

**Final Codebook (Internal Use)
and
Technical Documentation**

Contract Number: DTTS59-99-D-00489

Task Order Number: T000005

for

**Survey Administration for the
Bureau of Transportation Statistics
Omnibus Survey Program**

Airline Passenger Survey

to the

Bureau of Transportation Statistics

**September 11, 2000
(Revised March 2, 2001)**



TABLE OF CONTENTS

1. Introduction and Background	1
1.1 Notes for the User.....	2
2. Survey Methodology.....	3
2.1 The Target Population.....	3
2.2 Sample Selection.....	3
2.3 Survey Weights	5
2.4 Response Rates	5
2.5 Estimated Statistics	6
3. Summary of Survey Procedures.....	7
3.1 Data Collection Schedule.....	7
3.2 Data Collection Procedures.....	7
Appendix A: Demographic Comparison	A-1
Appendix B: Annotated Questionnaire.....	B-1
Appendix C: Index of Data Elements by Alphabetic Order	C-1
Appendix D: Frequency Tables for all Questionnaire Data Elements.....	D-1

1. INTRODUCTION AND BACKGROUND

The Bureau of Transportation Statistics (BTS) has a requirement to conduct a series of national surveys to monitor expectations of and satisfaction with the transportation system and to gather event, issue, and mode-specific information. These surveys will comprise the BTS Omnibus Survey Program. The surveys serve as an information source for the U.S. Department of Transportation (DOT) modal administrators, who can use them to support congressional requests and as internal DOT performance indicators. The three sets of surveys to be conducted include household, establishment, and targeted surveys. Overall, the surveys support the collection of information on a wide range of transportation-related topics.

This report presents the results of the Survey of Airline Passengers, a targeted survey conducted to obtain airline passengers' current satisfaction levels with airline service, based on their recent flight experiences on commercial airlines. The survey was conducted for BTS by Battelle, RTI, and Knowledge Networks using web-based data collection.

The data were collected between August 25 and September 5, 2000 from a sample of individuals 18 years and older who had taken one or more commercial airline flights since January 1, 2000. The final completed sample size is 1,061 cases, and the total number of variables in the internal-use dataset is 92.

This report provides technical documentation for the Survey of Airline Passengers. Its primary goal is to document background information, sampling procedures, data collection, data elements and survey variables, response rates, and final weights.

This report contains the following information:

- Background on the survey initiative;
- Overview of how sample members were selected for the survey;
- Information regarding the data collection period and the number of completed interviews;
- Information on the number of cases in the file and guidance on the use of weights for analyses;
- A list of variables in the data file generated from the SAS data set; and
- The sampling plan used for the survey effort.

1.1 NOTES FOR THE USER

A CD-ROM containing the survey data and documentation accompanies this report. The CD-ROM contains the data files, tables of results, and a codebook.

In addition to the different types of information contained in the data files, they are provided in five different formats:

1. SAS Version 6.12 (.SD2 file extension),
2. SAS Transport (.DAT file extension),
3. Microsoft Excel (.XLS file extension),
4. Microsoft Access (.MDB file extension), and
5. ASCII (.TXT file extension).

The tables of results are presented in three different formats:

1. Microsoft Word (.DOC file extension)
2. Hypertext Mark-up Language (.HTM file extension)
3. Wordperfect (.WPD file extension)

2. SURVEY METHODOLOGY

This section describes the survey methodology, including the identification of the target population, the selection of the sample, the calculation of the survey weights, and the calculation of the survey response rates.

2.1 THE TARGET POPULATION

The target population for this survey is comprised of the non-institutionalized population, aged eighteen years or older who are currently living in the United States and who made one or more commercial air trips since January 1, 2000. This is the population about which inferences are to be made.

2.2 SAMPLE SELECTION

The study was based on a sample of individual adults aged 18 or older selected from the Knowledge Networks' web-enabled national panel and surveyed via web-TV. This national panel currently includes approximately 45,000 panel households, composed of about 100,000 individuals. A sub-sample of 1,541 persons 18 years and older was selected for this project. The selection was restricted to one adult per household. The selected adults received up to two e-mail requests to complete the survey.

2.2.1 TELEPHONE NUMBER SAMPLE

The basis for the panel is a national sample of telephone numbers selected from the Genesys system, developed and maintained by the Marketing Systems Group. This system employs list-assisted random digit dialing (RDD). List-assisted refers to the use of commercial lists of directory-listed telephone numbers to increase the likelihood of dialing household residences. This method gives unlisted telephone numbers the same chance to be selected as directory-listed numbers.

Banks of 100 consecutive telephone numbers were constructed and compared to a database containing the count of directory-listed residential telephone numbers in each bank. The banks that contain zero directory-listed telephone numbers were deleted from the sampling frame. This greatly increases the chance of dialing residential households. Obviously, the deleted banks will contain some residential telephone numbers. However, recent research has shown that less than 2 percent of the residential telephone numbers nationally are located in 100-banks with zero directory-listed numbers.

Prior to sample selection, Genesys imposed an implicit stratification on the telephone prefixes using the Census divisions and metropolitan status. Within each Census division, counties and their associated prefix areas located in metropolitan statistical areas (MSAs) were ordered by the size of the MSA. Counties and their associated prefix areas within a Census division that are located outside of MSAs were first sorted by state. Within each state, the counties and their associated prefix areas were ordered by geographic location. Finally, the telephone exchanges within the groupings shown above were sorted into numerical order. This implicit stratification ensured that the sample of telephone numbers was geographically representative.

After the prefixes were stratified by Census division and metropolitan status, a single stage, equal-probability sample of telephone numbers was drawn. The total number of ten-digit telephone numbers in the universe was 100 times the total number of working banks in the universe. The selection interval was calculated by dividing the total number of ten-digit telephone numbers by the designated sample size. To identify the first sample telephone number, a random number between 0 and 1 was generated and multiplied by the selection interval. The integer part of this product divided by 100 identified the

sequential working bank where the first sample number was located. The fractional portion of this product, truncated to two digits, provides the suffix. To identify the second sample number, a new random number was generated and was multiplied by the selection interval. This product was added to the selection interval and the result was divided by 100. The suffix of the sample number was identified in the same way as the suffix of the first sample number. This process continued until all sample telephone numbers were determined.

Genesys-ID Plus was used to detect non-working numbers before the sample was released. This system actually dials the telephone number. If the system detects non-working intercept signals, the telephone number being dialed is excluded from the sample. Calls that were answered or whose outcome could not be definitively identified by the dialer are passed to live attendees who disposition the number accordingly. Non-working and non-residential numbers identified at this point of the process were excluded from the sample. Additional non-residential telephone numbers were excluded from the sample by comparing them to a database of Yellow Page listings.

2.2.2 THE WEB-ENABLED PANEL

This section discusses the formation of the web-enabled panel and the selection of a sub-sample of persons from it for the survey of airline passengers.

Once a household has been selected through the RDD process described in the previous section, household members are contacted first by an express delivery mailing and then by telephone for enrollment in the panel. When a household agrees to participate in the panel, it is provided with free hardware, free Web access, free e-mail accounts for each household member over the age of 13, ongoing technical support, and a rich incentive program. This extends panel participation to those households without a computer or Internet access. Currently the web-enabled panel has over 45,000 member households and 100,000 individuals, and is expected to increase to 250,000 members by the first quarter of 2001.

Sub-samples of individuals are selected for client surveys as needed. For the survey of airline passengers, 1,541 persons 18 years of age and older were selected. The selection was limited to one adult per household. Panel sub-samples are selected so that they are self-weighting. The primary sampling rule is not to assign more than one survey per week to members so as not to overburden them with survey requests. In certain cases, a survey sample calls for prescreening; that is, for members to be drawn from a subsample of the panel (e.g., females). In such cases, care is taken to ensure that all subsequent survey samples drawn that week are selected in such a way as to result in a sample that is representative of the panel distributions.

2.3 SURVEY WEIGHTS

This section discusses the development of the survey weights, which reflect all non-response, multiple telephone line, and post-stratification adjustments. The survey weights were based on the inverses of their overall selection probabilities, with adjustments for non-response.

The first step in weighting the sample was to calculate the sampling weight for each sampled telephone number. The sampling weight for each telephone number was calculated as the inverse of its overall probability of selection. Some households have multiple telephone lines for voice communication. Thus, these households have multiple chances of being selected into the sample and adjustments must be made to their survey weights. A compensating factor for multiple telephone lines is included in the weight computation.

The next step was to adjust for non-response. Sampled persons were classified as responding or non-responding to the screening items on the questionnaire (the screening questions are #S1 and #S2 in Appendix B). The method of iterative proportion fitting was applied to adjust for possible differential non-response by age, gender, race, ethnicity, region, and metropolitan status. Independent Census population estimates for July 2000 were used to make the adjustments.

Adjusting weighted survey counts so that they agree with Census population counts can compensate for different response rates by demographic subgroups, increase the precision of survey estimates, and reduce the bias present in the estimates resulting from the inclusion of only telephone households. The post-stratified survey weights across all screened individuals sum to 202,233,133 – an estimate of the total U.S. population age 18 years or older.

2.4 RESPONSE RATES

The final-stage response rate of 78.3 percent was obtained for the survey of airline passengers. That is, 1,206 of the 1,541 persons sampled for this study completed the survey. Of these, 145 persons were screened out because they had not taken any commercial air trips in 2000 or since they were employed by a commercial airline company. The remaining 1,061 sample persons completed the interviews.

The overall response rate calculation must also take into account non-response encountered in the panel formation, recruiting and maintenance. The web-enabled panel is based on a probability sample of all U.S. telephone households in web-TV areas. Households that do not have a telephone are not covered (approximately 6 percent of U.S. households), nor are households in areas where web-TV is not available (approximately 13 percent of U.S. households). Comparing the demographics of the panel with data for the U.S. adult population indicates that the panel may under-represent older adults, adults with less education, rural areas (due to lower web-TV signal coverage), and persons in low-income households (see appendix A). This means that the survey results may be biased to some degree against low income and rural households. The sample results were weighted to national demographics, in order to attempt to correct for these potential biases.

There is also the potential in all surveys that the results may be biased due to non-response. The overall response rate for this survey is approximately 25 percent. The components leading to this response rate are as follows:

Percent of sample households recruited to join the panel	53%
Percent of recruited households installing web-TV	72%
Percent completing the household profile survey	83%
Percent eligible persons completing airline passenger survey	78%
Overall response rate	25%

2.5 ESTIMATED STATISTICS

Weighted data for 1,061 respondents were used to compute estimated percentages and standard errors shown in the Frequency Tables (located in Appendix D), for each of the survey items. SUDAAN software was used to compute the standard errors in accordance with the sample design. That is, the effects of stratification and unequal weighting were properly incorporated into the estimation process. The Taylor series linearization estimation method for stratified sampling with replacement was used to compute the standard error estimates for the ratio variables.

3. SUMMARY OF SURVEY PROCEDURES

This section describes the procedures undertaken to conduct the survey, including the data collection schedule and survey procedures.

3.1 DATA COLLECTION SCHEDULE

This survey was targeted to collect 1,000 completed interviews from adults who had taken at least one commercial air flight in 2000. Data collection began on August 25, 2000 and continued until September 5, 2000. A total of 1,206 sample persons completed the survey; of these, 1,061 had flown one or more commercial air flights during 2000.

3.2 DATA COLLECTION PROCEDURES

The survey questions were programmed for administration on web-TV, as in a computer-assisted interview survey. While no formal pre-testing was performed, the programmed questionnaire was made available for examination by project and client staff following the programming. The administration of the questions was controlled to include the desired skip patterns, response checks, and backup controls. No incentives were offered to respondents for completing the interview, and the interview screens were programmed only in English.

To initiate the survey, e-mail messages were sent to the selected adult panel members. The e-mail messages informed the recipients that a survey was waiting for them. Clicking on a button within the email started the multimedia questionnaire, which was expected to take most respondents 10 to 15 minutes to complete. Self-administration allowed respondents to complete the surveys at their convenience, in the comfort and privacy of home. Because every household has the same standardized hardware, survey consistency was assured.

A total of 1,241 potential respondents were initially selected for the study and sent e-mail messages on August 25. To ensure that 1,000 completes would be obtained, an additional 300 potential respondents were assigned to the study. These households were sent their first e-mail messages on September 1.

The provision of hardware, Internet access, and e-mail accounts provides respondents with a valuable benefit, which in turn serves to foster cooperation and fast turnaround. Up to two reminder e-mails (after day 3 and day 6) were sent to those not responding to the survey during the field period.

Both Battelle and RTI provided their respective IRB reviews of the survey instrument. This process helps assure the privacy of the individual respondent and the confidentiality of survey results. BTS provided Battelle and RTI with information concerning OMB approval, including the OMB number and date. This information was made available to respondents as required.

Appendix A

		InterSurvey Panel	Adult U.S. Population
Gender			
	Male	49.5%	47.9%
	Female	50.5%	52.1%
Age			
	18-24	13.0%	13.1%
	25-34	21.4%	18.7%
	35-44	25.7%	22.2%
	45-54	20.5%	18.2%
	55-64	10.1%	11.6%
	65 or over	9.1%	16.2%
Race			
	White	82.0%	83.4%
	Black/African-American	10.6%	11.9%
	American Indian/Alaska Native	0.9%	0.9%
	Asian/Pacific Islander	3.4%	3.8%
	Other	3.6%	n/a
Hispanic Ethnicity			
	Hispanic	7.4%	10.5%
	Non-Hispanic	92.6%	89.5%
Employment Status			
	In the Labor Force	69.9%	65.7%
	Working Full-Time	61.4%	54.9%
	Working Part-Time	8.5%	10.7%
	Not in the Labor Force	30.1%	34.3%
Marital Status			
	Married	62.8%	57.8%
	Not Married	37.2%	42.2%
Housing Ownership			
	Own	74.2%	70.9%
	Rent	25.8%	29.1%
Level of Education			
	Less than High School Diploma	7.8%	16.8%
	High School Diploma or Equiv.	23.6%	32.9%
	Some College	31.4%	19.7%
	Associate Degree	8.9%	7.2%
	Bachelor's Degree or Beyond	28.2%	23.3%
Household Income			
	Under \$10,000	3.6%	7.8%
	\$10,000-\$24,999	12.7%	19.8%
	\$25,000-\$49,999	32.3%	30.5%
	\$50,000-\$74,999	26.0%	19.5%
	\$75,000 or more	24.3%	22.2%
Census Region			
	Northwest	18.5%	19.0%
	Midwest	22.7%	23.2%
	South	34.4%	35.4%
	West	24.4%	22.4%

Appendix B

Air Travel Survey Codebook

August 21, 2000 (Version 3)

(For persons who have made at least one air travel trip since January 2000)

NOTES:

Column numbers are identified in [brackets].

Codes are identified in (parentheses).

Open ended [oe] responses can be found in a separate data file.

An empty open end response signifies that the question was not seen.

An open end response with “_na_” signifies that the question was refused/skipped.

Codes applicable for all variables:

(-1) Refused/decline to answer

(-2) Question not asked

Codes applicable for all multi-select (checkbox) variables:

(0) NOT selected

(1) Selected

Member ID

[S1] Have you flown as a passenger on a commercial airline since January 1, 2000?

(Q2)

___ Yes

___ No

[S2] Are you currently employed by a commercial airline company in any capacity?

(Q3)

___ Yes

___ No

Thank you for participating in this survey. The U.S. Department of Transportation (DOT) is seeking to better understand how people like you experience traveling on commercial airlines. Your opinions will be valuable in helping the DOT to improve air travel for everyone. We want to know what is working well and what is not working so well, and what the airline industry could be doing to enhance your travel experiences. Your responses will be held in strict confidence and will only be reported in aggregated statistics.

[1] Which statement best describes the number of air travel trips you typically take?
(Q4)

- ☐ 10 or more trips per year **(1)**
- ☐ 5 to 9 trips per year **(2)**
- ☐ 2 to 4 trips per year **(3)**
- ☐ 1 or fewer trips per year **(4)**

[2] Overall, how satisfied are you with the service you receive from commercial airlines?
(Q5)

- ☐ Very satisfied **(1)**
- ☐ Somewhat satisfied **(2)**
- ☐ Neither satisfied nor dissatisfied **(3)**
- ☐ Somewhat dissatisfied **(4)**
- ☐ Very dissatisfied **(5)**

[3] Please rate your level of satisfaction with each aspect of the performance of commercial airlines. How satisfied or dissatisfied are you with the airlines' performance in . . .

(Select one answer from each row in the grid.

If not applicable, select N.A.)

		Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Neither Satisfied nor Dissatisfied (3)	Somewhat Satisfied (4)	Very Satisfied (5)	N/A (6)	
[a] (Q6)	allowing you to change itineraries after you have purchased a ticket?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	
[b] (Q7)	providing refunds?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	
[c] (Q8)	informing you of flight cancellation policies?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	
[d] (Q9)	informing you of cancellations in a timely manner?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	
[e] (Q10)	informing you before you board the plane about flight delays?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	
[f] (Q11)	informing you after you board the plane about flight delays?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	
[g] (Q12)	assisting you when flights are canceled or delayed?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	
[h] (Q13)	responding to your complaints?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	
[i]	arriving on time?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>	

		Very Dissatisfied (1)	Somewhat Dissatisfied (2)	Neither Satisfied nor Dissatisfied (3)	Somewhat Satisfied (4)	Very Satisfied (5)	N/A (6)	
(Q14)								
[j] (Q15)	providing lower fares?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>		
[k] (Q16)	informing you of policies for holding and changing a reservation?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>		
[l] (Q17)	providing smooth and efficient check-in service?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>		
[m] (Q18)	departing on time?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>		
[n] (Q19)	providing sufficient leg and elbow room in coach class?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>		
[o] (Q20)	delivering baggage to the claim area in a timely fashion?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>		
[p] (Q21)	assisting you when checked baggage is lost, stolen, or damaged?	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>		
[q] (Q22)	telling you which airline will actually be operating the flight	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>		

The next group of six questions are about your most recent experience flying on a commercial airline. Please think about this trip as you answer the next few questions.

[oe] What was the destination of your most recent air travel trip?

[4] How long did you have to wait in line to check in for your flight to _____?
(Q23)

- ☐ Less than 15 minutes (1)
- ☐ 15 to 29 minutes (2)
- ☐ 30 minutes to 44 minutes (3)
- ☐ 45 minutes to an hour (4)
- ☐ More than an hour (5)

[5] Did you fly first class, business class, or coach?
(Q24)

- ☐ First Class (1)
- ☐ Business Class (2)
- ☐ Coach (3)
- ☐ Don't Know (4)

[6] Was your flight to _____ cancelled? (Q25)

- ____ Yes
- ____ No (Skip to question 11)

[7] Did the airline provide you with assistance in re-booking your flight?
(Q26)

- ____ Yes
- ____ No (Skip to question 11)

[8] How helpful was the airline in re-booking your flight?
(Q27)

- ☐ Very helpful (1)
- ☐ Somewhat helpful (2)
- ☐ Not at all helpful (3)

[9] Did you have to stay overnight because of flight delays?
(Q28)

- ____ Yes
- ____ No

The next group of fifteen questions are about your most recent experience flying on a commercial airline and any DELAYS you may have experienced.

[10] Was your flight to _____ delayed? (Q29)

- ____ Yes
- ____ No

[11] How long was the delay? (Q30)

- ☐ Less than 15 minutes (1)
- ☐ 15 to 29 minutes (2)
- ☐ 30 minutes to less than one hour (3)
- ☐ 1 hour to less than 2 hours (4)
- ☐ 2 to 3 hours (5)
- ☐ More than 3 hours (6)

[12] How well did the airline keep you informed about the delay?
(Q31)

- ☐ Very well informed (1)
- ☐ Somewhat well informed (2)
- ☐ Not at all informed (3)

[13] Were you given conflicting reasons for the delay from different sources?
(Q32)

____ Yes

____ No

[14] Where were you each time you were informed that your flight was delayed?

[a] Somewhere other than the airport (Q33)

[b] In the airport terminal (Q34)

[c] On board the airplane (Q35)

[15] Please rate the airline's efforts to meet your essential needs (e.g., food, water, bathrooms, access to medical treatment, etc.) while you waited for your flight?
(Q36)

- ☐ Very good (1)
- ☐ Good (2)
- ☐ Fair (3)
- ☐ Poor (4)
- ☐ Very poor (5)

[16] Did you miss a connecting flight because of flight delays?
(Q37)

___ Yes

___ No

[17] Did the airline provide you with assistance in re-booking the flight you missed ?
(Q38)

___ Yes

___ No

[18] How helpful was the airline in re-booking your flight?
(Q39)

Very helpful (1)

Somewhat helpful (2)

Not at all helpful (3)

[19] Did you have to stay overnight because of flight delays?
(Q40)

___ Yes

___ No

[20] If you checked baggage on your trip to _____, did your baggage arrive at the airport with your flight?

___ Did not check baggage (1)

(Q41)

___ Yes (2)

___ No (3)

[21] How long did you have to wait for your baggage?
(Q42)

- ☐ Less than 15 minutes (1)
- ☐ 15 to 29 minutes (2)
- ☐ 30 to 45 minutes (3)
- ☐ More than 45 minutes (4)

[22] Was your baggage returned to you within 24 hours after you reported your loss to the airline?
(Q43)

____ Yes

____ No

[23] Did you file a written complaint with the airline about any aspect of your trip to _____?
(Q44)

____ Yes

____ No

[24] How satisfied or dissatisfied were you with the way the airline handled your complaint?
(Q45)

- ☐ Very satisfied (1)
- ☐ Somewhat satisfied (2)
- ☐ Neither satisfied nor dissatisfied (3)
- ☐ Somewhat dissatisfied (4)
- ☐ Very dissatisfied (5)
- ☐ I have not yet heard from the airline (6)

The next group of questions ask about how various aspects of commercial airline flight delays and cancellations have affected your life and your travel behavior.

[25] Please read the following statements and indicate whether they describe your experiences always, frequently, occasionally, rarely, or never. If a question does not apply to you, please check the "N.A." category.

Select one answer from each row in the grid.

If not applicable, select N.A.

		Always (1)	Frequently (2)	Occasionally (3)	Rarely (4)	Never (5)	N.A. (6)
[a] (Q46)	I have missed business meetings because of flight delays.	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>
[b] (Q47)	I have missed family affairs such as weddings, parties, etc. because of flight delays.	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>
[c] (Q48)	I have missed medical appointments because of flight delays.	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	06 <input type="checkbox"/>
[d] (Q49)	I arrive at the airport much earlier than I used to because of long check-in lines.	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	
[e] (Q50)	I worry about flight delays before I fly.	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	
[f] (Q51)	I spend more money in airport terminals than I planned for food and other amenities because of flight delays.	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	
[g] (Q52)	I have missed flights because of long lines at the check-in counter.	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	
[h] (Q53)	I take risks on the road rushing to my destination because of flight delays.	01 <input type="checkbox"/>	02 <input type="checkbox"/>	03 <input type="checkbox"/>	04 <input type="checkbox"/>	05 <input type="checkbox"/>	

The remaining questions are about your general flying experience.

[26] In general, do you fly first class, business class, or coach?
(Q54)

- ☐ First Class (1)
☐ Business Class (2)
☐ Coach (3)

[27] Do you have any special dietary needs that require special services from an airline when you fly?

___ Yes
___ No

(Q55)

[28] Are your special dietary needs met by the airlines? (Q56)

- ☐ Always or almost always (1)
- ☐ Most of the time (2)
- ☐ Some of the time (3)
- ☐ Rarely(4)
- ☐ Never (5)

[29] Do you have a disability or health problem that requires special services from an airline when you fly?
(Q57)

- ____ Yes
- ____ No

[30] Are your needs adequately met by the airlines?
(Q58)

- ☐ Always or almost always (1)
- ☐ Most of the time (2)
- ☐ Some of the time (3)
- ☐ Rarely(4)
- ☐ Never (5)

[31] Finally, think about your personal air travel experiences over the past 2 years. Would you say that the customer service provided by the airlines is getting better over time, getting worse, or staying about the same?
(Q59)

- ☐ Getting better (1)
- ☐ Staying about the same (2)
- ☐ Getting worse (3)
- ☐ Don't know (4)

[32] What three areas do you think the commercial airlines need to focus on most to improve air travel?

- ☐ **[a]** Providing more seating room (Q60)
- ☐ **[b]** Providing better meals in flight (Q61)
- ☐ **[c]** Providing lower fares (Q62)
- ☐ **[d]** Reducing delays (Q63)
- ☐ **[e]** Providing smooth and efficient check-in service (Q64)
- ☐ **[f]** Responding to consumer complaints (Q65)
- ☐ **[g]** Providing reasonable compensation for flight delays and cancellations (Q66)
- ☐ **[h]** Delivering baggage to claim areas in a timely fashion (Q67)
- ☐ **[i]** Reducing cancellations (Q68)
- ☐ **[j]** Other (*please describe*) _____ (Q69)

[D1] Would you like to review the privacy/confidentiality statement?

Yes

No

[D2] Please provide us with any other comments describing your air travel experience.

[D3] Gender (GENDER)

Male (1)

Female (2)

[D4] Age

[D5] Agecat (Age categorized)
(AGECAT)

18-24 (1)

25-34 (2)

35-44 (3)

45-54 (4)

55-64 (5)

65-74 (6)

75 + (7)

[D6] Race (RACE)

- Caucasian **(1)**
- Black/African-American **(2)**
- American Indian or Alaskan Native **(3)**
- Asian/Pacific Islander **(4)**
- Other **(5)**

[D7] Marital

- Married **(1)**
- Widowed **(2)**
- Divorced **(3)**
- Separated **(4)**
- Never married **(5)**

[D8] Education (EDUC)

- Less than high school **(1)**
- Some high school **(2)**
- High school graduate or equivalent **(3)**
- Some college **(4)**
- Associate degree **(5)**
- Bachelor's degree **(6)**
- Master's degree **(7)**
- Professional degree **(8)**
- Doctorate degree **(9)**

[D9] Hhsize (total size of household) Household size (HHSIZE)

- One **(1)**
- Two **(2)**
- Three **(3)**
- Four **(4)**
- Five **(5)**
- Six **(6)**
- Seven **(7)**
- Eight **(8)**
- Nine **(9)**
- Ten or more **(10)**

[D10] Hhkids

None **(0)**

One **(1)**

Two **(2)**

Three **(3)**

Four **(4)**

Five **(5)**

Six **(6)**

Seven **(7)**

Eight **(8)**

Nine **(9)**

Ten or more **(10)**

**[D11] Hhinc (Household Income) Household Income
(HHINCOME)**

Less than \$5,000 **(1)**

\$5,000 to \$7,499 **(2)**

\$7,500 to \$9,999 **(3)**

\$10,000 to \$12,499 **(4)**

\$12,500 to \$14,999 **(5)**

\$15,000 to \$19,999 **(6)**

\$20,000 to \$24,999 **(7)**

\$25,000 to \$29,999 **(8)**

\$30,000 to \$34,999 **(9)**

\$35,000 to \$39,999 **(10)**

\$40,000 to \$49,999 **(11)**

\$50,000 to \$59,999 **(12)**

\$60,000 to \$74,999 **(13)**

\$75,000 to \$84,999 **(14)**

\$85,000 to \$99,999 **(15)**

\$100,000 to \$124,999 **(16)**

\$125,000 or more **(17)**

[D12] Region

(REG9)

New England **(1)**

Mid-Atlantic **(2)**

North-East central **(3)**

West-North Central **(4)**

South Atlantic **(5)**

East-South Central **(6)**

West-South Central **(7)**

Mountain **(8)**

Pacific **(9)**

[D13] Zip code

(ZIP)

[D14] Strat

(STRAT)

[D15] weights
FINWT2)

(FINWT1 and

Thank you for taking the time to complete this survey.

Appendix C

Contents of the Dataset

Data Set Name:	OUT.ATS	Observations:	21249
Member Type:	DATA	Variables:	92
Engine:	V612	Indexes:	0
Created:	13:29 Tuesday, February 20, 2001	Observation Length:	743
Last Modified:	13:29 Tuesday, February 20, 2001	Deleted Observations:	0
Protection:		Compressed:	NO
Data Set Type:		Sorted:	NO
Label:			

-----Alphabetic List of Variables and Attributes-----

#	Variable	Type	Len	Pos	Format	Informat	Label
24	A1	Num	8	191			Have you flown as a passenger on a comm
25	A3	Num	8	199			Are you currently employed by a commerc
26	A5	Num	8	207			Which statement best describes the numb
27	A6	Num	8	215			Overall, how satisfied are you with the
28	A7	Num	8	223			Please rate your level of satisfaction
29	A8	Num	8	231			Please rate your level of satisfaction
30	A9	Num	8	239			Please rate your level of satisfaction
92	AGE	Num	8	735			Respondent Age
4	AGECAT	Num	8	24	AGECAT.	2.	Age, combined - 7 categories
31	B0	Num	8	247			Please rate your level of satisfaction
32	B1	Num	8	255			Please rate your level of satisfaction
33	B2	Num	8	263			Please rate your level of satisfaction
34	B3	Num	8	271			Please rate your level of satisfaction
35	B4	Num	8	279			Please rate your level of satisfaction
36	B5	Num	8	287			Please rate your level of satisfaction
37	B6	Num	8	295			Please rate your level of satisfaction
38	B7	Num	8	303			Please rate your level of satisfaction
39	B8	Num	8	311			Please rate your level of satisfaction
40	B9	Num	8	319			Please rate your level of satisfaction
41	C0	Num	8	327			Please rate your level of satisfaction
42	C1	Num	8	335			Please rate your level of satisfaction
43	C2	Num	8	343			Please rate your level of satisfaction
44	C3	Num	8	351			Please rate your level of satisfaction
45	C4	Num	8	359			How long did you have to wait in line t
46	C5	Num	8	367			Did you fly first class, business class
47	C6	Num	8	375			Was your flight to TXVAL=[QQ\$TEXT] canc
48	C8	Num	8	383			Did the airline provide you with assist
49	D0	Num	8	391			How helpful was the airline in re-booki
50	D1	Num	8	399			Did you have to stay overnight because
51	D2	Num	8	407			Was your flight to TXVAL=[QQ\$TEXT] dela
52	D4	Num	8	415			How long was the delay?
53	D5	Num	8	423			How well did the airline keep you infor
54	D6	Num	8	431			Were you given conflicting reasons for
58	D9	Num	8	463			Please rate the airline's efforts to me
55	D7_1	Num	8	439			Where were you each time you were infor
56	D7_2	Num	8	447			Where were you each time you were infor
57	D7_3	Num	8	455			Where were you each time you were infor
59	E0	Num	8	471			Did you miss a connecting flight becaus
60	E2	Num	8	479			Did the airline provide you with assist
61	E3	Num	8	487			How helpful was the airline in re-booki
62	E4	Num	8	495			Did you have to stay overnight because
63	E5	Num	8	503			If you checked baggage on your trip to
64	E7	Num	8	511			How long did you have to wait for your
65	E9	Num	8	519			Was your baggage returned to you within

#	Variable	Type	Len	Pos	Format	Informat	Label
8	EDUC	Num	8	56	EDUC.	2.	Education (highest degree received)
66	F0	Num	8	527			Did you file a written complaint with t
67	F2	Num	8	535			How satisfied or dissatisfied were you
68	F3	Num	8	543			Please read the following statements an
69	F4	Num	8	551			Please read the following statements an
70	F5	Num	8	559			Please read the following statements an
71	F6	Num	8	567			Please read the following statements an
72	F7	Num	8	575			Please read the following statements an
73	F8	Num	8	583			Please read the following statements an
74	F9	Num	8	591			Please read the following statements an
20	FINWT1	Num	8	152	F10.	10.	Weight for screener survey
22	FINWT2	Num	8	168	F8.2	8.2	Weight for main survey
23	FMSACAT	Char	15	176			MSA Status - Y/N - formatted
75	G0	Num	8	599			Please read the following statements an
76	G1	Num	8	607			In general, do you fly first class, bus
77	G2	Num	8	615			Do you have any special dietary needs t
78	G4	Num	8	623			Are your special dietary needs met by t
79	G5	Num	8	631			Do you have a disability or health prob
80	G7	Num	8	639			Are your needs adequately met by the ai
81	G8	Num	8	647			Finally, think about your personal air
82	G9_1	Num	8	655			What three areas do you think the comme
83	G9_2	Num	8	663			What three areas do you think the comme
84	G9_3	Num	8	671			What three areas do you think the comme
85	G9_4	Num	8	679			What three areas do you think the comme
86	G9_5	Num	8	687			What three areas do you think the comme
87	G9_6	Num	8	695			What three areas do you think the comme
88	G9_7	Num	8	703			What three areas do you think the comme
89	G9_8	Num	8	711			What three areas do you think the comme
90	G9_9	Num	8	719			What three areas do you think the comme
91	G9_10	Num	8	727			What three areas do you think the comme
3	GENDER	Num	8	16	GENDER.	1.	Gender - Profile & NORC
11	HHINCOME	Num	8	80	HHINCOME.	2.	Household 1999 pre-tax income (full scal
10	HHKIDS	Num	8	72	HHKIDS.	2.	Number of kids (under 18) in HH
9	HHSIZE	Num	8	64	HHSIZE.	2.	Household size (adults and children)
5	HISPAN1	Num	8	32	HISPAN1A.	8.	Ethnicity (Spanish, Hispanic or Latino o
7	MARITAL	Num	8	48	MARITAL.	2.	Marital status
2	MNO	Num	8	8	F7.	7.	Member id
14	MSACAT	Num	8	104	MSACAT.	1.	MSA Status - Y/N
6	RACE	Num	8	40	RACE.	2.	Race (recoded)
12	REG9	Num	8	88	REG9A.	1.	Region 9 - based on State of residence
1	RESPSTAT	Num	8	0	RESPST.		Respondent Status
19	STRAT1	Num	8	144	F4.	4.	Strata for screener survey
21	STRAT2	Num	8	160	F4.	4.	Strata for main survey
15	WTVAR1	Num	8	112	F1.	1.	Weighting variable 1 - age x gender
16	WTVAR2	Num	8	120	F1.	1.	Weighting variable 2 - race/ethnicity
17	WTVAR3	Num	8	128	F1.	1.	Weighting variable 3 - region x metro/no
18	WTVAR4	Num	8	136	F1.	1.	Weighting variable 4 - education
13	ZIP	Num	8	96	F5.	5.	Zip code of residence

Appendix D

FREQUENCY TABLES		
Questionnaire Item	Frequency Count (in thousands)	Percent (standard error)
1. Which statement best describes the number of air travel trips you typically take?		
10 or more trips per year	2,776	5.08 (0.66)
5 to 9 trips per year	6,295	11.52 (1.17)
2 to 4 trips per year	28,071	51.37 (1.99)
1 or fewer trips per year	17,500	32.03 (1.92)
Subtotal Valid Responses	54,642	100.00
Total	54,642	
2. Overall, how satisfied are you with the service you receive from commercial airlines?		
Very satisfied	9,535	17.45 (1.53)
Somewhat satisfied	27,354	50.06 (1.95)
Neither satisfied nor dissatisfied	7,596	13.90 (1.32)
Somewhat dissatisfied	8,430	15.43 (1.27)
Very dissatisfied	1,727	3.16 (0.57)
Subtotal Valid Responses	54,642	100.00
Total	54,642	
3. Please rate your level of satisfaction with each aspect of the performance of commercial airlines. How satisfied or dissatisfied are you with the airlines' performance in ...		
a. allowing you to change itineraries after you have purchased a ticket?		
Very dissatisfied	8,422	19.95 (1.70)
Somewhat dissatisfied	10,313	24.43 (2.00)
Neither satisfied nor dissatisfied	13,611	32.24 (2.07)
Somewhat satisfied	4,851	11.49 (1.25)
Very satisfied	5,024	11.90 (1.64)
Subtotal Valid Responses	42,221	100.00
Question Not Asked	289	
N/A	12,132	
Total	54,642	
b. providing refunds?		
Very dissatisfied	6,927	19.48 (1.94)
Somewhat dissatisfied	6,647	18.69 (1.75)
Neither satisfied nor dissatisfied	14,930	41.98 (2.31)
Somewhat satisfied	3,695	10.39 (1.46)
Very satisfied	3,368	9.47 (1.54)
Subtotal Valid Responses	35,567	100.00
Question Not Asked	400	
N/A	18,675	
Total	54,642	

c. informing you of flight cancellation policies?		
Very dissatisfied	7,187	16.47 (1.43)
Somewhat dissatisfied	10,337	23.69 (1.76)
Neither satisfied nor dissatisfied	15,899	36.43 (2.03)
Somewhat satisfied	5,602	12.84 (1.45)
Very satisfied	4,617	10.58 (1.49)
Subtotal Valid Responses	43,642	100.00
Question Not Asked	323	
N/A	10,676	
Total	54,642	
d. informing you of cancellations in a timely manner?		
Very dissatisfied	7,681	18.48 (1.55)
Somewhat dissatisfied	9,913	23.85 (1.91)
Neither satisfied nor dissatisfied	13,191	31.74 (2.07)
Somewhat satisfied	6,125	14.74 (1.74)
Very satisfied	4,652	11.19 (1.72)
Subtotal Valid Responses	41,563	100.00
Question Not Asked	341	
N/A	12,737	
Total	54,642	
e. informing you before you board the plane about flight delays?		
Very dissatisfied	7,905	16.31 (1.41)
Somewhat dissatisfied	10,588	21.84 (1.66)
Neither satisfied nor dissatisfied	13,705	28.27 (1.90)
Somewhat satisfied	9,463	19.52 (1.84)
Very satisfied	6,816	14.06 (1.59)
Subtotal Valid Responses	48,477	100.00
Question Not Asked	292	
N/A	5,873	
Total	54,642	
f. informing you after you board the plane about flight delays?		
Very dissatisfied	7,901	16.41 (1.43)
Somewhat dissatisfied	11,200	23.26 (1.84)
Neither satisfied nor dissatisfied	13,303	27.62 (1.90)
Somewhat satisfied	9,283	19.27 (1.64)
Very satisfied	6,473	13.44 (1.52)
Subtotal Valid Responses	48,159	100.00
Question Not Asked	348	
N/A	6,135	
Total	54,642	

g. assisting you when flights are canceled or delayed?		
Very dissatisfied	6,621	15.00 (1.44)
Somewhat dissatisfied	9,535	21.60 (1.76)
Neither satisfied nor dissatisfied	14,364	32.53 (2.08)
Somewhat satisfied	8,710	19.73 (1.82)
Very satisfied	4,924	11.15 (1.54)
Subtotal Valid Responses	44,154	100.00
Question Not Asked	237	
N/A	10,250	
Total	54,642	
h. responding to your complaints?		
Very dissatisfied	4,992	12.30 (1.28)
Somewhat dissatisfied	7,549	18.61 (1.75)
Neither satisfied nor dissatisfied	16,496	40.66 (2.21)
Somewhat satisfied	6,958	17.15 (1.93)
Very satisfied	4,578	11.28 (1.67)
Subtotal Valid Responses	40,572	100.00
Question Not Asked	196	
N/A	13,874	
Total	54,642	
i. arriving on time?		
Very dissatisfied	5,729	10.63 (1.05)
Somewhat dissatisfied	10,303	19.11 (1.48)
Neither satisfied nor dissatisfied	10,155	18.83 (1.54)
Somewhat satisfied	14,347	26.61 (1.76)
Very satisfied	13,385	24.82 (1.90)
Subtotal Valid Responses	53,919	100.00
Question Not Asked	182	
N/A	540	
Total	54,642	
j. providing lower fares?		
Very dissatisfied	10,718	19.63 (1.54)
Somewhat dissatisfied	15,648	28.66 (1.86)
Neither satisfied nor dissatisfied	14,233	26.07 (1.69)
Somewhat satisfied	9,706	17.78 (1.54)
Very satisfied	4,296	7.87 (1.14)
Subtotal Valid Responses	54,601	100.00
Question Not Asked	41	
Total	54,642	

k. informing you of policies for holding and changing a reservation?		
Very dissatisfied	3,439	6.33 (0.88)
Somewhat dissatisfied	8,272	15.23 (1.38)
Neither satisfied nor dissatisfied	25,047	46.12 (1.93)
Somewhat satisfied	11,896	21.91 (1.63)
Very satisfied	5,650	10.40 (1.37)
Subtotal Valid Responses	54,304	100.00
Question Not Asked	337	
Total	54,642	
l. providing smooth and efficient check-in service?		
Very dissatisfied	3,094	5.67 (0.81)
Somewhat dissatisfied	8,628	15.82 (1.42)
Neither satisfied nor dissatisfied	12,824	23.51 (1.65)
Somewhat satisfied	19,440	35.64 (1.86)
Very satisfied	10,565	19.37 (1.73)
Subtotal Valid Responses	54,552	100.00
Question Not Asked	90	
Total	54,642	
m. departing on time?		
Very dissatisfied	5,369	9.87 (0.99)
Somewhat dissatisfied	13,775	25.32 (1.70)
Neither satisfied nor dissatisfied	10,927	20.08 (1.49)
Somewhat satisfied	17,221	31.65 (1.85)
Very satisfied	7,121	13.09 (1.54)
Subtotal Valid Responses	54,412	100.00
Question Not Asked	230	
Total	54,642	
n. providing sufficient leg and elbow room in coach class?		
Very dissatisfied	19,934	36.52 (1.84)
Somewhat dissatisfied	16,670	30.54 (1.85)
Neither satisfied nor dissatisfied	8,264	15.14 (1.31)
Somewhat satisfied	8,070	14.79 (1.49)
Very satisfied	1,640	3.01 (0.73)
Subtotal Valid Responses	54,578	100.00
Question Not Asked	64	
Total	54,642	

o. delivering baggage to the claim area in a timely fashion?		
Very dissatisfied	5,191	9.55 (1.16)
Somewhat dissatisfied	9,982	18.36 (1.44)
Neither satisfied nor dissatisfied	12,889	23.71 (1.70)
Somewhat satisfied	17,641	32.45 (1.86)
Very satisfied	8,657	15.92 (1.52)
Subtotal Valid Responses	54,360	100.00
Question Not Asked	282	
Total	54,642	
p. assisting you when checked baggage is lost, stolen, or damaged?		
Very dissatisfied	3,983	7.33 (0.90)
Somewhat dissatisfied	6,953	12.79 (1.23)
Neither satisfied nor dissatisfied	24,880	45.77 (1.95)
Somewhat satisfied	10,950	20.14 (1.69)
Very satisfied	7,597	13.97 (1.58)
Subtotal Valid Responses	54,362	100.00
Question Not Asked	279	
Total	54,642	
q. telling you which airline will actually be operating the flight?		
Very dissatisfied	2,508	4.63 (0.73)
Somewhat dissatisfied	5,999	11.07 (1.27)
Neither satisfied nor dissatisfied	24,393	45.00 (1.97)
Somewhat satisfied	11,898	21.95 (1.64)
Very satisfied	9,406	17.35 (1.66)
Subtotal Valid Responses	54,203	100.00
Question Not Asked	439	
Total	54,642	
The next group of six questions are about your most recent experience flying on a commercial airline.		
4. How long did you have to wait in line to check in for your flight?		
Less than 15 minutes	29,293	53.86 (1.91)
15 to 29 minutes	16,278	29.93 (1.74)
30 minutes to 44 minutes	5,470	10.06 (1.20)
45 minutes to an hour	1,497	2.75 (0.54)
More than an hour	1,844	3.39 (0.86)
Subtotal Valid Responses	54,384	100.00
Refused/Declined	258	
Total	54,642	

5. Did you fly first class, business class, or coach?			
First Class	1,974	3.62	(0.80)
Business Class	2,179	4.00	(0.69)
Coach	49,648	91.04	(1.11)
Don't Know	730	1.34	(0.41)
Subtotal Valid Responses	54,531	100.00	
Refused/Declined	111		
Total	54,642		
6. Was your flight canceled?			
Yes	2,327	4.26	(0.67)
No	52,315	95.74	(0.67)
Subtotal Valid Responses	54,642	100.00	
Total	54,642		
7. Did the airline provide you with assistance in re-booking your flight?			
Yes	1,905	81.86	(5.65)
No	422	18.14	(5.65)
Subtotal Valid Responses	2,327	100.00	
Question Not Asked	52,315		
Total	54,642		
8. How helpful was the airline in re-booking your flight?			
Very helpful	1,036	54.40	(8.69)
Somewhat helpful	642	33.71	(7.87)
Not at all helpful	227	11.89	(5.17)
Subtotal Valid Responses	1,905	100.00	
Question Not Asked	52,737		
Total	54,642		
9. Did you have to stay overnight because of flight delays?			
Yes	707	37.11	(8.33)
No	1,198	62.89	(8.33)
Subtotal Valid Responses	1,905	100.00	
Question Not Asked	52,737		
Total	54,642		

The next group of fifteen questions are about your most recent experience flying on a commercial airline and any DELAYS you may have experienced.

10. Was your flight delayed?

Yes	17,337	31.88 (1.80)
No	37,038	68.12 (1.80)
Subtotal Valid Responses	54,374	100.00
Refused/Declined	268	
Total	54,642	

11. How long was the delay?

Less than 15 minutes	988	5.70 (1.78)
15 to 29 minutes	2,216	12.78 (2.19)
30 minutes to less than one hour	4,067	23.46 (2.84)
1 to less than 2 hours	5,432	31.33 (3.19)
2 to 3 hours	2,644	15.25 (2.44)
More than 3 hours	1,990	11.48 (1.84)
Subtotal Valid Responses	17,337	100.00
Question Not Asked	37,305	
Total	54,642	

12. How well did the airline keep you informed about the delay?

Very well informed	4,041	23.31 (3.14)
Somewhat well informed	9,058	52.25 (3.32)
Not at all informed	4,237	24.44 (2.64)
Subtotal Valid Responses	17,337	100.00
Question Not Asked	37,305	
Total	54,642	

13. Were you given conflicting reasons for the delay from different sources?

Yes	4,632	26.72 (2.76)
No	12,705	73.28 (2.76)
Subtotal Valid Responses	17,337	100.00
Question Not Asked	37,305	
Total	54,642	

14. Where were you each time you were informed that your flight was delayed?

a. Somewhere other than the airport.

Yes	329	1.90 (0.74)
No	17,007	98.10 (0.74)
Subtotal Valid Responses	17,337	100.00
Question Not Asked	37,305	
Total	54,642	

b. In the airport terminal.			
Yes	12,900	74.41 (2.95)	
No	4,437	25.59 (2.95)	
Subtotal Valid Responses	17,337	100.00	
Question Not Asked	37,305		
Total	54,642		
c. On board the airplane.			
Yes	6,472	37.33 (3.18)	
No	10,864	62.67 (3.18)	
Subtotal Valid Responses	17,337	100.00	
Question Not Asked	37,305		
Total	54,642		
15. Please rate the airline's efforts to meet your essential needs(e.g., food, water, bathrooms, access to medical treatment ,etc.) while you waited for your flight.			
Very good	2,723	16.06 (2.94)	
Good	4,895	28.87 (3.04)	
Fair	5,234	30.86 (3.03)	
Poor	2,322	13.70 (2.26)	
Very Poor	1,783	10.51 (1.73)	
Subtotal Valid Responses	16,957	100.00	
Refused/Declined	198		
Question Not Asked	37,487		
Total	54,642		
16. Did you miss a connecting flight because of flight delays?			
Yes	3,061	17.66 (2.39)	
No	14,276	82.34 (2.39)	
Subtotal Valid Responses	17,337	100.00	
Question Not Asked	37,305		
Total	54,642		
17. Did the airline provide you with assistance in re-booking the flight you missed?			
Yes	2,535	82.82 (5.72)	
No	526	17.18 (5.72)	
Subtotal Valid Responses	3,061	100.00	
Question Not Asked	51,581		
Total	54,642		

18. How helpful was the airline in re-booking your flight?			
Very helpful	1,009	32.97	(7.30)
Somewhat helpful	1,462	47.78	(7.39)
Not at all helpful	589	19.25	(5.87)
Subtotal Valid Responses	3,061	100.00	
Question Not Asked	51,581		
Total	54,642		
19. Did you have to stay overnight because of flight delays?			
Yes	1,261	7.30	(1.53)
No	16,014	92.70	(1.53)
Subtotal Valid Responses	17,275	100.00	
Refused/Declined	62		
Question Not Asked	37,305		
Total	54,642		
20. If you checked baggage on your trip, did your baggage arrive at the airport with your flight?			
Yes	42,720	78.18	(1.46)
No	2,795	5.12	(0.76)
Did not check baggage	9,127	16.70	(1.30)
Subtotal Valid Responses	54,642	100.00	
Total	54,642		
21. How long did you have to wait for your baggage?			
Less than 15 minutes	15,746	36.91	(2.25)
15 to 29 minutes	21,315	49.97	(2.29)
30 to 45 minutes	4,715	11.05	(1.53)
More than 45 minutes	880	2.06	(0.55)
Subtotal Valid Responses	42,656	100.00	
Refused/Declined	64		
Question Not Asked	11,922		
Total	54,642		
22. Was your baggage returned to you within 24 hours after you reported your loss to the airline?			
Yes	1,671	59.79	(7.53)
No	1,124	40.21	(7.53)
Subtotal Valid Responses	2,795	100.00	
Question Not Asked	51,847		
Total	54,642		

23. Did you file a written complaint with the airline about any aspect of your trip?		
Yes	1,637	3.00 (0.56)
No	53,004	97.00 (0.56)
Subtotal Valid Responses	54,642	100.00
Total	54,642	
24. How satisfied or dissatisfied were you with the way the airline handled your complaint?		
Very satisfied	309	18.88 (8.64)
Somewhat satisfied	231	14.08 (5.76)
Neither satisfied nor dissatisfied	120	7.31 (4.57)
Somewhat dissatisfied	247	15.06 (6.37)
Very dissatisfied	251	15.32 (5.50)
I have not yet heard from the airline	481	29.36 (8.75)
Subtotal Valid Responses	1,637	100.00
Question Not Asked	53,004	
Total	54,642	
25. Please read the following statements and indicate whether they describe your experiences always, frequently, occasionally, rarely, or never. If a question does not apply to you, please check the "N.A." category.		
a. I have missed business meetings because of flight delays.		
Always	25	0.07 (0.07)
Frequently	689	1.89 (0.48)
Occasionally	3,942	10.82 (1.19)
Rarely	6,002	16.48 (1.71)
Never	25,769	70.74 (2.02)
Subtotal Valid Responses	36,428	100.00
Question Not Asked	82	
N/A	18,132	
Total	54,642	
b. I have missed family affairs such as weddings, parties, etc. because of flight delays.		
Always	43	0.10 (0.07)
Frequently	632	1.49 (0.47)
Occasionally	2,551	5.99 (0.84)
Rarely	5,337	12.54 (1.30)
Never	33,999	79.88 (1.57)
Subtotal Valid Responses	42,562	100.00
Question Not Asked	72	
N/A	12,007	
Total	54,642	

c. I have missed medical appointments because of flight delays.			
Always	97	0.28	(0.28)
Frequently	142	0.40	(0.31)
Occasionally	663	1.88	(0.52)
Rarely	1,882	5.34	(0.94)
Never	32,453	92.10	(1.14)
Subtotal Valid Responses	35,237		100.00
Question Not Asked	77		
N/A	19,328		
Total	54,642		
d. I arrive at the airport much earlier than I used to because of long check-in lines.			
Always	16,038	29.36	(1.73)
Frequently	11,698	21.41	(1.55)
Occasionally	10,985	20.11	(1.49)
Rarely	10,651	19.50	(1.75)
Never	5,257	9.62	(1.25)
Subtotal Valid Responses	54,628		100.00
Question Not Asked	14		
Total	54,642		
e. I worry about flight delays before I fly.			
Always	10,853	19.86	(1.48)
Frequently	10,623	19.44	(1.58)
Occasionally	14,229	26.04	(1.70)
Rarely	12,690	23.22	(1.73)
Never	6,246	11.43	(1.28)
Subtotal Valid Responses	54,642		100.00
Total	54,642		
f. I spend more money in airport terminals than I planned for food and other amenities because of flight delays.			
Always	5,595	10.25	(1.05)
Frequently	9,380	17.19	(1.37)
Occasionally	12,164	22.29	(1.63)
Rarely	16,240	29.76	(1.83)
Never	11,190	20.51	(1.70)
Subtotal Valid Responses	54,569		100.00
Question Not Asked	73		
Total	54,642		

g. I have missed flights because of long lines at the check-in counter.		
Always	82	0.15 (0.15)
Frequently	371	0.68 (0.21)
Occasionally	3,398	6.23 (0.78)
Rarely	8,655	15.86 (1.26)
Never	42,072	77.09 (1.46)
Subtotal Valid Responses	54,578	100.00
Question Not Asked	64	
Total	54,642	
h. I take risks on the road rushing to my destination because of flight delays.		
Always	805	1.48 (0.38)
Frequently	2,175	4.00 (0.61)
Occasionally	5,680	10.44 (1.09)
Rarely	10,713	19.70 (1.50)
Never	35,019	64.38 (1.83)
Subtotal Valid Responses	54,392	100.00
Question Not Asked	250	
Total	54,642	
26. In general, do you fly first class, business class, or coach?		
First Class	911	1.67 (0.48)
Business Class	2,259	4.13 (0.72)
Coach	51,472	94.20 (0.86)
Subtotal Valid Responses	54,642	100.00
Total	54,642	
27. Do you have any special dietary needs that require special services from an airline when you fly?		
Yes	3,693	6.76 (1.02)
No	50,949	93.24 (1.02)
Subtotal Valid Responses	54,642	100.00
Total	54,642	
28. Are your special dietary needs met by the airlines?		
Always or almost always	822	22.33 (7.75)
Most of the time	1,156	31.41 (7.28)
Some of the time	901	24.48 (6.08)
Rarely	571	15.52 (5.47)
Never	230	6.26 (3.01)
Subtotal Valid Responses	3,682	100.00
Refused/Declined	11	
Question Not Asked	50,949	
Total	54,642	

29. Do you have a disability or health problem that requires special services from an airline when you fly?			
Yes	2,145	3.93	(0.86)
No	52,497	96.07	(0.86)
Subtotal Valid Responses	54,642	100.00	
Total	54,642		
30. Are your needs adequately met by the airlines?			
Always or almost always	579	27.01	(10.09)
Most of the time	1,061	49.46	(11.22)
Some of the time	228	10.61	(5.71)
Rarely	228	10.65	(7.51)
Never	49	2.27	(2.28)
Subtotal Valid Responses	2,145	100.00	
Question Not Asked	52,497		
Total	54,642		
31. Finally, think about your personal air travel experiences over the past 2 years. Would you say that the customer service provided by the airlines is getting better over time, getting worse, or staying about the same?			
Getting better	6,176	11.30	(1.22)
Staying about the same	29,705	54.36	(1.89)
Getting worse	16,302	29.83	(1.67)
Don't know	2,459	4.50	(0.79)
Subtotal Valid Responses	54,642	100.00	
Total	54,642		
32. What three areas do you think the commercial airlines need to focus on most to improve air travel?			
a. Providing more seating room.			
Yes	35,782	65.48	(1.79)
No	18,860	34.52	(1.79)
Subtotal Valid Responses	54,642	100.00	
Total	54,642		
b. Providing better meals in flight.			
Yes	14,273	26.12	(1.80)
No	40,369	73.88	(1.80)
Subtotal Valid Responses	54,642	100.00	
Total	54,642		
c. Providing lower fares.			
Yes	36,919	67.57	(1.85)
No	17,723	32.43	(1.85)
Subtotal Valid Responses	54,642	100.00	
Total	54,642		

d. Reducing delays.			
	Yes	20,273	37.10 (1.86)
	No	34,369	62.90 (1.86)
	Subtotal Valid Responses	54,642	100.00
	Total	54,642	
e. Providing smooth and efficient check-in service.			
	Yes	12,670	23.19 (1.70)
	No	41,972	76.81 (1.70)
	Subtotal Valid Responses	54,642	100.00
	Total	54,642	
f. Responding to consumer complaints.			
	Yes	6,078	11.12 (1.14)
	No	48,564	88.88 (1.14)
	Subtotal Valid Responses	54,642	100.00
	Total	54,642	
g. Providing reasonable compensation for flight delays and cancellations.			
	Yes	15,665	28.67 (1.76)
	No	38,977	71.33 (1.76)
	Subtotal Valid Responses	54,642	100.00
	Total	54,642	
h. Delivering baggage to claim areas in a timely fashion.			
	Yes	9,552	17.48 (1.57)
	No	45,089	82.52 (1.57)
	Subtotal Valid Responses	54,642	100.00
	Total	54,642	
i. Reducing cancellations.			
	Yes	8,615	15.77 (1.41)
	No	46,027	84.23 (1.41)
	Subtotal Valid Responses	54,642	100.00
	Total	54,642	
j. Other			
	Yes	4,099	7.50 (0.95)
	No	50,543	92.50 (0.95)
	Subtotal Valid Responses	54,642	100.00
	Total	54,642	

33. Gender			
	Male	25,958	47.76 (2.00)
	Female	28,392	52.24 (2.00)
	Subtotal Valid Responses	54,350	100.00
	Not ascertained	292	
	Total	54,642	
34. Age			
	18-24	5,130	9.53 (1.10)
	25-34	12,585	23.38 (1.65)
	35-44	11,473	21.32 (1.53)
	45-54	10,865	20.19 (1.59)
	55-64	4,894	9.09 (1.18)
	65-74	6,249	11.61 (1.43)
	75+	2,623	4.87 (1.00)
	Subtotal Valid Responses	53,819	100.00
	Not ascertained	823	
	Total	54,642	
35. Race			
	Caucasian	42,088	81.71 (1.72)
	Black/African-American	4,759	9.24 (1.52)
	American Indian or Alaskan Native	595	1.15 (0.29)
	Asian/Pacific Islander	2,036	3.95 (0.69)
	Other	2,034	3.95 (0.80)
	Subtotal Valid Responses	51,511	100.00
	Not ascertained	3,131	
	Total	54,642	
36. Education			
	Less than high school	704	1.30 (0.68)
	Some high school	2,514	4.63 (1.18)
	High school graduate or equivalent	11,632	21.43 (1.83)
	Some college	14,121	26.01 (1.54)
	Associate degree	1,939	3.57 (0.56)
	Bachelor's degree	14,820	27.30 (1.70)
	Master's degree	6,254	11.52 (1.19)
	Professional degree	1,892	3.49 (0.66)
	Doctorate degree	410	0.76 (0.26)
	Subtotal Valid Responses	54,285	100.00
	Not ascertained	357	
	Total	54,642	

37. Household Size			
One	10,819	19.87	(1.59)
Two	22,354	41.05	(1.99)
Three	8,782	16.13	(1.51)
Four	8,224	15.10	(1.26)
Five	2,891	5.31	(0.82)
Six	678	1.24	(0.32)
Seven	510	0.94	(0.45)
Eight	33	0.06	(0.06)
Nine	128	0.24	(0.24)
Ten or more	35	0.06	(0.06)
Subtotal Valid Responses	54,454	100.00	
Not ascertained	187		
Total	54,642		
38. Household Income			
Less than \$5,000	445	0.95	(0.35)
\$5,000 to \$7,499	114	0.24	(0.15)
\$7,500 to \$9,999	219	0.47	(0.20)
\$10,000 to \$12,499	959	2.04	(0.84)
\$12,500 to \$14,999	663	1.41	(0.64)
\$15,000 to \$19,999	1,474	3.14	(0.79)
\$20,000 to \$24,999	3,124	6.65	(1.41)
\$25,000 to \$29,999	2,464	5.25	(0.97)
\$30,000 to \$34,999	2,380	5.07	(0.92)
\$35,000 to \$39,999	4,172	8.88	(1.36)
\$40,000 to \$49,999	6,489	13.82	(1.41)
\$50,000 to \$59,999	5,933	12.63	(1.29)
\$60,000 to \$74,999	7,415	15.79	(1.50)
\$75,000 to \$84,999	2,869	6.11	(0.85)
\$85,000 to \$99,999	2,192	4.67	(0.78)
\$100,000 to \$124,999	3,566	7.59	(1.24)
\$125,000 or more	2,490	5.30	(0.86)
Subtotal Valid Responses	46,969	100.00	
Not ascertained	7,673		
Total	54,642		

39. Region			
	New England	1,351	2.47 (0.28)
	Mid-Atlantic	9,321	17.06 (0.88)
	North-East central	7,792	14.26 (0.69)
	West-North Central	3,967	7.26 (0.69)
	South Atlantic	9,318	17.05 (0.96)
	East-South Central	3,165	5.79 (0.92)
	West-South Central	4,953	9.06 (0.53)
	Mountain	4,331	7.93 (0.61)
	Pacific	10,444	19.11 (0.77)
	Total	54,642	100.00