2007

WASHINGTON-BALTIMORE REGIONAL AIR PASSENGER SURVEY

September 2008

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ABSTRACT

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AGENCY:
The Metropolitan Washington Council of Governments is the regional organization of the Washington area's major local governments and their governing officials. COG works toward solutions to such regional problems as growth, transportation, inadequate housing, air pollution, water supply, water quality, economic development and noise, and serves as the regional planning organization for Metropolitan Washington.

REPORT ABSTRACT:
This report presents the findings of a survey of approximately 19,000 air passengers at Ronald Reagan Washington National, Baltimore/Washington International Thurgood Marshall and Washington Dulles International Airports. Topics of analysis include airport use, airport preference, trip purpose, mode of access, and passenger characteristics.

SUBJECT:
2007 Washington-Baltimore regional air passenger characteristics.

PRECEDING REPORTS:
Washington-Baltimore Regional Air Passenger Survey (1982)
Washington-Baltimore Regional Air Passenger Survey: Analysis of Findings (1984)
1987 Washington-Baltimore Regional Air Passenger Survey, Volume I: Principal Findings
1987 Washington-Baltimore Regional Air Passenger Survey, Volume II: Geographic Findings
1987 Washington-Baltimore Regional Air Passenger Survey, Volume III: Survey Methodology
1992 Washington-Baltimore Regional Air Passenger Survey, Volume I: Principal Findings
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EXECUTIVE SUMMARY

In October, 2007 a regional air passenger survey was conducted at the three major commercial airports in the Washington-Baltimore Region: Ronald Reagan Washington National Airport (DCA), Washington Dulles International Airport (IAD) and Baltimore/Washington International Thurgood Marshall Airport (BWI). The survey was jointly funded by the Metropolitan Washington Airports Authority (MWAA) and the Maryland Aviation Administration (MAA) of the Maryland Department of Transportation (MDOT). Approximately 27,300 passengers out of a total of 55,500 enplaning passengers on 685 flights were interviewed as they waited to board their planes, an overall response rate of 49 percent. More than 19,000 completed survey questionnaires were completed. The survey questionnaires asked about the trip that was being made, the passenger's trip to the airport, the passenger's choice of airport, and the passenger's demographic characteristics. The 2007 regional air passenger survey was the eighth in a series of regional air passenger surveys conducted since 1981. Prior surveys were conducted in 1981/82, 1987, 1992, 1998, 2000, 2002 and 2005. Data from the air passenger surveys will provide the basis for analysis of major changes in airport use in the region and are an essential component of the air systems planning and master planning processes.

This report summarizes the findings regarding passenger trip characteristics, and compares the 2007 data to similar data collected in 2005 and 2002. Regional percentages shown in this document are subject to a sampling error of approximately plus or minus three percentage points at the 90 percent confidence level. Percentages at each of the individual airports are subject to a sampling error of twice that amount.

Some of the most important findings from the 2007 Washington-Baltimore Regional Air Passenger Survey, including changes in air passenger behavior and characteristics from 2002 to 2005, are summarized in the executive summary.

Airport Usage:

- Total enplanements in the region have shown a steady increase. Total annual air passenger enplanements at the region's three commercial airports are estimated to have increased by 5% between 2005 and 2007.

- Total annual enplanements in 2007 (32 million) are now 7.7 million greater than in 2002 (24.3 million).

- Almost half of the increase in total enplanements between 2002 and 2007 is because of an increase of 3.8 million in the number connecting passengers, from 4.6 to 8.4 million.

- A little over half of the increase is because of a 4 million increase in the number of locally originating passengers from 19.6 to 23.6 million.

- Connecting passengers enplanements at Dulles accounted for 2.5 million of the total increase at all airports. This accounts for 67% of the total regional increase.

- Connecting passengers increased by 614,000 at National (+161%), and by 616,000 at BWI (+59%), when compared with 2002.

- The largest increase in the number of local originating air passengers between 2002 and 2007 was at National, with 2.3 million passengers, an increase of 27%.

- Local originating air passengers at BWI increased by 510,000 (+6%) between 2002 and 2007.

- Local originating air passengers increased by a healthy 4 million between 2005 and 2007.

- Airport shares of locally originating air passenger trips in 2007 were:

  - 37% to BWI Airport (down from 38% in 2005)
  - 35% to National Airport (up from 32% in 2005)
  - 27% to Dulles Airport (down from 30% in 2005)

Primary Reason for Selecting Airport Used:

- In 2007, closest airport and cost are the most important factors in selecting airport used:

Closest Airport:

  - 69% of National Airport Users (down from 71% in 2005)
  - 58% of BWI Airport Users (down from 63% in 2005)
  - 54% of Dulles Airport Users (up from 51% in 2005)

Lowest Airfare:

  - 24% of BWI Airport Users (up from 22% in 2005)
  - 14% of Dulles Airport Users (down from 22% in 2005)
  - 7% of National Airport Users (down from 8% in 2005)

- While the percentage of passengers citing closest airport as their most important reason declined at all airports when compared with 2005, an increase in citing more convenient flight times was observed at all airports.

- Similarly, the percentage of local originating passengers at BWI citing less expensive airfare as the most important region for their airport choice increases from 22% in 2005 to 24% in 2007.

- The percentage of air passengers at Dulles citing less expensive airfares as their most important reason declined since 2005 and is less than the percentage citing this reason at BWI. This finding suggests that even though the percentage of those who chose Dulles citing closest airport increased, "quality of air service" factors, specially more convenient flight times and less expensive airfare at BWI showed an increase. Overall, "quality of air service" factors are less important than accessibility conditions in terms of airport choice.

Airport Preference:

- Overall airport preferences expressed by all air passengers changed little between 2005 and 2007. National was preferred by 38% of the air passengers, BWI by 29% and Dulles by 18%. About 15% of the air passenger expressed no preference for a particular airport.

- In 2007, 37% of the area residents interviewed in the survey expressed a preference for National Airport, 34% preferred BWI and 22% preferred Dulles.

- In 2007, 39% of the non-residents reported that they preferred to use National Airport, 26% preferred BWI and 13% preferred Dulles.

Trip Purpose:

- In 2007, the percentage of locally originating air passengers reporting that they were traveling for non-business related reasons remained almost the same, from 58% in 2005 to 59% in 2005.

- While non-business trips such as vacation, and student or school related travel dropped from 26% in 2005 to 23%, and from 7% to 4% in 2005 respectively, similarly personal or family affaires-related travel increased from 22% to 30%.

- This shift of non-business related trips could be attributed to the period of the air passenger survey being conducted during the fall in 2007 while the 2005 survey was conducted during the spring. Comparison of non-business travel with the 2002 survey conducted during the fall, reflect the same pattern as that of the 2007.

Ground Trip Origin:

- Between 2005 and 2007 the percentage of air passengers beginning the air passenger trips from a private residence dropped from 61% to 57%. However, when compared with 2002, the percentage of air passengers starting their trip from a private residence slightly increased from 55% to 57%.

- Air passenger leaving from a hotel or motel increased from 26% to 29% for the same time period.

Mode of Access:

- The most common mode of access to the airports in 2007 continued to be the automobile (private and rental), accounting for 64 percent of all local originations.

- Metrorail usage by passengers traveling to National Airport continues to be among the highest proportions of any airport in the Nation, at 14 percent. However, access by private car dropped to 32% from 35 percent in 2005 and slightly exceeded the percentage arriving by taxi, 31 percent.

- The percentage air passenger arriving by rental car at National increased from 7% in 2005 to 10% in 2007.

Air Traveler Characteristics:

- In 2005, for the first time in any of the Washington-Baltimore regional air passenger surveys, a 50/50 split between resident and non-resident air passengers was observed. However, in 2007 residents accounted for 43% of the total departing air passengers, and non-residents with 57%. This split reflects the same pattern observed in prior 2005, a 60% non-resident/40% resident split.

- In 2007, the percentage of local originating passengers under the age of 25 dropped from 16% in 2005 to 9% in 2007, while the percentage of passengers age 35 and older increased from 67% to 71%.

- Air travelers in the Washington-Baltimore region continue to be affluent. In 2007, 28% of the region's passengers had household incomes less than $80,000. At all three airports more than 70% of air passengers both residents and non-residents had incomes of $80,000 or more.

- Comparison of residents and non-residents that are departing passengers show that just over half of area residents have annual household income of over $120,000.

- More than half of air passengers departing from the three major airports purchased their ticket through the Internet, in 2007. Almost half of business travelers bought their ticket through a travel agent and/or corporate office combined, while over three-quarters of non-business travelers did so though the Internet.

- The majority of domestic destined passengers 65 percent, (up from 57 percent in 2005), bought their ticket through the Internet, while only 46 percent of international destined passengers used the Internet for online ticket purchase is up from 37 percent in 2005.

This survey was a joint venture, conducted by the National Capital Region Transportation Planning Board (TPB), the Maryland Aviation Administration and the Metropolitan Washington Airports Authority, in cooperation with the airlines serving the region. The project was guided by the Aviation Technical Subcommittee of the TPB Technical Committee, composed of a broad range of Federal, State, Local, and private aviation interests.

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I. INTRODUCTION

This report summarizes the findings from the 2007 Washington-Baltimore Regional Air Passenger Survey conducted concurrently at Baltimore/Washington International Thurgood Marshall Airport (BWI), Washington Dulles International Airport (IAD) and Ronald Reagan Washington National Airport (DCA). The Metropolitan Washington Council of Governments (MWCOG) conducted this survey as part of its Continuous Airport System Planning (CASP) program. One of the goals of this program is to continue the rational development of aviation facilities and services at the three major commercial airports serving the Washington-Baltimore region. Figure 1 represents the jurisdictions that combine to make up this region, and locates the three airports.

The 2007 regional air passenger survey was the eighth in a series of regional air passenger surveys conducted since 1981. Prior surveys were conducted in 1981/82, 1987, 1992, 1998, 2000, 2002 and 2005. Data from the air passenger surveys will provide the basis for analysis of major changes in airport use for the region. Hundreds of millions of dollars have been invested in facility improvements at the region's three major commercial airports in the past several years and more improvements are planned for the future. The data produced by these air passenger surveys will be invaluable in further planning for these improvements. Several other areas in which the survey data will be particularly useful are as follows:

- Market analyses, passenger trip mode and purpose, geographic information, preferred airport, and socioeconomic data on passengers for use in developing airport, airline and support services;

- Planning for airport access roadways and services, including development of transportation model improvements such as enhanced mode split models and estimates of airport traffic volumes;

- Planning terminals and groundside facilities, including parking, curbside, baggage, and passenger boarding gate areas;

- Time series trend analyses of changes in air traveler characteristics and airport use; and,

- Air passenger demand and allocation forecasting for future updates of the Washington-Baltimore Regional Airport System Plan.

The 2007 air passenger survey was conducted during two weeks in the fall of 2007: the week of October 7th through October 20th and the week of October 21st through November 3rd. A small number of flights that were either missed or required resurveying were surveyed during the week of October 21st to November 3rd. Approximately 27,300 passengers out of a total of 55,500 enplaning passengers on 685 (607 domestic and 78 International) flights were interviewed as they waited to board their planes, an overall response rate of 49 percent. More than 19,100 completed survey questionnaires representing the responses of these 27,300 passengers were collected, processed and tabulated.

Table 1
2007 Washington-Baltimore Regional Air Passenger Survey
Data Collection Summary

Airport	No. of Flights Surveyd	No. Survey Completed (With Pass. Factor)	Rev. Pass Count	Response Rate	Actual No. of Completed Surveys
BWI	227	10,042	21,277	47%	6,986
DCA	212	6,745	14,825	45%	4,627
IAD	246	10,526	19,422	49%	7,343
Total	**685**	**27,313**	**55,524**	**49%**	**18,956**
Mailback					**157**
Grand Total					**19,113**

The 2007 Washington-Baltimore Regional Air Passenger Survey sample included flights from 33 airlines, of which 16 were international and 17 were domestic carriers. The sample flights selected were grouped into seven regional destination clusters containing a total of 114 destinations, 32 international and 82 domestic (see Table 2). Table 3 shows the distribution of selected sample flights by departure time period at each airport.

Table 2
2007 Washington-Baltimore Regional Air Passenger Survey
No. of Survey Flights by Airport and Flight Destination Region

	BWI	DCA	IAD	Total
Mid-Atlantic	21	22	33	**76**
North-East	30	26	20	**76**
New York	20	26	20	**66**
South East	56	60	49	**165**
West	60	46	58	**164**
Great Lakes	20	20	20	**60**
International	20	12	46	**78**
Total	**227**	**212**	**246**	**685**

Table 3
2007 Washington-Baltimore Regional Air Passenger Survey
No. of Survey Flights by Airport and Flight Hours

Hours	BWI	DCA	IAD	Total
5:00 AM - 10:00 AM (AM Peak)	73	63	63	**199**
10:00 AM - 2:00 PM (Mid- Day)	39	61	47	**147**
2:00 PM - 6:30 PM (PM Peak)	73	52	81	**206**
6:30 PM - 12:00 AM (Night)	42	36	55	**133**
Total	**227**	**212**	**246**	**685**

Figure 1
Washington / Baltimore
Air System Planning Region

Note:-
BWI = Baltimore/Washington International Thurgood Marshall Airport
DCA = Ronald Reagan National Airport
IAD = Dulles International Airport

The same format and survey techniques used in the previous surveys were used to ensure data consistency and increase the usefulness of data collected from previous surveys.

The survey instrument contained questions regarding the passengers' trip (i.e. destination, trip purpose), the trip to the airport (i.e. origination, mode of access), about the passengers' choice of airport (i.e. airport preference, airport usage), and several demographic questions regarding the passenger (i.e. household size, age, income). The information gathered will be useful in airport system planning, as well as in the airport master planning process. The 2007 survey questionnaire is included as Appendix B of this report.

This survey was a joint venture conducted by the National Capital Region Transportation Planning Board (TPB), the Maryland Aviation Administration and the Metropolitan Washington Airports Authority, in cooperation with the airlines serving the region. The project was guided by the TPB Technical Committee's Aviation Technical Subcommittee which is composed of a broad range of federal, state, local, and private aviation interests.

II. FINDINGS

This chapter summarizes the major results of the 2007 Washington-Baltimore Regional Air Passenger Survey. Survey results are summarized by airport as well as for the Washington-Baltimore air systems planning region as a whole. The various travel modes used to access each airport, trip purpose, number of trips at each airport, preferred airport, trip origin, place of origin, age of air travelers and income of air travelers are addressed. These discussions generally reflect trips where passengers arrived at the airport by ground transportation. Passengers who connected with flights are included only in discussions of "total enplanements" in the "Airport Use" section of this report.

Although the data for the 2007 survey was primarily collected over a two week period in October, the survey results have been "annualized" to an observed of annual passengers for the 12-month period from January to December 2007. Regional percentages shown in the data tables are subject to a sampling error of approximately plus or minus three percentage points at the 90 percent confidence level. Percentages at individual airports are subject to a sampling error of twice that amount. Where applicable, the 2007 survey results are compared with results from the 2002 and the 2005 surveys.

Airport Use

Commercial aviation activity in the region rebounded significantly between 2002 and 2005. After declining by 12 percent between 2000 and 2002, total annual air passenger enplanements at the region's three commercial airports have increased by 25 percent between 2002 and 2005, and by 5 percent between 2005 and 2007. As shown in Table 4, estimated annual enplanements in 2007 (32 million) are now 4.5 million greater than in 2000 (27.5 million).

Table 4 shows that almost half of the increase in total enplanements between 2005 and 2007 was due to an increase of 760,000 in the number connecting passengers (from 7.6 to

8.4 million), and about half of the increase is because of a 770,000 increase in the number of locally originating passengers (from 22.9 to 23.6 million).

The greatest increase in the number of connecting passengers between 2005 and 2007 was seen at BWI, + 346,000, an increase of 26 percent. Connecting passengers increased by 235,000 at Dulles (4% increase), and by 183,000 at National (22% increase). Connecting passengers at BWI accounted for 45 percent of the total increase in connecting passengers coming through the region.

The largest increase in the number of local originating air passengers between 2005 and 2007 was observed at National, by 957,000 passengers, an increase of 13 percent. Local originating air passengers at BWI increased by 185,000 (2% increase) between 2005 and 2007. However, at Dulles, local originating passengers declined by 396,000 between 2005 and 2007. This mainly could be attributed to the discontinuation of service by low fare hub airline, Independence Air at Dulles, which dominated the market during 2005 calendar year. Overall local originating air passengers increased regionally slightly by 772,000 between 2005 and 2007, or a 3 percent increase.

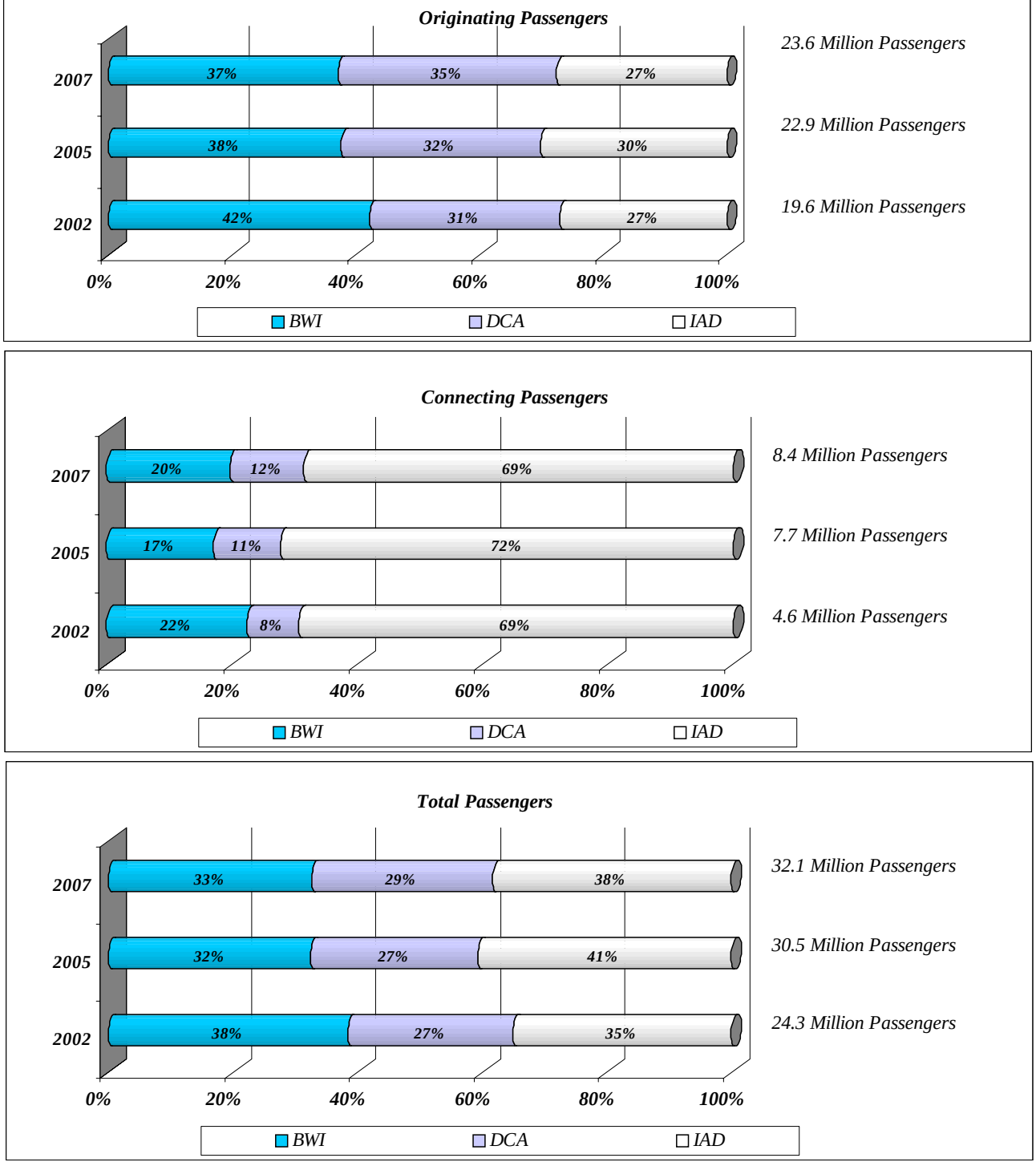
Figure 2 illustrates the airport share of total enplaning passengers, connecting passengers, and originating passengers from the surveys conducted in the three most recent survey years. In 2007, the greatest share of the region's total enplaning passengers departed from Dulles airport, which accounted for 38 percent (down from 41 percent in 2005), while 33 percent (up from 32 percent in 2005) departed from BWI and 29 percent (up from 27 percent in 2005) departed from National. Dulles had the greatest share of the region's connecting passengers (68%) and BWI has the greatest share of the region's local originating passengers.

Table 4
Washington-Baltimore Regional Airports
Air Passengers Trip Originations
(Thousands of Originations)

		B.W.I.			DULLES			NATIONAL			REGION		
Enplanement Type		**2002**	**2005**	**2007**	**2002**	**2005**	**2007**	**2002**	**2005**	**2007**	**2002**	**2005**	**2007**
Local originations (came by ground transportation)	*Number*	8,284	8,605	8,790	5,293	6,876	6,480	6,055	7,378	8,335	**19,632**	**22,859**	**23,605**
	Percent	89%	87%	84%	62%	55%	53%	94%	90%	89%	**81%**	**75%**	**74%**
Connected from another flight	*Number*	1,041	1,311	1,663	3,223	5,533	5,783	381	812	1,000	**4,645**	**7,656**	**8,446**
	Percent	11%	13%	16%	38%	45%	47%	6%	10%	11%	**19%**	**25%**	**26%**
Total Enplanement	*Number*	**9,325**	**9,916**	**10,453**	**8,516**	**12,409**	**12,263**	**6,436**	**8,190**	**9,335**	**24,277**	**30,515**	**32,051**
Percent of Region		**38%**	**32%**	**33%**	**35%**	**41%**	**38%**	**27%**	**27%**	**29%**	**100%**	**100%**	**100%**

Notes:
** Totals may not add due to rounding*
** "Total Enplanements" includes passengers on domestic scheduled, commuter and international flights*

Figure 2 - Airport Share of Passengers



Airport Preference

Survey respondents were asked to rank the three most important reasons for choosing the airport from which they were flying out of a list of nine possible reasons. Table 5 summarizes the most important reasons cited by air passengers for choosing the airport they used. The possible reasons have been categorized as either accessibility conditions (closest airport, better public transportation, better road access and parking facilities) or quality of air service reasons (convenient flight times, nonstop or direct flights, less expensive airfares, frequent flier restrictions).

The percentage of locally originating passengers citing accessibility conditions as the most important reason for choosing the airport they used overall dropped slightly from 68 percent in 2005 to 66 percent in 2007. While the percentage of passengers citing this reason remained virtually unchanged at Dulles, and National, between 2002 and 2005, it increased dramatically at BWI, for the same time period. However, for 2007, at BWI the share of passengers citing accessibility conditions as a primary reason for choosing the airport dropped by 4 percent when compared with 2005. Similarly, the percentage of locally originating passengers at BWI citing more convenient flight times, direct non-stop flights to their destination, and less expensive air fare as the most important reason for their airport increased slightly when compared with 2005.

This finding from the 2007 air passenger survey suggests that because of convenience of flight times, the availability of direct non-stop flights to destinations, and less expensive air fare, may have caused the increase in "quality of air service" factors in air passenger reasons for choosing BWI. At Dulles, the decline in accessibility reasons could be attributed to an increase in passengers citing more convenient flight times and direct non-stop flights to their destinations as a primary reason for choosing the airport. The decline at Dulles of passengers citing less expensive air fare dropped dramatically when compared with 2005. This could be attributed to the cessation of service by low cost carrier, Independence Air during the period.

Quality of air service, as an important reason for selecting the airport used slightly increased slightly from 30 percent in 2005 to 31 percent in 2007. Of the quality of air service characteristics, the percentage of passengers citing lower air fares as the primary reason for choosing an airport decreased slightly from 17 percent in 2005 to 15 percent in 2007, a trend observed between 2002 and 2005. The percentage of passengers citing more convenient flight times as the most important reason increased to its 2002 level of 7 percent.

Passengers were also asked which airport they would have preferred to use for their trip because using some travel restrictions and service availability sometimes present passengers from using their preferred airport. Table 6 shows the percentages for preferred airport, by airport, for locally originating passengers for each of the survey years.

For the region, in 2007, 37 percent (up from 36 percent in 2005), of locally originating passengers preferred to use National, 18 percent (down from 20 percent in 2005) preferred to fly out of Dulles, while 29 percent (down from 30 percent in 2005) preferred to travel from BWI. Fifteen percent of the passengers expressed no particular preference for one of the region's three commercial airports, same as in 2002.

Between 2005 and 2007, there was no change in the number of passengers flying out of their preferred airport. In 2005 and 2007, 66 percent of the local originating air passenger reported that they flew out of their preferred airport. Figure 3 illustrates these percentages for the three most recent survey years.

Table 5
Washington-Baltimore Regional Airports
Most Important Reason for Choosing Airport Used

Primary reason for choosing airport used	B.W.I.			DULLES			NATIONAL			REGION		
	2002	2005	2007	2002	2005	2007	2002	2005	2007	2002	2005	2007
Accessibility												
Closest airport	53%	63%	58%	51%	51%	54%	70%	71%	69%	58%	62%	61%
Better public ground transportation	1%	0%	0%	1%	2%	0%	5%	5%	6%	2%	3%	2%
Better access roads and parking	4%	3%	4%	6%	5%	3%	2%	3%	1%	4%	3%	3%
SUBTOTAL --Accessibility	**58%**	**66%**	**62%**	**58%**	**58%**	**57%**	**77%**	**79%**	**76%**	**64%**	**68%**	**66%**
Quality of Air Service												
More convinient flight times	5%	4%	5%	9%	7%	9%	8%	6%	8%	7%	5%	7%
Only airport with direct/non-stop flight	2%	2%	4%	9%	7%	11%	2%	3%	3%	4%	4%	5%
Less expensive airfare	30%	22%	24%	14%	22%	14%	8%	8%	7%	19%	17%	15%
Frequent flyer with specific airline	2%	2%	2%	3%	3%	4%	2%	2%	2%	2%	2%	2%
Only airport serving market	2%	2%	2%	3%	3%	3%	1%	1%	1%	2%	2%	2%
SUBTOTAL -- Quality of Air Service	**41%**	**32%**	**37%**	**38%**	**42%**	**41%**	**21%**	**20%**	**21%**	**34%**	**30%**	**31%**
OTHER	2%	2%	2%	3%	2%	2%	2%	2%	2%	2%	2%	2%
TOTAL	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**101%**	**100%**	**100%**	**100%**	**100%**

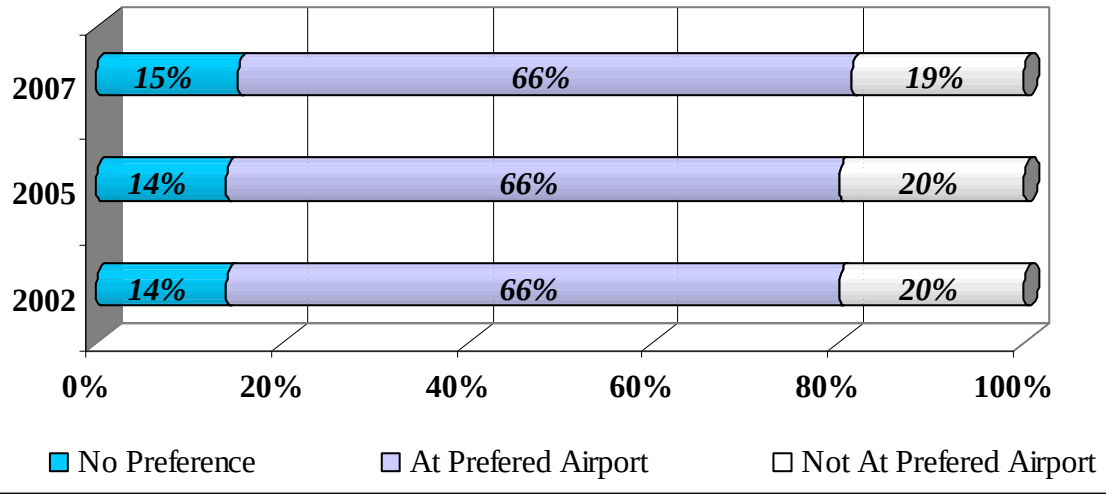
Notes:
** Totals may not add due to rounding*
** "Total Enplanements" include passengers on scheduled domestic, commuter and international flights*

Table 6
Washington-Baltimore Regional Airports
Originating Passengers Preferred Airport
(Thousands of Originations)

Prefered Airport		B.W.I. 2002	B.W.I. 2005	B.W.I. 2007	DULLES 2002	DULLES 2005	DULLES 2007	NATIONAL 2002	NATIONAL 2005	NATIONAL 2007
B.W.I.	*Number*	5,319	5,880	5,881	318	437	429	325	290	281
	Percent	67%	70%	70%	6%	7%	7%	5%	4%	3%
DULLES	*Number*	491	479	411	2,914	3,356	3,280	506	579	427
	Percent	6%	6%	5%	56%	52%	54%	7%	8%	5%
NATIONAL	*Number*	1,092	950	959	1,129	1,593	1,453	5,268	5,261	6,072
	Percent	14%	11%	11%	22%	25%	24%	73%	74%	75%
No Preference	*Number*	1,063	1,079	1,171	800	1,054	945	1,111	974	1,296
	Percent	13%	13%	14%	16%	16%	15%	15%	14%	16%
TOTAL	*Number*	7,965	8,388	8,422	5,161	6,440	6,107	7,210	7,104	8,076
	Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-Respondents		319	217	367	132	436	374	213	274	260
Total Originations		**8,284**	**8,605**	**8,789**	**5,293**	**6,876**	**6,481**	**7,423**	**7,378**	**8,336**

Notes:
** Totals may not add due to rounding*

Figure 3
Satisfaction with Airport Used
(originating Passengers Only)



The difference in airport preference between residents and non-residents is summarized in Table 7. In 2007, local originating passengers who were visiting the region (non-residents) accounted for 57 percent of local originating passengers. Of these visitors, 39 percent listed National as their preferred airport compared with 37 percent of resident air passengers who preferred National. Preference rates for non-residents were 26 and 13 percent for BWI and Dulles, respectively, compared to 34 percent and 22 percent for residents. Non-residents continued to be least likely to express a preference for a particular airport, (22 percent), compared to residents (7 percent).

Table 7
Washington-Baltimore Regional Airports
Originating Passengers Preferred Airport by Resident Status
(Thousand of Originations)

Prefered Airport		Non-Residents 2002	Non-Residents 2005	Non-Residents 2007	Residents 2002	Residents 2005	Residents 2007	TOTAL 2002	TOTAL 2005	TOTAL 2007
B.W.I.	*Number*	3,019	2,656	2,975	2,189	3,307	2,940	**5,208**	**5,963**	**5,915**
	Percent	29%	27%	26%	33%	36%	34%	**31%**	**31%**	**30%**
DULLES	*Number*	1,772	1,508	1,520	1,679	2,348	1,917	**3,451**	**3,856**	**3,437**
	Percent	17%	15%	13%	25%	25%	22%	**20%**	**20%**	**17%**
NATIONAL	*Number*	3,669	3,905	4,408	2,463	3,270	3,201	**6,132**	**7,175**	**7,609**
	Percent	35%	40%	39%	37%	35%	37%	**36%**	**38%**	**38%**
No Preference	*Number*	1,890	1,689	2,475	389	389	612	**2,279**	**2,078**	**3,087**
	Percent	18%	17%	22%	6%	4%	7%	**13%**	**11%**	**15%**
TOTAL	*Number*	**10,350**	**9,758**	**11,378**	**6,720**	**9,314**	**8,670**	**17,070**	**19,072**	**20,048**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Notes:
** Totals may not add due to rounding*

Trip Purpose

In 2007, the percentage of locally originating air passengers reporting that they were traveling for non-business related reasons increased slightly, compared to 2005. In past surveys, business-related travel accounted for roughly half of all reported travel. As shown in Table 8, this percentage dropped to 41 percent. In 2005 non-business, vacation travel increased from 19 percent in 2002 to 26 percent in 2005 and student/school-related travel increased from 4 percent to 7 percent. However, in 2007 a drop in vacation and student or school related trips was observed to 23 percent and 4 percent respectively. Similarly, an increase in personal or family related reasons increased from 22 percent in 2005 to 30 percent in 2007.

The increase in non-business related trips between earlier surveys and 2005 was possibly due to reasons such as transitory temporal or seasonal factors. Past air passenger surveys have been typically conducted in the fall (mid-October/ early-November), but the 2005 survey was conducted in the early spring (March 6th to March 19th). Though the 2005 survey was specifically scheduled to avoid the "Cherry Blossom Festival," the Easter holiday/recess, and public school spring-break holidays, this early March time period did

coincide with some college semester spring breaks. Nonetheless, even in the last several fall air passenger surveys, a slow shift from business-related to non-business related air travel had been observed. The 2007 survey results show a similar pattern as results from earlier fall surveys.

Figure 4 depicts the breakdown of air travel by trip purpose at each of the three airports in 2007. This figure shows that National generally has the greatest percentage of business-related air travel, Dulles has the greatest percentage of vacation-related travel and BWI has the greatest percentage of personal or family-related travel.

Figure 4
Trip Purpose

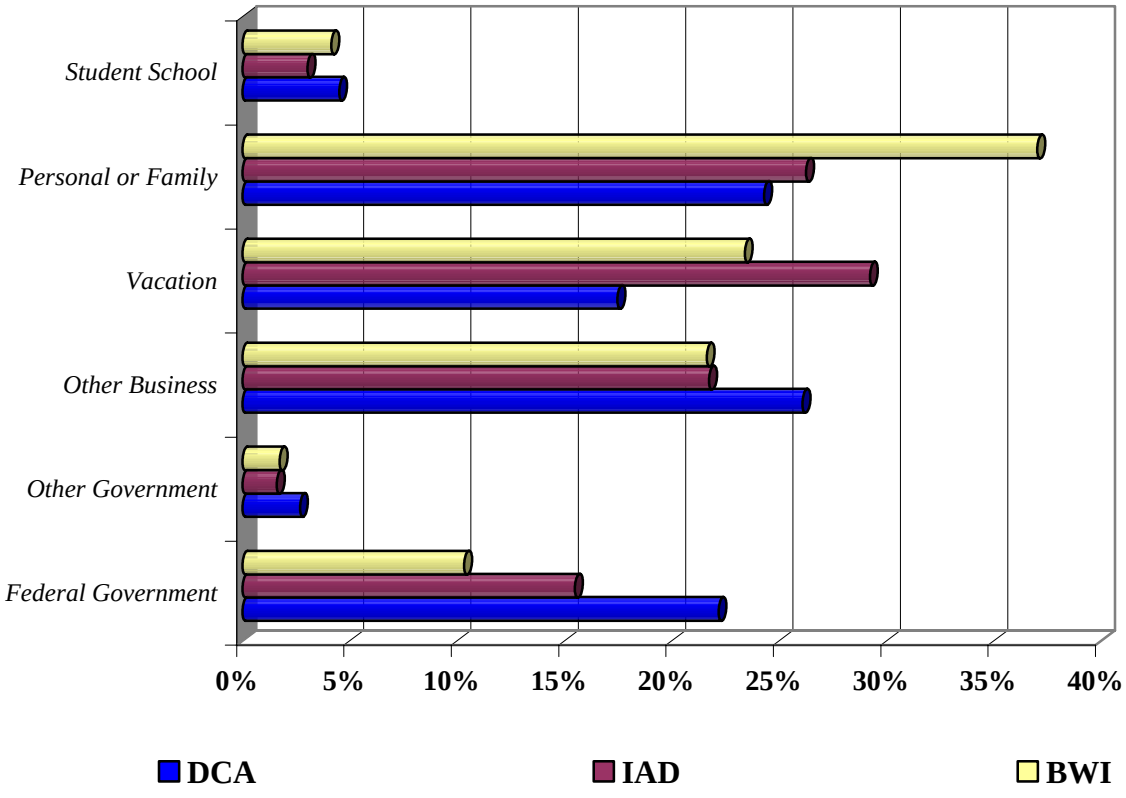


Table 8
Washington-Baltimore Regional Airports
Originating Passengers Trip Purpose
(Thousands of Passengers)

Trip Purpose		B.W.I. 2002	B.W.I. 2005	B.W.I. 2007	DULLES 2002	DULLES 2005	DULLES 2007	NATIONAL 2002	NATIONAL 2005	NATIONAL 2007	REGION 2002	REGION 2005	REGION 2007
Business Related													
Business related to federal government (including military)	*Number*	1,037	1,007	902	1,041	978	991	1,483	1,893	1,837	**3,561**	**3,878**	**3,730**
	Percent	13%	12%	10%	20%	14%	16%	25%	26%	22%	**18%**	**17%**	**16%**
Other government-related business	*Number*	177	150	151	67	152	102	186	350	222	**430**	**652**	**475**
	Percent	2%	2%	2%	1%	2%	2%	3%	5%	3%	**2%**	**3%**	**2%**
Other Business	*Number*	2,323	2,073	1,886	1,302	1,350	1,391	1,752	1,700	2,162	**5,377**	**5,123**	**5,439**
	Percent	28%	24%	22%	25%	20%	22%	29%	23%	26%	**28%**	**23%**	**23%**
SUBTOTAL -- Business	*Number*	3,537	3,230	2,939	2,410	2,480	2,484	3,421	3,943	4,221	**9,368**	**9,653**	**9,644**
	Percent	43%	38%	34%	46%	36%	39%	57%	54%	51%	**48%**	**42%**	**41%**
Non-Business Related													
Vacation	*Number*	1,694	2,328	2,044	1,152	2,189	1,859	892	1,482	1,447	**3,738**	**5,999**	**5,350**
	Percent	21%	27%	23%	22%	32%	29%	15%	20%	17%	**19%**	**26%**	**23%**
Personal or family affairs	*Number*	2,611	2,165	3,232	1,353	1,580	1,676	1,409	1,359	2,016	**5,373**	**5,104**	**6,924**
	Percent	32%	25%	37%	26%	23%	26%	23%	19%	24%	**28%**	**22%**	**30%**
Student or school related	*Number*	266	646	362	249	524	193	199	438	374	**714**	**1,608**	**929**
	Percent	3%	8%	4%	5%	8%	3%	3%	6%	5%	**4%**	**7%**	**4%**
Other	*Number*	114	174	154	87	82	172	82	99	232	**283**	**355**	**558**
	Percent	1%	2%	2%	2%	1%	3%	1%	1%	3%	**1%**	**2%**	**2%**
SUBTOTAL -- Non-Business	*Number*	4,685	5,313	5,792	2,841	4,375	3,900	2,582	3,378	4,069	**10,108**	**13,066**	**13,761**
	Percent	57%	62%	66%	54%	64%	61%	43%	46%	49%	**52%**	**58%**	**59%**
TOTAL	*Number*	**8,222**	**8,543**	**8,731**	**5,251**	**6,855**	**6,384**	**6,003**	**7,321**	**8,290**	**19,476**	**22,719**	**23,405**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Non-Respondents		62	62	60	42	21	95	52	57	45	156	140	200
Total Originations		**8,284**	**8,605**	**8,791**	**5,293**	**6,876**	**6,479**	**6,055**	**7,378**	**8,335**	**19,632**	**22,859**	**23,605**

Notes:
** Totals may not add due to rounding*

Trip Origin Activities

Table 9 summarizes the ground trip origin responses for the last three survey years. In all three surveys, most local passengers left for the airport from a private residence. Between 2005 and 2007, the percentage of air passengers beginning their trip from a private residence decreased from 61 percent to 57 percent. Those leaving from a hotel or motel increased 26 percent to 30 percent. National Airport continued to have the greatest percentage of passengers originating from a hotel or motel at 40 percent. For the region, there was no change in the percentage of passengers who reported beginning their trip to the airport from either their regular place of employment, or in those passengers beginning their trip from another place of business, 5 and 6 percent respectively.

Mode of Access

Table 10 provides a summary of mode of access to each airport and for the region. Regionally, as in previous surveys, the most common mode of access to the airports in 2007 was the automobile (both private autos and rental cars), accounting for 64 percent of all local originations. Although between 2002 and 2005, the percentage of passengers arriving by private car increased and the percentage arriving by rental declined at all airports, it was only at BWI that arrivals using private cars increased, while at Dulles and National a decline is observed between 2005 and 2007. Taxicabs were used by 18 percent of the passengers, and public transportation (including Metrorail, BWI rail and airport buses/van and limousines) carried 14 percent. Courtesy buses provided by hotels and motels accounted for only 5 percent of all local originations in both 2005 and 2007.

Metrorail usage by passengers traveling to National Airport continues to be among the highest proportions of any airport in the nation, at 14 percent. However, access by private car to National decreased to 32 percent from 35 percent in 2005, almost the same as those arriving by Taxi, 31 percent. The percentage of air passengers arriving by rental car at National rebounded to 10 percent from 7 percent in 2005, which was the same level in 2002.

Table 9
Washington-Baltimore Regional Airports
Originating Passengers Ground Trip Origin
(Thousands of Passengers)

Ground Trip Origin		B.W.I. 2002	B.W.I. 2005	B.W.I. 2007	DULLES 2002	DULLES 2005	DULLES 2007	NATIONAL 2002	NATIONAL 2005	NATIONAL 2007	REGION 2002	REGION 2005	REGION 2007
Private residence	*Number*	5,101	5,586	5,769	3,233	4,693	3,895	2,429	3,415	3,627	**10,763**	**13,694**	**13,291**
	Percent	62%	65%	66%	62%	69%	62%	41%	47%	44%	**55%**	**61%**	**57%**
Hotel/motel	*Number*	1,907	1,708	1,893	1,309	1,296	1,676	2,400	2,804	3,288	**5,616**	**5,808**	**6,857**
	Percent	23%	20%	22%	25%	19%	27%	40%	38%	40%	**29%**	**26%**	**30%**
Passenger's regular place	*Number*	462	430	409	274	298	296	509	360	465	**1,245**	**1,088**	**1,170**
of employment	*Percent*	6%	5%	5%	5%	4%	5%	8%	5%	6%	**6%**	**5%**	**5%**
Another place of	*Number*	520	481	410	304	313	281	568	624	668	**1,392**	**1,418**	**1,359**
business	*Percent*	6%	6%	5%	6%	5%	4%	9%	9%	8%	**7%**	**6%**	**6%**
Other	*Number*	185	333	212	132	176	131	85	104	218	**402**	**613**	**561**
	Percent	2%	4%	2%	3%	3%	2%	1%	1%	3%	**2%**	**3%**	**2%**
TOTAL	*Number*	8,175	8,538	8,693	5,252	6,776	6,279	5,991	7,307	8,266	**19,418**	**22,621**	**23,238**
	Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	**100%**	**100%**	**100%**
Non-Respondents		109	67	96	41	100	197	64	71	70	**214**	**238**	**363**
Total Originations		**8,284**	**8,605**	**8,789**	**5,293**	**6,876**	**6,476**	**6,055**	**7,378**	**8,336**	19,632	22,859	23,601

Notes:
** Totals may not add due to rounding*

An analysis of mode of access by resident status shows some interesting differences. Figure 5 illustrates this for the region. While residents of the region overwhelmingly used the private auto to access an airport, 74 percent in 2007, air passengers visiting the region continued to be almost evenly split among private autos (32%), rental cars (24%) and taxicabs (21%). This percentage split was similar to that for 2002 and 2005. Non-resident air passengers were also more likely than resident air travelers to use rail transit for there ground access to the airport.

Tables 11 to 14 summarize resident versus non-resident (passengers arriving by ground transportation only) mode of access, to each airport and for the region as a whole.

Figure 5
Mode of Access by Resident Status

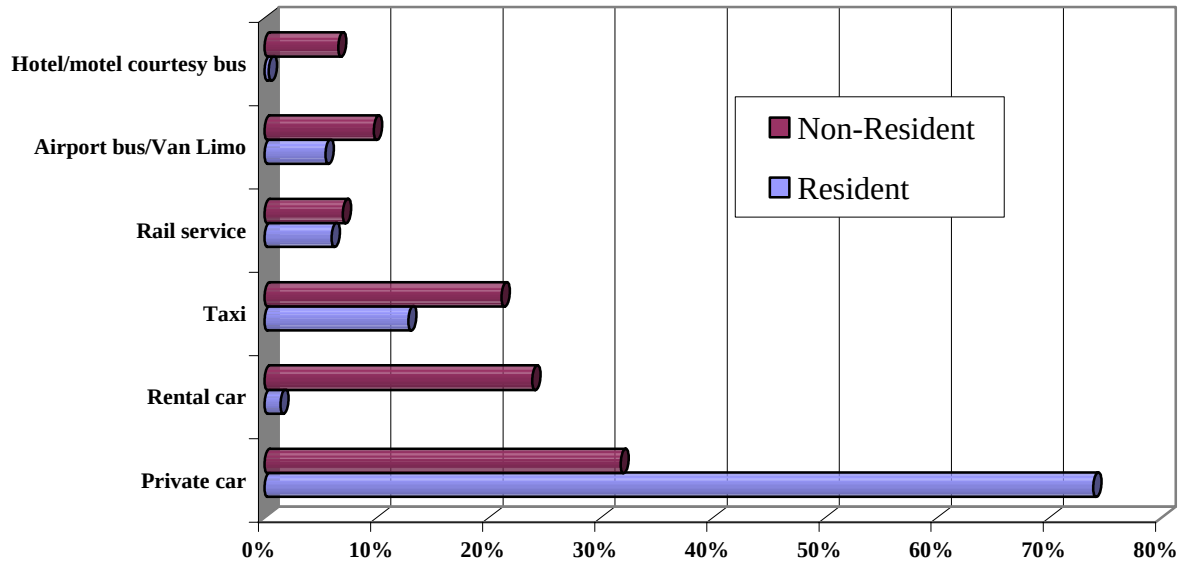


Table 10
Washington-Baltimore Regional Airports
Originating Passengers Mode of Access
(Thousands of Passengers)

Mode of Access		B.W.I.			DULLES			NATIONAL			REGION		
		2002	2005	2007	2002	2005	2007	2002	2005	2007	2002	2005	2007
Private car	*Number*	4,642	5,141	5,563	2,853	3,959	3,413	1,860	2,519	2,639	**9,355**	**11,619**	**11,615**
	Percent	57%	60%	64%	54%	59%	54%	31%	35%	32%	**48%**	**52%**	**50%**
Rental car	*Number*	1,587	1,098	1,478	741	660	908	639	510	793	**2,967**	**2,268**	**3,179**
	Percent	19%	13%	17%	14%	10%	14%	11%	7%	10%	**15%**	**10%**	**14%**
Taxi	*Number*	592	593	493	802	1,007	1,018	1,985	2,486	2,570	**3,379**	**4,086**	**4,081**
	Percent	7%	7%	6%	15%	15%	16%	33%	34%	31%	**17%**	**18%**	**18%**
Metrorail (DCA)	*Number*	43	53	25	31	38	74	753	940	1,116	**827**	**1,031**	**1,215**
	Percent	1%	1%	0%	1%	1%	1%	13%	13%	14%	**4%**	**5%**	**5%**
Rail service	*Number*	146	129	140	NA	NA	NA	2	5	0	**148**	**134**	**140**
	Percent	2%	2%	2%				0%	0%	0%	**1%**	**1%**	**1%**
Light Rail (BWI)	*Number*	34	42	24	NA	NA	NA	NA	NA	NA	**34**	**42**	**24**
	Percent	0%	0%	0%							**0%**	**0%**	**0%**
Airport bus/Van/Limo	*Number*	705	839	728	334	552	571	237	333	555	**1,276**	**1,724**	**1,854**
	Percent	9%	10%	8%	6%	8%	9%	4%	5%	7%	**7%**	**8%**	**8%**
Hotel/motel courtesy bus	*Number*	246	406	244	226	282	290	326	422	545	**798**	**1,110**	**1,079**
	Percent	3%	5%	3%	4%	4%	5%	5%	6%	7%	**4%**	**5%**	**5%**
Other	*Number*	179	227	10	248	215	33	146	67	16	**573**	**509**	**59**
	Percent	2%	3%	0%	5%	3%	1%	2%	1%	0%	**3%**	**2%**	**0%**
TOTAL	*Number*	8,174	8,528	8,705	5,235	6,713	6,307	5,948	7,282	8,234	**19,357**	**22,523**	**23,246**
	Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	**100%**	**100%**	**100%**
Non-Respondents		110	77	86	58	163	174	107	96	101	**275**	**336**	**361**
Total Originations		**8,284**	**8,605**	**8,791**	**5,293**	**6,876**	**6,481**	**6,055**	**7,378**	**8,335**	**19,632**	**22,859**	**23,607**

Notes:
** Totals may not add due to rounding*

Table 11
Washington-Baltimore Regional Airports
Originating Passengers Mode of Access by Resident Status - B.W.I. Airport
(Thousands of Originations)

B.W.I.

Mode of Access		Non-Residents 2002	Non-Residents 2005	Non-Residents 2007	Residents 2002	Residents 2005	Residents 2007	TOTAL 2002	TOTAL 2005	TOTAL 2007
Private car	*Number*	1,794	1,477	1,841	2,267	3,136	3,035	**4,061**	**4,613**	**4,876**
	Percent	40%	40%	44%	81%	79%	87%	**56%**	**60%**	**63%**
Rental car	*Number*	1,448	967	1,300	26	47	33	**1,474**	**1,014**	**1,333**
	Percent	33%	26%	31%	1%	1%	1%	**20%**	**13%**	**17%**
Taxi	*Number*	389	331	323	136	195	108	**525**	**526**	**431**
	Percent	9%	9%	8%	5%	5%	3%	**7%**	**7%**	**6%**
Metrorail	*Number*	27	28	11	12	23	11	**39**	**51**	**22**
(DCA)	*Percent*	1%	1%	0%	0%	1%	0%	**1%**	**1%**	**0%**
Rail service	*Number*	102	78	76	39	39	57	**141**	**117**	**133**
	Percent	2%	2%	2%	1%	1%	2%	**2%**	**2%**	**2%**
Light Rail	*Number*	12	21	14	12	14	10	**24**	**35**	**24**
(BWI)	*Percent*	0%	1%	0%	0%	0%	0%	**0%**	**0%**	**0%**
Airport bus/	*Number*	338	416	419	253	350	227	**591**	**766**	**646**
Van/Limo	*Percent*	8%	11%	10%	9%	9%	6%	**8%**	**10%**	**8%**
Hotel/motel	*Number*	206	336	211	19	48	17	**225**	**384**	**228**
courtesy bus	*Percent*	5%	9%	5%	1%	1%	0%	**3%**	**5%**	**3%**
Other	*Number*	122	49	5	35	121	0	**157**	**170**	**5**
	Percent	3%	1%	0%	1%	3%	0%	**2%**	**2%**	**0%**
TOTAL	*Number*	**4,438**	**3,703**	**4,200**	**2,799**	**3,973**	**3,498**	**7,237**	**7,676**	**7,698**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Notes:
** Totals may not add due to rounding*

Table 12
Washington-Baltimore Regional Airports
Originating Passengers Mode of Access by Resident Status - IAD Airport
(Thousands of Originations)

IAD

Mode of Access		Non-Residents 2002	Non-Residents 2005	Non-Residents 2007	Residents 2002	Residents 2005	Residents 2007	TOTAL 2002	TOTAL 2005	TOTAL 2007
Private car	*Number*	885	1,050	876	1,598	2,306	1,914	**2,483**	**3,356**	**2,790**
	Percent	34%	45%	37%	77%	72%	76%	**53%**	**61%**	**57%**
Rental car	*Number*	652	506	711	25	44	27	**677**	**550**	**738**
	Percent	25%	22%	30%	1%	1%	1%	**14%**	**10%**	**15%**
Taxi	*Number*	407	266	331	324	579	413	**731**	**845**	**744**
	Percent	16%	11%	14%	16%	18%	16%	**16%**	**15%**	**15%**
Metrorail	*Number*	23	20	39	7	8	11	**30**	**28**	**50**
(DCA)	*Percent*	1%	1%	2%	0%	0%	0%	**1%**	**1%**	**1%**
Rail service	*Number*	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
	Percent									
Light Rail	*Number*	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
(BWI)	*Percent*									
Airport bus/	*Number*	215	246	282	90	222	144	**305**	**468**	**426**
Van/Limo	*Percent*	8%	10%	12%	4%	7%	6%	**7%**	**8%**	**9%**
Hotel/motel	*Number*	195	168	115	15	28	10	**210**	**196**	**125**
courtesy bus	*Percent*	7%	7%	5%	1%	1%	0%	**4%**	**4%**	**3%**
Other	*Number*	226	95	13	17	9	0	**243**	**104**	**13**
	Percent	9%	4%	1%	1%	0%	0%	**5%**	**2%**	**0%**
TOTAL	*Number*	**2,603**	**2,351**	**2,367**	**2,076**	**3,196**	**2,519**	**4,679**	**5,547**	**4,886**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Notes:
** Totals may not add due to rounding*

Table 13
Washington-Baltimore Regional Airports
Originating Passengers Mode of Access by Resident Status - DCA Airport
(Thousands of Originations)

DCA

Mode of Access		Non-Residents 2002	Non-Residents 2005	Non-Residents 2007	Residents 2002	Residents 2005	Residents 2007	TOTAL 2002	TOTAL 2005	TOTAL 2007
Private car	*Number*	571	641	876	1,023	1,580	1,413	**1,594**	**2,221**	**2,289**
	Percent	16%	17%	19%	56%	59%	55%	**30%**	**34%**	**31%**
Rental car	*Number*	566	402	679	18	34	62	**584**	**436**	**741**
	Percent	16%	10%	14%	1%	1%	2%	**11%**	**7%**	**10%**
Taxi	*Number*	1,345	1,684	1,739	446	601	584	**1,791**	**2,285**	**2,323**
	Percent	39%	44%	37%	24%	23%	23%	**34%**	**35%**	**32%**
Metrorail	*Number*	405	513	602	296	359	421	**701**	**872**	**1,023**
(DCA)	*Percent*	12%	13%	13%	16%	13%	16%	**13%**	**13%**	**14%**
Rail service	*Number*	1	1	0	1	2	0	**2**	**3**	**0**
	Percent	0%	0%	0%	0%	0%	0%	**0%**	**0%**	**0%**
Light Rail	*Number*	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**
(BWI)	*Percent*									
Airport bus/	*Number*	177	222	401	37	78	99	**214**	**300**	**500**
Van/Limo	*Percent*	5%	6%	8%	2%	3%	4%	**4%**	**5%**	**7%**
Hotel/motel	*Number*	301	336	417	2	6	6	**303**	**342**	**423**
courtesy bus	*Percent*	9%	9%	9%	0%	0%	0%	**6%**	**5%**	**6%**
Other	*Number*	114	50	12	9	6	5	**123**	**56**	**17**
	Percent	3%	1%	0%	0%	0%	0%	**2%**	**1%**	**0%**
TOTAL	*Number*	**3,480**	**3,849**	**4,726**	**1,832**	**2,666**	**2,590**	**5,312**	**6,515**	**7,316**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Notes:
** Totals may not add due to rounding*

Table 14
Washington-Baltimore Regional Airports
Originating Passengers Mode of Access by Resident Status - REGION Airports
(Thousands of Originations)

REGION

Mode of Access		Non-Residents			Residents			TOTAL		
		2002	2005	2007	2002	2005	2007	2002	2005	2007
Private car	*Number*	3,250	3,168	3,593	4,888	7,022	6,362	**8,138**	**10,190**	**9,955**
	Percent	31%	32%	32%	73%	71%	74%	**47%**	**52%**	**50%**
Rental car	*Number*	2,666	1,875	2,690	69	125	122	**2,735**	**2,000**	**2,812**
	Percent	25%	19%	24%	1%	1%	1%	**16%**	**10%**	**14%**
Taxi	*Number*	2,141	2,281	2,393	906	1,375	1,105	**3,047**	**3,656**	**3,498**
	Percent	20%	23%	21%	14%	14%	13%	**18%**	**19%**	**18%**
Metrorail	*Number*	455	561	652	315	390	443	**770**	**951**	**1,095**
(DCA)	*Percent*	4%	6%	6%	5%	4%	5%	**4%**	**5%**	**6%**
Rail service	*Number*	103	79	76	40	41	57	143	120	133
	Percent	1%	1%	1%	1%	0%	1%	**1%**	**1%**	**1%**
Light Rail	*Number*	12	21	14	12	14	10	24	35	24
(BWI)	*Percent*	0%	0%	0%	0%	0%	0%	**0%**	**0%**	**0%**
Airport bus/	*Number*	730	884	1,102	380	650	470	**1,110**	**1,534**	**1,572**
Van/Limo	*Percent*	7%	9%	10%	6%	7%	5%	**6%**	**8%**	**8%**
Hotel/motel	*Number*	702	840	743	36	82	33	**738**	**922**	**776**
courtesy bus	*Percent*	7%	8%	7%	1%	1%	0%	**4%**	**5%**	**4%**
Other	*Number*	462	194	30	61	136	5	**523**	**330**	**35**
	Percent	4%	2%	0%	1%	1%	0%	**3%**	**2%**	**0%**
TOTAL	*Number*	**10,521**	**9,903**	**11,293**	**6,707**	**9,835**	**8,607**	**17,228**	**19,738**	**19,900**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Notes:
** Totals may not add due to rounding*

Air Traveler Characteristics

Section D of the survey questionnaire contains several questions regarding demographic characteristics of the air passenger. This section of the report summarizes the results of the responses to these questions.

Resident Status

Table 15 summarizes resident status for locally originating air passengers in 2007, 2005, and 2002. In 2005, there was a significant increase in the percentage of locally originating air passengers who are area residents and a subsequent drop in the percentage who are non-residents. For the first time in any of the Washington-Baltimore regional air passenger surveys, a 50/50 split between resident and non-resident air passengers was seen in 2005. However, in 2007, the expected 60 percent non-resident/40 percent resident split was observed, similar to pre-2005 survey results. It can be concluded that the 50/50 split observed in 2005 could be attributed to seasonal factors.

Table 15
Washington-Baltimore Regional Airports
Originating Passengers Resident Status
(Thousands of Passengers)

		B.W.I.			DULLES			NATIONAL			REGION		
Resident Status		**2002**	**2005**	**2007**	**2002**	**2005**	**2007**	**2002**	**2005**	**2007**	**2002**	**2005**	**2007**
Resident	*Number*	2,819	3,989	3,524	2,088	3,230	2,544	1,848	2,685	2,604	6,755	9,904	8,672
	Percent	39%	52%	46%	44%	58%	51%	35%	41%	35%	39%	50%	43%
Non-Resident	*Number*	4,465	3,732	4,216	2,619	2,377	2,418	3,508	3,881	4,745	10,592	9,990	11,379
	Percent	61%	48%	54%	56%	42%	49%	65%	59%	65%	61%	50%	57%
TOTAL	***Number***	**7,284**	**7,721**	**7,740**	**4,707**	**5,607**	**4,962**	**5,356**	**6,566**	**7,349**	**17,347**	**19,894**	**20,051**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

Notes:
** Totals do not include non-respondents*
** Totals may not add due to rounding*

Age

Between 2005 and 2007, the percentage of locally originating air passengers under the age of 25 declined from 16 to 9 percent, while the percentage of passengers age 35 and older increased from 67 percent in 2005 to 71 percent in 2007. This shift in age of departing passengers could be attributed to seasonal factors. Table 16 provides the detailed age distribution for passengers at the three airports and the region as a whole.

Income

Air travelers in the Washington-Baltimore region continue to be affluent. Table 17 shows originating air passengers household income data at the three airports and the region. In 2007, 46 percent of the region's originating air passengers had household incomes of at least $120,000. This is somewhat similar when compared with 2005 in which the same percentage of passengers household had an annual income of less than $100,000. At BWI, 58 percent of departing passengers had a household income less than $120,000, at National it was 51 percent and at Dulles 49 percent, in 2007. Air travelers at Dulles had slightly higher household incomes than passengers at National and BWI.

Comparison of residents and non-residents departing passengers' household income show that over a little over half of area residents have annual household income over $120,000 while almost 60 percent of non-residents departing passengers make below that. This finding demonstrates that air travelers from the Washington-Baltimore region are affluent.

Table 16
Washington-Baltimore Regional Airports
Originating Passengers Respondents Age
(Thousands of Passengers)

		B.W.I.			DULLES			NATIONAL			REGION		
Age Roup		**2002**	**2005**	**2007**	**2002**	**2005**	**2007**	**2002**	**2005**	**2007**	**2002**	**2005**	**2007**
18 or Younger	*Number*	172	486	238	113	427	107	139	228	77	**424**	**1,141**	**422**
	Percent	2%	6%	3%	2%	7%	2%	2%	4%	1%	**2%**	**6%**	**2%**
19 to 24 Years	*Number*	585	847	664	243	614	289	359	505	497	**1,187**	**1,966**	**1,450**
	Percent	7%	11%	8%	5%	10%	5%	6%	8%	7%	**6%**	**10%**	**7%**
25 to 34 Years	*Number*	1,494	1,321	1,472	944	1,091	1,083	1,242	1,165	1,528	**3,680**	**3,577**	**4,083**
	Percent	19%	17%	19%	19%	18%	20%	22%	18%	20%	**20%**	**18%**	**19%**
35 to 49 Years	*Number*	2,651	2,674	2,324	1,922	1,923	1,868	2,102	2,213	2,536	**6,675**	**6,810**	**6,728**
	Percent	34%	34%	30%	39%	32%	34%	37%	34%	34%	**36%**	**33%**	**32%**
50 to 64 Years	*Number*	2,382	2,012	2,523	1,390	1,649	1,694	1,521	1,992	2,358	**5,293**	**5,653**	**6,575**
	Percent	30%	26%	32%	28%	27%	31%	27%	31%	31%	**29%**	**28%**	**31%**
65 or Older	*Number*	589	469	652	318	318	510	359	409	553	**1,266**	**1,196**	**1,715**
	Percent	7%	6%	8%	6%	5%	9%	6%	6%	7%	**7%**	**6%**	**8%**
TOTAL	***Number***	**7,873**	**7,809**	**7,873**	**4,930**	**6,022**	**5,551**	**5,722**	**6,512**	**7,549**	**18,525**	**20,343**	**20,973**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Non-Respondents		411	796	915	363	854	929	333	866	787	1,107	2,516	2,631
Total Originations		**8,284**	**8,605**	**8,788**	**5,293**	**6,876**	**6,480**	**6,055**	**7,378**	**8,336**	**19,632**	**22,859**	**23,604**

Notes:
** Totals may not add due to rounding*

Table 17
Washington-Baltimore Regional Airports
Originating Passengers Respondent Household Income
(Thousands of Originations)

Household Income		BWI	IAD	DCA	TOTAL
Less than $15,000	*Number*	168	128	141	**437**
	Percent	2%	3%	2%	**2%**
$15,000 - 24,999	*Number*	147	124	83	**354**
	Percent	2%	3%	1%	**2%**
$25,000 - 44,999	*Number*	583	255	420	**1,258**
	Percent	9%	5%	6%	**7%**
$45,000 - 79,000	*Number*	1,346	722	1,100	**3,168**
	Percent	20%	15%	17%	**17%**
$80,000 - 119,000	*Number*	1,715	1,108	1,637	**4,460**
	Percent	25%	23%	25%	**25%**
$120,000 - 159,000	*Number*	1,104	844	1,021	**2,969**
	Percent	16%	18%	16%	**16%**
$160,000 - 199,999	*Number*	651	505	632	**1,788**
	Percent	10%	11%	10%	**10%**
$200,000 and up	*Number*	1,101	1,089	1,497	**3,687**
	Percent	16%	23%	23%	**20%**
TOTAL	*Number*	6,815	4,775	6,531	**18,121**
	Percent	100%	100%	100%	**100%**
Non-Respondents		**1,974**	**1,704**	**1,805**	**5,483**
Total Originations		**8,789**	**6,479**	**8,336**	**23,604**

Notes:
** Totals may not add due to rounding*

Airline Ticket Purchase

The content of the Regional Air Passenger Survey questionnaire, while substantially similar to that of previous versions, did incorporate some changes since 2005. Most notably, passengers were asked how they purchased their ticket. Table 18 shows distribution of passengers' airline ticket purchase by airport. More than half of air

passengers departing from the three major airports purchased their ticket through the Internet. Online sales and e-ticketing together with self-service kiosks have become the means of airline ticket purchase and reservations. It can be said that the high share of Internet ticket purchase is a major shift in consumer preference when it comes to planning and booking travel. Though respondents were not asked a reason on how they purchased their tickets, it can be concluded that for many consumers, the convenience and access to detailed flight options available through the Internet-shopping at any time and place could be a major factor. While online travel buying trends are growing, it is important to remember that traditional travel sales outlets are still competitive, because many online travel planners still use familiar distribution channels to make their ticket purchase. Twenty percent of all departing passengers, in 2007 purchased their tickets through the traditional means of a travel agent. This is down from 25 percent in 2005.

Table 18
Washington-Baltimore Regional Airports
Originating Passengers Respondent Ticket Purchase
(Thousands of Passengers)

Ticket Purchase		BWI		IAD		DCA		Total	
		2005	2007	2005	2007	2005	2007	2005	2007
Ticket Counter	*Number*	131	120	145	76	179	141	**455**	**337**
	Percent	2%	1%	2%	1%	2%	2%	**2%**	**1%**
Internet	*Number*	5,195	6,468	3,621	3,760	3,425	4,616	**12,241**	**14,844**
	Percent	63%	74%	54%	60%	47%	56%	**55%**	**64%**
Telephone	*Number*	607	350	444	344	566	338	**1,617**	**1,032**
	Percent	7%	4%	7%	5%	8%	4%	**7%**	**4%**
Travel Agent	*Number*	1,680	1,076	1,816	1,465	2,171	2,073	**5,667**	**4,614**
	Percent	20%	12%	27%	23%	30%	25%	**25%**	**20%**
Corporate Office	*Number*	696	693	655	658	907	1,058	**2,258**	**2,409**
	Percent	8%	8%	10%	10%	13%	13%	**10%**	**10%**
TOTAL	*Number*	8,309	8,707	6,681	6,303	7,248	8,226	**22,238**	**23,236**
	Percent	100%	100%	100%	100%	100%	100%	**100%**	**100%**
Non-Respondents		295	83	196	176	129	109	**620**	**368**
Total Originations		**8,604**	**8,790**	**6,877**	**6,479**	**7,377**	**8,335**	**22,858**	**23,604**

Notes:
** Totals may not add due to rounding*

Three quarters of locally departing passengers at BWI said that they purchased their airline tickets through the Internet, compared to Dulles with 60 percent and at National with 56 percent. However, the use of the Internet to purchase airline ticket has increased at all airports when compared with 2005 (see Table 18), while the share of passengers who bought their tickets through the traditional means of a Travel Agent dropped.

Table 19
Washington-Baltimore Regional Airports
Originating Passengers Respondent Ticket Purchase by Trip Purpose
(Thousands of Passengers)

Ticket Purchase		Business 2005	Business 2007	Non-Business 2005	Non-Business 2007	Total 2005	Total 2007
Ticket Counter	*Number*	112	108	336	216	**448**	**324**
	Percent	1%	1%	3%	2%	**2%**	**1%**
Internet	*Number*	3,762	4,174	8,440	10,596	**12,202**	**14,770**
	Percent	40%	44%	66%	78%	**55%**	**64%**
Telephone	*Number*	424	212	1,163	808	**1,587**	**1,020**
	Percent	5%	2%	9%	6%	**7%**	**4%**
Travel Agent	*Number*	3,124	2,844	2,527	1,745	**5,651**	**4,589**
	Percent	33%	30%	20%	13%	**26%**	**20%**
Corporate Office	*Number*	1,998	2,229	252	173	**2,250**	**2,402**
	Percent	21%	23%	2%	1%	**10%**	**10%**
TOTAL	*Number*	9,420	9,567	12,718	13,538	**22,138**	**23,105**
	Percent	100%	100%	100%	100%	**100%**	**100%**
Non-Respondents		236	79	350	222	**586**	**301**
Total Originations		**9,656**	**9,646**	**13,068**	**13,760**	**22,724**	**23,406**

Notes:
** Totals may not add due to rounding*

As shown on Table 19, more than half of business travelers bought their ticket through a travel agent and/or corporate office combined, while over three-quarters of non-business travelers did so though the Internet, in 2007. Among those who purchased their ticket through a travel agent almost 61 percent were business travelers, and vacationers accounted for 22 percent. Ninety percent of business travelers used their corporate office

to purchase their air ticket. Buying airline ticket from the ticket counter and through telephone was down by half when compared with 2005.

Table 20 provides information on departing passengers by domestic (within the U.S.) and international (outside the U.S.) destination. According to the table, the percentage of domestic passengers purchasing their ticket through the Internet increased from 57 percent in 2005 to 65 percent in 2007, while the percentage of international passengers purchasing their tickets through the Internet increased from 37 to 46 percent during the same period. By contrast, while only 18 percent of domestic passengers purchased their ticket from travel agent, 40 percent of international passengers used a travel agent to purchase their ticket. These differences can be attributed to the dominance of e-ticketing in the U.S. airlines' direct sales to consumers, particularly in the domestic market.

Table 20
Washington-Baltimore Regional Airports
Originating Passengers Respondent Ticket Purchase by Trip Destination
(Thousands of Passengers)

Ticket Purchase		Domestic 2005	Domestic 2007	International 2005	International 2007	Total 2005	Total 2007
Ticket Counter	*Number*	425	313	30	25	**455**	**338**
	Percent	2%	1%	2%	1%	**2%**	**1%**
Internet	*Number*	11,605	13,994	636	851	**12,241**	**14,845**
	Percent	57%	65%	37%	46%	**55%**	**64%**
Telephone	*Number*	1,534	941	83	90	**1,617**	**1,031**
	Percent	7%	4%	5%	5%	**7%**	**4%**
Travel Agent	*Number*	4,790	3,873	878	740	**5,668**	**4,613**
	Percent	23%	18%	51%	40%	**25%**	**20%**
Corporate Office	*Number*	2,146	2,283	111	126	**2,257**	**2,409**
	Percent	10%	11%	6%	7%	**10%**	**10%**
TOTAL	*Number*	20,500	21,404	1,738	1,832	**22,238**	**23,236**
	Percent	100%	100%	100%	100%	**100%**	**100%**
Non-Respondents		542	350	77	18	**619**	**368**
Total Originations		**21,042**	**21,754**	**1,815**	**1,850**	22,857	23,604

Notes:
** Totals may not add due to rounding*

APPENDIX A

SURVEY METHODOLOGY

SURVEY METHODOLOGY

The following discussion is a brief summary of the methodology used to conduct the 2007 Washington-Baltimore Regional Air Passenger Survey.

Survey Design

The survey was designed to provide current air traffic patterns and user characteristics for passengers departing from the region's three major commercial airports (Ronald Reagan Washington National, Washington Dulles International and Baltimore/Washington International Airports). It was designed to be compatible with the previous surveying efforts, done in 1981/82, 1987, 1992, 1998, 2000, 2002 and 2005, so comparative analysis could be performed.

Scheduled domestic, commuter and international flights were surveyed at each airport, where applicable. The sample for domestic flights was stratified by different regions of the United States: Northeast, New York Metropolitan Area, Mid-Atlantic, Southeast, Great Lakes, and West. For international flights, the sample was stratified into twenty four different regions of the world. All flights selected for surveying were scheduled during a two-week period beginning October 7th and extending through October 20th, 2007. Flights that were missed and those that required resurveying due to insufficient response rates were to be surveyed during the following two-week period.

Sample Selection

A sample of departing air travelers was obtained by surveying all passengers on selected flights scheduled during the survey period. A sample frame was developed which included all scheduled departures during the two-week period. This list was compiled electronically from the Official Airline Guide (OAG), provided by the Metropolitan Washington Airports Authority. The edited sample frames contained one record for each flight leaving from the three airports during a seven-day week (e.g. flights scheduled to

fly seven days a week were included in the sample frame seven times, flights flying six days during the week were included six times, etc.)

To ensure an acceptable level of confidence for parameter estimates while remaining within the budget constraints, a sample of approximately 685 flights was drawn. Since each of the three airports had approximately the same number of domestic departures, 200 domestic flights were selected at each airport. To account for increased international flight activity from the region, additional international flights were selected at each airport.

The sample was then reviewed by the participating airlines. Each airline provided any corrections or changes for their respective flights, and provided a list of any new flights that were to be added during the survey period. These editions were then used to select the final flight sample. The final samples were listed by airport, date, and departure time to enable manpower requirements to be calculated and staff time to be scheduled.

The survey was conducted of departing passengers only. Arriving passengers were not surveyed, primarily due to limited resources. It would also have been difficult to hold arriving passengers' attention as they look for a connecting flight, or hurry through the airport to ground transportation. It is assumed, therefore, that the characteristics of arriving passengers would mirror those of the departing passengers surveyed. This is a hypothesis that should be tested in a future survey.

Conducting the Survey

The survey was conducted during two weeks in the fall of 2007, Sunday, October 7th through Saturday, October 20th A small number of flights that were either missed or required resurveying were done during the following week. Survey managers were appointed for each of the airports from MWCOG staff, and teams of surveyors were assembled. One or two surveyors were assigned to each flight that was selected, based on the size of aircraft and how many passengers were expected. Self-administered questionnaires were distributed to the passengers as they checked-in and waited for

boarding, in the gate area. The questionnaires were collected as the passengers completed them, or when the flight was called for boarding. Any late arriving passengers were given a questionnaire and a self-addressed postage paid mail-back envelope and asked to complete it in route and drop it in the mail. A copy of the Survey Procedures for the 2005 Air Passenger Survey is included in this report as Appendix C.

Factoring the Survey Data

It is important to note that, since the survey was conducted over two weeks in October 2007, and not continuously throughout the calendar year, the survey data do not reflect any specific annual period. Rather, the survey as it was conducted represents a "snapshot" of passenger activity, taken during an early fall travel period. It is thought that this survey period should be representative of typical average results.

The survey responses were expanded to represent annual passenger estimates by a three-step process. The survey responses obtained on each sampled flight were first factored up to the boarding count totals (revenue passengers only). This number was obtained from the gate attendant at the closing of each flight. Secondly, the factored survey responses were expanded to represent bi-weekly passenger totals. And lastly, an annualized estimate of regional air travel was obtained by expanding the data from the bi-weekly survey period to an independent annual total.

Geocoding

Trip origin addresses collected the 2007 Air Passenger Survey were geocoded to the COG\TPB 2191 Transportation Analysis Zone (TAZ) system as well as a revised Washington-Baltimore 161 Aviation Analysis Zone (AAZ) System.

Final File

Once the factoring and geocoding processes were completed, a final file was created. Additional information regarding the passengers destination and residence status, as well as trip TAZ and AAZ were appended to the factored records. The file format for the final data file for the 2007 Washington-Baltimore Regional Air Passenger is included in this report as Appendix C.

Level of Confidence

For the region as a whole, the theoretical level of error for response totals was expected to be within a range of plus or minus three percentage points. The level of error for each of the individual airports, or by other sub-units, was expected to be higher. Analysis of the survey data indicates that, at a 90 percent level of confidence, parameter at the regional level are within a range of plus or minus three percentage points. Percentages at individual airports are subject to a sampling error of twice that amount.

APPENDIX B

SURVEY QUESTIONNAIRE

C. ABOUT YOUR AIRPORT CHOICE

1. **Please rank the three most important reasons for choosing Baltimore/Washington International Thurgood Marshall Airport for your flight today.** *(Please write #1, #2 or #3 in the appropriate spaces.)*
   _____ Closest airport
   _____ Easy road access
   _____ Convenient limo, bus or rail service
   _____ Good parking facilities
   _____ More convenient flight times
   _____ Less expensive airfare
   _____ Only airport with nonstop flights
   _____ Only airport that serves market
   _____ Frequent flyer specific airline
   _____ Other
   (Specify) _____
2. **If you could have arranged the airline schedule for your trip today, which airport would you have PREFERRED to use?** *(Please circle ONE answer)*
   a. Baltimore/Washington International Thurgood Marshall
   b. Washington Dulles International
   c. Ronald Reagan Washington National
   d. No preference.
3. **Please indicate which other airport(s) you considered using today.** *(Please circle ALL answers that apply.)*
   a. Washington Dulles International
   b. Ronald Reagan Washington National
   c. Other airport
   (Specify) _____
   d. Did not consider another airport
4. **During the last twelve months, how many flights did you make from each of the following airports ?** *(Please write a number in the appropriate spaces. Count today's trip as one flight.)*
   _____ Baltimore/Washington International Thurgood Marshall
   _____ Washington Dulles International
   _____ Ronald Reagan Washington National

D. ABOUT YOURSELF

1. **Please indicate the location of your current residence:**

   _____
   City/County State Zip Code Country

2. **How many people live in your household ?**

   _____ People *(Enter '1' if you live alone.)*

3. **Please circle your age bracket:**

a.	18 or younger	d.	35–39
b.	19–24	e.	50-64
c.	25-34	f.	65 or older

4. **Please circle the answer that approximates the TOTAL household annual income of all persons in your HOUSEHOLD:**

a.	Less than $15,000	e.	$80,000-119,999
b.	$15,000-24,999	f.	$120,000-159,999
c.	$25,000-44,999	g.	$160,000-199,999
d.	$45,000-79,999	h.	$200,000 or more

If you were visiting the Washington-Baltimore area Please answer Questions #5 and #6, then proceed directly to section E.

5. **How many nights did you stay in the area?**
   _____ Nights *(Enter '0' if you are leaving the same day you arrived.)*
6. **Approximately how much did you spend PER DAY while you were in the area?** *(Include expenses which are meals, hotels, rental cars, etc. Do not include airfare. Please circle ONE answer.)*

a.	Less than $100	e.	$400-499
b.	$100-199	f.	$500-599
c.	$200-299	g.	$750-999
d.	$300-399	h.	$1,000 or more

7. **How many nights will you spend away on this trip?**
   _____ Nights *(Enter '0' if you are returning today.)*
8. **How many vehicles are usually available for use at your residence?**
   _____ Vehicles *(Enter '0' if no vehicles are available.)*

E. PLEASE WRITE ANY COMMENTS YOU MAY WISH TO BRING TO OUR ATTENTION BELOW

Again, Thanks For Your Help!

2007 WASHINGTON–BALTIMORE REGIONAL AIR PASSENGER SURVEY

TO DETERMINE LOCAL AIRPORT NEEDS

BWI

This survey is being conducted by:
Metropolitan Washington Council of Governments
Metropolitan Washington Airports Authority
Maryland Aviation Administration
in cooperation with the Airlines serving the Region's Airports.

This survey concerns your trip today.
Please complete this form, even if you have received a form on other days.

All answers are confidential.
Personal identification is not required.
Thank you for your cooperation

A. ABOUT YOUR TRIP TODAY

1. How did you get to Baltimore/Washington International Airport for this trip ?
(Please circle ONE answer.)

a. I came to this airport by GROUND TRANSPORTATION *(e.g. auto, taxi, Metro, etc.)*
(Please proceed directly to QUESTION #2.)

b. I was on this flight when it arrived at this airport.
(STOP . That is all the information we need.)

c. I made a connection at this airport from a DOMESTIC FLIGHT with _____ Airlines. *(Please fill in the name of the airline and STOP. That is all we need to know.)*

d. I made a connection at this airport from an INTERNATIONAL FLIGHT with _____ Airlines *(Please fill in the name of the airline and STOP. That is all we need to know.)*

If you arrived at this airport by GROUND TRANSPORTATION. Please complete the rest of this survey.

2. What is the destination of your trip today?

_____	_____
Airport	City
_____	_____
State/Province	Country

3. What type of trip is this?
(Please circle the answer for the main purpose of your travel).

a. Business related to the Federal government *(Including military)*
b. Business related to state or local government
c. Business that is not related to government
d. Vacation
e. Personal or family affairs
f. Student or school related
g. Other purpose
(Specify) _____

4. How did you purchase your ticket for this trip?
(Please circle one answer)

a. Ticket Counter
b. Internet
c. Telephone
d. Travel Agent
e. Corporate Office

B. ABOUT YOUR GROUND TRIP TO BALTIMORE/ WASHINGTON INTERNATIONAL AIRPORT:

1. Where did you start your ground trip to Baltimore/Washington International Thurgood Marshall Airport ?
(Please circle ONE answer.)

a. Private residence
b. Hotel/Motel
c. My regular place of employment
d. Another Place of business
e. Other _____ (Specify)

2. What is the address of the place above ?
(If you prefer to provide a less specific geographic location, please indicate the nearest intersection, or building name.)

_____

Street Number	Street Name	City Quadrant (e.g. SW, NE)

_____

City	State	Zip Code

3. What time did you begin your trip to the airport today? (Enter time and circle AM or PM)

_____ : _____ AM PM

4. What time did you arrive at the airport today ?
(Enter time and circle AM or PM)

_____ : _____ AM PM

5. Did any member of your household, friends, or business associates travel to the airport with you ?

a. NO
b. Yes
   1. How many ? _____
   2. Of this group, how many came to board a plane? _____

6. How many checked-in bags on this flight are yours ? *(Enter '0' if no bags were checked.)*_____

7. What was your primary means of transportation to this airport?
(Please circle ONE answer)

a. Private Car
b. Rented Car
c. Taxi
d. Airport bus/van/limo
e. Other (Specify) _____
f. Metrorail (National)
g. Amtrak/MARC (BWI)
h. Light Rail (BWI)
i. Hotel/Motel courtesy bus

8. If you arrived in a private vehicle (excluding rental cars):

a. Were you dropped off at terminal curbside ?

Yes _____ No _____

b. Where was that vehicle parked (either directly or after dropping you off) ?

1. It was not parked
2. Hourly Parking Garage
3. Daily Parking Lot B
4. Daily A Garage
5. ESP Parking Lot
6. Long Term A or B
7. Overflow A or B
8. BWI Rail Station Garage
9. Off-Airport Private Parking

- For How Long
a. For a few hours or less
b. Until you return from this trip

APPENDIX C

SURVEY PROCEDURES

2007 Washington-Baltimore Regional Air Passenger Survey

SURVEY PROCEDURES MANUAL

OCTOBER 2007

Metropolitan Washington Council of Governments

ABOUT THE 2007 AIR PASSENGER SURVEY

You are about to assist in conducting an air passenger travel survey. The purpose of this survey is to collect information about ground access patterns and user characteristics of air travelers at the three major commercial airports in the Washington-Baltimore area: Ronald Reagan Washington National, Washington Dulles International and Baltimore/Washington International Thurgood Marshall Airports. This is the eighth in a series of air passenger surveys. Previous surveys were conducted in 1982, 1987, 1992, 1998, 2000, 2002 and 2005.

This survey is being conducted by the Metropolitan Washington Council of Governments, in conjunction with the Maryland Aviation Administration (part of the Maryland Department of Transportation, which owns and operates BWI Airport) and the Metropolitan Washington Airports Authority (which operates Ronald Reagan National and Dulles Airports). The airlines that serve the region's airports are also cooperating in this survey effort.

The 2007 survey will begin on SUNDAY, October 7TH and continue for fourteen consecutive days, ending on SATURDAY, October 20TH. Several surveyors may be needed during the period from October 21st through November 3rd, to survey flights that might have been missed, cancelled or under-surveyed.

SURVEY ORGANIZATION

The Metropolitan Washington Council of Governments (MWCOG) is responsible for the overall management of the survey. MWCOG has contracted with Area Wide Market Research, Inc. to conduct the survey. Area Wide Market Research is supplying ***SURVEY SUPERVISORS, LEAD ASSISTANTS and SURVEYORS*** at each of the three airports.

A project manager, appointed from COG staff, is responsible for reviewing and approving the survey contractor's work plan, coordinating the contractor's work with airport and airline personnel as appropriate, managing the involvement of other COG staff, Toni Giardini and Clara Reschovsky, in this project, and monitoring the progress of all survey activities to ensure their successful completion.

There will be one (1) Survey Supervisor at each airport. ***Survey Supervisors*** will be responsible for the overall management of survey field operations at their assigned airport. Specific responsibilities of the Survey Supervisors will include:-

- pre-survey set up and training activities;
- overall supervision of survey interviewing during the main 14-day survey period and the following one-to-two week resurvey make-up period;
- appropriate coordination of survey interviewing operations with COG staff and airport personnel; and
- keeping the ***Area Wide Market Research's President*** up-to-date on daily survey activities.

It is expected that the Survey Supervisor for each airport will be "on call" at all times during survey operations and will work directly with the Lead Assistants at each airport to resolve any problems that may arise.

The ***Lead Assistants*** will work in conjunction with a Survey Supervisor to cover all airport field office functions. Specific responsibilities will include

- the scheduling and assignment of field staff interviewers to specific survey flights,
- the preparation and checking of survey questionnaire packets for each sampled flight to be surveyed during their work shift,
- review of the returned survey questionnaires after each flight is surveyed to determine whether or not there was an adequate number of valid completed

questionnaires for that flight, and

- maintenance of a survey flight log book.

Lead Assistants will also be expected to perform some survey interviewing in the event that not enough survey interviewers are available for a particular work shift.

A field office will be established at each airport, from which the actual survey will be conducted. The field office will be staffed by the ***LEAD ASSISTANTS***, who will be responsible for managing the office, dispatching the ***SURVEYORS*** to the boarding gates, and maintaining the survey logbook.

The surveyors will be directly responsible to the lead assistants. The key responsibility of the surveyors will be to distribute questionnaire forms to passengers as they wait to board a selected flight, and collect the completed forms. Surveyors may also be required to explain the purpose of the survey, identify the sponsoring agencies, or explain a particular question to the passengers, if they are asked.

FIELD OFFICE PROCEDURES

The basic unit of the survey is the scheduled airline flight. A random sample of all flights during the survey period will be generated. Once the survey is completed, the sample data will be factored to represent annual passenger totals at each airport. All record keeping for the survey will be based on the individual flight.

1. ***A SURVEY LOG BOOK*** will be kept in the field office at each airport. In this book there will be a listing of the flights to be surveyed each day of the survey period, as well as a **FLIGHT RECORD LOG SHEET** for each flight. Based on the listing of selected flights, a surveyor schedule will be prepared, indicating how the selected flights will be covered. At the beginning of each day and several times throughout the day, as necessary, the lead assistant will determine which gates the selected flights will depart

from. The lead assistant is also responsible for assigning surveyor numbers to individuals for that particular day, in order to assure the surveyors are aware of the gates at which that day's surveying will be done, and making sure the surveyors have the necessary materials for the survey.

2. ***A FLIGHT PACKAGE*** has been prepared in advance for each flight to be surveyed. All flight packages for each day of the survey period will be placed in a box (or two), marked specifically for that day. Each flight package will contain an appropriate number of survey questionnaires (based on the seating capacity of the scheduled aircraft), a copy of the **GATE *ANNOUNCEMENT*** to be read by airline gate personnel, and a number of ***MAIL-BACK ENVELOPES***.

3. A copy of the ***FLIGHT RECORD LOG SHEET*** will also be included in each flight package. This will allow the surveyor to make entries on the log sheet while at the gate. The original copy of the flight record log sheet will be kept in the ***SURVEY LOG BOOK***, which will remain in the field office.

4. After each flight is surveyed, the lead assistant will be responsible for the following:
   - obtain revenue passenger count from the airline personnel
   - determining whether there was an adequate number of completed survey responses, and whether the flight was surveyed successfully (defined as collecting valid responses from at least 20 percent of the revenue passengers on that flight); and,
   - making sure the surveyors transfer their notes from the flight record log sheet into the survey logbook.

5. If a flight is determined to have been surveyed successfully, the flight

package will be placed back in the box for that particular day. If the flight was missed. Cancelled or not surveyed successfully, the package will be placed in a "Resurvey" box. All flights to be resurveyed will be made-up either in the second week of the survey, or the week following completion of the survey. (NOTE: if a flight is missed, the surveyor still needs to find out the number of revenue passengers on that flight, if possible).

6. Before the surveyors leave for the day, the lead assistant will make sure that they are aware of the flights for which they will be responsible the following day.

2007 WASHINGTON / BALTIMORE REGIONAL AIR PASSENGER SURVEY FLIGHT RECORD

SAMPLE: **B100705WN1865**

AIRPORT: **BWI** DESTINATION CITY: **Orlando FL**

DAY: **SUN** CARRIER: **Southwest Airlines**

DATE: **10/7/2007** FLIGHT #: **1865**

DEPARTURE TIME: **6:05:00 AM**

AIRCRAFT: **733** NO. SEATS: **137** OAG CODE: **WN**

QUESTIONNAIRES:

IN PACKET: BEGINNING # **B00001** ENDING # **B00137**

ADDITIONAL: BEGINNING # _____ ENDING# _____

ADDITIONAL: BEGINNING # _____ ENDING# _____

NO. OF NON-MAILBACK FORMS DISTRIBUTED: _____

NO. OF MAILBACKS DISTRIBUTED: _____

TOTAL NO. OF FORMS DISTRIBUTED: _____

NO. OF COMPLETED QUESTIONNAIRES; _____

NO. OF REVENUE PASSENGERS: _____

RESPONSE RATE: _____ SUCCESSFUL FLIGHT?_____

RESURVEY DATE #1: _____ RESURVEY DATE #2: _____

REMARKS:_____

SURVEYING PROCEDURES

Upon arriving at the airport each day, surveyors are to go to the field office and check in with the lead assistant on duty. Lead assistants will also be assigned to survey flights.

1. The lead assistant will supply each surveyor with the following:

   - All necessary identification badges;
   - the flight package for the flight(s) to be surveyed. ***It is important that each surveyor double check that you have the correct flight package, and that it contains the correct materials.*** (NOTE: All attempts will be made to group flights to be surveyed that are in the same general areas of the airport. Surveyors, therefore, may not be returning to the field office between flights. When this is the case, the surveyor is to make sure you have all materials needed to survey all flights that have been selected); and,

   - any additional supplies, such as extra questionnaires, pencils, rubber bands, extra mail-back envelopes, etc., and any special instructions for the day.

2. Lead assistants will check the airport schedule monitors and identify the gates at which the selected flights will board, and make sure the surveyors know how to get to those gates. In general, the surveyor should be at the gate at least one hour prior to the flight's scheduled departure time (for international flights, the surveyors should arrive up to an hour and a half early).

3. When you reach the gate, introduce yourself to the gate attendant on duty, and tell them that the flight has been selected to be surveyed. If there are any problems with the gate personnel, leave the gate area immediately and contact the field office. Otherwise, present the gate announcement to the attendant and ask that it be read over the PA system two times during the passenger check-in period. In some instances, the surveyor will make the announcement, if the gate attendants are extremely busy.

4. Once the announcement is first read, approach the passengers who have already checked-in. One suggested introduction would be:

"Good morning (afternoon, evening), we are conducting an air passenger survey at Dulles (BWI, Ronald Reagan National) Airport. Are you waiting to board (flight number) to (flight destination) (for example, United Flight number 127 to Los Angeles)? Would you mind taking a few minutes to fill out this brief questionnaire?

5. If the passenger agrees, hand him/her a questionnaire and thank them. Inform them that you will be collecting the completed questionnaires before the flight is called for boarding.

6. If the passenger does not want to participate, thank them anyway and go to the next passenger.

7. If the passenger identifies him/herself as an airline employee of other non-revenue passenger, ***DO NOT GIVE THEM A QUESTIONNAIRE. Thank them too***

8. Move around the waiting room in an organized fashion, remembering to smile and be as polite as possible.

9. Although we are interested in obtaining information from as many passengers on a flight as possible, there may be situations in which a single passenger can fill out a single questionnaire for more than one passenger:

   - a tour group that is traveling to and from the same destination, especially if the group is non-English speaking.

   The passenger who fills out the questionnaire should indicate that the information provided counts for (*X*) number of passengers. This can be done by placing the number in the box located at the bottom of the comments section. However the passenger who fills out the questionnaire should fill out Section D, About Yourself

BWI

B100705WN1865

GATE ATTENDANTS: PLEASE READ THE FOLLOWING ANNOUNCEMENT TWICE PRIOR TO THE INITIAL BOARDING ANNOUNCEMENT FOR THIS FLIGHT.

(Valid for Flights between October 7, 2007, and November 3, 2007)

"LADIES AND GENTLEMEN",

THE PASSENGERS ON *Southwest Airlines* *Flight Number* *1865* TO *Orlando FL* HAVE BEEN SELECTED TO PARTICIPATE IN AN AIR PASSENGER SURVEY BEING CONDUCTED IN THE BALTIMORE-WASHINGTON REGION.

YOUR PARTICIPATION IN THE SURVEY IS COMPLETELY VOLUNTARY; IT WILL ONLY TAKE A FEW MINUTES TO COMPLETE THE QUESTIONNAIRE.

A SURVEY REPRESENTATIVE IS HERE TO DISTRIBUTE THE QUESTIONNAIRES AND COLLECT THEM WHEN YOU ARE FINISHED.

Southwest Airlines **AND BALTIMORE / WASHINGTON INTERNATIONAL THURGOOD MARSHALL AIRPORT WOULD LIKE TO THANK YOU FOR YOUR COOPERATION."**

SUN 10/7/2007

10. After you have distributed questionnaires to the passengers waiting in the boarding area, move toward the check-in desk. Position yourself near the check-in desk, and, as passengers leave the desk, briefly explain the survey and hand them a questionnaire.

    IT IS EXTREMELY IMPORTANT THAT YOU DO NOT INTERFERE WITH THE CHECK-IN PROCESS.

11. If the flight package does not contain a sufficient number of questionnaires, use the extra forms that you should be carrying.

    Be sure to note the sequence numbers of the extra questionnaires on the survey log sheet.

12. Approximately ten minutes after the first announcement was read, ask the gate attendant to read it a second time, if possible.

13. As boarding time approaches, begin to hand out mail-back envelopes with the questionnaires to all late-arriving passengers, and any others who may not have time to complete the form.

14. At boarding time, the surveyor needs to collect all completed questionnaires while watching for additional late-arriving passengers. Your goal is to try and reach every passenger on that selected flight. If you miss some, it will be acceptable.
    ABOVE ALL ELSE, DO NOT INTERFERE WITH THE AIRLINES' BOARDING PROCESSES.

15. After the flight boards, there are two things the surveyors need to do:

    - Organize the flight package for the return to the office. Separate completed questionnaires from undistributed ones (and any that were not completed fully). Write down the number of mail-backs you distributed on the flight log; and,

- Obtain the total number of revenue passengers who boarded that flight from the airline gate attendant. Make sure the attendant gives you the ***revenue*** count. Record this number on the flight log sheet.

16. If the boarding process is delayed, try to stay at the gate so you can survey any late-arriving passengers.

17. When you have the chance, return to the field office and transfer your notes to the Flight Log.

18. When you are not surveying a flight or on a break, help the lead assistant maintain records and prepare for the upcoming flights.

19. Before leaving for the day, be sure to verify when your next shift will be, and what flights you are expected to survey.

PERSONNEL REQUIREMENTS

While working on this survey, you will be representing the Metropolitan Washington Council of Governments, the Maryland Aviation Administration of the Maryland Department of Transportation, the Metropolitan Washington Airports Authority, and to some extent, the airlines themselves. Your appearance must be business-like. It will be easier to conduct the interviews if you present yourself in this manner. Casual attire is not acceptable.

You are expected to engage only in activities or discussions that are directly related to the work of obtaining the information required for the survey.

The success or failure of this survey will be due in large part to your efforts. COG, MAA, and MWAA would like to thank you in advance for your participation in this survey. We are looking forward to conducting a survey that encounters fewer problems and produces even better results that the surveys done in the past.

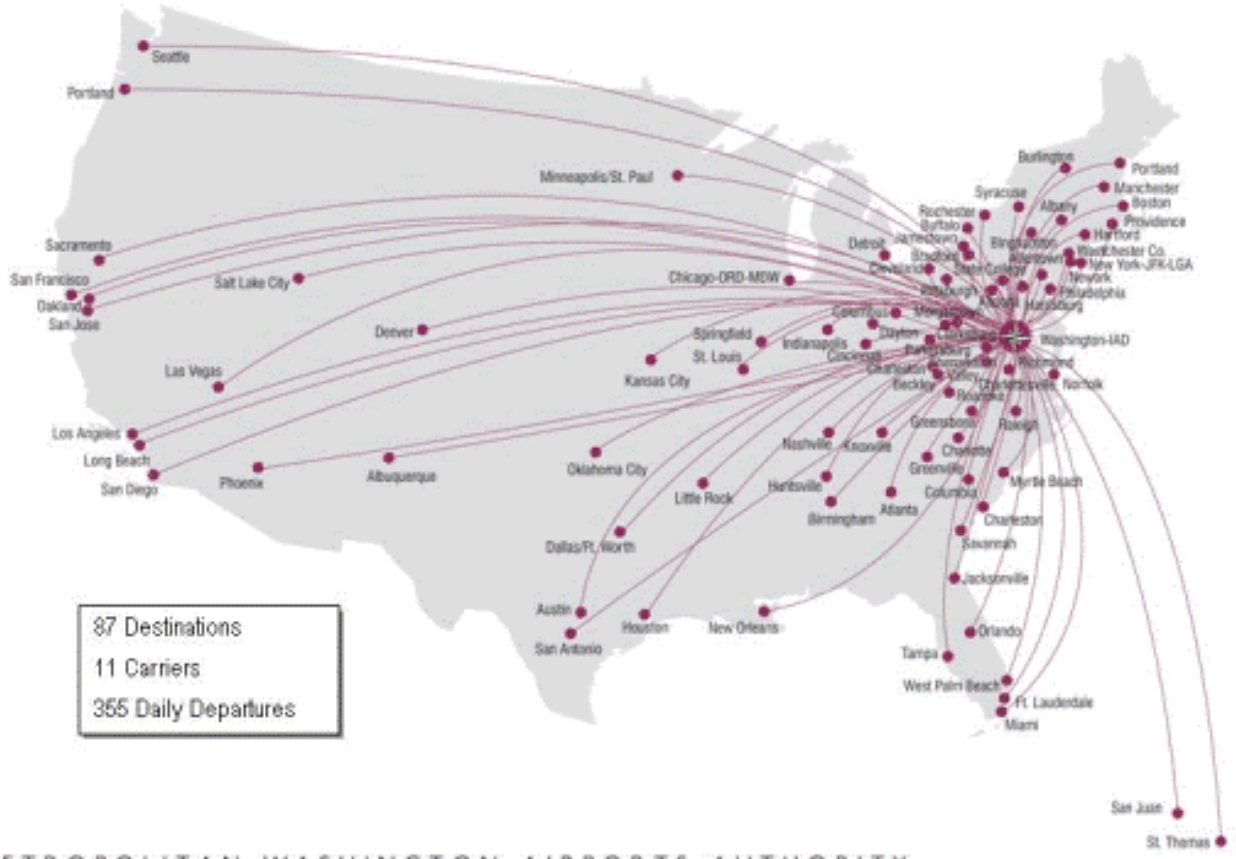
APPENDIX D

Washington-Baltimore

Regional Airports

Domestic Nonstop Service at Washington Dulles

Source: OAG January 25-31, 2008

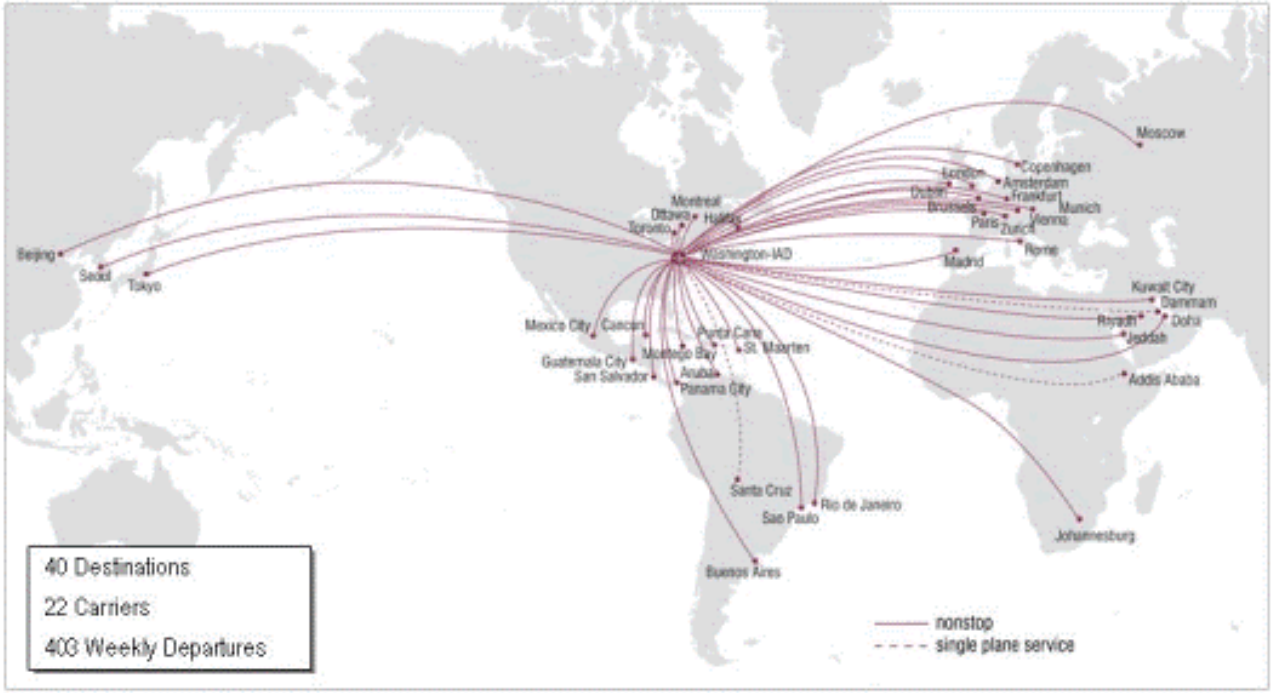


METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

International Air Service at Washington Dulles

Nonstop and single plane cities served to/from Dulles

Source: OAG January 25-31, 2008

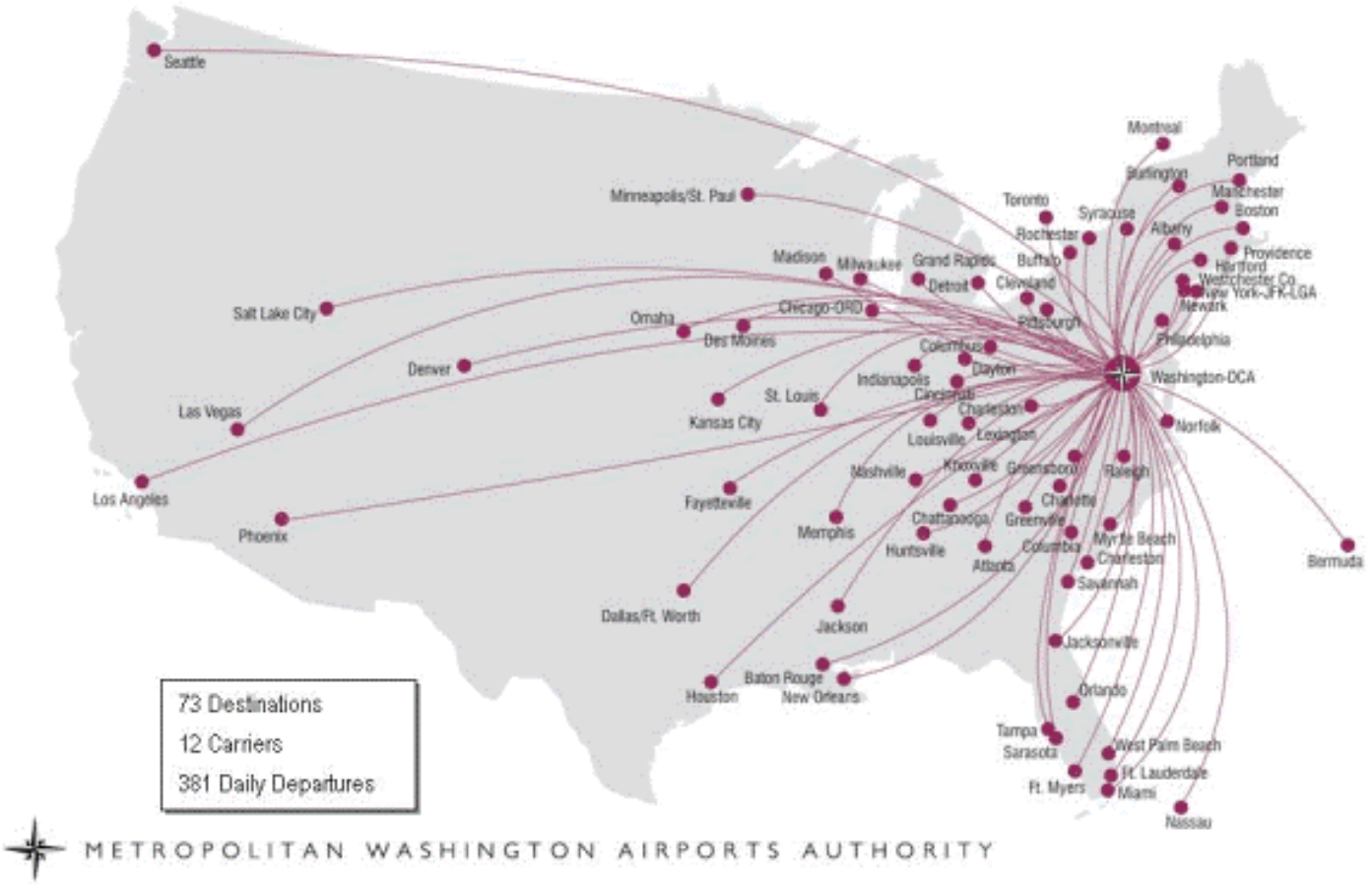


Addis Ababa
Amsterdam
Aruba
Beijing
Brussels
Buenos Aires
Cancun
Copenhagen
Dammam
Doha
Dublin
Frankfurt
Guatemala City
Halifax
Jeddah
Johannesburg
Kuwait
London
Madrid
Mexico City
Montego Bay
Montréal
Moscow
Munich
Ottawa
Panama City
Paris
Punta Cana
Rio de Janeiro
Riyadh
Rome
San Salvador
Santa Cruz
São Paulo
Seoul
St. Maarten
Tokyo
Toronto
Vienna
Zürich

METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

North America Nonstop Service at Washington National

Source: OAG January 25-31, 2008



METROPOLITAN WASHINGTON AIRPORTS AUTHORITY

Baltimore-Washington International Thurgood Marshall Airport

Top Five Passenger Airlines by Market Share CY 2007	Southwest (52.49%)
	AirTran (11.82%)
	Delta (6.56%)
	United (6.44%)
	US Airways (6.40%)
Number of Airlines Providing International Scheduled Service	5
	Air Canada Jazz
	Air Jamaica
	British Airways
	North American
	USA 3000
Number of International Nonstop Scheduled Destinations	8
	Accra, Ghana
	Cancun, Mexico
	Lagos, Nigeria
	La Romana, Dominican Republic
	London, England
	Montego Bay, Jamaica
	Punta Cana, Dominican Republic
	Toronto, Canada
Average Number of Domestic Nonstop Destinations (2/08)	62
Top Five Domestic Origin and Destination Airports to/from BWI in 2007	Orlando, Atlanta, Tampa, Boston and Providence
2006 US Rank according to Airports Council International (ACI)	24th for passengers