

APPENDIX A

TECHNICAL INFORMATION

Introduction

The questionnaire used in this survey is designed to meet the information requirements of the Office of Management & Budget, as well as a number of government sponsors, airlines, and other users of travel statistics, including:

- The International Trade Administration (ITA), Office of Travel and Tourism Industries (OTTI) and the Bureau of Economic Analysis of the U.S. Department of Commerce.
- Participating U.S. flag and foreign flag carriers.
- Private and government organizations (U.S. and foreign) concerned with tourism and its development.

Geographic Structure of Survey

The survey is designed to obtain representation from all world regions, and all areas of the United States. As mentioned in the introduction to the report, OTTI actively recruits airlines to obtain as representative a sample as possible. Survey results are reported by world region and U.S. area destinations in Tables 1, 23, and 24.

The following two paragraphs explain the regional and U.S. divisions.

Overseas Regions And Countries

The world regions for this survey and report are essentially the same ones developed for the *U.S. International Air Travel Statistics* (USIATS), which are widely used in the analysis of international air passenger traffic. There are two differences between the regions used here, and the USIATS regions:

1. In this report Mexico is taken out of the Mid-America Region and the remaining countries become the Central American Region. A separate report is available for Mexico data.
2. USIATS places Egypt in Africa while the OTTI database (and this report) places it in the Middle East Region.

Appendix D lists and illustrates the countries and territories in each region.

United States

A modified version of Census Divisions is used for the Survey of International Air Travelers and reports. Appendix E lists and illustrates the states in each division. The survey also reports statistics for large metropolitan areas and tourist attractions with adequate response frequencies.

Airline Participation

The Office of Travel and Tourism Industries selects airlines for participation in the survey, based on the geographic

areas served by the airline, the airline's market share in that area, the desirability for both US. and foreign-flag carrier representation in each area, and cost considerations. Airline participation is voluntary, and is influenced by a variety of different factors, some of which are listed on the following page.

The number of participating airlines for 2002 is shown by quarter in the table on the next page. Quarterly participation varies for a number of reasons, including the addition or loss of airline participants during the year, temporary non-participation resulting from civil unrest, strikes, acts of terrorism, or takeovers, and individual airline agreements with OTTI.

Number of Participating Airlines 2003	
Quarter	Number of Airlines
First	51
Second	51
Third	55
Fourth	53

Each month, participating airlines receive the dates and flight numbers of flights selected for the survey. They also receive "flight kits", containing questionnaires in the appropriate languages, (125 forms unless otherwise requested), pencils, and instructions. The survey is distributed after boarding, and collected prior to

debarcation.¹ The completed flight kits are then returned to the Office of Travel and Tourism Industries' contractor.

The response rates for airlines returning flight kits in 2003 are highlighted in the table below.

2003 Flight Response Rates			
Quarter	Number Sent	Number Completed	Percent Complete
First	1,455	1,048	72%
Second	1,356	898	51%
Third	1,331	711	53%
Fourth	1,396	672	48%
Total	5,538	3,329	56%

A flight kit is considered complete if one or more questionnaires have been completed. A number of factors lead to a flight kit not being completed, including:

- The kit is delayed in transit to the airline
- The kit is not put on the airplane
- The flight crew fails to distribute or collect the questionnaires (is possibly too busy or unwilling to distribute them)
- Competing surveys from the airlines own survey or other in-flight surveys
- The completed kit is lost in the internal airline mail or the U.S. mail

¹ For a limited number of airlines, the data collection takes place at the airport in the departure area.

Passenger Response Rate

Each quarter, airline passenger response rates for the survey are calculated in order to determine relative survey performance. Factors affecting passenger response rates include:

- Language barriers
- Variation in on-board survey distribution methods
- Short flight length, or nighttime flights
- Limited questionnaire supply
- Overall cooperation by flight crew and passengers

Response rate calculations are based on the number of questionnaires distributed on each flight compared to the number completed. This methodology has been modified, making response rate comparisons to previous years difficult. A description of the modifications follows:

- *Prior to 1991:* In calculating response rates it was assumed that surveyed flights had 100% passenger loads, and all had received questionnaires. All flights designated by the sample were counted even if the flight was never actually surveyed. This method *drastically* understated passenger response rates.
- *Beginning in 1991:* The flight crew was requested to record the number of questionnaires distributed. For those flights returning this information, the number of completed questionnaires was taken as a percent of the total number distributed. This methodology change caused an increase in response rate compared to previous years.

- *Beginning in 1993:* Boarding area refusals were included in the passenger response rate calculation.² These refusals had not previously been included, and this caused a decrease in response rate.

OTTI feels that the current method of passenger response rate calculation more accurately reflects the true passenger response rate than previous methods. OTTI will continue its effort towards improving response rates.

For the 2003 survey period, the passenger response rate was 46%.

Sample Design

The survey sample is designed primarily around geographical considerations (obtaining broad representation of all world regions), airline willingness to participate, and cost considerations.

The design is a stratified, two-stage cluster sample. In the first stage, scheduled flights are randomly selected from strata defined by airline and foreign destination. The second stage is constituted by the responding travelers on each flight. When the survey is conducted on a selected flight, those passengers who respond are considered to represent all passengers on that flight. The selection procedure is described in detail below.

1. *Development of strata:* Strata are developed to assure that all participating airlines and countries are adequately represented in the sample. For foreign-flag carriers, stratification is generally done by airline only (the assumption is made that the majority of passengers

² For a limited number of flights, surveying is done in the boarding areas.

on foreign-flag flights departing the U.S. will either be residents of their country or of the U.S.). For U.S. carriers serving several markets of interest, stratification is made by carrier and foreign destination.

2. *Selection of sample within strata:* All surveys are conducted on flights departing the United States. Surveys are conducted monthly, and flights are selected which depart during the third full week of each month.³ Specific flights are selected within each stratum by simple random sampling, using the monthly Official Airline Guide roster of flights (as the universe) and a random number generator.

Because of the difficulty of survey administration by the flight crew, no attempt is made to select a random sample of passengers within each flight. Instead, the second-stage sample includes all passengers on a given flight who respond to the survey.

In practice, some departures from the original sample design are necessary. Substitution for sampled flights is permitted when circumstances prevent the survey's execution on the sampled flight. Additionally, a few airlines occasionally do not participate in some months of a quarter, so their samples are not distributed over the entire quarter. In certain cases, entire strata must be eliminated from the sample because of difficulties by the airline in conducting the survey on the desired routes.

³ Sampling flights one week out of the month simplifies the operating procedures for the airlines and facilitates the processing of survey materials.

Estimation and Reliability of Results

The survey responses are the primary data source for computing estimates. The responses are weighted using information from the DHS form I-94 (the I-94 provides information on country of residence and port of customs for most non-U.S. resident travelers to the U.S.).

The weighting process is outlined below:

A weight is calculated for each survey respondent. This weight is defined as the number of passengers represented by the respondent. Calculation of the weight is a multi-step process.

1. The initial weight of a respondent is one, unless children are part of his or her travel party, in which case, the initial weight has a value greater than one, depending on the number of children and the size of the travel party.
2. Both the I-94 data and survey responses are sorted and summarized by country of residence and port of customs information.
3. The weight computed for individual survey responses is the result of directly proportioning the I-94 data to the surveys by country of residence and port of customs.
4. The weights determined by the country of residence and port of customs variables in the survey responses match the corresponding control totals from the I-94 data summarized in the same manner. These weights are applied to all results in the report (except for the number of respondents shown as the top row in each table).

Because of the multistage nature of the sample design and the resulting computational burden, sampling variability has

not been calculated for the estimates. Instead, their reliability is indicated by the number of respondents to the relevant questionnaire items. The more respondents, the more reliable the estimate. Judgment must be used in deciding on the degree of confidence to place in an estimate, and in its proper use. Likewise, non-response errors have not been estimated and may be significant, especially when combined with sampling variability.

Questionnaire Enhancements

Since its inception in 1982/83, the questionnaire has had numerous enhancements. The enhancements are described below:

- *Second quarter 1985:* the questionnaire was streamlined for ease of administration. Questions were added related to trip planning process, leisure/recreation activities, and airline services.
- *1990:* Greater detail was requested on many questions, including package tours, international trip frequency, and pre-trip planning. Questions were added on main destination, airline ratings and personal safety. Valid ranges for many questions were extended to allow for economic and demographic changes. Geographic coding was also expanded to improve the detail of origin and destination information available.
- *1993:* Questions were added on main purpose of trip, airline seating area, airport attribute ratings, passport control and customs attribute ratings, occupation, and categories of personal safety threats. The international telephone service questions were deleted. Many

existing questions were either re-worded or the response choices were expanded.

- *1996:* Questions were added on zip code (Q2), country of birth (Q3), and methods of payment for trip expenses (Q17). To better track the travel flows of the international traveler, connecting flight information was added (Q5). Questions were added to provide an estimate on the number of trips taken in the past twelve months and past five years (Q27). Modifications were made to other questions. These modifications include:
 - The questions on main trip and other purposes of trip were modified to align responses to the World Tourism Organization categories (Q10).
 - The leisure activities question contains four new categories: visiting small towns and villages, cultural heritage sights/activities, environmental/ecological excursions, and ethnic heritage sights/activities (Q19).
 - The reasons for flying this airline question was modified to select the three main reasons (Q22).
 - Two attributes were added to the airport ratings question. They are airport terminal cleanliness and international traveler facilities (Q24).

A copy of this questionnaire can be found in Appendix B.

Report Enhancements

1990: Beginning in 1990, Indonesia was moved from Oceania to the Far East region. This resulted in improved data correlation with the I-94 database, which is used as an integral part of the weighting process. Many additional changes were made, which are addressed in the appendices of the 1990 - 1992 reports.

1993: With the 1993 questionnaire enhancement, report changes were made. They are addressed in the 1993-1995 report text.

1996: There were eleven new tables added to the 1996 report:

- Table 4, Question 8: “Means Of Booking Air Trip”
- Table 7, Question 15a7: “Use Of Prepaid Lodging”
- Table 8, Question 15b: “Advance Package Booking”
- Table 17, Question 27b: “U.S. Trips In The Last 12 Months”
- Table 18, Question 27c: “U.S. Trips In The Last 5 Years”
- Table 20, Question 14d: “Number Of Destinations Listed”
- Table 28, Question 17: “Trip Expenses Payment Method”
- Table 29, Question 22a: “Factors In Airline Choice”
- Table 30, Question 22b: “Main Factor In Airline Choice”
- Table 31, Question 23b: “Type Of Airline Ticket”
- Table 32, Question 23a: “Seating Area”

Because of the questionnaire changes, there are tables found in past reports that are not directly comparable to 1996 - 2003. These include those described below:

- Table 1, Question 2a - “Country of Residence”: Certain countries have been added or deleted based upon the

sample collected on overseas travelers from these countries of residence.

- Table 2, Question 7a - “Advance Trip Decision” and Table 3, Question 7b - “Advance Airline Reservation”: These two tables have a “Same Day” category added.
- Table 5, Question 6 - “Information Sources”: This table has a new category added, “In-Flight Information Systems”.
- Table 12, Question 10a - “Main Purpose of Trip”, and Table 13, Question 10b - “Purpose of Trip”: ITA now uses the World Tourism Organization’s recommended categories for purpose of trip. The tables reported two new categories - “Health Treatment” and “Religion/Pilgrimages”. The table no longer shows the category “Accompany Spouse on Business”. The wording has been changed in one category from “Vacation/Holiday” to “Leisure/ Recreation/Holidays”. The previous “Business” category was changed to “Business/Professional” and the “Convention/Conference/Trade Fair” was changed to “Convention/Conference/ Trade Show”. Other categories remain the same. In addition, to provide an estimate on the combined business and convention market as well as the leisure/recreation/holidays and visit friends and relatives categories, ITA has combined the estimates and provided them in Table 13.
- Table 22, Question 4 - “Port of Entry”: This table has several different ports than shown in past reports.
- Table 23, Question 2b - “Main Destination” and Table 24, Question 14a - “U.S. Destinations Visited”: Some states have been added or deleted based upon the sample collected.

- Table 25, Question 19 - "Leisure Activities": Four new activities are reported.

Finally, to accommodate the new information collected and reported in the new tables, the number of crosstabs in this report was reduced in 1996 when compared to past reports. Please remember that the survey responses are maintained in a data base, and customized reports may be developed to provide information collected in the survey that is not shown in this report. Please consult the questionnaire to determine if there are other column headings or tables you would like to see based upon the Survey of International Air Travelers data. Call the U.S. Department of Commerce, International Trade Administration (ITA), Office of Travel and Tourism Industries (OTTI) or the contractor for the survey to determine the availability of customized reports (see Introductory section for phone numbers).

The above changes reflect the continuing efforts of OTTI and publication users to obtain and provide the most useful information possible.

APPENDIX C

List of U.S. and Foreign Flag Carriers Voluntarily Participating in the Survey in 2003*

Aerolineas Argentinas	America West	Lacsa	Philippine Airlines
Aeromexico	Asiana Airlines	KLM	Qantas
Aero Postal	Avianca	Korean Air	Royal Air Maroc
Air China	Bahamas Air	Jalways	SAS
Air France	British Airways	Japan Airlines	Saudi Arabian Airlines
Air Jamaica	BWIA	Kuwait Airways	Singapore Airlines
Air Micronesia	China Airlines	Lan Chile	South African Airways
Air New Zealand	Continental Airlines	LOT Polish Airlines	TACA
Alaska Airlines	Delta Air Lines	Lufthansa	Tarom
Alia – Royal Jordanian	EVA	Malaysian Airlines	Turkish Airlines
Alitalia	Finnair	Mexicana	United Airlines
All Nippon Airways	Iberia	Northwest Airlines	US Airways
American Airlines	Icelandair	Olympic Airways	Varig Brazilian Airlines
			Virgin Atlantic

**In addition to the above airlines, intercepts were collected at Sanford International Airport for the following charter airlines: Air 2000 LTD, Air Atlanta Icelandic, European Airways, John Mason Cook, Monarch Airlines, and My Travel. For more information on the data collected at Sanford please refer to Page vii of the Introduction, under “Survey Participation”.*

APPENDIX D

WORLD BY REGION AND COUNTRY OR TERRITORY

Central America

Belize
Costa Rica
El Salvador
Guatemala
Honduras
Nicaragua
Panama Republic
San Andres Island

South America

Argentina
Bolivia
Brazil
Chile
Colombia
Ecuador
French Guiana
Guyana
Paraguay
Peru
Surinam
Uruguay
Venezuela

Caribbean

Anguilla Island
Antigua
Aruba
The Bahamas
Barbados
Bermuda
Cuba
Dominica
Dominican Republic
Grand Cayman
Grenada
Guadeloupe
Haiti
Jamaica
Martinique
Montserrat Island
Neth. Antilles
Providential Islands
St. Barthelemy
St. Kitts/Nevis
St. Lucia
St. Vincent
Trinidad/Tobago
Turks/Caicos
Virgin Islands/ U.K.

Europe

Austria
Belgium
Bosnia-Herzegovina
Bulgaria
Byelarus (Belarus)
Croatia
Czech Republic
Denmark
Finland
France
Georgia
Germany
Greece
Holy City
Hungary
Iceland
Ireland
Italy
Kazakhstan
Kyrgyzstan
Lithuania
Luxembourg
Malta
Moldova
Netherlands
Norway
Poland
Portugal
Romania
Russia
Slovakia
Slovenia
Spain
Sweden
Switzerland
Tajikistan
Turkmenistan
Ukraine
United Kingdom
Uzbekistan
Yugoslavia

Africa

Algeria
Cameroon
Cape Verde Island
Ethiopia
Guinea
Ghana
Ivory Coast
Kenya
Liberia
Morocco
Nigeria
S.W. Africa/S. Africa
Senegal
Tanzania
Togo
Tunisia
Zambia
Zimbabwe

Middle East

Bahrain
Cyprus
Egypt*
Iran
Iraq
Israel
Jordan
Kuwait
Lebanon
Qatar
Saudi Arabia
Syria
Turkey
United Arab Emirates

Asia

Bangladesh
Brunei
China/Mainland
China/Taiwan
Hong Kong
India
Indonesia**
Japan
Korea-South
Malaysia
Okinawa/Ry Island
Pakistan
Philippines
Singapore
Thailand

Oceania

American Samoa
Australia
Cook Islands
Fiji Islands
French Polynesia
Kiribati
Marshall Islands
Micronesia
Nauru Republic
New Zealand
Papua/New Guinea
Tonga

*In 1982 Egypt was reported in the Africa region.

**Prior to 1990, Indonesia was reported in the Oceanic region.

APPENDIX E

U.S. BY OFFICE OF TRAVEL AND TOURISM INDUSTRIES - MODIFIED CENSUS DIVISIONS

<u>New England</u>	<u>Middle Atlantic</u>	<u>East North Central</u>	<u>West North Central</u>	<u>South Atlantic</u>	
Connecticut	New Jersey	Illinois	Iowa	Delaware	
Maine	New York	Indiana	Kansas	District	of
Columbia					
Massachusetts	Pennsylvania	Michigan	Minnesota	Florida	
New Hampshire		Ohio	Missouri	Georgia	
Rhode Island		Wisconsin	Nebraska	Maryland	
Vermont			North Dakota	North Carolina	
			South Dakota	South Carolina	
				Virginia	
				West Virginia	
<u>East South Central</u>	<u>West South Central</u>	<u>Mountain</u>	<u>Pacific*</u>	<u>Pacific Islands*</u>	<u>Atlantic Islands*</u>
Alabama	Arkansas	Arizona	Alaska	American Samoa	Puerto Rico
Kentucky	Louisiana	Colorado	California	Guam	U.S. Virgin
Islands					
Mississippi	Oklahoma	Idaho	Oregon	Hawaii	
Tennessee	Texas	Montana	Washington	Trust Territories	
		Nevada			
		New Mexico			
		Utah			
		Wyoming			

*Office of Travel and Tourism Industries division different from U.S. Bureau of Census division.

APPENDIX F

DESTINATIONS SERVED BY REGIONAL MARKETING ORGANIZATIONS

America's Heartland Capital Region Group

Iowa
Kansas
Missouri
Nebraska
Oklahoma

District of Columbia
Maryland
Virginia

Discover New England

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

Foremost West

Arizona
Colorado
New Mexico
Utah
Wyoming

Gateway

New Jersey
New York
Pennsylvania

Great Lakes of N.A.

Illinois
Indiana
Michigan
Minnesota
Ohio
Wisconsin

Arkansas
Illinois
Iowa
Kentucky
Louisiana
Minnesota
Mississippi
Missouri
Tennessee
Wisconsin

Mississippi River Country

Denver SMSA
Idaho
Montana
South Dakota
Wyoming

Rocky Mtn. Int'l

Alabama
Arkansas
Florida
Georgia
Kentucky
Louisiana
Mississippi
North Carolina
South Carolina
Tennessee
Virginia
W. Virginia

Travel South