal affairs but also involved some vacation or pleasure.

In addition to the purpose of their most recent trip, respondents were asked the farthest point which they reached. From this information the airline distance covered was estimated. The distribution was as follows:

<u>Airline Distance</u>	<u>Percent of Trips</u>
100 - 499 miles	73
500 - 999 miles	9
1000 miles or over	9
Not ascertained	9
Total	100

Table 44

Purpose of Most Recent Trip by Common Carrier
(Percentage distribution of adults who took
a trip in the "last" 12 months)
(weighted distribution)

<u>Purpose of Trip</u>	<u>Most Important Purpose</u>		<u>All Purposes</u>
	<u>1956</u>	<u>1957</u>	<u>1957</u>
<u>Vacation and pleasure travel</u>	<u>43.7</u>	<u>40.9</u>	<u>47.6</u>
To visit friends, relatives	21.0	16.8	19.1
To attend organized sports event, concert, other special event	2.1	5.1	5.7
No further information; other recreation; sightseeing; honeymoon	19.1	17.3	20.1
To attend convention (non-business)	1.5	1.7	1.7
<u>Business travel</u>	<u>40.5</u>	<u>35.2</u>	<u>37.3</u>
For employer (business, government)	17.2	18.0	18.4
By self-employed (business or professional man)	5.1	8.2	9.2
Not ascertained whether for employer or by self-employed	12.9	6.3	6.6
Convention or meeting	5.3	2.7	3.1
<u>Personal affairs</u>	<u>15.8</u>	<u>17.1</u>	<u>19.7</u>
Shopping trip	.2	1.0	1.8
Emergency, illness, death, to visit doctor or hospital	6.4	5.8	6.1
To and from school	.2	1.4	1.4
Moving to new home	.6	1.2	1.2
Escort or drive someone	.5	.4	.4
Other personal affairs	4.8	7.3	8.8
<u>Purpose not ascertained</u>	<u>3.1</u>	<u>6.8</u>	<u>7.6</u>
Total	100.0	100.0	112.2 ^{1/}
Number of adults	771	647	647

^{1/} Since respondents can give more than one purpose, the total will be more than 100 per cent.

What proportion of all trips involved each of the principal modes of travel?

About 37 per cent of the trips involved the use of air; 38 per cent, rail; 26 per cent, bus; and 9 per cent the use of auto or other modes (Table 45).

Altogether, about 13 per cent of the trips involved use of more than one mode. Use of several modes was especially common for the longer trips. Of the trips to points 500 - 999 miles away, for example, roughly 23 per cent involved two modes. (To the extent that some trips involved three or more modes, 23 per cent is an overestimate. It seems reasonable to conclude, however, that about one trip in five by common carrier to a point 500 - 999 miles away involves the use of more than one mode of travel.)

The proportion of all common carrier trips which involve the use of air is about 37 per cent for trips to points 100 - 499 miles away, 44 per cent for trips 500 - 999 miles away, and 64 per cent to trips 1000 miles or more away. For rail the proportions are 40, 46, and 34, respectively, indicating that the relative position of rail is probably strongest for trips under 1000 miles. Bus travel is most likely to be involved in the shorter trips.

The 1955 Survey showed a contrast between trips by auto and trips by common carrier in the proportion of travelers who were traveling alone. Only about one auto traveler in seven is traveling by himself. Of those traveling by common carrier, about half are traveling alone. This result was confirmed by the 1957 Survey (Table 46).

Of the passengers by common carrier, while one-half travel alone, an additional one-quarter travel with a single companion. Parties of three or more account for the remaining one-quarter of the common carrier travelers. A few people, roughly 6 per cent of the total, are in parties of six or more persons. There do not appear to be any major differences among the three modes in the number of people who travel together. Similarly, there do not

Table 45

Mode of Travel by Distance of Trip
(Weighted distribution of trips)

<u>Mode of Travel</u>	<u>All</u>	<u>100-499 Miles</u>	<u>500-999 Miles</u>	<u>1000 or More Miles</u>
Air	37	37	44	64
Rail	38	40	46	34
Bus	26	27	19	12
Auto	7	7	14	4
Other	2	1	*	16
Not ascertained	<u>3</u>	<u>*</u>	<u>*</u>	<u>*</u>
Total ^{1/}	113	112	123	130
Number of trips	647	474	59	56
Per cent of trips	100	73	9	9

^{1/} Since trips including more than one mode are included, the totals are more than 100 per cent.

* Less than 0.5 per cent.

Table 46

Number of Companions on "Most Recent" Trip by
Mode of Travel
(Weighted percentage distribution of adults who took
a common carrier trip in the last 12 months)

<u>Number of Companions</u>	<u>All Adults Who Took a Trip</u>		<u>Air</u>		<u>Rail</u>		<u>Bus</u>	
	<u>1956</u>	<u>1957</u>	<u>1956</u>	<u>1957</u>	<u>1956</u>	<u>1957</u>	<u>1956</u>	<u>1957</u>
Went alone	50.7	48.3	51.5	47.6	45.4	51.9	57.6	56.7
One companion	28.1	24.4	28.0	28.3	36.0	24.4	15.5	16.7
Two companions	7.7	6.0	7.7	5.0	8.8	8.6	6.0	2.3
Three companions	3.3	3.7	2.8	7.4	4.0	1.8	3.0	1.2
Four companions	2.1	2.4	3.6	2.1	1.7	4.3	.2	.8
Five companions	2.0	.5	.1	*	.5	1.1	7.4	.4
Six companions	.1	1.8	.1	*	.2	2.7	*	*
Seven companions	*	.8	*	1.2	*	1.2	.	*
Eight companions	*	*	*	.1	*	*	*	*
Nine or more companions	3.5	2.6	2.0	2.3	1.2	.8	9.7	6.5
Not ascertained	<u>2.5</u>	<u>9.5</u>	<u>4.2</u>	<u>6.0</u>	<u>2.2</u>	<u>3.2</u>	<u>.6</u>	<u>15.4</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of trips	6111	6127	2181	2111	2116	2146	1269	1517

* Less than .05 per cent.

appear to have been any major changes in 1957 in the size of the groups traveling by common carrier. People traveling in groups continue to find it economical to travel by auto.

The most recent trips by air and rail also can be classified according to whether the traveler went coach or first class. Roughly three out of five of the rail passengers went by coach (Table 47). Roughly one out of five of the air travelers went by air coach. (The apparent shift between 1956 and 1957 in the proportion traveling by air coach is within the range attributable to sampling error.)

Table 47

Whether Traveled Coach or First Class, by Mode of Travel
on "Most Recent" Trip by Rail or Air
(Percentage distribution of adults who took
a trip in the last 12 months)
(weighted distribution)

<u>Accommodations</u>	All Adults Who Took a Trip					
			Rail		Air	
	<u>1956</u>	<u>1957</u>	<u>1956</u>	<u>1957</u>	<u>1956</u>	<u>1957</u>
Coach	37.2	35.3	53.1	57.6	21.4	13.1
First class	57.5	57.5	40.8	39.4	74.0	83.7
Both	3.0	1.9	5.2	1.8	.8	2.2
Not ascertained	<u>2.3</u>	<u>5.3</u>	<u>.9</u>	<u>1.2</u>	<u>3.3</u>	<u>1.0</u>
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of trips	6111	6127	2116	2146	2181	2010

B. Attitudes Toward Travel by Different Common Carriers

In the sequence of questions about their most recent trip by common carrier, respondents were asked: "How did you happen to choose this way of traveling instead of some other?" Thus, they were asked to discuss the advantages and disadvantages of the modes in the context of an actual decision about an actual trip.

The responses of people who mentioned air travel are shown in (Table 48). By far the most frequent favorable comment about air travel is that it is fast. Almost half of all comments about air travel are concerned with speed. About one comment in ten refers to air travel as comfortable or restful. About one in ten, also refers to the cost of air travel, but of these some observe that for their trip travel by air was cheaper while others remark that it was more expensive.

Not many people mention disadvantages of air travel in response to this question. Of those who do, the largest number mention fear of flying, either their own fear, or fear of members of their family.

Between 1956 and 1957 there were no changes in the advantages and disadvantages of air as people see them.

For 1957, for the first time, the advantages and disadvantages of air travel have been tabulated separately for those who went by air coach and those who took a first class flight (Table 49). The distributions of advantages and disadvantages are similar. The comments made about air travel by those who went by coach are about the same as the comments of those who went first class.

The leading advantage of rail travel is that it is comfortable and restful and the passenger facilities are good (Table 50). This sensation of comfort no doubt refers in part to the actual physical characteristics of rail travel. It may also reflect psychological comfort in the sense of

Table 48

Advantages and Disadvantages of Air for the Most Recent Trip^{1/}
(Percentage distribution of advantages and disadvantages)

<u>Advantages of air</u>	<u>Per Cent of All Advantages and Disadvantages of Air</u>	
	<u>1956</u>	<u>1957</u>
Cheaper	6.2	7.1
Safer	1.5	1.7
Faster	45.2	41.4
Comfortable, restful, good passenger facilities (e.g. meals)	12.6	9.1
Special event (e.g. honeymoon); adventure; wanted to see what it was like	2.8	1.9
Good (better) connections:		
Planes go more places	1.3	0.2
Planes go at the right times	0.4	0.4
Planes connect well with one another or with other modes	0.9	0.2
Good connections; convenient; no further information	7.9	4.3
<u>Disadvantages of air</u>		
(Too) expensive	4.4	4.1
Respondent or members of his family object to or fear flying	7.2	6.1
Planes are not dependable in bad weather	1.1	4.1
Bad connections:		
Planes don't go to right places, enough places; are badly scheduled for reasons of destination	0.4	2.2
Planes don't go at right times; are badly schedule for reasons of timing	1.3	0.9
Planes connect badly with one another or with other modes	0.6	*
Hard to get to a plane; terminals are inconveniently located	3.1	2.8
Bad connections: no further information	0.9	1.1
<u>Other advantages and disadvantages</u>	<u>2.2</u>	<u>12.4</u>
Total	100.0	100.0
Number of adults who discussed air	370	220

^{1/}The question was: "How did you happen to choose this way of traveling instead of some other?"

* Less than .05 per cent.

Table 49

Advantages and Disadvantages of Air by Whether Traveled
Coach or First Class
(Percentage distribution of advantages and disadvantages)

<u>Advantages of air</u>	<u>All</u>	<u>Went Air Coach</u>	<u>Went Air First Class</u>
Cheaper	7.1	9	7
Safer	1.7	2	2
Faster	41.4	38	47
Comfortable, restful, etc.	9.1	8	11
Special event (honeymoon); adventure	1.9	1	2
Good connections	5.1	3	5
<u>Disadvantages of air</u>			
(Too) expensive	4.1	7	2
Respondent or members of his family object to or fear flying	6.1	10	3
Planes not dependable in bad weather	4.1	1	3
Bad connections:			
Don't go to right place; badly scheduled for reasons of destination	2.2	1	1
Don't go at right times	.9	*	1
Connect badly with one another or with other modes	*	*	*
Hard to get to a plane; ter- minals inconveniently located	2.8	5	3
Bad connections: no further information	1.1	1	2
<u>Other advantages and disadvantages</u>	<u>12.4</u>	<u>14</u>	<u>11</u>
Total	100.0	100	100
Number of adults	220	94	138

* Less than .05 per cent.

Table 50

Advantages and Disadvantages of Rail for the Most Recent Trip^{1/}
(Percentage distribution of advantages and disadvantages)

<u>Advantages of rail</u>	<u>Per Cent of All Advantages and Disadvantages of Rail</u>	
	<u>1956</u>	<u>1957</u>
Cheaper	9.8	5.9
Free pass	6.2	*
Safer	8.6	3.7
Faster	12.5	7.7
Comfortable, restful; good passenger facilities (e.g. rest rooms, diner, club car)	23.8	19.1
Enjoy the scenery; sightseeing	3.0	3.4
Good (better) connections:		
Trains go to more places	3.0	3.3
Trains go at the right times	3.4	1.8
Trains connect well with one another or with other modes	0.6	0.4
Trains are easy to reach; stations are conveniently located	3.0	4.9
Good connections; convenient; no further information	12.7	8.1
<u>Disadvantages of rail</u>		
(Too) expensive	*	3.4
Trains are slow	*	4.7
Bad connections; trains don't go to right places, enough places; are badly scheduled for reasons of destination	3.4	5.7
Trains don't go at right times; are badly scheduled for reasons of timing	2.8	2.4
Trains connect badly with one another or with other modes	0.4	0.8
Bad connections; no further information	2.0	0.8
Hard to get to a train; stations are inconveniently located	1.0	0.8
<u>Other advantages and disadvantages</u>	<u>3.8</u>	<u>23.1</u>
Total	100.0	100.0
Number of adults who discussed rail	364	220

^{1/} The question was: "How did you happen to choose this way of traveling instead of some other?"

* Less than .05 per cent.

freedom from the anxiety which many people experience in connection with air travel.

The other advantages of rail travel which are mentioned most often are that it is faster, cheaper, and safer. People have in mind different modes in making these comparisons; for example, rail travel is referred to as faster than auto or bus, but rarely as faster than air. The three advantages of speed, price, and safety combined are mentioned about as often as comfort.

There are not many disadvantages of rail travel mentioned by respondents in answer to the question under analysis. Of those reasons for not going by rail which are mentioned, the most frequent is that trains don't go to the right places. Even that complaint is not mentioned often. There are also a few unfavorable comments about the times when trains leave. And, finally, a few people speak of trains as expensive, or slow. It should not be inferred that because these factors are mentioned rarely they are unimportant. The particular sequence of questions has proved to be successful in obtaining the positive reasons why people did choose the mode they actually used. It seems to be difficult to recall disadvantages of other modes, probably because the majority of travelers made the choice of mode without much deliberation. It is primarily the people who had a real choice to make who mentioned disadvantages of rail (or of other modes), and the disadvantages in the minds of these people are of importance.

From 1956 to 1957 there were no major shifts in the advantages and disadvantages of rail travel. The statistics in Table 50 show an apparent decline in the proportion of mentions of a free pass as a reason for rail travel and an increase in comments that trains are expensive or slow. These changes, however, are probably the result of random error.

It would be reasonable to expect that coach passengers would be more likely than first class passengers to comment that rail travel is cheap, while first class passengers should be more likely to speak of rail travel as comfortable. More first class passengers than coach passengers might be expected to compare rail with air, and hence, to think of rail travel as slow. The results do point in these directions, but the differences in comments by coach and pullman passengers are small (Table 51). The main finding is that coach passengers and first class passengers generally agree as to the advantages and disadvantages of rail travel. To both groups the leading characteristic of rail travel is that it is comfortable.

If the leading advantage of air travel is speed and of rail travel, comfort, the leading advantage of bus travel is that it is cheap. Two or three times as many people mention cheapness as any other advantage of bus travel (Table 52). People also mention that they go to more places and go at the right times, that they enable one to see the scenery, and that they are fast. Between 1956 and 1957 there were no major changes in the relative importance of the advantages of bus travel as people discuss them.

The two most frequent complaints about bus travel are that it is slow and that it is fatiguing. A few people also mention problems of availability of bus service at the times and to the places where they want to go. Again, there were no major changes from 1956 to 1957 in the relative importance of different disadvantages of bus travel.

A number of people mentioned travel by auto in discussing their most recent trip by common carrier. As mentioned earlier, about 7 per cent of the common carrier trips involved also travel by auto. Altogether, 14 per cent of the travelers discussed travel by auto. Thus, about half of those who discussed auto actually went entirely by common carrier. What was it about auto travel that these people did not like? The most common com-

Table 51

Advantages and Disadvantages of Rail by Whether Traveled
Coach or First Class
(Percentage distribution of advantages and disadvantages)

<u>Advantages of rail</u>	<u>All^{1/}</u>	<u>Went Rail Coach</u>	<u>Went Rail First Class</u>
Cheaper	6	8	5
Safer	4	4	4
Faster	8	9	8
Comfortable, restful	19	19	26
Enjoy the scenery; sightseeing	3	2	3
Good connections:			
Go to more places	3	5	1
Go at the right time	2	1	4
Trains connect well with one another or with other modes	*	1	*
Trains are easy to reach; sta- tions are conveniently located	5	5	6
Good connections: convenient; (no further information)	8	10	8
<u>Disadvantages of rail</u>			
(Too) expensive	3	2	2
Slow	5	4	7
Bad connections:			
Don't go to right places, enough places, etc.	6	3	2
Trains don't go at right times; badly scheduled for reasons of timing	2	1	1
Trains connect badly with one another or with other modes	1	1	*
Bad connections: (no further information)	1	1	*
Hard to get to a train; stations inconveniently located	1	1	*
<u>Other advantages and disadvantages</u>	<u>23</u>	<u>23</u>	<u>23</u>
Total	100	100	100
Number of adults who dis- cussed rail	220	137	60

^{1/} Includes mentions of respondents who did not travel by rail "last year" but took a trip by some other mode.

* Less than 0.5 per cent.

Table 52

Advantages and Disadvantages of Bus for the Most Recent Trip^{1/}
(Percentage distribution of advantages and disadvantages)

<u>Advantages of bus</u>	<u>Per Cent of All Advantages and Disadvantages of Bus</u>	
	<u>1956</u>	<u>1957</u>
Cheaper	23.3	22.0
Safer	2.4	1.1
Faster	5.2	5.7
See the scenery	7.0	6.8
More flexible schedule: stop when and where you want, stay longer	2.7	2.5
Better (good) connections:		
Buses go to more places; "only way you could get there"	9.2	8.4
Buses go at right times	4.2	5.4
Buses connect well with one another or with other modes	1.9	1.4
Buses are easy to reach; terminals are conveniently located	1.9	0.6
Good connections; convenient (no further information)	11.0	10.3
<u>Disadvantages of bus</u>		
Slow	5.1	7.6
Fatigue; lack of comfort	9.2	7.3
Bad connections:		
Buses don't go to right places, enough places; are badly scheduled for reasons of destination	*	1.1
Buses don't go at right times; are badly scheduled for reasons of timing	0.5	1.1
Buses connect badly with one another or with other modes	0.5	0.8
Bad connections: no further information	0.5	*
Hard to get to a bus; terminals are inconveniently located	0.5	0.8
<u>Other advantages and disadvantages of bus</u>	<u>14.9</u>	<u>17.1</u>
Total	100.0	100.0
Number of adults who discussed bus	249	179

^{1/} The question was: "How did you happen to choose this way of traveling instead of some other?"

* Less than .05 per cent.

plaint concerns fatigue or nervous strain associated with long trips by automobile. Another sizeable group of people said that they did not have a suitable car available for the particular trip in question, either because they did not own one, or someone else needed it, or it was in poor condition. Other difficulties, such as that auto travel is slow or is difficult with children or elderly people, were mentioned only occasionally (Table 53).

Table 53

Advantages and Disadvantages of Auto for the Most Recent Trip
(Percentage distribution of advantages and disadvantages)

Per Cent of All Advantages and Disadvantages of Auto		1956 2/		1957	
Advantages of auto					
More of us could go; "free ride at someone else's expense;" chose auto for reasons of companionship (spectio)	1.4	3.4	5.1	5.1	5.1
Cheaper	1.4	1.4	1.4	1.4	1.4
Faster	1.4	1.4	1.4	1.4	1.4
Likes to drive; roads are good, safer	*	*	*	*	*
More privacy	*	*	*	*	*
More comfortable; relaxing; less tire-	2.0	2.0	*	*	*
some					
No schedule; one can time one's trip as one pleases (can start and stop when one wishes); can choose one's own route	1.4	1.4	2.6		
Faster with children (babies) or with old (sick) people	*	*	*	*	*
Car is available upon arrival	1.4	1.4	*	*	*
Car goes from door-to-door; avoid changing modes or going to and from terminal; personal belongings more easily carried	1.4	1.4	1.4	1.4	1.4
Enjoy the scenery	2.0	2.0	1.4	1.4	1.4
No good connections by other modes; "only way you could get there;" car is better for short distances	2.0	2.0	1.4	1.4	1.4
Convenient	2.7	2.7	1.7	1.7	1.7
<hr/>					
Fatigue ("it's hard to drive so far") doesn't like to drive; can't drive; didn't have car; roads may be bad (ice, snow, construction)	49.0	49.0			
Cars are too expensive	**	**	2.6	2.6	2.6
Roads may be bad; weather hazard	**	**	0.9	0.9	0.9
Cars are not safe (in general)	**	**	2.5	2.5	2.5
Harder with children; old people	**	**	4.3	4.3	4.3
Cars are too slow	**	**	6.0	6.0	6.0
Don't like to drive a car (in general)	**	**	0.8	0.8	0.8
Cars are not suitable for long distances (in general)	**	**	3.4	3.4	3.4
Fatigue, nervous strain, highways too crowded	**	**	21.4	21.4	21.4
Car not available for this trip; don't own a car; car in poor condition	**	**	17.9	17.9	17.9
<hr/>					
Other advantages and disadvantages of auto	31.9	31.9	19.7	19.7	19.7
Total	100.0	100.0	100.0	100.0	100.0
Number of adults who discussed auto	136	136	88	88	88

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1/ This table is based on comments about auto travel made in connection with a decision to use a common carrier. The question was: "How did you happen to choose this way of traveling instead of some other?"

* Less than .05 per cent.

** Not coded separately.

C. Choice of Mode of Transportation: A Summary

In the "Interim Report" on the 1957 Survey, a summary analysis of choice of mode was presented based primarily on people's comments about this choice for their most recent trip. This analysis is here repeated, using data for the full survey.

A problem of basic and continuing interest to anyone concerned with the transportation industry is the problem of choice of mode. How do people decide whether to travel by air, rail, bus or auto? The following discussion represents an attempt to summarize what has been learned about this question from the National Travel Market Surveys.

The decision to take a trip will not be discussed here. For some trips it is artificial to separate the decision to take the trip from the decision to travel by a certain mode, since the traveller may have made a choice only between going by a certain mode or not taking the trip at all. But indirectly a discussion of choice of mode may help to explain why for some trips only one mode is ever considered.

The reasons people give for selecting one mode rather than another are many and varied. For analysis, factors influencing choice of mode may be grouped under eight headings:

1. Availability of the mode
2. Convenience of arrival and departure
3. Speed
4. Price
5. Safety
6. Comfort
7. Desire for varied experience
8. Other factors

By "availability" is meant availability as perceived or understood by the traveller. A mode must be available to him before any other considerations about it are relevant.

Given that two or more modes are available to a person, his choice will depend on his goals or desires. Convenience, speed, price, safety, comfort, and a variety of experiences represent things that people may want. Which is most important will depend on the person and on the circumstances of the particular trip.

Other factors may enter into choice of mode. Choice of mode may have consequences which extend after the trip is over. For example, people may drive in order to have their car available at their destination, or may go by common carrier in order not to have their car on their hands at their destination. Or they may be gratified by other people's reaction to the news that they came, say, by air. Thus, "prestige" and "convenience or inconvenience of having a car at the destination" are among the factors which could be added to the list.

What is the relative importance of each factor? A first step in quantifying the answer to this question is presented in Table 54. People were asked about the advantages and disadvantages of different modes for their most recent trip by common carrier. A study of their answers led to the classification of factors influencing choice of mode discussed above. Table 54 shows for each mode the frequency of mention of each of the seven major factors, with positive and negative comments about the mode indicated separately. Percentages shown are proportions of all mentions of the selected advantages and disadvantages, rather than proportions of all adults mentioning each factor. People frequently mention several advantages or disadvantages which influenced a single choice of mode.

Table 54

Advantages and Disadvantages of Different Modes
for Respondent's Most Recent Trip by Common Carrier
(Percentage distribution of selected advantages and disadvantages)^{1/}

Factors Influencing Choice of Mode	All Modes	Air	Rail	Bus	Auto
<u>Availability</u>	<u>10.4</u>	<u>1.0</u>	<u>3.8</u>	<u>3.0</u>	<u>2.6</u>
Mentioned as available (goes right to destination)	5.0	0.1	1.4	2.7	.8
Mentioned as not available (does not own a car; does not go to right place)	5.4	0.9	2.4	.3	1.8
<u>Convenience of arrival and departure</u>	<u>20.3</u>	<u>5.6</u>	<u>8.0</u>	<u>6.1</u>	<u>.6</u>
Convenient times of day	3.0	0.2	0.8	1.7	0.3
Inconvenient times of day	1.6	0.3	1.0	0.3	*
Actual time of arrival is uncertain (may be delayed by bad weather)	1.7	1.7	*	*	*
Terminals conveniently located	2.7	*	2.1	0.5	0.1
Terminals inconveniently located	1.9	1.3	0.3	0.3	*
"Convenient" ("good connections") (no further information)	8.7	1.7	3.5	3.3	0.2
"Inconvenient" ("bad connections") (no further information)	0.7	0.4	0.3	*	*
<u>Speed</u>	<u>26.7</u>	<u>16.5</u>	<u>5.3</u>	<u>4.2</u>	<u>.7</u>
Fast, faster	21.7	16.5	3.3	1.8	0.1
Slow, slower	5.0	*	2.0	2.4	0.6
<u>Price</u>	<u>15.6</u>	<u>4.5</u>	<u>3.2</u>	<u>7.0</u>	<u>.9</u>
Inexpensive, cheap	13.0	2.9	2.5	7.0	0.6
Expensive	2.6	1.6	0.7	*	0.3
<u>Safety</u>	<u>5.2</u>	<u>3.1</u>	<u>1.5</u>	<u>.3</u>	<u>.3</u>
Safe, safer	2.5	0.7	1.5	0.3	*
Unsafe, people are afraid	2.7	2.4	*	*	.3
<u>Comfort</u>	<u>17.2</u>	<u>3.6</u>	<u>9.0</u>	<u>2.0</u>	<u>2.6</u>
Comfortable (restful, easy with children, good meals)	11.7	3.6	8.1	*	*
Not comfortable (rough, noisy, tiring)	5.5	*	.9	2.0	2.6
<u>Varied experience</u>	<u>4.6</u>	<u>.8</u>	<u>1.5</u>	<u>2.2</u>	<u>.1</u>
Interesting (scenery, new people, new way to travel)	4.6	.8	1.5	2.2	.1
Uninteresting	*	*	*	*	*
Total	100.0	35.1	32.3	24.8	7.8

^{1/} This table excludes 265 comments, 18.6 per cent of the total, which were not fitted under the headings in this table. See discussion in text.

* Less than .05 per cent.

Thus the table shows which factors people are most likely to talk about when asked directly about choice of mode. The first four factors in order of frequency of mention are speed, convenience of arrival and departure, comfort, and price. Comments about availability, desire for varied experience and safety are less frequent. (All other factors combined were mentioned about as frequently as price or comfort. The tabulation of "other" factors, however, includes some comments which belonged under one or another of the major headings but it was not clear which.)

Should the conclusion be drawn that the order of importance to people of these major factors is the same as the order of the frequency with which they are mentioned? Indirect evidence discussed below suggests that some factors are not discussed as often as their importance merits. Price is such a factor. People do not talk about it freely, but it can be shown to influence their decisions. It does seem fair to infer, however, that factors which are mentioned by many people are likely to be important. In the following discussion each of the seven factors will be discussed in turn.

Availability: The question of availability is essentially the question, was there a real choice? One or more of the modes may have been unavailable to the traveller. A common carrier may not include in its service the line of travel from a given origin to a given destination. Automobile travel may not be available because the individual does not own a car. It is possible that a person may own a car, but the car may be in such doubtful condition that he is reluctant to use it for a trip. It is also possible that the family owns a car but the traveller may not be able to take it because of the requirements of others in the family. For example:

- #50 A longshoreman, h2, \$2000-2999, New York City, who went alone to Virginia to see his father who was ill. He went by rail.

"My car is not in good enough shape for such a long trip. The train is cheaper and quicker, and you're sure to get there on time."

- #85 The wife of a bakery truck driver, h1, income not ascertained, Texas, who went alone to Austin to visit her mother. She went by bus.

"My husband needed the car. It's cheaper by bus than by plane or rail. And there's no worry of driving or traffic - just relax."

- #86 A high school athletic coach, 34, \$7500-9999, Texas, who went alone to Lubbock to attend a coaching clinic. He went by bus.

"My wife needed the car and by bus was the most convenient way to get there. It was the quickest way to get there."

Such comments are tabulated in Table 34 as comments that auto travel was not available along with references to not owning a car. No separate count was made of the different reasons for considering a car not available, but only 1.8 per cent of the comments made refer to an auto not being available, for whatever reason. People do not bring up the fact that they do not have a car. Probably they take it for granted themselves in making their choice of mode, and do not think to mention it to the interviewer.

Information from other surveys indicates what the situation is with regard to ownership of automobiles. In early 1957, 28 per cent of all spending units did not own a car. The probability that a spending unit will own a car depends on its income, as shown by the following tabulation from the 1957 Survey of Consumer Finances:

<u>Income in 1956</u>	<u>Owns</u>	<u>Does not own</u>	<u>Total</u>
Under \$1000	28	72	100
\$1000 - 1999	39	61	100
\$2000 - 2999	59	41	100
\$3000 - 3999	72	28	100
\$4000 - 4999	82	18	100
\$5000 - 7499	90	10	100
\$7500 - 9999	94	6	100
\$10,000 and over	96	4	100
All incomes	72	28	100

The proportion of spending units owning one or more automobiles has increased since 1949 as follows:

<u>Year</u>	<u>Owns</u>	<u>Does not own</u>	<u>Total</u>
1949	51	49	100
1950	55	45	100
1951	60	40	100
1952	60	40	100
1953	61	39	100
1954	66	34	100
1955	67	33	100
1956	70	30	100
1957	72	28	100

Thus, the proportion of the population for whom travel by auto has not been available because they did not own a car has almost been cut in half since 1949.

The comments made about availability of other modes are infrequent, but consistent in pattern with expectations. People note that bus travel is available, more frequently than that it is not. They also comment on the absence of rail travel in a few instances. Data from earlier Surveys have shown that the relative frequency of use of the four modes depends on the type of community. The underlying factor at work is presumably differences in availability of service. (See Table 51, p. 161, The Travel Market 1955.)

Speed: The urgency of the desire for speed which is felt by individual travellers depends on the reasons why they are interested in speed. Four distinct reasons for being interested in speed appear in the data. First, people may want speed in order to spend more time at their destination.

For example:

- #46 A farmer's wife, 45, \$5000-5999, Michigan, who went alone to California to visit her son in the Marine Corps. She went by air.

"It's quicker - I could not be away over ten days. But you don't see as much country as by auto or bus."

- #30 An enamel worker, 34, \$5000-5999, California, who went with his wife and child to Pennsylvania to visit relatives. They went by rail.

"None of the three of us has been in the air and I think the railroad is easier for us than driving a car. Sleeping is better on the train than in a car or bus and you want a child to get her sleep. However, it's slower and I'm always rushed for time when I take a vacation. I had only two weeks paid and I didn't want to take off too many days from work."

Second, speed may be important because the traveller wants to get the travel itself over with as quickly as possible.

- #43 The wife of a mathematics professor, 43, \$7500-9999, New York State, who went to Colorado with her baby to visit her family and "show off my child".

"It saved time with the baby. For that distance I didn't have to be in transit so long. But having to change planes, especially with a child, is hard. I changed in New York going and in Chicago coming back. It required getting from Newark to LaGuardia to avoid a six hour wait. The old Chicago terminal is horrible--overcrowded and a nightmare. The loud-speaker wasn't working and I couldn't get near my counter."

Third, speed may be important because one wishes to reach the destination quickly. For example:

- #31 An inspector for a transit company, 53, \$6000-71499, New York City, who went alone to Ireland to see his mother who had a heart attack. He went by air.

"I was in a big hurry and it took me to my destination quickly."

Finally, the traveller may want speed in order to get the whole trip over with as quickly as possible. Business travellers, in particular, may feel this way about a trip. For example:

- #38 A construction contractor, 49, \$7500-9999, Texas, who went to Dallas alone on business. He went by air.

"It's faster--back at my work the next day. And it's not so tiring."

The diversity of reasons for speed leads to different conclusions as to what is to be done quickly. A person who wants to get the whole trip over but does not care how he spends the time away from home is in a different kind of hurry from a person who wishes to reach the destination as rapidly as possible. The two people may select different modes, especially for the part of the trip going away from home.

The importance of differences in speed of movement of different vehicles will depend on the distance to be covered. The impact of these considerations may be traced most clearly in the analysis originally presented in The Travel Market, 1956 of factors influencing choice of mode (pp. 119-135). It is there shown that people are more likely to travel by air on a business trip than a non-business trip. (As noted in Table 34, people who comment that a mode is fast are most likely to be talking about air.) In general, the business traveller wants to get the whole trip over quickly, and air travel is popular for business trips. The preference for air is strongest for long trips, to points 1000 miles or more away, on business.

Convenience of arrival and departure: Of all comments about advantages and disadvantages of different modes, 20 per cent referred to convenience. Of these, nearly half were rather vague or general comments to the effect that one mode or another was convenient. For example:

#42 An electrical engineer, 29, \$6000-7499, New York State, who went alone to Norfolk, Virginia, on a business trip. He went by air, but had to make part of return trip by rail when his plane was grounded.

"Air is much better - more convenient. Trains are annoying, boring. I'm more fatigued after riding a train than driving my car. And the price differential - it's cheaper by plane than taking a sleeper. However, there's the likelihood of getting grounded and the inconvenience in plane scheduling. You can't always get reservations when you want them."

It is not clear that this respondent really meant by "convenient" much more than he stated specifically in the latter part of his answer. Other respondents, however, refer to convenience in more specific terms. People have three things in mind: location of terminals (4.6 per cent of all comments); times of day of arrival and departure (also 4.6 per cent of all comments), and the risk that the actual arrival will not be on time (1.7 per cent). These last comments were made exclusively about air travel.

More favorable than unfavorable comments were made about the location of rail terminals, but the comments about location of airports were unfavorable. For example:

#53 A retired corporation president, 75, \$20,000 plus, New Jersey, who went alone from New Hampshire to New York City to attend a director's meeting. He went by rail.

"It's more comfortable to travel by rail - the convenience of the stations."

#5 A retired widow, 70, under \$1000, Ohio, who went alone to New Jersey to visit her daughter. She went by rail.

"To get there, they can meet me at Philadelphia. Connections by air were inconvenient - there is no airport near them."

Bus travel was mentioned favorably in connection with the times of day when the buses depart and reach their destination. For example:

- #19 A safety engineer for the U.S. Navy, 55, \$7500-9999, California, who went alone to Los Angeles on business. He went by bus.

"The bus schedule suited me best. But it took a little longer than by air."

The automobile, of course, has advantages over other modes because one can go door-to-door in one's car and time one's trip as one pleases. At least it is possible to fix either departure or arrival with some flexibility. In the 1955 Survey respondents discussed their most recent trip by any mode. Of the comments about travel by auto, 19 per cent referred to flexibility of schedule or of route, and 5 per cent to the fact that cars go door-to-door. These advantages would seem to be strongest for short trips of less than the maximum tolerable drive for one day. A traveller who plans to drive for five or six hours to reach his destination can exercise more choice as to when during a single day he leaves and arrives than one who plans to drive for ten or twelve hours.

Comfort: The desire for comfort has several aspects. Altogether, 17.2 per cent of the comments made referred to comfort in one form or another. Nearly all of the comments about rail were favorable, and air travel enjoyed almost as good a ratio of favorable to unfavorable observations. People referred to bus and auto more often unfavorably, than favorably. (For auto this situation reflects the fact that the respondents who discussed it had chosen some other mode for all or part of the trip in question. In the 1955 Survey 4 per cent of the comments about auto were that it was easier with children or with old or sick people.)

The following quotations may illustrate the variety of factors which go to make a trip physically or psychologically comfortable or the opposite:

Safety: A few respondents mention safety as a factor in their choice of mode. 3.2 per cent of all comments refer to safety. The most frequent is that air travel is not safe. Travel by auto also is mentioned as unsafe but only by a few people. The comments about rail and bus are also unusual in this context, but those which are made are favorable.

Safety may be desired by the traveller for himself, or others may fear for him. This heading may be understood to cover both the desire actually to be safe and the desire to feel safe. For example:

- # 9 The wife of an attorney, 60, \$7500-9999, Indiana, who went alone to Minnesota on a pleasure trip. She used bus and rail.

"I wanted to take a plane trip to see what it was like." When asked about disadvantages of air she said: "Sure, I'm very nervous."

- #27 A widowed sales clerk in a department store, 40, \$7500-9999, Indiana, who went alone on a trip within Indiana to visit her sick mother-in-law. She went by rail.

"I like it better. I feel safer on a train - I just feel safer. It's not as tiring - more relaxed. The highways are too crowded. And the train is quicker."

- # 8 A retired man, 72, \$3000-3999, New York City, who went with his wife to Florida on a vacation. They went by rail.

"I don't like the planes - they are so risky. It's a relaxing trip by train."

Other factors: It is not intended to minimize the importance of other factors which may enter into choice of mode by grouping them under one head at the end of the discussion. Few people discussed the advantages of having a car on arrival as a factor in choice of mode in a situation in which the choice was in favor of a common carrier. Hence, there are few comments on this point in the spring survey. But, in a discussion of reasons why they did go by car in the 1955 Survey, five per cent of the comments referred to

a given year.

It may also be worthy of mention that the total cost of a trip includes the cost of food and lodging en route. Thus, there is a discontinuity in the total cost per mile of travel by automobile for a traveller at the distance which represents the largest trip which he can drive in one day. For example:

- #66 An accountant for a steel fabricating firm, 42, \$10,000-14,999, Ohio, who went alone to Pittsburgh on business. He went by rail.

"I did not want to drive both ways without sufficient time to sleep between coming and going. But the railroad's service, equipment, and schedules were very poor."

Another approach to the study of price is through comparison of patterns of travel by different income groups. This topic, however, exceeds the scope of the present report.

Desire for varied experience: People may experience pleasure in travel from varying the monotony of their lives. Their interest may be in the other passengers, in the scenery, or the vehicle itself and its operation. About 4.6 per cent of all comments referred to this aspect of travel. Nearly all of the comments were favorable. For example:

- #52 The wife of a supervisor in a department store, 30, \$3000-3999, Massachusetts, who went on a pleasure trip to New York City with her husband and child. They went by rail.

"I thought it was convenient and fast enough. Where we were visiting was near the station. And the train gave us a chance to see some sights."

- #22 The wife of a retired farmer, 63, under \$1000, Kansas, who went alone to Kansas City to visit her sister. She went by bus.

"It's cheaper. I like to ride in a bus - enjoy visiting with other people. It's comfortable in the winter time - always warm. A disadvantage was that my sister had to meet the bus and if we had our own car I could go right to her home."

- # 6 A woman employed as a cashier by a land title company, 25, \$3000-3999, California, who went alone to her home in Seattle to pick up her car. She went by air.

"It saves time and it saves money considering the time it takes. But the airport is way outside the city."

- #25 A farmer, 35-39, \$10,000-14,999, Louisiana, who went with his wife to New Orleans on a pleasure trip. They went by rail.

"We took the train because of traffic - there's too much traffic by car. But the train is more expensive than automobile travel."

- #72 A widowed cook in a fraternity house, 64, \$2000-2999, Missouri, who went alone to Ohio to see her daughter who had been in an accident. She went by bus.

"It's cheaper for me and I like to ride a bus to see things along the way."

The importance of price as a factor in choice of mode can be studied from other data. In analyzing the choice between travel by common carrier and travel by auto, the number of people in the group who travel together has been shown to be important. (See Table 56, The Travel Market 1955, p.166) Of those who travel by common carrier about half travel alone. Of those who travel by auto, only one in seven travels alone. The total price of the trip will depend on the number of people in the party if the trip is by common carrier. The number of people who go along makes little difference in the cost of operating a car. An occasional respondent will comment on this point. For example:

- #24 A nurse's aide, age not ascertained, \$1,000-4999, Idaho, who went alone to Spokane to visit her daughter. She went by bus.

"When I go alone I figure it's cheaper. But when you get there you don't have any means of transportation."

Differences in the total price for all members of a family may also help to explain why a smaller proportion of married people with children than of people at other stages in the life cycle take a trip by common carrier in

- #23. A hotel maid, 56, \$1000-1999, Michigan, who went alone to New York State to visit her family. She went by rail.

"I like it better on the train - you have more freedom than on the bus. You can get up and move around on a train and you are too cramped on a bus."

- #81 A divorcee who removes potato eyes in a produce plant; 34, \$1000-1999, Connecticut, who went to Michigan with her son to visit. She went by bus.

"I don't like the noise of the train. You see a lot more scenery - a bus is the next thing to a car. I had a double-decker - rest room and everything."

- #26 The wife of a retired baker, 68, \$1000-1999, South Dakota, who took a trip within South Dakota, with one other person to visit her daughter. They went by car and returned by bus.

"Bus was the only means that was available. To tell you the truth, it takes longer than when you drive yourself. But it's nice; you don't have any worries - just relax and not worry about watching the road."

- #18 A widow, 57, \$3000-3999, Pennsylvania, who went alone to New York State for a funeral. She went by rail and auto.

"I relax on the train; for me it is the only way to travel. I can walk to the depot and get on the train to New York. The only unpleasantness is if there are people with too many children on the train."

There seem to be three types of comfort which people discuss: comfort in terms of control of the motion, noise, or roughness of the ride itself; comfort in terms of services such as food or any passenger facilities; and comfort in terms of ability to solve easily problems of coping with children or invalids. Another dimension of comfort, in a sense, is a feeling of security, which is discussed under "safety".

Price: In discussing reasons for their choice of mode on their most recent trip by common carrier, people mention price with only moderate frequency. The most frequent comment about price is that bus travel is inexpensive. A few mentions were made of the cost of air travel and rail travel, some favorable and some unfavorable. For example:

this point. Again, people are not likely to say they went by air to impress their friends later, but whether they did in fact enjoy making an impression is an open question. Also, special circumstances may be of great importance for individuals. A free pass on a mode is a powerful argument for choosing it!

Summary: In this chapter it is argued that it is useful to think of choice of mode in two steps. First, what modes are available? Second, what goals of the individual can he achieve by selecting a certain mode? Half a dozen goals have been suggested and discussed as they relate to the different modes of travel. It is hoped that the logical framework here developed may be of value in further work.

V. Attitudes Toward Travel by Jet Plane

The first section of this chapter reproduces a preliminary memorandum circulated as "A Note on Attitudes Toward Travel by Jet Plane." The second section contains further analysis of the answers to the same questions.

A. Preliminary Analysis

In the late fall of 1957 the Survey Research Center included as a part of its 1957 National Travel Market Survey a question about attitudes toward jet travel. This question was asked of 1493 adults selected to represent all adults in the United States. It was asked at the conclusion of a series of questions about trips taken by the respondent in the preceding year.

There is always a risk involved in relying on answers to a single question to reveal attitudes. The possibility cannot be ruled out that answers might have been different if the question had been phrased differently. Respondents might have reacted differently if they had been asked about jets in a different context. Thus, the main emphasis in interpreting the findings should be placed on differences in feelings about jets from one group to another and on reasons for feelings about jets rather than on the absolute level of the proportion who say they would "like jet travel."

It is of some interest to note, however, that the population is less than unanimous in its enthusiasm for jet travel. One third of the adult population would like to travel by jet plane. (Table 55). Half would not like to travel by jet. The remainder express mixed or ambiguous sentiments, or have no opinion on the topic. It is hardly surprising to find some people who have no clear opinion since for many the prospect of travel by jet is remote. For example, the 7 per cent of the adult population who never have been 100 miles or more away from home cannot be expected to respond to the idea of travel by

Table 55

Acceptance of Jet Travel by Modes of Travel Used Last Year

<u>Feelings About Jet Travel</u> ^{2/}	<u>All Adults</u>	<u>Modes Used Last Year</u> ^{1/}			<u>Took No Trip Last Year</u>
		<u>Air</u>	<u>Rail</u>	<u>Bus, Auto</u>	
Would like jet travel	33%	67%	45%	38%	23%
Middle position: likes certain things about it but dislikes others	4	6	5	4	3
Would not like jet travel	51	20	45	48	59
Doesn't know whether would like jet travel	3	3	3	3	3
No difference between jets and other planes	3	2	1	3	3
Not ascertained	6	2	1	4	9
Total	100%	100%	100%	100%	100%
Number of interviews	1493	125	161	1063	465

1/ If a traveler used more than one mode, he appears in more than column under "modes used last year".

2/ The question was: "As you probably know, there are plans for developing jet planes for passenger service. How would you feel about traveling in a jet plane? What do you have in mind?"

jet with any very clear idea of what it would mean. Indeed, it is appropriate to ask the general question, what is the relation between peoples' past experience with travel and their attitudes toward jets?

Table 55 shows separately the feelings about jet travel of those who used different modes last year and those who took no trip of 100 miles away from home during the twelve months prior to interview. The differences in attitudes toward jet travel are very pronounced indeed. Of those who took an air trip last year, 67 per cent would like jet travel. Of those who took a rail trip, 45 per cent would like jet travel. Of those who traveled by bus or auto, 38 per cent like jets. Finally, only 23 per cent of those who took no trip would like jet travel!

These answers should be interpreted in the context of the reasons people give for liking and not liking jet travel (Table 56). The great advantage of jet travel which people expect is speed. Of those who would like jet travel, about half (48 per cent) mention speed or saving time. The other favorable answers fall into three groups: those who see other specific advantages of jets (comfort, safety); those who anticipate that flying in jets will be something new or exciting; and those who both believe that flying in jets will be like flying in any kind of plane and like to fly.

The unfavorable answers fall into a different pattern. A common complaint is that jets will be too fast. One group of respondents fear that jets will not be safe. Another group, also nervous, put the emphasis on their own feelings more than the characteristics of the planes and say that they would be afraid of jet travel. Very few people seem to expect jets to be noisy or uncomfortable; at least, few mention these objections as reasons for not wanting to travel by jet. A large group, however, amounting to one adult in four, state that they do not want to travel by jet because they do not like the idea of flying in any kind of plane.

Table 56

Reasons for Liking or Not liking Jet Travel

<u>Reasons for Liking Jet Travel</u> ^{1/}	<u>Feelings About Jet Travel</u>		
	<u>All Adults</u>	<u>Would Like Jet Travel</u>	<u>Middle Position</u>
Faster, saves time	18%	48%	28%
Safer, safe	5	12	13
Quieter	1	3	--
More comfortable	2	6	--
Exciting, adventuresome, thrilling	4	13	--
Likes new things, believes in being modern	2	6	--
Likes flying in any kind of plane	5	14	71
Other reasons why would like jets	4	9	10
Don't know why but would like jets	2	6	2
Reason not ascertained	10	45	21
Number of interviews ^{2/}	1493	496	101

<u>Reasons for Not Liking Jet Travel</u>	<u>Feelings About Jet Travel</u>		
	<u>All Adults</u>	<u>Would Not Like Jet Travel</u>	<u>Middle Position</u>
Too fast	13%	23%	9%
Too new to be safe	2	2	5
Not safe: for other reasons	5	9	2
Too noisy	*	*	--
Less comfortable	*	*	1
Afraid of jets	10	18	2
Doesn't like flying in <u>any</u> kind of plane	24	43	18
Other reasons why would not like jets	5	7	12
Doesn't know why but would not like it	1	2	--
Not ascertained	9	5	17

* Less than .5 percent.

^{1/} See Table 1, footnote 2, for the question asked.

^{2/} Columns will not add to 100% since a respondent might give no reason or several reasons for liking jet travel.

This last result is consistent with earlier findings of the 1955 National Travel Market Survey.^{1/} A substantial number of people are nervous about planes and flying. Comments that jets are "too fast" or "not safe" or that "I'm afraid of jets" seem to originate from the same underlying feeling of insecurity. It is noteworthy that only a few people talk about jets being too new to be safe - a comment which implies that they will become safe after a period of testing and mechanical improvement. The problem seems to be much more one of a sense of strangeness.

It is consistent with this interpretation that people who have taken a plane trip in the last year are more positive in their attitude toward jet travel than those who have not, as already noted. Familiarity reduces a sense of strangeness. This result is consistent with the finding that people who have taken an air trip as of the beginning of a year are more likely to travel by air during the year than those who have not had this experience.^{2/} It seems reasonable to expect, therefore, that people will show some of the same reluctance to travel by jet plane which they have shown with regard to piston aircraft, but that this reluctance will be reduced gradually as people become familiar with travel by jet plane.

To give to the reader a sense of how people phrased their answers, a number of direct quotations from interviews are included below.

^{1/} See The Travel Market 1955, pp. 32-34.

^{2/} See "A Cross-Section Analysis of Non-Business Air Travel" by John B. Lansing and Dwight Blood" (mimeographed).

Positive Comments

Faster,
Save
Time

Wife of Retail Store owner; age 51; \$4000-4999; took one trip by air, one by rail, and six by auto last year.

"I'd like it. I love to fly, and I think you'd get wonderful service this way. I think the time-saving element alone would be worthwhile."

Business Machine Salesman; age 28; \$6000-7499; took fifteen auto trips last year; high school graduate and company training.

"I would go if available and I needed it. Jets are faster, less expensive in the end."

Furniture Finisher; age 38; \$5000-5999; took two auto trips last year; eight years of school.

"Good idea' Convenient and time saving."

Aircraft Engineer; age 33; \$10,000-14,999; took ten trips by air, twenty by auto; three years in college.

"I'd like it. It's smoother and faster."

Quiet,
Smooth

Wife of Advertising Executive; age 39; \$10,000-14,999; took one trip by train last year.

"I'd love it. I love airplanes - quiet, smooth and fast."

Wife of a Musician; age 31, \$10,000-14,999; took one rail trip last year.

"I think it would be all right. You'd get there faster, probably a smoother ride."

Wife of Farmer; age 30; \$6000-7499; took two auto trips last year.

"It would be all right, I guess. They'd be fast and comfortable."

Positive Comments (Conti.)

Exciting, Wife of man in the army, works as a secretary; age 20; \$3000-3999;
Adventure- took two plane, three rail, two auto trips last year.
some,
Thrilling "I'd love it. Just to fly in a jet plane would be fascinating."

Retired man; age 67; \$3000-3999; took three auto trips last year;
high school and 2 years college.

"I'd like to ride in a jet very much. Would do anything once.
Jet planes fascinate me. I hope I get to do it."

New Things, Police Officer; age 34; \$5000-5999; took five auto trips last year;
Believes in high school graduate and army training.
Being
Modern, etc. "I think I would like it. It is something new and a challenge."

Truck Driver; age 29; \$5000-5999; took three auto trips last year;
high school graduate.

"I think it's as safe as anything else. It's the 'future' in
travel. It's nice to get to a distant place faster."

Safety Wife of Plumber; works as a store clerk; age 47; \$5000-5999; took two
auto trips last year.

"I believe it would be fine. I think they are safer than the
others."

Pharmacist and Drug Store Owner; age 36; \$6000-7499; took no trips
last year; three years of college.

"I would like to very much. They will be faster and safer. By
that time everything should be better and safer."

Just as Gas Plant Production Worker; age 40; \$7500-9999; took eight auto trips
Soon go last year; eight years of school.
by Jet as
by Any
Other
Plane

"I'd as soon travel in a jet as in any other plane, I think. I
think they are as safe as any of them."

Auto Electrician; age 63; \$6000-7499; took one air trip and one auto
trip last year; high school graduate.

"No difference. Flying is flying, means and speed should make no
difference."

Mixed, Positive and Negative Reaction

Faster
Save
Time

Secretary of Merchants' Association; male; age 69; \$2000-2999; took one auto trip last year; high school graduate.

"I wouldn't mind, I guess - it's OK. You'd get there in a hurry - if you got there."

Wife of Maintenance Man; age 29; \$5000-5999; took one auto trip last year.

"It would be a wonderful experience, but I'd be scared to death. I don't care to fly."

Machinist; age 45; \$6000-7499; took one auto trip last year; high school graduate.

"I guess I might travel in a jet plane if everyone else did, but I don't think I would like it. I suppose it will come about that everyone will travel that way."

Wife of Barber; age 27; \$10,000-14,999; took one auto trip last year.

"It would be wonderful in business, but personally I am afraid of planes. I'd like jet planes, I feel they are more perfected. Even though other planes are older, I feel that mechanics who are developing jets know more about them than ordinary aircraft."

Negative Comments

Too
Fast.

Wife of Dairy Worker, works as a nurse; age 64; \$7500-9999; one bus trip last year.

"I don't think I'd like it. I can go fast enough in a regular plane."

Wife of Machinist Welder; age 38; \$6000-7499; three or four auto trips.

"I wouldn't do it. They're just too fast for me."

Wife of Appliance Repairman; age 25; \$3000-3999; took no trips last year.

"Well, I could never ride at such great speed, nor would I risk it. Such terrific speed, one would have to get used to it, and at my age it would be a risk, a heart attack could happen."

Wife of Farmer; age 44; \$3000-3999; took one bus trip and two auto trips last year.

"Too fast, and too soon for me to try them. I like to go much slower than by jet plane!"

Too New
to be
Safe

Financial Controller for Hotel Chain; age 50; \$10,000-14,999; traveled at least 100,000 miles by air last year, took 20 rail trips, 20 bus trips, and went about 16,000 miles by car; has college degree.

"I will, after the first year of operation. They can have their crack-ups first. Everything must be perfect on a jet, or it will blow up. The pilots are jittery about them."

Retired Farmer; age 77; under \$1000; took no trips last year; high school graduate.

"I wouldn't get into one - I'd go horse back or walk, then I'd know I'd get there. There have been wrecks, etc. I'm not scared to die, but don't want to be crippled up."

Negative Comments (Conti.)

Not Nylon Knitter; age 36; male; \$4000-4999; took one auto trip last year;
Safe five years of school.

"I don't like them, - I'm afraid they would blow up."

Wife of Truck Driver; age 47; \$4000-4999; took two auto trips last year.

"No thanks! They crash too fast!"

Contractor; age 58; \$7500-9999; took no trips last year; six years of school.

"I wouldn't travel by plane, and surely not by jet plane. I don't think they are safe as yet for passenger use."

Don't Wife of Mechanic; age 44; \$4000-4999; took no trips last year.
Like
Flying in I'm afraid of airplanes - I'd never go up in one."
Any Kind
of Plane

IBM Operator; age 50; female; \$3000-3999; took one auto trip last year; 10 years of school.

"I will not travel in one. I'm afraid of planes."

Wife of Car Salesman; age 33; \$3000-3999; one auto trip last year.

"I think I'll stay on the road. I just never have had any urge to get up in the air."

Farmer; age 29; single; under \$1000; took no trips last year; 5 years of school.

"I wouldn't do it. I just wouldn't ride in one of them or in any kind of plane."

Insurance agent; age 67; \$7500-9999; took two auto trips last year; one year in college.

"I think I prefer an automobile or a train, I mean as long as I can I'm going to keep both feet on the ground."

Negative Comments (Conti.)

Other
Reasons

Piano Teacher; age 72; female; \$2000-2999; took no trips last year;
college graduate.

"Me?! Ridiculous! Another invention contributing to the end of
the world."

Wife of saw mill worker; age 40, under \$1000; took no trips last year.

"I don't think I would like it, too high up in the air for me."

B. Further Analysis

The preceding analysis has shown that people's attitudes toward travel by jet plane are related to whether they took a trip last year, and, in particular, to whether they took a trip by air. What other factors are related to attitudes toward jet travel? By investigating the characteristics of people which are related to their comments about jet travel, it may be possible to understand better both the meaning to them of their attitudes and the possible implications of their attitudes for their future behavior.

Young people are much more likely to react favorably to jet travel than older people. Since whether people travel has been shown to be closely related to their attitudes toward jets, the data on the relation of age to acceptance of jets have been prepared separately for those who took a trip of some sort by some mode "last year", and those who took no trip. (Table 57). This method has been used throughout this section of the report. Of those aged 18-24 who took at least one trip "last year", over half say they would like jet travel. Of those aged over 65, only 14% would like jet travel. Among those who took no trip, the age differences are similar.

This finding is consistent with results in other studies, which tend to show that young people are more ready than older people to accept innovations in everything from house design to the mechanical features of automobiles.

The advantages of jet travel which young people mention frequently are that jet planes are fast and that to ride in a jet will be exciting or adventuresome (Table 58). It is not surprising that people over 65 are less enthusiastic about speed and excitement.

Table 57

Acceptance of Jet Travel by Age, Distinguishing Travelers and Non-Travelers
(Percentage distribution of respondents)

Attitude Toward Jet Travel	Took a Trip "Last Year"			
	Age			
	18-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over
Would like jet travel	55	46	31	14
Middle position	1	4	5	5
Would not like jet travel	35	41	53	70
No difference between jets and other planes	6	3	3	3
Don't know	3	3	4	2
Not ascertained	*	3	4	6
Total	100	100	100	100
Number of respondents	68	477	353	119

Took No Trip "Last Year"

Attitude Toward Jet Travel	Age			
	18-24 yrs.	25-44 yrs.	45-64 yrs.	65 years and over
Would like jet travel	46	27	21	15
Middle position	*	5	2	*
Would not like jet travel	54	53	60	70
No difference between jets and other planes	*	2	3	3
Don't know	*	2	5	2
Not ascertained	*	11	9	10
Total	100	100	100	100
Number of respondents	24	165	157	116

* Less than 0.5%.

Table 58

Reasons for Liking or Not Liking Jet Travel by Age, Distinguishing
Travelers and Non-Travelers

(Percentage distribution of respondents)

Took a Trip "Last Year"

<u>Advantages of Jet Travel</u>	<u>Age</u>			
	<u>18-24 yrs.</u>	<u>25-44 yrs.</u>	<u>45-64 yrs.</u>	<u>65 years and over</u>
Faster, saves time	32	27	17	7
Safer	3	6	6	5
Quieter	1	1	2	*
More comfortable	6	4	1	1
Exciting, adventuresome	12	6	3	1
Believes in being modern	1	4	1	*
"I like flying"	6	7	4	6
Would accept jet	3	3	1	*
Other reasons for liking jets	7	5	4	1
Total	**	**	**	**
Number of cases	68	477	353	119

Took No Trip "Last Year"

<u>Advantages of Jet Travel</u>	<u>Age</u>			
	<u>18-24 yrs.</u>	<u>25-44 yrs.</u>	<u>45-64 yrs.</u>	<u>65 years and over</u>
Faster, saves time	12	16	8	5
Safer	4	5	3	*
Quieter	*	*	1	*
More comfortable	*	1	1	*
Exciting, adventuresome	8	5	2	3
Believes in being modern	*	1	3	1
"I like flying"	8	2	1	3
Would accept jet	4	2	3	3
Other reasons for liking jets	*	5	3	1
Total	**	**	**	**
Number of cases	24	165	157	116

Table 58 (Conti.)

Reasons for Liking or Not Liking Jet Travel by Age, Distinguishing Travelers and Non-Travelers

<u>Disadvantages of Jet Travel</u>	<u>Took Trip "Last Year"</u>			
	<u>Age</u>			
	<u>18-24 yrs.</u>	<u>25-44 yrs.</u>	<u>45-64 yrs.</u>	<u>65 years and over</u>
Too fast	16	12	11	11
Too new to be safe	1	2	3	1
Not safe; for other reasons	3	5	6	8
Too noisy	*	*	*	*
Less comfortable	*	*	*	1
"I'm afraid of jets"	7	6	13	14
I don't like flying in any plane	10	18	21	31
Other reasons	<u>3</u>	<u>4</u>	<u>5</u>	<u>7</u>
Total	**	**	**	**
Number of respondents	68	477	353	119

<u>Disadvantages of Jet Travel</u>	<u>Took No Trip "Last Year"</u>			
	<u>Age</u>			
	<u>18-24 yrs.</u>	<u>25-44 yrs.</u>	<u>45-64 yrs.</u>	<u>65 years and over</u>
Too fast	8	17	15	13
Too new to be safe	*	1	1	*
Not safe; for other reasons	8	2	6	2
Too noisy	*	1	*	*
Less comfortable	*	*	*	1
"I'm afraid of jets"	8	5	14	12
I don't like flying in any plane	25	33	30	33
Other reasons	<u>8</u>	<u>3</u>	<u>4</u>	<u>9</u>
Total	**	**	**	**
Number of respondents	24	165	157	116

* Less than 0.5 per cent.

** Columns will not add to 100% since a respondent might give no reason or several reasons for liking jet travel.

On the other hand, people over 65 are more likely than those under 45 to respond to the question about jets by observing that they do not like to fly in any kind of plane. Among those who took a trip there are differences among the age groups in the frequency of this remark. Of those aged 18-24, only one in ten feels this way, compared to two in ten of those aged 25-64, and three in ten of those 65 or over. Among those who took no trip, the differences from one age group to the next are small. About three out of ten at every age level "don't like flying in any kind of plane."

Fear of the new and untried may be expected to depend on education. People with more education should be more willing to try something like jet travel. The data support this line of reasoning. Of those who took a trip last year and have only a grammar school education, two out of ten would like jet travel; of those with a high school education, four out of ten would like it; of those who have been to college, five out of ten would like it (Table 59). Even among those who took no trip "last year" there are differences from one education group to the next. Of those who took no trip and have only a grade school education, 17 per cent would like jet travel, compared to about 30 per cent of the group who attended high school or college.

Do people at different education levels mention different advantages of jet travel? All of the advantages of jet travel (speed, safety, comfort) are mentioned more often by those who have been to college than by those with less education (Table 60). Only those who took a trip "last year" and have been to college are likely to remark that they look forward to jet travel because they like flying. Of that group, 13 per cent make this comment.

Table 59

Acceptance of Jet Travel by Education, Distinguishing Travelers
and Non-Travelers

Attitude toward Jet Travel	Took a Trip Last Year Education		
	None or Grade School	High School	College
Would like jet travel	21	41	51
Middle position	2	6	4
Would not like jet travel	66	43	36
No difference between jets and other planes	2	4	4
Don't know	5	2	2
Not ascertained	<u>4</u>	<u>4</u>	<u>3</u>
Total	100	100	100
Number of respondents	294	457	267

Attitude Toward Jet Travel	Took No Trip Last Year Education		
	None or Grade School	High School	College
Would like jet travel	17	30	31
Middle position	2	3	4
Would not like jet travel	69	51	45
No difference between jets and other planes	2	2	9
Don't know	3	4	*
Not ascertained	<u>7</u>	<u>10</u>	<u>11</u>
Total	100	100	100
Number of respondents	241	164	45

* Less than 0.5 per cent.

Table 60

**Reasons for Liking or Not Liking Jet Travel by
Education, Distinguishing Travelers and Non-Travelers**
(Percentage distribution of respondents)

Advantages of Jet Travel	Took a Trip "Last Year"			Took No Trip "Last Year"		
	Education			Education		
	None, or Grade School	High School	College	None, or Grade School	High School	College
Faster, saves time	12	25	26	5	15	18
Safer	3	6	7	2	4	7
Quieter	1	1	2	*	*	*
More comfortable	1	3	4	*	1	*
Exciting, adventuresome	3	5	6	2	5	7
Believes in being modern	1	3	2	1	2	4
"I like flying"	2	6	13	2	2	4
Would accept jet travel	1	2	3	4	2	2
Other reasons for liking jets	2	4	8	2	4	2
Total	**	**	**	**	**	**
Number of adults	294	457	267	241	164	45

Disadvantages of Jet Travel	Took a Trip "Last Year"			Took No Trip "Last Year"		
	Education			Education		
	None, or, Grade School	High School	College	None or, Grade School	High School	College
Too fast	16	10	10	16	12	18
Too new to be safe	2	1	3	*	2	*
Not safe, for other reasons	6	5	5	4	3	7
Too noisy	*	*	*	*	1	*
Less comfortable	*	*	*	*	*	*
"I'm afraid of jets"	15	8	6	14	7	2
I don't like flying in any plane	27	19	14	34	32	24
Other reasons why would not like jets	1	5	4	1	2	7
Total	**	**	**	**	**	**
Number of cases	294	457	267	241	164	45

* Less than 0.5 per cent.

** Columns will not add to 100% since a respondent might give no reason or several reasons for liking jet travel.

There is a tendency for people with more education not to make comments indicating fear. Of those with grade school education about 15 per cent say "I'm afraid of jets", compared to 2-6 per cent of those who have been to college. Similarly, fewer of those who have been to college "don't like flying in any kind of plane."

Education and income are closely correlated, and it is highly probable that any attitude which is positively correlated with education will also be positively correlated with income. Jet travel proves to be no exception (Table 61). High income people are more likely than low income people to say they would like jet travel. For example, consider those who took no trip "last year" and have an income below \$3000. Of this group only 12 per cent would like jet travel. Of those who took no trip but had an income of \$7500-9999, 44 per cent would like jet travel. Thus, people in the upper middle and upper income groups, who are the members of the population now most likely to travel by air, are also the people most likely to be favorably inclined toward jets.

Travel patterns have been shown in earlier sections of this report to vary from one size of community to another. It is reasonable to anticipate that attitudes toward travel by jet plane will vary in the same manner. The data indicate that people in urban areas are in fact more likely than those in rural areas to say they "would like jet travel" (Table 62). Of those who took at least one trip last year and live in a large metropolitan area, over 40 per cent give this favorable response, compared to 33 per cent of those in rural areas. Of those who took no trip and live in large cities, one third are favorably inclined, compared to only 15 per cent in rural areas. The climate of opinion about jets is clearly more favorable in the urban centers, which also tend to be the areas which generate the most air travel.

Table 61

Acceptance of Jet Travel by Family Income,
Distinguishing Travelers and Non-Travelers
 (Percentage distribution of respondents)

Attitude Toward Jet Travel	Took A Trip "Last Year"					Took No Trip "Last Year"				
	Family Income					Family Income				
	Under \$3,000	\$3,000- 4,999	\$5,000- 7,499	\$7,500- 9,999	\$10,000 & Over	Under \$3,000	\$3,000- 4,999	\$5,000- 7,499	\$7,500- 9,999	\$10,000 & Over
Would like jet travel	19	36	44	51	48	12	29	36	44	1/
Middle position	3	4	4	2	12	*	5	4	8	1/
Would not like jet travel	69	49	43	36	30	74	52	41	32	1/
No difference between jets and other plane	2	2	3	5	4	2	3	4	4	1/
Don't know	3	4	3	4	2	2	3	5	4	1/
Not ascertained	4	5	3	2	4	10	8	10	8	1/
Total	100	100	100	100	100	100	100	100	100	1/
Number of respondents	201	251	347	103	93	201	130	76	25	1/

1/ Too few interviews to percentagize.

Table 62

Acceptance of Jet Travel by Place of Residence, Distinguishing Travelers and Non-Travelers

(Percentage distribution of respondents)

Took Trip "Last Year"

<u>Attitude Toward Jet Travel</u>	<u>Large Metropolitan Areas</u>		<u>Other Areas</u>		
	<u>Central Cities</u>	<u>Suburbs</u>	<u>Cities 50,000 and over</u>	<u>Cities 2,500-50,000</u>	<u>Rural</u>
Would like jet travel	42	47	37	37	33
Middle position	4	6	3	6	3
Would not like jet travel	44	34	47	51	53
No difference between jets and other planes	2	7	3	1	4
Don't know	6	3	2	2	4
Not ascertained	<u>2</u>	<u>3</u>	<u>8</u>	<u>3</u>	<u>3</u>
Total	100	100	100	100	100
Number of respondents	121	128	172	282	324

Took No Trip "Last Year"

<u>Attitude Toward Jet Travel</u>	<u>Large Metropolitan Areas</u>		<u>Other Areas</u>		
	<u>Central Cities</u>	<u>Suburbs</u>	<u>Cities 50,000 and over</u>	<u>Cities 2,500-50,000</u>	<u>Rural</u>
Would like jet travel	33	32	14	25	15
Middle position	*	3	2	5	3
Would not like jet travel	60	49	57	57	65
No difference between jets and other planes	3	4	6	2	1
Don't know	3	4	4	2	3
Not ascertained	<u>1</u>	<u>8</u>	<u>17</u>	<u>9</u>	<u>13</u>
Total	100	100	100	100	100
Number of respondents	89	72	49	83	173

*Less than 0.5 per cent.

These data suggest that for the most part the people most likely to travel by jet may be those most likely to be favorably disposed. From this point of view a crucial group are the people who now travel by air on business. In Table 63 the people who took at least one air trip on business in the year prior to interview are compared to those who took one or more non-business trips but no business trip. The sample is small enough so that not much confidence can be placed in the observed difference between these two groups. But the data do at least point in the direction of a more favorable attitude toward jets on the part of the business travelers. This result is reasonable in view of the fact that the characteristic of travel by jet which people think of first is speed. The business traveler is particularly likely to think of situations in which speed is an important advantage to him.

Men are more likely than women to say that they would like to travel by jet plane. Of those who took a trip "last year", five out of ten of the men but only three out of ten of the women say they would like to travel by jet (Table 64). Among those who took no trip "last year", similarly, the proportion of men who give a favorable answer is about twice as large as the proportion of women.

The reasons for their attitudes toward jets given by the two sexes also are different. Men are much more likely than women to mention the fact that jets are faster or will save time (Table 65). As already noted, relatively few people see any advantages of jets other than speed. Men are more likely than women, however, to say that jets will be safer. This difference probably reflects the greater sophistication of men about mechanical devices.

On the other hand, women are more likely than men to mention speed as a disadvantage of jets. The data suggest that speed is less desirable

Table 63

Acceptance of Jet Travel, by
Business and Non-Business Use of Air
(Percentage distribution of respondents
who took an air trip last year)

Attitude toward Jet Travel	Use of Air Last Year	
	Took a Business Trip by Air ^{1/}	Took a Non-business Trip by Air
Would like jet travel	76	66
Middle position	5	7
Would not like jet travel	11	21
No difference between jets and other planes	*	4
Don't know	3	2
Not ascertained	5	*
Total	100	100
Number of adults	38	84

* Less than 0.5%

^{1/} Includes adults who took both a business and a non-business air trip.

Table 64

Acceptance of Jet Travel by Sex,
Distinguishing Travelers and Non-Travelers
(Percentage distribution of respondents)

<u>Attitude Toward Jet Travel</u>	<u>Took A Trip "Last Year"</u>		<u>Took No Trip "Last Year"</u>	
	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
Would like jet travel	50	28	33	16
Middle position	4	4	3	2
Would not like jet travel	35	59	44	69
No difference between jet and other planes	4	2	5	1
Don't know	4	3	3	4
Not ascertained	3	4	12	8
Total	100	100	100	100
Number of adults	485	542	186	280

Table 65

Reasons for Attitude Toward Jet Travel,
by Sex, for Travelers and Non-Travelers
(Percentage distribution of respondents)

	<u>Took A Trip "Last Year"</u>		<u>Took No Trip "Last Year"</u>	
<u>Advantages of Jet Travel</u>	<u>Men</u>	<u>Women</u>	<u>Men</u>	<u>Women</u>
Faster, save time	28	16	18	5
Safer	7	4	6	1
Quieter	2	1	1	*
More comfortable	4	2	1	*
Exciting; adventuresome	4	6	3	4
Likes new things; believes in being modern	3	1	2	1
Likes flying	8	4	2	2
Other reasons why would like jets	5	3	5	1
 <u>Disadvantages of Jet Travel</u>				
Too fast	8	15	11	17
Too new to be safe	2	2	2	*
Unsafe for other reasons	4	6	3	4
Too noisy	*	*	*	*
Less comfortable	*	*	*	*
"I'm afraid of jets" (personal reference)	5	13	5	13
Doesn't like flying	13	26	21	38
Other reasons why wouldn't like jets	4	5	6	5
 Number of respondents	 485	 542	 186	 280

* Less than 0.5 per cent.

Columns will not add to 100 per cent because respondents were allowed more than one reason for liking or not liking jet planes.

to women than it is to men. Women are also more likely to mention fear of jets or fear of flying in general. Of the women who took no trip "last year", nearly four out of ten observed that they did not like the idea of flying in any kind of plane. Only two out of ten of the men who took no trip made this comment. Of those who did take a trip, similarly, more women than men do not like flying. Women are also more likely than men to comment that they personally are afraid of jets.

It is socially more acceptable for women to admit they are afraid than men. Thus, it is not safe to conclude from the data that men actually are less nervous than women about jet planes. Some men may be nervous and reluctant to admit it. The data do make clear, however, that men and women react differently to the idea of travel by jet plane.

Appendix A

Sampling Errors

TABLE A
Approximate Sampling Errors of Percentages ^{1/}
For "Per Interview" Responses
(Expressed in Percentages)

Reported Percentage	Number of Interviews										
	4200	3000	2000	1500	1000	700	500	400	300	200	100
50	1.5	1.8	2.2	2.6	3.2	3.8	4.5	5.0	5.8	7.1	10.0
	2.6	2.9	3.4	3.9	4.6	5.3	6.1	6.7	7.6	9.1	12.7
30 or 70	1.4	1.7	2.0	2.4	2.9	3.5	4.1	4.6	5.3	6.5	9.2
	2.3	2.7	3.2	3.5	4.2	4.8	5.6	6.1	6.9	8.4	11.6
20 or 80	1.2	1.5	1.8	2.1	2.5	3.0	3.6	4.0	4.6	5.7	8.0
	2.0	2.3	2.8	3.1	3.7	4.2	4.9	5.3	6.0	7.3	10.2
10 or 90	0.9	1.1	1.3	1.5	1.9	2.3	2.7	3.0	3.5	4.2	6.0
	1.5	1.8	2.1	2.3	2.8	3.2	3.6	4.0	4.5	5.5	7.6
5 or 95	0.7	0.8	1.0	1.1	1.4	1.6	1.9	2.2	2.5	3.1	4.4
	1.1	1.3	1.5	1.7	2.0	2.3	2.7	2.9	3.3	4.0	5.5

^{1/} The sampling error measures the sampling variability, that is, the variations that might occur by chance because only a sample of the population is surveyed. For most items the chances are 95 in 100 that the value being estimated (the percentage of spending units possessing a given attribute) lies within a range equal to the reported percentages plus or minus the sampling error.

Two estimates of the sampling error are presented for each cell. The lower values are based on the standard error formula for simple random samples. The higher values are based on extensive computations of individual sampling errors carried out on National Travel Market Survey data, and allow for the departures from simple random sampling in the Survey design such as stratification and clustering.

The sampling error does not measure the total error involved in specific survey estimates since it does not include non-response and reporting errors.

TABLE B

**Sampling Errors of Differences ^{1/}
For "Per Interview" Responses
(Expressed in Percentages)**

Size of Subgroup	Size of Subgroup							
	2000	1500	1000	700	500	300	200	100
For percentages from about 35% to 65%								
2000	3.2-4.9	3.4-5.2	3.9-5.7	4.4-6.3	5.0-7.0	6.2-8.3	7.4-9.8	10.2-13.2
1500		3.7-5.5	4.1-6.0	4.6-6.5	5.2-7.2	6.3-8.4	7.5-9.9	10.3-13.3
1000			4.5-6.5	4.9-7.0	5.5-7.6	6.6-8.9	7.8-10.2	10.5-13.5
700				5.4-7.4	5.9-8.0	6.9-9.2	8.0-10.5	10.7-13.8
500					6.3-8.6	7.2-9.7	8.4-11.0	11.0-14.1
300						8.2-10.7	9.1-11.9	11.5-14.8
200							10.0-12.9	12.2-15.7
100								14.1-18.0
For percentages around 20% and 80%								
2000	12.5-3.9	2.7-4.1	3.1-4.6	3.5-5.0	4.0-5.6	5.0-6.6	5.9-7.8	8.2-10.6
1500		2.9-4.4	3.3-4.8	3.7-5.2	4.1-5.8	5.1-6.7	6.0-7.9	8.2-10.6
1000			3.6-5.2	3.9-5.6	4.4-6.1	5.3-7.1	6.2-8.2	8.4-10.8
700				4.3-6.0	4.7-6.4	5.5-7.4	6.4-8.4	8.6-11.0
500					5.1-6.8	5.8-7.8	6.7-8.8	8.8-11.3
300						6.5-8.6	7.3-9.5	9.2-11.8
200							8.0-10.3	9.8-12.6
100								11.3-14.4
For percentages around 10% and 90%								
2000	1.9-2.9	2.1-3.1	2.3-3.4	2.6-3.8	3.0-4.2	3.7-5.0	4.5-5.9	6.1-7.9
1500		2.2-3.3	2.4-3.6	2.7-3.9	3.1-4.3	3.8-5.0	4.5-6.0	6.2-8.0
1000			2.7-3.9	3.0-4.2	3.3-4.6	3.9-5.3	4.7-6.1	6.3-8.1
700				3.2-4.5	3.5-4.8	4.1-5.5	4.8-6.3	6.4-8.3
500					3.8-5.1	4.3-5.8	5.0-6.6	6.6-8.5
300						4.9-6.4	5.5-7.1	6.9-8.9
200							6.0-7.7	7.3-9.4
100								8.5-10.8
For percentages around 5% and 95%								
2000	1.4-2.1	1.5-2.3	1.7-2.5	1.9-2.7	2.2-3.0	2.7-3.6	3.2-4.3	
1500		1.6-2.4	1.8-2.6	2.0-2.9	2.2-3.1	2.8-3.7	3.3-4.3	
1000			1.9-2.8	2.1-3.0	2.4-3.3	2.9-3.9	3.4-4.4	
700				2.3-3.2	2.6-3.5	3.0-4.0	3.5-4.6	
500					2.8-3.7	3.1-4.2	3.6-4.8	
300						3.6-4.7	4.0-5.2	
200							4.4-5.6	

^{1/} The values shown are the differences required for significance (95 per cent probability) in comparisons of percentages derived from two different subgroups of the National Travel Market Survey. Two values - low and high - are given for each cell. See note 1 to Table A.

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Type of community (see place of residence)

Questionnaire

(We'd also like to know how much traveling people are doing, and how they travel. We're not interested in short-distance trips, but in trips of 100 miles or more away.)

ASK T1 - T3a ABOUT THE RESPONDENT'S TRAVEL:

T1. Have you ever taken a trip to a place 100 miles or more away by air?

/Yes/

/Never/

(IF
"YES")

T1a. In about what year did you first take an air trip to a place 100 miles or more away?

T1b. Did you take any air trips to places 100 miles or more away in the last twelve months?

/Yes/

/No/

(IF TOOK
AIR TRIP
IN LAST
TWELVE
MONTHS)

T1c. How many? _____

T1d. How many of your air trips were on first class flights? _____

T1e. And how often did you go by air coach? _____

T1f. Were any of your trips by company, private, or military plane?

/Company/

/Private/

/Military/

/Used none of these/

(IF "YES") T1g. How many were by company, private, or military plane? _____

T2. And how about rail, have you ever taken a trip by rail to a place 100 miles or more away?

/Yes/

/Never/

(IF "YES") T2a. Did you take any rail trips to places 100 miles or more away in the last twelve months?

/Yes/

/No/

(IF TOOK
RAIL TRIP
IN LAST
TWELVE
MONTHS)

T2b. How many? _____

T2c. On how many of your rail trips did you travel first-class?

T2d. And how often did you go by coach?

(IF TOOK
NO RAIL
TRIP IN
LAST
TWELVE
MONTHS)

T2e. When was the last time you took a trip to a place 100 miles or more away by rail?

T3. And now, how about busses, have you ever taken a trip by bus to a place 100 miles or more away?

/Yes/

/Never/

(IF "YES") T3a. Did you take any bus trips to places 100 miles or more away in the last twelve months?

/Yes/

/No/

(IF TOOK
A BUS TRIP
IN LAST
TWELVE
MONTHS)

T3b. How many? _____

T4. And have you ever taken a trip to a place 100 miles or more away by auto?

/Yes/

/Never/

(IF "YES") T4a. Did you take any auto trips to places 100 miles or more away in the last twelve months?

/Yes/

/No/

(IF TOOK AN
AUTO TRIP
IN LAST
TWELVE
MONTHS)

T4b. How many? _____

T5. Were any of your trips in the last twelve months business trips - I mean, trips in connection with your work?

/Yes/

/No/

(IF TOOK
ANY
BUSINESS
TRIPS)

T5a. How many of your air trips were business trips? your rail trips? your bus trips? your auto trips?

Air	Rail	Bus	Auto
<u>/None/</u> _____	<u>/None/</u> _____	<u>/None/</u> _____	<u>/None/</u> _____

IF THE RIGHT-HAND BOX OF THE COVER SHEET IS CHECKED, ASK QUESTIONS T1-T5a ABOUT EACH OF THE EXTRA ADULTS IN THE FAMILY, OTHER THAN THE HEAD AND HIS WIFE.

ADULT NUMBER _____

INTERVIEW NUMBER _____

(RESPONDENT'S MOST RECENT TRIP BY COMMON CARRIER -- ASK THIS PAGE AND THE NEXT FOR R'S WHO DID TAKE A COMMON CARRIER TRIP IN PAST TWELVE MONTHS)

T6. Now we'd like to ask about your most recent trip to a place 100 miles or more away by plane, bus, or train. What was the purpose of the trip?

T6a. Was there any other reason for the trip? _____

T7. Where did you go? (town and state) _____

T8. How long were you away? Back the same day 1-2 days 3-6 days
Week to 10 days 11 days to 2 weeks
3-4 weeks 5-6 weeks Over 6 weeks

T9. Did anyone go with you? (How many went besides yourself?) _____

T10. How did you travel? Rail Bus Air

mixed modes (specify) _____

other (specify) _____

.1. How did you happen to choose this way of traveling instead of some other?

T11a. Were there any (other) advantages of going this way? _____

(IF SAYS "CONVENIENT" T11b. In what way? _____
OR "BAD CONNECTIONS") _____

T11c. Were there any (other) disadvantages of going by this mode? _____

(IF SAYS T11d. In what way? _____
"INCONVENIENT"
OR "BAD
CONNECTIONS") _____

(IF WENT
BY RAIL
OR AIR)

T12. Did you travel coach or first class? Coach First Class

ASK EVERYBODY

(We're also interested in how people will be getting around in the future)

T13. As you probably know, there are plans for developing jet planes for passenger service. How would you feel about traveling in a jet plane?

T13a. What do you have in mind? _____