PRICEWATERHOUSECOOPERS

Department of Homeland Security Private Sector Office Evaluation of OTTI Departure-Gate Surveying: Dulles International Airport

April 21, 2006

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Section 1.0 Background and Introduction

The Office of Travel and Tourism Industries (OTTI), a division of the Department of Commerce, has operated a Survey of International Air Travelers program since 1983. This program provides comprehensive, comparable survey data on overseas travel patterns, and characteristics and spending patterns on international travelers to and from the United States. Data from the survey is used to analyze behavior of specific visitor segments for planning and marketing activities. A number of stakeholders rely on the data this survey provides, including various government agencies, participating airlines, and the travel industry. Furthermore, these stakeholders have a keen interest in receiving accurate, useful results.

In February 2006, the Department of Homeland Security-Private Sector Office (DHS-PSO) initiated a pilot study of opportunities to improve the departure gate survey component of the OTTI In-Flight Survey of International Air Travelers. The study was funded to help maximize the results of the survey for its stakeholders. Our team was selected to provide an evaluation of the methodology utilized for departure-gate surveying at Dulles International Airport. The team consisted of employees from PricewaterhouseCoopers (PwC), Westat, AMSAQ, and the Travel Industry Association of America (TIA). Team roles are shown in Table 1-1, below. Additional information concerning the authors of this report can be found in Section 5.0

Company	Role
PricewaterhouseCoopers	Provided overall guidance and coordination of the project, assisted with supervision of field staff and report development.
Westat/AMSAQ	Field staff administered the survey; analysts evaluated "usability" of returned surveys and provided analysis of project results.
Travel Industry Association of America	Provided subject matter expertise on OTTI, the survey, airlines, and the travel industry.

Table 1-1 - Companies and Responsibilities

To perform the evaluation, two interviewers were deployed over a two calendar-week period to administer the program's existing survey instrument. This instrument contains 29 questions designed by the U.S. government, the airlines, and the travel industry. The information collected includes the following:

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- **Destination/Gateway Information:** Destinations visited including: states and major cities/attractions; countries; main destination visited; port-of-entry; use of connecting flights including airport connections used; leisure/recreational activities; nights away from home; types of transportation used while on the trip; accommodations used; and use of credit card, travelers checks, or debit cards for payment of expenses.
- **Trip Planning Information:** Purpose of trip (main and other purposes); type of airline ticket (First Class, Business Class, Coach, frequent flyer tickets/upgrade, discount/group fare, non-revenue); traveler seating area; advanced trip decision/airline reservation timing; method of booking trip/lodging; information sources used; prepaid package/inclusive tour usage; and number of days prior departure the package was purchased.
- **Ratings Information:** Factors involved in choosing the airline for this trip; general impression of the airline (provided to airlines only); ratings of eighteen elements of the airplane for this flight (provided to airlines only); recommendation rating for this airline for next trip (provided to airlines only); INS/Customs service ratings; ratings of ten airport attributes; time required to clear Customs; and baggage delivery time rating.
- **Demographic Information:** Residence and citizenship of traveler; U.S. zip codes; country of birth; gender; age; occupation; income; type and size of travel party; number of foreign trips in past five years and past twelve months; and trip expenditures (total and itemized).

The field staff distributed and collected the questionnaire at departure gate lounges where passengers gather before boarding their flights. The flights surveyed were international flights departing Dulles Airport and were selected by the team on the basis of scheduled flights on the relevant days of the week.

The goals of this project were:

- To determine how many surveys can be collected by the interviewers during periods of six to eight collecting hours;
- To determine how many returned questionnaires are usable for the survey, where usable means properly filled out and capable of being inputted into the survey database; and
- To determine whether using one or two interviewers at a particular gate makes a tangible difference to distribution/collection productivity.

The next section of this report describes the methods used to achieve the goals of the project. The findings of the evaluation are illustrated in Section 3.0, including information on the

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completeness of the 527 surveys returned by the passengers, results of a short survey of 204 passengers who arrived at the gate with less than thirty minutes until boarding and results of a trip purpose question (business vs. pleasure) asked of 145 respondents who refused to participate in the survey. Finally, the conclusion in Section 4.0 presents our lessons learned during the course of the pilot project and recommendations for improving the Survey of International Travelers program.

Section 2.0 Methodology

The evaluation was performed in three phases. During Phase 1, coordination took place between the Department of Homeland Security (DHS), Metropolitan Washington Airport Authority (MWAA), and a number of airlines to obtain permission to conduct the surveys; interviewers were trained; and flight schedules were obtained. Phase 2 consisted of conducting the survey at Dulles International Airport. In Phase 3, data was analyzed and reported.

2.1. Phase 1: Project Planning

To promote a smooth execution of the project, a number of activities were performed prior to conducting the survey. First, since the work took place in the secure boarding area of the airport, clearances were obtained through the airport authority and permission was granted by the airlines whose passengers were to be surveyed.

With assistance from DHS, the MWAA agreed to provide daily passes, which allowed access to the boarding area for each of the interviewers and supervisors. These passes were expected to permit team members to pass through the employee gate of the airport, which would save valuable time since the security screening lines are much shorter at this entrance.

Letters were sent to Lufthansa/United Airlines, British Airways, and Air France seeking permission to conduct surveys at the departure gates of their international flights. Flights from these three airlines compose the majority of all flights leaving Dulles. All three airlines provided the team with written consent to interview their customers. Once approvals were obtained, a draft schedule of flights to be surveyed was developed from a list of all departing flights provided by OTTI and MWAA. This list included flight numbers, destinations, and departing/arrival times; however, gate assignments could not be determined since these details are not announced until the day of the flight.

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To prepare for Phase 2 of the project, two tools were developed to assist field personnel in collecting the data needed to evaluate the program: a "Respondent Tracking Log" and a "Follow Up Question and Answer (Q&A) Sheet." The purpose and use of these tools will be described in the methodology for Phase 2 of the project.

Next, OTTI provided an inventory of 3,000 surveys to conduct the pilot test. The surveys requested and made available to the team were in English, Spanish, French, German, and Italian. These languages were selected based on the expected nationalities flying on the flights selected for surveying.

The final step of the planning phase involved training the team's personnel on conducting the survey. While the field staff used were professionals with a great deal of survey experience, this training was necessary to familiarize the staff with details specific to this engagement. A comprehensive training manual was developed for the interviewers to explain the reason for the survey, train them on field procedures specific to this evaluation, and describe refusal avoidance techniques. The manual included detailed procedures for using the tools described above and prepared the interviewers for their encounters with the passengers with whom they would be interacting.

A four hour training course was provided based on the content of the training manual and using Senior Managers with extensive survey background as instructors. The procedures of the manual were described in more detail and any questions the interviewers or supervisors had were answered in a group environment. Several hands-on scenarios were performed to further prepare the interviewers. Once the field personnel had been trained sufficiently, survey administration began immediately.

2.2. Phase 2: Conducting the Survey

The field team for this evaluation consisted of a supervisor and two interviewers. The team typically arrived at the airport approximately three hours prior to departure time of the first planned flight. This allowed ample time to obtain a daily pass (for entry into the secure boarding area), validate the flight schedule using airport departure monitors, advance through security, and proceed to the departure gate of the first flight. The team experienced varied success in passing through the employee gate of the airport since Transportation Security Agency (TSA) employees were not aware of MWAA's arrangement regarding the daily passes. The time spent prior to the first departure can be shortened if interviewers obtain a

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more permanent credential for access to the secure areas of the airport. Also, as the interviewers become more accustomed to the flight schedule and airport layout, more time can be saved since there will be more certainty over departure times and locations.

Data collection began immediately following training on March 27, 2006. Permission to collect data was given by Lufthansa/United Airlines (sixteen flights were selected for data collection), British Airways (two flights selected) and Air France (six flights). Due to the departure schedules of these flights, all data collection was done in the evening between approximately 2:30 p.m. and 10:00 p.m., depending on the individual flight.

The interviewers and supervisor arrived at the gate approximately two hours prior to flight time. Airline personnel at the gates were presented with credentials and a copy of the letter indicating permission had been granted to conduct the survey. The gate personnel typically provided a boarding time (most often about forty-five minutes prior to departure time) and the number of passengers they expected on the flight according to the manifests or number of meals ordered. Once the airline employees had been informed of the team's intent, interviewers began to administer the survey.

Passengers were approached by the interviewers who utilized the study introduction to recruit respondents. If the passenger appeared to not understand English, a card inquiring "Do you speak (Spanish, French, German, Italian)" in each of those languages was presented. If any of the languages applied, the survey was offered to the passenger in the indicated language. The Respondent Tracking Log was used to trace whether a passenger accepted a questionnaire and to record the number of people in the traveling party. If the passenger refused to take the survey, several refusal avoidance techniques were used to encourage the passenger to change his or her mind; however, if the passenger still declined, reasons for the refusal were noted on the Respondent Tracking Log. Also in the case of refusals, the passenger was asked by the interviewer whether the trip was for business or pleasure. This data point was also captured on the Respondent Tracking Log and provided insight to the type of passenger refusing the survey.

Over the first seven days of conducting the survey, interviewers stopped recruiting new respondents approximately fifteen minutes prior to boarding time to provide sufficient time for passengers to complete the surveys. On the last two days of data collection, one interviewer distributed surveys until thirty minutes prior to boarding. At that time, the second

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interviewer began the Late Arrival Survey, a short survey of passengers who arrived with less than thirty minutes until boarding (see Section 3.6).

After surveys were complete, they were collected in one of two ways. Either the interviewer received the survey directly or the respondent deposited the survey in a prominently marked collection box set up next to the supervisor. Most respondents preferred to give the completed survey back to the interviewers.

Next, the Follow Up Q&A Sheet was used to record answers to five short questions that were asked of a small number of survey respondents after completing the survey (no more than four per flight—two who seemed to speak English as their first language and two who did not). These questions were specifically about the survey itself and were designed to help provide our team, DHS-PSO, and OTTI with an understanding of potential changes that may help achieve better survey results.

Since international flights often use large planes carrying 150 or more passengers, the boarding process is rather long. After observing that many passengers seemed to arrive too late to take the complete survey, the team developed a "Late Arrival Data Collection Log" to obtain additional data for the project from a number of the late arrivals. This log contained five questions extracted from the survey instrument that interviewers could quickly (average completion time of one minute) ask respondents orally who did not have the opportunity to take the full survey.

Once all data had been collected, completed surveys, Respondent Tracking Logs, Follow Up Q&A Sheets, and Late Arrival Data Collection Logs were packaged in an envelope for processing to be completed the next day. Also included in the envelope was a sheet maintained by the supervisor including:

- Flight data (gate number, flight number, destination, and departure time);
- The time the interviewers arrived;
- Counts of passengers waiting at various times; and
- General comments regarding the exercise at that particular gate for the flight including comments on patterns of non-response on the surveys per flight.

Each day, the supervisor conducted an informal debriefing with the interviewers in an effort to capture any lessons learned from that day's activities. Any patterns observed were noted

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and the interviewers were given an opportunity to voice concerns or make suggestions for any alternative methods to try the next day.

Over the course of the project, a number of data collection alternatives were introduced including the times that field personnel arrived at the gate and the use of one versus two interviewers. The results of these variations are illustrated in Section 3.0.

2.3. Phase 3: Analyzing and Reporting

Data analysis took place daily, beginning the day after data collection began on March 27, 2006. As described in Section 3.0 of this report, there were several types of analyses that were done:

- A count of surveys received as well as a review of the questionnaires for completeness;
- Counts by interviewer of passengers approached, refusals and passengers who could not complete the questionnaire due to a language barrier;
- An analysis of the results of the Follow up Questions;
- An analysis of trip purpose for respondents who refused to participate in the survey; and
- An analysis of the results of the Late Arrival Survey.

The final results also include the number of completed surveys per interviewer hour (4.3 for two interviewers working the same flight and 4.2 for one interviewer).

The culmination of these analyses yielded the results reported in Section 3.0 of this document. In addition to this report, an oral briefing was provided to DHS-PSO at the end of the first week of surveying. During this meeting, several high level, preliminary numbers were discussed including the number of flights surveyed and the number of completed and partially completed surveys obtained. Also, a general overview of progress to that point was discussed.

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Section 3.0 Results

3.1. Boarding Area Passenger Tally

Supervisors kept a tally of passengers arriving at the departure gate areas up to ten minutes prior to each flight boarding. A total of 4,878 passengers boarded 24 flights, but getting accurate boarding area counts was complicated by several factors:

- Delays by the interviewers in getting through security.
- Unanticipated schedule change on a Lufthansa flight due to Germany starting daylight-saving time a week earlier than the United States.
- Multiple flights departing neighboring gates at roughly the same times led to an overflow of people at the gates.
- Passenger counts were taken ten minutes prior to boarding on 21 out of 24 flights. On these flights, an average of only 33 percent of the passengers had arrived at their departure gates ten minutes or longer prior to boarding the flight. Using this average and applying it to the total passengers listed on all 24 flights would have given the interviewers approximately 1,616 potential respondents. However, not all passengers were traveling alone. Of those the interviewers approached, 68 percent were traveling alone; 23 percent were traveling with one other person; and nine percent were traveling with two or more people (ranging from two others to over forty), totaling approximately 1,036 eligible respondents.

3.2. Passengers Recruited and Refusals

Of the 24 total flights surveyed, the interviewers approached a total of 724 potential survey respondents (as well as 39 respondents with whom they were unable to communicate because of language differences). This resulted in 131 refusals and 527 collected surveys, resulting in a cooperation rate of 73 percent. A total of 27 surveys were not collected due to respondents presumably either taking the survey with them on the flight or discarding the survey and not informing the interviewer. Figure 3-1 and Table 3-1 illustrate passenger participation.

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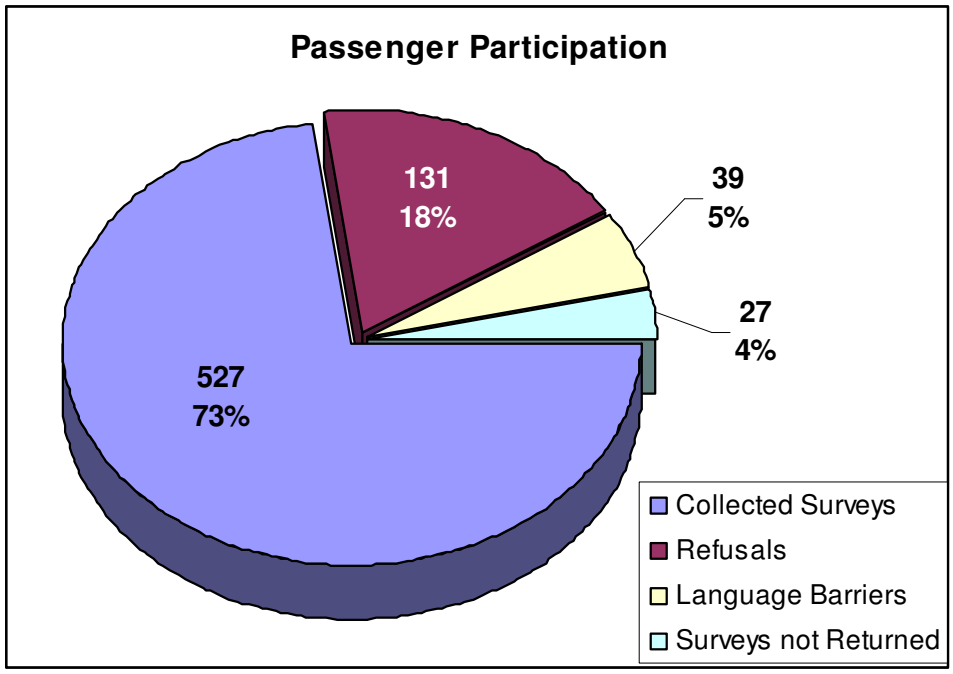

Figure 3-1: Passenger Participation

Passengers	Passenger counts	N	Percentage of N
Total passengers scheduled for 24 flights	4878	--	--
Estimated eligible respondents	1616	4878	33%
Estimated Approaches	**Passenger counts**	**Estimated N**	**Percentage of Estimated N**
Respondents approached	724	1036	70%
Response	**Respondents**	**N**	**Percentage of N**
Collected surveys	527	724	73%
Refusals	131	724	18%
Language barriers	39	724	5%
Surveys not returned	27	724	4%

Table 3-1: Estimated responses

3.3. Completed surveys

The surveys were reviewed for completeness, i.e., the number of incorrectly answered or incorrectly skipped questions as well as incomplete answers. The surveys were then rated as:

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- Complete: a survey with no errors (no skip errors; no questions answered incorrectly);
- 3/4 complete: 1 to 25 errors (wrong skips; incomplete or improperly answered questions -e.g. someone answered "Yes" when the question asked that they assign rankings, etc.);
- 1/2 complete: 26 to 50 errors; and
- 1/4 complete: More than 50 errors.

Table 3-2 shows that fully ninety percent of the surveys were ¾ complete or better; six percent were fifty percent completed and fewer than one percent were ¼ or less correctly completed.

Another three percent were either blank or the question regarding residency was not completed. Since many of the skip patterns in the survey are based on whether the respondent is or is not a US resident, if the response is unclear, then proper skips cannot be determined.

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Percent of surveys with errors						
	N	Completed (no errors)	¾ complete (25 or fewer errors)	½ complete (26 to 50 errors)	¼ complete (More than 50 errors)	Blank/could not follow skips*
US resident	348	2%	93%	5%	<1%	--
Non-US resident	162	0%	89%	10%	<1%	--
Residency could not be determined	17	--	--	--	--	100%
Total	527	1%	89%	6%	<1%	3%

* Respondent did not indicate if US resident. Many skips are based on residency.
(May not total 100% due to rounding)

Table 3-2: Percentage of completed surveys

3.4. Completes per interviewer hour

Over the course of data collection, three distinct types of methodologies were employed:

1) Two interviewers arrived approximately 1.5 to 2 hours prior to boarding and distributed surveys to as many passengers as possible, stopping approximately fifteen minutes prior to boarding;
2) One interviewer arrived at the gate approximately 1.5 to 2 hours prior to boarding, and distributed surveys to as many respondents as possible, up until approximately thirty minutes prior to boarding.
3) For the same flights as in (2), a second interviewer asked respondents the five questions on the Late Arrival Survey (see section 3.6).

The second and third data collection methodologies were implemented for the last two days of data collection. Table 3.3 shows the average number of surveys completed per interviewer hour.

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Methodology	Number of interviewer hours	Number of usable surveys (at least ¼ complete)	Surveys per interviewer hour
1) Two interviewers distributing surveys	104	441	4.2
2) One interviewer distributing surveys	16	69	4.3
3) One interviewer conducting Late Arrival Survey only.	16	187*	11.7

* Late arrival surveys only.

Table 3-3: Completed surveys per interviewer hour

3.5. Refusals

3.5.1. Trip Purpose survey

Respondents who refused to participate were asked the primary purpose of their trips (business vs. pleasure). Of the 131 people who refused to participate in the study, 41 percent told us they were traveling primarily for business purposes and 49 percent told us they were traveling primarily for pleasure. The remaining ten percent refused to answer this question.

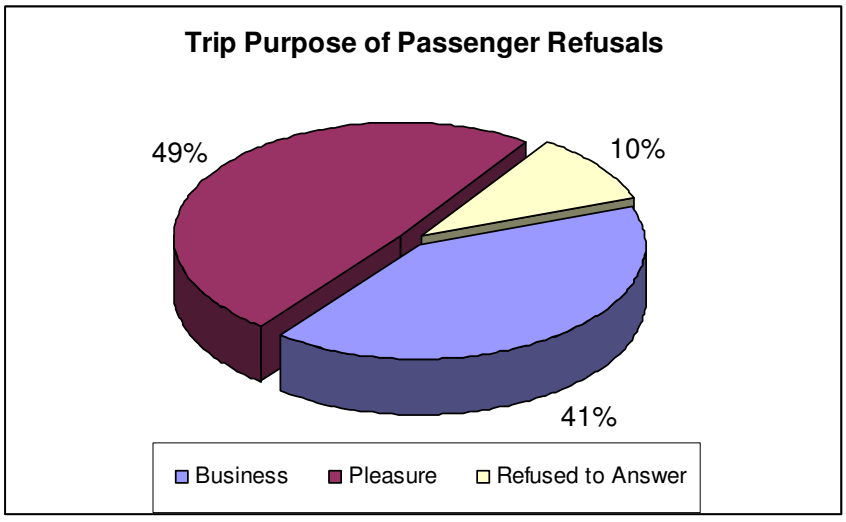

Figure 3-2: Trip Purpose of Passenger Refusals

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3.5.2. *Number in family travel party*

Respondents who refused were also asked how many people were traveling with them. Most were traveling by themselves (66%). About eleven percent were traveling with one other person and four percent were traveling with larger family groups. The remaining nineteen percent refused to answer this question.

3.5.3. *Reasons for refusing*

The interviewers asked the refusal respondents why they did not wish to be part of the study. As shown in Figure 3-3, thirty percent of the refusal respondents told the interviewers they were not interested in participating. Another four percent did not give a reason, while eleven percent stated they did not have time to complete the survey. Twenty-six percent gave other reasons, such as not having their reading glasses; being injured and not able to write; too tired; the survey was too long (these respondents handed the survey back to the interviewer immediately); and other reasons. The remaining 29 percent refused to respond to the question.

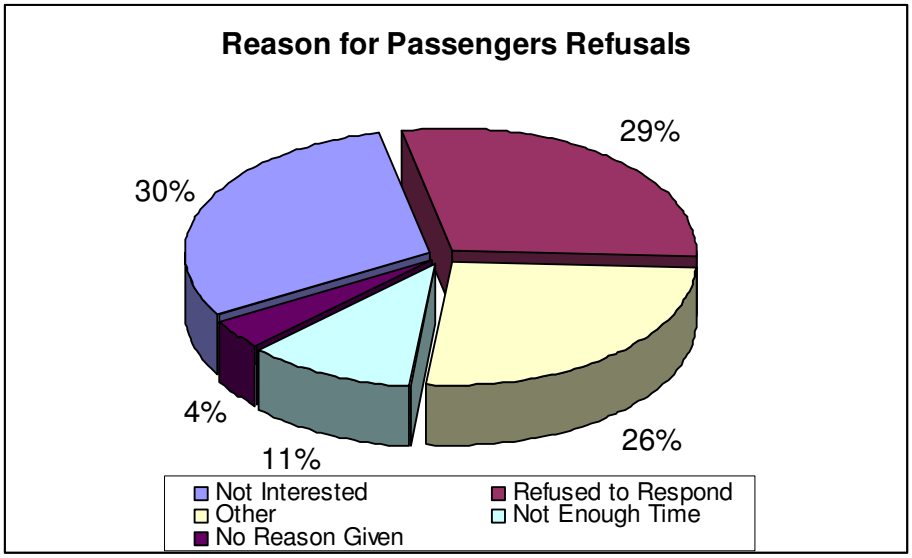

Figure 3-3: Reason for Refusals

Overall, the respondents who refused tended to be traveling for pleasure (49%), traveling alone (66%), or were simply not interested in participating in the survey (30%).

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3.6. Late arrival questionnaire

Because of time required to complete the survey, the interviewers did not normally try to recruit passengers who arrived less than fifteen minutes prior to boarding. We were concerned, however, that those passengers may have had unique characteristics that, if not considered, may have biased the survey estimates. Consequently, a brief five-question interview was prepared to examine late arriving passenger characteristics.

Beginning on Monday April 3, 2006, interviewers began asking travelers who arrived at the gate within thirty minutes of boarding a set of five questions to determine if they were business travelers, families traveling (perhaps with small children), and/or were coming from a connecting flight:

1) Is the primary purpose of your trip business or pleasure?
2) How many people are traveling with you (including yourself)?
3) At what airport did you start your air travel for this trip today?
4) At what airport will you end your air travel for this trip today?
5) Are you a US resident?

Table 3-4, below, presents the results of the interviews with late arrival passengers:

Question	Response	Percentage of respondents*
1) Is the primary purpose of your trip business or pleasure?		N=204
	Business	51%
	Pleasure	41%
	Refused	6%
	Language barrier	2%
2) How many people are traveling with you (including yourself)?		N=204
	One	62%
	Two	19%
	Three or more	13%
	Refused	4%
	Language barrier	2%
3) At what airport did you start your air travel for this trip today?		N=204
	Dulles	58%
	Another airport	33%
	Refused	6%
	Language barrier	3%

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Question	Response	Percentage of respondents*
4) At what airport will you end your air travel for this trip today?	Arrival airport country	N-204
Lufthansa/United	Arrival airport country	N=125
	Germany	34%
	Switzerland	15%
	Italy	13%
	Turkey	5%
	France	2%
	Poland	2%
	Austria	2%
	Other countries	17%
	Refusal	6%
	Language barrier	3%
Air France	Airport country	N=60
	France	40%
	Italy	10%
	Spain	8%
	Germany	3%
	Switzerland	3%
	Nigeria	3%
	Other countries	25%
	Refusal	3%
	Language barrier	3%
British Airways	Airport country	N=19
	England	21%
	Kenya	21%
	Nigeria	11%
	Other countries	37%
	Refusal	10%
5) Are you a US Resident?		N=204
	Yes	52%
	No	38%
	Refusal	7%
	Language barrier	2%

* May not total 100%, due to rounding.

Table 3-4: Late Arrival Interview Results

Based on the above responses, we concluded late arrival passengers were slightly more likely to be business travelers (51%) and US residents (52%). They were more likely to be traveling alone (62%) and were not on a previous connecting flight (58%).

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3.7. Follow up interviews

To enable the research team to understand how respondents viewed the survey, no more than four respondents per flight (two for whom English seemed to be their primary language and two for who English did not appear to be their primary language) were asked five questions:

1) Did you have enough time to complete the survey?
2) Were there any questions you could not answer?
3) Were there any questions you would not answer?
4) Have you taken this survey before, even if it was at another airport?
5) Is there anything else you'd like to tell me about the survey you just completed?

The table below (Table 3.5) shows the responses by question, and the combined totals for each question. For the most part, neither those who spoke English as their primary language nor those who did not speak English as their primary language had difficulty completing the survey in the time allotted (90% overall). Relatively few could not answer the questions (34% overall). Among those who would not answer questions, a greater percentage was English speakers than non-English speakers (59% vs. 41%). Very few had completed the survey before (7% overall). About half (52%) had other comments (discussed below).

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	English as primary language Percent Responses (N=49)		
Question	*Yes*	*No*	*No response*
Enough time	94%	0%	6%
Could not answer	31%	65%	4%
Would not answer	59%	37%	4%
Survey before	10%	86%	4%
Other*	51%	43%	6%
	English not primary language Percent Responses (N=39)		
Question	*Yes*	*No*	*No response*
Enough time	85%	5%	10%
Could not answer	38%	54%	8%
Would not answer	41%	51%	8%
Survey before	2%	90%	8%
Other*	54%	36%	10%
	Total (All respondents) Percent responses (N=88)		
Question	*Yes*	*No*	*No response*
Enough time	90%	2%	8%
Could not answer	34%	60%	6%
Would not answer	51%	43%	6%
Survey before	7%	87%	6%
Other*	52%	40%	8%

Table 3-5: Follow up survey summary

*The "Other" comments seemed to concentrate on three themes:

1) The length of the survey (ten respondents);
2) The desire not to answer income and spending questions (4 respondents); and
3) The inability to answer questions about the flight itself, because they had not yet been on the airplane (10 respondents—see section 3.8, below).

3.8. Questions on airline services

Questions 20 and 21 asked respondents to rate the quality of the airline and the flight. Question 20 asks the respondent to rate the airline on various qualities and Question 21 asks if the respondent would recommend the airline to someone else and/or use it again. Out of 527 surveys that were reviewed, 286 respondents skipped or incorrectly answered question 20, and 82 respondents skipped or improperly answered question 21. A skip for these

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questions may need to be added to allow respondents to skip them if they have not flown on that airline before the questionnaire is completed.

Section 4.0 Conclusions

Many issues affected survey distribution and collection. Because airport layout and logistics may play a large role in the time required to distribute surveys, the impact of these issues will likely vary according to the airport.

- International flights may depart out of different terminals at the same airport. Travel between the terminals may take up to twenty minutes depending on the time of day and the volume of travelers present in the airport.

- Planes did not always board at the stated times due to crews arriving late from other flights or mechanical and weather issues, and this could cause problems for interviewers scheduled to be at another gate.

- Some non-surveyed international flights boarded at neighboring gates and at approximately the same times as the selected flights, resulting in 500 or more travelers in the boarding areas at or near boarding time. This created considerable confusion among interviewers trying to collect completed surveys and may have influenced response rates (travelers may be stressed from the large amount of people and concerned with boarding the flight on time).

- Many passengers arrived at the gate just a few minutes prior to the boarding time, which made it impossible for them to participate in the survey.

- Utilizing one interviewer per departure gate is more efficient than two interviewers. A single interviewer was able to generate approximately 4.3 surveys per hour. The interviewers stressed this during a debriefing held after all data collection was completed.

- Many respondents complained about the length of the questionnaire and time commitment to complete it. The results of the Follow Up questions (section 3.7) support this conclusion and the interviewers corroborated this during the debriefing.

- Many respondents indicated that a number of questions could not be answered because the respondent had not yet taken the flight (e.g., questions 20 and 21 pertaining to airline's level of service). The results of the Follow Up questions (section 3.7) support this conclusion as do comments made by interviewers during the debriefing.

- The number of incomplete surveys is partially due to respondents not being able to answer questions 20 and 21 (see above). However, approximately 90 percent of the surveys were at least ¾ complete (Section 3.3).

- A number of different languages were spoken for which survey forms for the pilot study were not available, including Polish, Hungarian, Arabic, and Indian.

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Section 5.0 About the authors

5.1. About PricewaterhouseCoopers

PwC is the largest professional services firm in the world, with more than 125,000 people in 142 countries. The firm has been a trusted advisor to Fortune 500 companies, government agencies and public institutions for over 150 years. PwC has nearly 100 years of experience providing comprehensive business advisory and technical services to meet the government's financial, operational, risk and compliance needs through its Washington Federal Practice (WFP).

PwC is a recognized thought leader in a wide range of disciplines, including statistics, survey design and implementation, research, economic analysis and reporting, risk management, program management, and analytical services. As one of the world's pre-eminent professional services organizations, PwC helps clients solve complex business problems and aim to enhance their ability to build value, manage risk and improve performance. The firm takes pride in the fact that its services add value by helping to improve the overall performance of its clients.

PwC provides substantial experience in successfully conducting and evaluating surveys, implementing analytical methods to evaluate data, improving processes, managing projects, and other services to a wide range of public and private sector clients. The firm is acclaimed for its deep expertise, corporate and financial stability, disciplined process improvement methodologies, and commitment to client success.

5.2. About Westat

Westat is an employee-owned research corporation serving agencies of the U.S. Government, as well as businesses, foundations, and state and local governments. Demonstrating technical and managerial excellence since 1961, Westat has emerged as one of the foremost contract research organizations in the United States. In addition to their capabilities as a leading statistical survey research organization, Westat has developed skills and experience in custom research and program evaluation studies across a broad range of subject areas, including transportation and travel studies. Westat uses a wide variety of methodologies to develop, implement, and analyze regionally and nationally representative travel studies. Westat also has the technical expertise in survey and analytical methods, computer systems technology, biomedical science, and clinical trials to sustain a leadership position in all research endeavors.

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5.3. About AMSAQ, Inc.

AMSAQ is a small, disadvantaged, woman-owned, 8(a)-certified company located in Rockville, Maryland. AMSAQ, Inc. serves government agencies and private organizations in four core business areas:

- Professional Contract Research and Consulting Services
- Conference and Travel Support
- Support for Facilities & Human Resources
- Network Systems Support

In terms of contract research and consulting, AMSAQ staff has extensive experience in providing professional consulting services in program evaluation, policy research, and performance measurement to governmental agencies and research firms. AMSAQ's program evaluation capabilities include conducting implementation studies as well as outcome and impact analyses. Our policy research experience includes benefit-cost analyses, management process reviews, and descriptive studies of programs and populations. Our staff has designed and conducted performance measurement projects, including Government Performance and Review Act-related design, data collection, analysis, and reporting. Our staff also has extensive experience in providing technical assistance and training on these and other social science research topics to state and local agency personnel. AMSAQ staff's methodological expertise includes survey research, policy analysis, case studies and focus groups, and statistical analysis.

5.4. About the Travel Industry Association of America (TIA)

The Travel Industry Association of America (TIA) is a non-profit association that seeks to increase the understanding of tourism's impact and the immense importance of tourism to the economic, social and cultural life of the United States by providing an array of marketing and economic research programs. For more than thirty years, TIA has been a highly respected leader in domestic travel economic and marketing research, providing the aggregate statistical dimension that gives the travel industry meaning and impact among policy makers in government, business, education and the news media. By gathering, conducting, and analyzing travel economic and marketing data, TIA's research measures the economic significance of the travel and tourism industry at national, state, and local levels; defines the size, characteristics, and growth of existing and emerging travel markets; and provides qualitative trend analysis and quantitative forecasts of future travel activity and impact.

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