



**2011 Washington Baltimore
Regional Air Passenger Survey**

May 2011

DRAFT

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EXECUTIVE SUMMARY

In November 2011 a regional air passenger survey (APS) 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 23,500 passengers out of a total of 59,300 enplaning passengers on 686 flights were interviewed as they waited to board their planes, an overall response rate of 39%. More than 23,000 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 2011 regional air passenger survey was the tenth in a series of regional air passenger surveys conducted since 1981. Prior surveys were conducted in 1981/82, 1987, 1992, 1998, 2000, 2002, 2005, 2007 and 2009. Data from the air passenger surveys provides 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 2011 data to similar data collected in 2007 and 2009. 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.

Major findings from the 2011 APS are summarized below by the following areas of interest: airport usage, airport choice, airport preference, air trip purpose, ground trip origin, airport mode of access, and air traveler characteristics.

Airport Choice

In 2011, closest airport and cost were the most important factors in selecting an airport. While the percentage of passengers citing closest airport as their most important reason for choosing IAD declined when compared with 2009, more respondents cited more convenient flight times and frequent flyer status with specific airlines. Overall, quality of air service was less important than accessibility conditions in terms of airport choice.

Closest Airport

- 71% of DCA travelers (down from 72% in 2009)
- 42% of IAD travelers (down from 53% in 2009)
- 56% of BWI travelers (unchanged from 2009)

Lowest Airfare

- 4% of DCA travelers (down from 7% in 2009)
- 8% of IAD travelers (down from 16% in 2009)
- 18% of BWI travelers (down from 27% in 2009)

Airport Preference

- For all air passengers (both residents and non-residents of the area) airport preference changed little between 2009 and 2011. In 2011, 39% of the air passengers preferred DCA, 20% preferred IAD, and 28% preferred BWI. About 14% of air passengers expressed no preference for a particular airport.
- In 2011, 36% of area residents preferred DCA, 26% preferred IAD, and 31% preferred BWI.
- In 2011, 39% of non-residents preferred DCA, 14% preferred IAD, and 27% preferred BWI.

Trip Purpose

- In 2011, the percentage of locally originating air passengers reporting that they were traveling for non-business related reasons dropped from 62% in 2009 to 56% in 2011.
- While non-business trips such as vacation, and student or school related travel, personal or family affairs decreased, business related trips overall increased from 38% in 2009 to 44% in 2011.

Ground Trip Origin

- Between 2009 and 2011 the percentage of air passengers beginning their trips from a private residence increased from 56% to 60%.
- The percentage of air passengers beginning their trip to the airport from a hotel or motel dropped slightly, from 29% to 27%, between 2009 and 2011.

Mode of Access

- The most common mode of access to the airports in 2011 continued to be the automobile (private and rental), accounting for 63% of all local originations.
- Metrorail usage by passengers traveling to DCA continues to be among the highest proportions of any airport in the United States at 16%. However, access by private car to DCA remained the same at 32%.

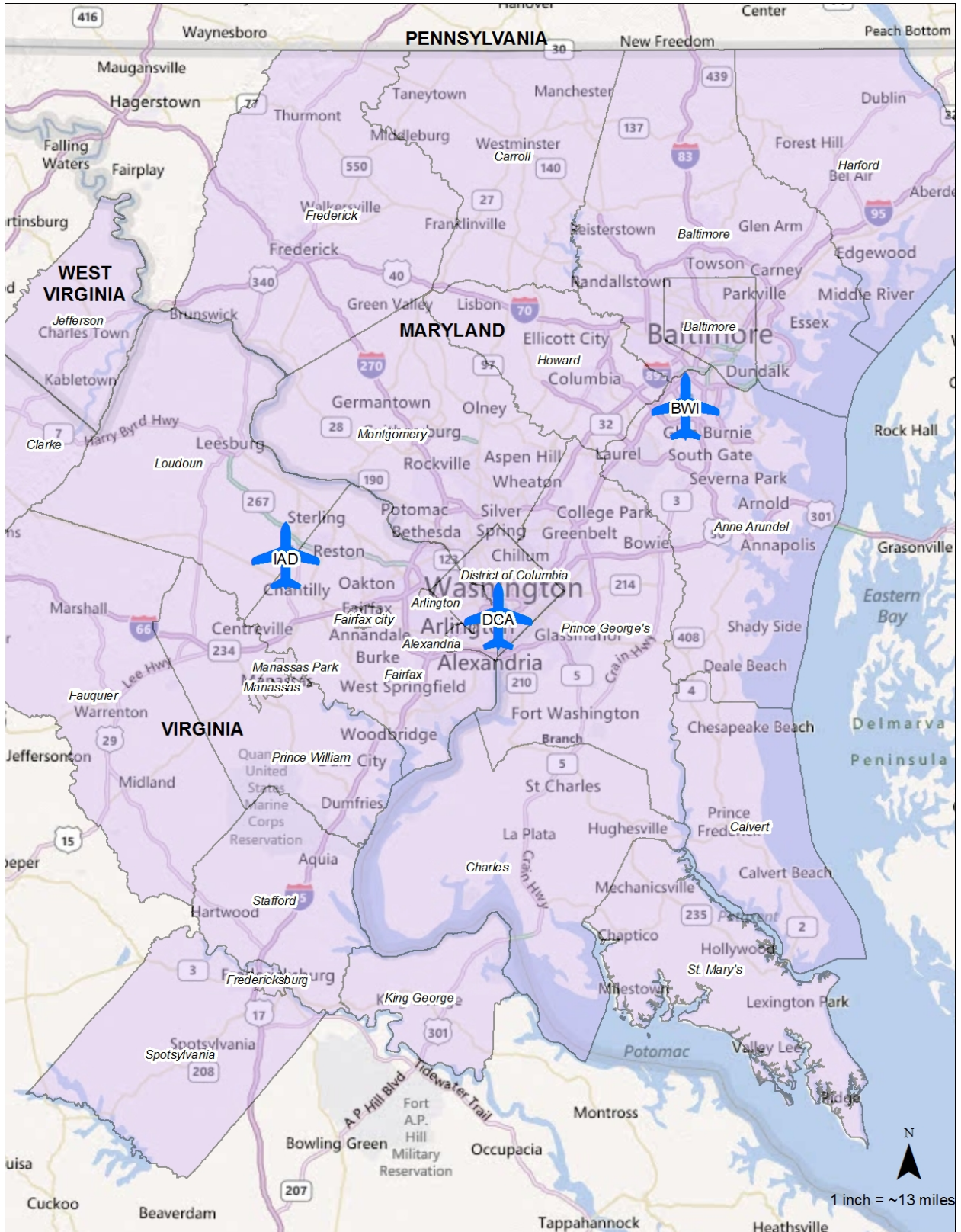
Air Traveler Characteristics

- In 2011, area residents accounted for 47% of the total departing air passengers, and non-residents 53%.
- Local originating passengers under the age of 25 dropped from 11% in 2009 to 7% in 2011, while the percentage of passengers age 35 and older show an increase of 4% between 2009 and 2011.

- Household incomes for air travelers in the Washington-Baltimore region continue to be higher than the regional median. In 2011, only 28% of the region's passengers had household incomes less than \$80,000, whereas 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 an annual household income of over \$120,000.

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. Project oversight was provided by the Aviation Technical Subcommittee of the TPB Technical Committee, composed of a broad range of Federal, State, Local, and private aviation interests.

Figure 1: Washington / Baltimore Air System Planning Region



INTRODUCTION

This report summarizes the findings from the 2011 Washington-Baltimore Regional Air Passenger Survey (APS) conducted concurrently at Ronald Reagan Washington National Airport (DCA), Washington Dulles International Airport (IAD), and Baltimore/Washington International Thurgood Marshall Airport (BWI). The Metropolitan Washington Council of Governments (COG) conducted this survey as part of its Continuous Airport System Planning (CASP) program. One of the goals of the CASP program is to continue the rational development of aviation facilities and services at the three major commercial airports serving the Washington-Baltimore region, shown in Figure 1.

The 2011 regional air passenger survey was the tenth in a series of regional air passenger surveys conducted since 1981. Prior surveys were conducted in 1981/82, 1987, 1992, 1998, 2000, 2002, 2005, 2007 and 2009. Data from the air passenger surveys provides 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
- Air passenger demand and allocation forecasting for future updates of the Washington-Baltimore Regional Airport System Plan

The 2011 air passenger survey was conducted during the two week period from Wednesday, November 2nd to Tuesday, November 15th. A small number of flights that were either missed or required resurveying were resurveyed between November 16th and November 22nd. Approximately 23,500 passengers out of a total of 59,300 enplaning passengers on 684 (605 domestic and 79 international) flights were interviewed as they waited to board their planes, an overall response rate of 39 percent. Nearly, 21,000 completed survey questionnaires representing the responses of these 29,700 passengers were collected, processed and tabulated.¹

¹ Families or groups traveling together may complete one questionnaire for their group, although it is preferable to have each individual over the age of 16 complete their own questionnaire.

Table 1: Data Collection Summary

Airport	Flights Surveyed	Revenue Passenger Count	Completed Surveys	Response Rate
BWI	229	22,933	8,766	38%
DCA	212	15,251	6,607	43%
IAD	243	21,137	8,057	38%
Total	684	59,321	23,430	39%
Mailback			133	
Grand Total			23,563	

The survey sample included flights from 35 airlines, of which 15 were international and 18 were domestic carriers. The sample flights were grouped into 335 destination clusters: 55 international and 280 domestic. The survey instrument contained questions regarding the respondent’s airline trip, the trip to the airport, the choice of airport, and several demographic questions, such as household size, household income, and respondent age. The 2011 survey questionnaire is included as Appendix B of this report.

FINDINGS - TRANSPORTATION

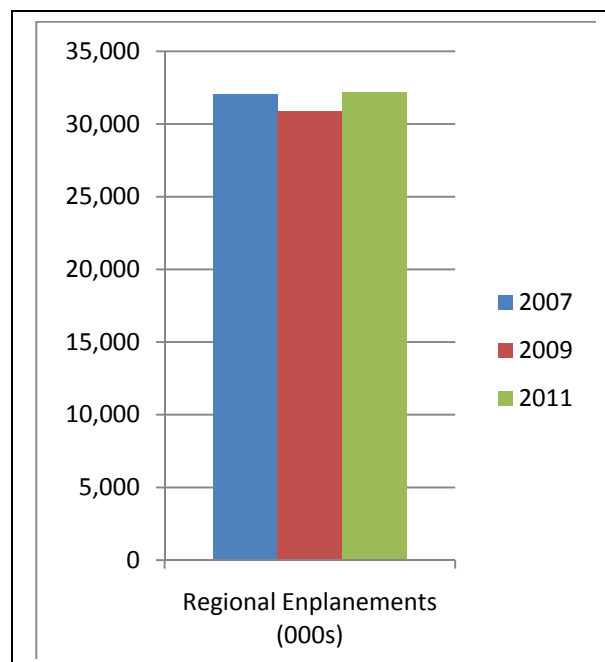
Survey results are summarized by airport as well as for the Washington-Baltimore air systems planning region as a whole. The various travel modes used to access each airport, trip purpose, number of trips at each airport, preferred airport, trip origin, place of origin, age of air travelers and income of air travelers are included. These summaries 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 2011 survey were collected over a two week period in October, the survey results have been annualized to observed annual passengers for the 12-month period from January to December 2011. 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 2011 survey results are compared with results from the 2007 and the 2009 surveys.

Airport Use (Survey Question A-1)²

Commercial aviation activity in the region rebounded slightly between 2009 and 2011, after a decline of 3% between 2007 and 2009. As shown in Table 2, observed annual enplanements in 2011 (32.1 million) are now 1.2 million higher than in 2009 (30.8 million).

Table 2 shows that the both local originating and connecting enplanements have increased regionally between 2009 and 2011. However, local originating enplanements increased by almost 3% while connecting enplanements increased by almost 10%. While local originating enplanements increased at IAD and DCA, a decline of 1.5% was observed at BWI. Regionally, IAD accounted for 79% of the local originating enplanement increase and DCA 21%.



The greatest percentage increase in connecting passengers between 2009 and 2011 was seen at BWI: 889,000, an increase of 56%. Connecting passengers dropped by 560,000 at IAD (a 12% decline), and increased by 351,000 at DCA (44% increase). Connecting passengers at BWI accounted for 72% of the total regional increase in connecting passengers, a situation attributed to the greater use of BWI as a hub airport for the merged operations of Southwest Airlines and AirTran Airways.³

The largest change in the number of local originating air passengers between 2009 and 2011 was observed at IAD: up 598,000 passengers, an increase of 9%. At DCA, local originating passengers increased by 160,000 between 2009 and 2011. Local originating air passengers at BWI went down by 142,000 (a 2% decrease) between 2009 and 2011. Regionally, local originating air passengers increased by 160,000 between 2009 and 2011, or a 2.5% increase.

Figure 2, Figure 3, and Figure 4 illustrate the airport share of local originating passengers, connecting passengers, and total enplaning passengers from the surveys conducted in 2007, 2009, and 2011. In 2009, the greatest share of the region's total enplaning passengers departed from IAD, which accounted for 37% (down from 38% in 2007), while 34% (up from 33% in 2007) departed from BWI and 29% (same as in 2007) departed from DCA. IAD had the greatest share of the region's connecting passengers (66%) and BWI has the greatest share of the region's local originating passengers.

² Where applicable, references are given to the survey question for which data are compiled for the analysis.

³ Southwest and AirTran merged on XXX date but kept separate operations until XXX date.

Table 2: Annual Air Passenger Trip Originations (000s⁴)

Enplanement Type		BWI			IAD			DCA			Region		
		2007	2009	2011	2007	2009	2011	2007	2009	2011	2007	2009	2011
Local originations (came by ground transportation)	<i>Number</i>	8,795	8,898	8,756	6,495	6,898	7,496	8,341	8,051	8,211	23,631	23,847	24,463
	<i>Percent</i>	84%	85%	78%	53%	60%	65%	89%	91%	88%	74%	77%	76%
Connected from another flight	<i>Number</i>	1,657	1,579	2,468	5,768	4,644	4,078	995	797	1,148	8,420	7,020	7,694
	<i>Percent</i>	16%	15%	22%	47%	40%	35%	11%	9%	12%	26%	23%	24%
Total Enplanement	<i>Number</i>	10,452	10,477	11,224	12,263	11,542	11,574	9,336	8,848	9,359	32,051	30,867	32,157
Percent of Region		33%	34%	35%	38%	37%	36%	29%	29%	29%	100%	100%	100%

Notes:

* Totals may not add due to rounding

* "Total Enplanements" includes passengers on domestic scheduled, commuter and international flights

⁴ Unless otherwise noted, "000s" means "thousands of originations"

Figure 2: Airport Share of Annual Local Originating Passengers

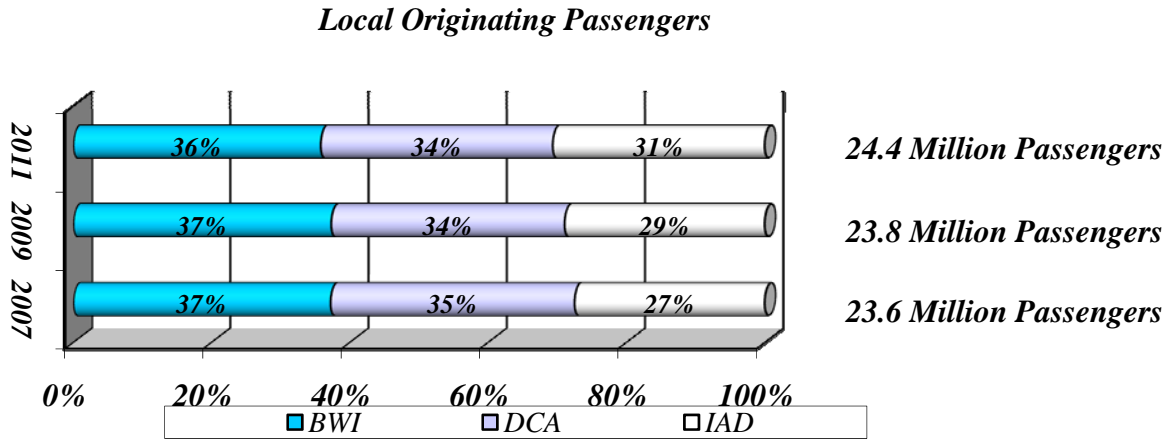


Figure 3: Airport Share of Annual Connecting Passengers

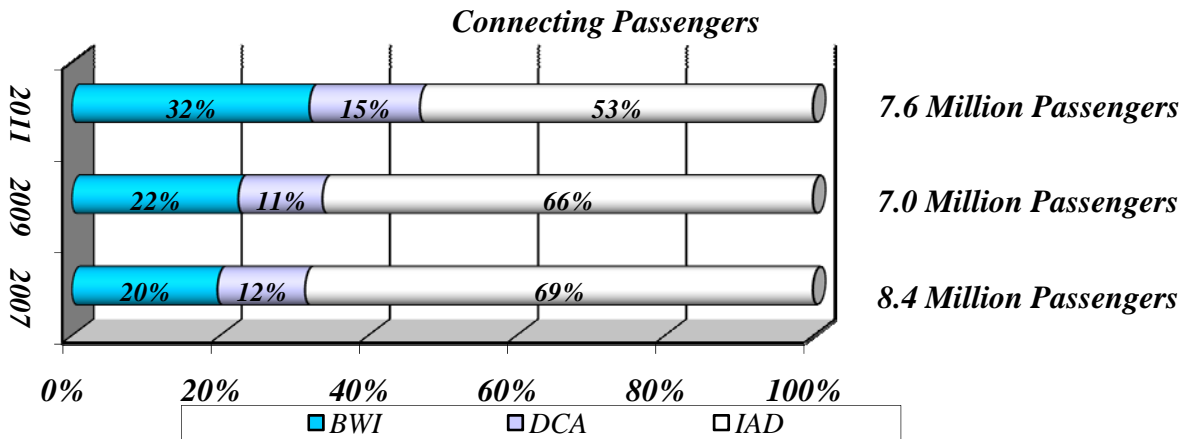
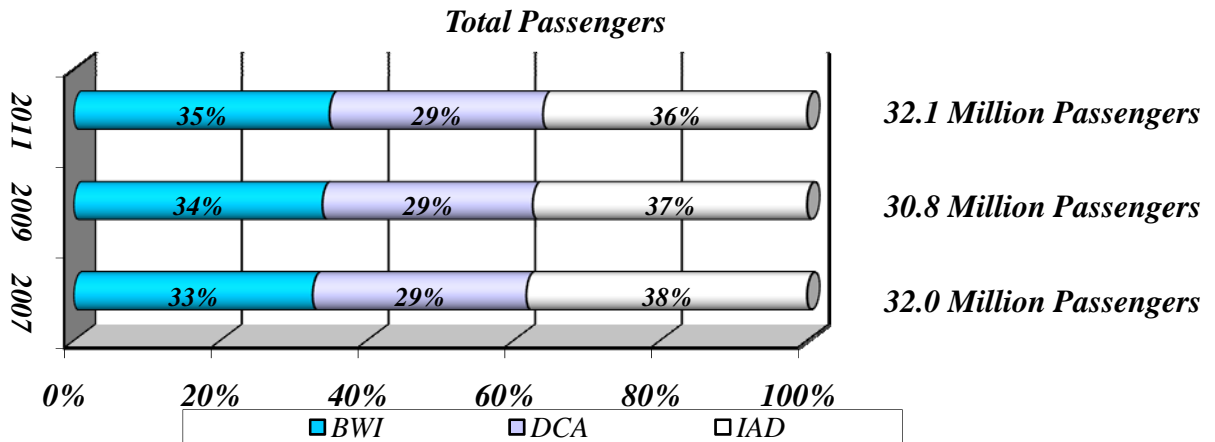


Figure 4: Airport Share of Total Annual Passengers

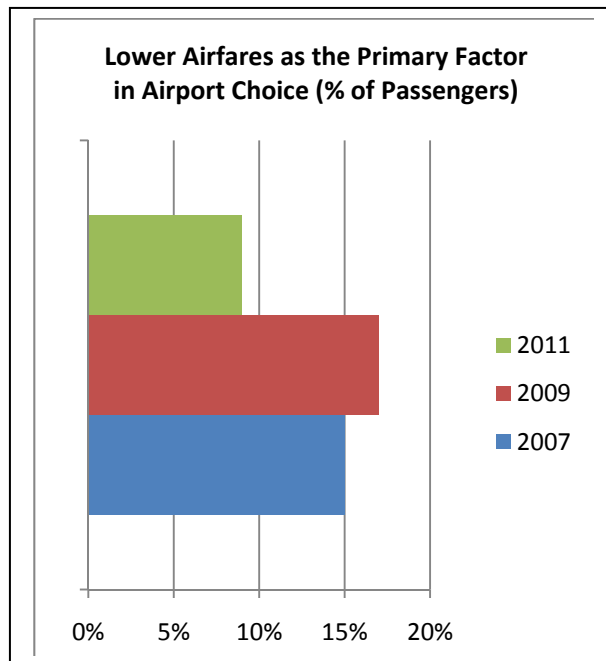


Airport Choice (Survey Question C-3)

Survey respondents were asked to rank the three most important reasons (out of a list of nine) for choosing the airport from where they were flying. Table 3 summarizes the airport choice responses, which are categorized either as 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).

When compared with 2009, in 2011 the percentage of locally originating passengers citing accessibility conditions as the most important factor in airport choice declined from 66% to 61% at the regional level. While the percentage of passengers citing this reason remained virtually unchanged at IAD between 2007 and 2009, a significant decline was observed between 2009 and 2011 - from 57% to 44%. This change suggests that convenience of flight times, availability of direct non-stop flights to destinations, and less expensive airfare may have caused an increase in quality of air service factors (and corresponding decline in the prominence of accessibility factors) for passengers choosing IAD.

While quality of air service as an important reason for choosing an airport showed a slight increase from 31% in 2007 to 33% in 2009, this factor decreased slightly in 2011 to 32%;



however, passengers citing less expensive airfare as a key factor of airport choice dropped dramatically at all three regional airports between 2009 and 2011. Of the quality of air service characteristics, the percentage of passengers citing lower airfares as the primary reason for choosing an airport declined 17% in 2009 to 9 percent in 2011, reversing an upward trend observed between 2007 and 2009. While passengers would be expected to be more sensitive to prices during an economic recession, the decline in lower airfare as an airport choice factor suggests that airlines may have also lowered their fares in response to the economic conditions. In addition, survey results discussed in a later section of this report indicate that the typical air traveler using the three regional airports is fairly affluent and thus may be relatively price insensitive and place

more value on time: the percentage of passengers citing more convenient flight times as the most important reason gained two percentage points when compared with 2009.

Airport Preference (Survey Question C-2)

Passengers were also asked which airport they would have preferred to use for their trip as travel restrictions and service availability sometimes present passengers from using their preferred airport. Table 4 shows the percentages for preferred airport, by airport, for locally originating passengers for each of the survey years.

For the region, in 2011, 38% of locally originating passengers preferred to use DCA, 19% preferred to fly out of IAD. These findings are similar to 2009. In 2011, 28% (up from 27% in 2009) preferred to travel from BWI. Fourteen percent of the passengers expressed no particular preference for one of the region's three commercial airports, down from 16% in 2009.

Between 2009 and 2011, there was a slight change in the number of passengers flying out of their preferred airport. In 2011, 67% of the local originating air passengers reported that they flew out of their preferred airport, up from 64% in 2009. Figure 3 illustrates these percentages for the three most recent survey years.

Table 3: Reasons for Airport Choice

Primary reason for choosing airport used	BWI			IAD			DCA			REGION		
	2007	2009	2011	2007	2009	2011	2007	2009	2011	2007	2009	2011
<u>Accessibility</u>												
Closest airport	58%	56%	56%	54%	53%	42%	69%	72%	71%	61%	61%	57%
Better public ground transportation	0%	1%	0%	0%	1%	0%	6%	6%	4%	2%	3%	2%
Better access roads and parking	4%	3%	3%	3%	3%	2%	1%	1%	1%	3%	2%	2%
SUBTOTAL --Accessibility	62%	60%	59%	57%	57%	44%	76%	79%	76%	66%	66%	61%
<u>Quality of Air Service</u>												
More convenient flight times	5%	5%	7%	9%	8%	11%	8%	8%	8%	7%	7%	9%
Only airport with direct/non-stop flight	4%	4%	4%	11%	11%	14%	3%	2%	3%	5%	5%	7%
Less expensive airfare	24%	27%	18%	14%	16%	8%	7%	7%	4%	15%	17%	9%
Frequent flyer with specific airline	2%	1%	4%	4%	4%	7%	2%	2%	2%	2%	2%	4%
Only airport serving market	2%	1%	2%	3%	3%	5%	1%	1%	1%	2%	2%	3%
SUBTOTAL --												
Quality of Air Service	37%	39%	35%	41%	42%	45%	21%	20%	19%	31%	33%	32%
OTHER	2%	1%	6%	2%	2%	11%	2%	1%	5%	2%	1%	7%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals may not add due to rounding

* "Total Enplanements" include passengers on scheduled domestic, commuter and international flights

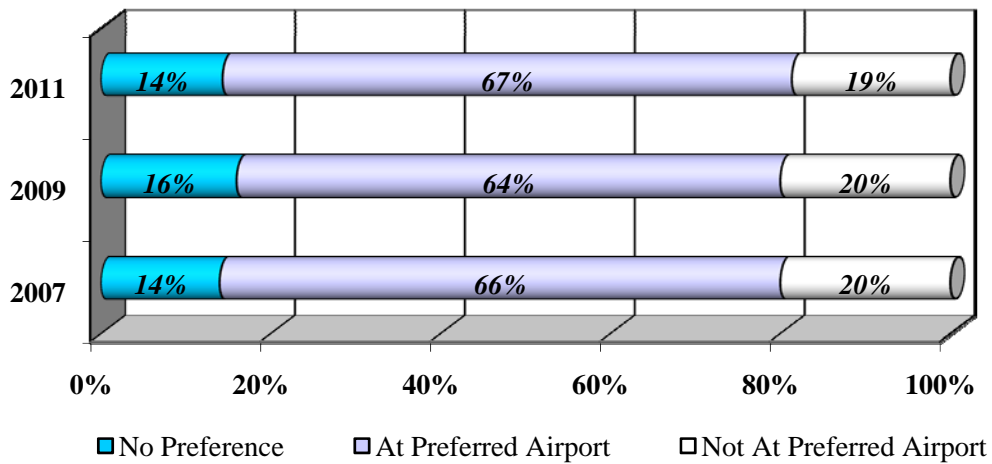
Table 4: Annual Originating Air Passengers' Preferred Airport (000s)

Preferred Airport		BWI			IAD			DCA		
		2007	2009	2011	2007	2009	2011	2007	2009	2011
BWI	<i>Number</i>	5,881	5,522	5,942	429	455	389	281	276	238
	<i>Percent</i>	70%	65%	70%	7%	7%	6%	3%	4%	3%
IAD	<i>Number</i>	411	530	435	3,286	3,303	3,566	427	504	587
	<i>Percent</i>	5%	6%	5%	54%	50%	52%	5%	7%	7%
DCA	<i>Number</i>	959	1,180	1,068	1,454	1,549	1,623	6,074	5,946	6,092
	<i>Percent</i>	11%	14%	13%	24%	24%	23%	75%	77%	77%
No Preference	<i>Number</i>	1,171	1,297	998	953	1,248	1,333	1,299	1,023	1,010
	<i>Percent</i>	14%	15%	12%	16%	19%	19%	16%	13%	13%
TOTAL	<i>Number</i>	8,422	8,529	8,443	6,122	6,555	6,911	8,081	7,749	7,927
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-Respondents		367	365	311	374	338	581	262	300	287
Total Originations		8,789	8,894	8,754	6,496	6,893	7,492	8,343	8,049	8,214

Notes:

** Totals may not add due to rounding*

Figure 5: Travel from Preferred Airport (Originating Passengers Only)



The difference in airport preference between residents and non-residents is summarized in Table 5. In 2011, local originating passengers who were visiting the region (non-residents) accounted for 53% of local originating passengers. Of these visitors, 39% selected DCA as their preferred airport compared with 36% percent of resident air passengers who preferred DCA. Preference rates for non-residents were 14% and 27% for IAD and BWI, respectively, compared to 23% and 31% for residents. Non-residents continued to be least likely to express a preference for a particular airport, (20%), compared to residents (10%).

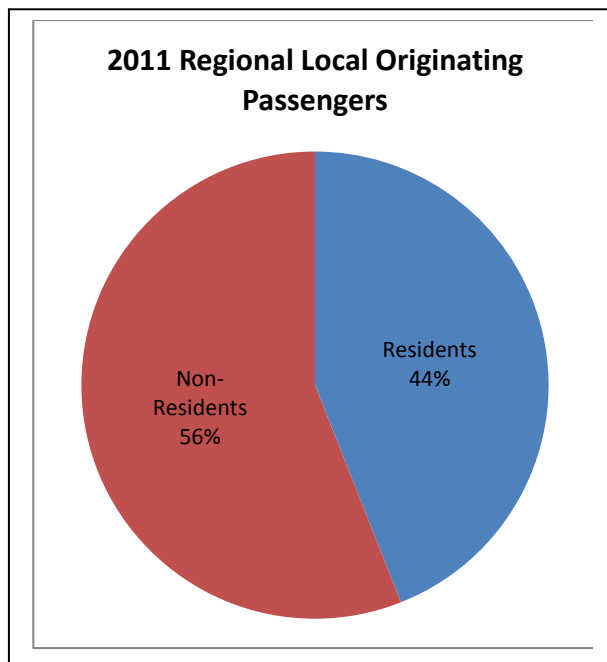


Table 5: Annual Originating Air Passengers' Preferred Airport by Resident Status (000s)

Preferred Airport		Non-Residents			Residents			TOTAL		
		2007	2009	2011	2007	2009	2011	2007	2009	2011
BWI	<i>Number</i>	2,959	3,138	3,085	2,940	2,415	3,143	5,899	5,553	6,228
	<i>Percent</i>	26%	26%	27%	34%	31%	31%	29%	27%	29%
IAD	<i>Number</i>	1,512	1,789	1,656	1,917	1,716	2,311	3,429	3,505	3,967
	<i>Percent</i>	13%	15%	14%	22%	22%	23%	17%	17%	18%
DCA	<i>Number</i>	4,393	4,634	4,464	3,201	3,227	3,681	7,594	7,861	8,145
	<i>Percent</i>	39%	38%	39%	37%	41%	36%	38%	39%	38%
No Preference	<i>Number</i>	2,464	2,722	2,304	613	559	981	3,077	3,281	3,285
	<i>Percent</i>	22%	22%	20%	7%	7%	10%	15%	16%	15%
TOTAL	<i>Number</i>	11,328	12,283	11,509	8,671	7,917	10,116	19,999	20,200	21,625
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals do not include non-respondents and resident unknown

Trip Purpose (Survey Question A-3)

In 2011, the percentage of locally originating air passengers reporting that they were traveling for non-business related reasons decreased compared to 2009. In past surveys, business-related travel accounted for a little than half of all reported travel. As shown in Table 6, this percentage increased to 44% in 2011 from 38% in 2009. In 2011 non-business vacation travel dropped from 24% in 2009 to 21% and student/school-related travel dropped from 5% to 3%. Similarly, personal or family related travel dropped from 29% in 2009 to 28% in 2011.

Figure 6 shows air travel by trip purpose at each of the three airports in 2011. This figure shows that DCA generally has the greatest percentage of business-related air travel, IAD has the greatest percentage of vacation-related travel and BWI has the greatest percentage of personal or family-related travel.

Figure 6: Annual Originating Air Passengers by Trip Purpose (Percent by Airport)

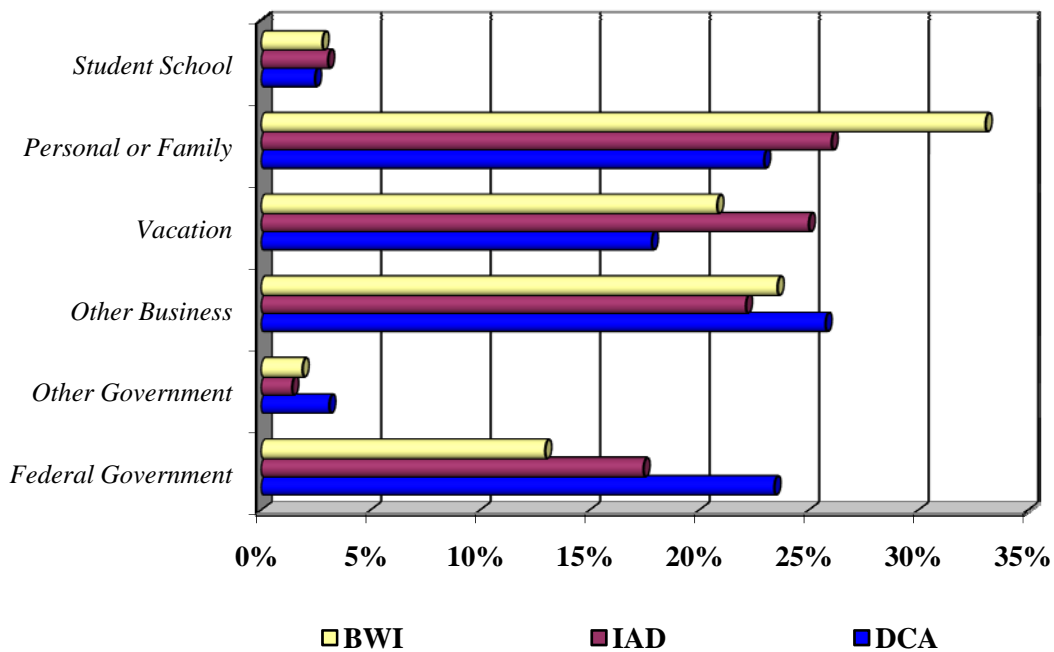


Table 6: Annual Originating Air Passenger Trip Purpose (000s)

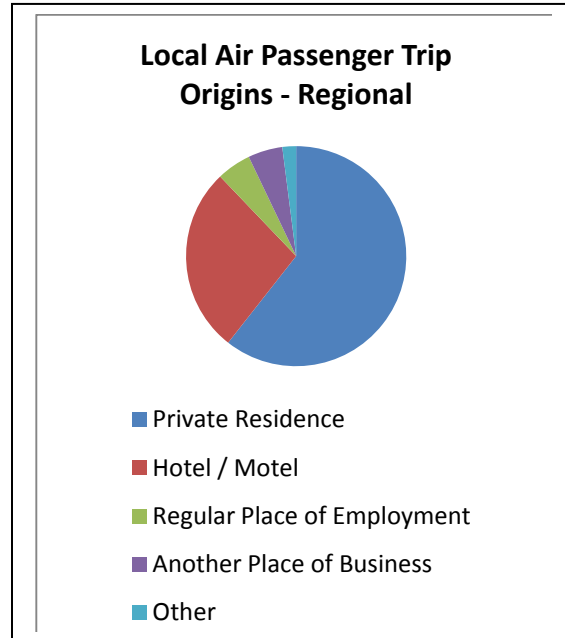
Trip Purpose		BWI			IAD			DCA			REGION		
		2007	2009	2011	2007	2009	2011	2007	2009	2011	2007	2009	2011
<i>Business Related</i>													
Business related to federal government (inc. military)	<i>Number</i>	902	933	1,127	991	1,158	1,259	1,840	1,672	1,915	3,733	3,763	4,301
	<i>Percent</i>	10%	11%	13%	15%	17%	17%	22%	21%	23%	16%	16%	18%
Other government-related business	<i>Number</i>	151	136	165	102	110	103	222	184	255	475	430	523
	<i>Percent</i>	2%	2%	2%	2%	2%	1%	3%	2%	3%	2%	2%	2%
Other Business	<i>Number</i>	1,889	1,692	2,048	1,391	1,238	1,596	2,164	1,838	2,106	5,444	4,768	5,750
	<i>Percent</i>	22%	19%	24%	22%	18%	22%	26%	23%	26%	23%	20%	24%
SUBTOTAL -- Business	<i>Number</i>	2,942	2,761	3,340	2,484	2,506	2,958	4,226	3,694	4,276	9,652	8,961	10,574
	<i>Percent</i>	34%	31%	38%	39%	37%	41%	51%	46%	52%	41%	38%	44%
<i>Non-Business Related</i>													
Vacation	<i>Number</i>	2,044	2,243	1,809	1,870	1,728	1,803	1,449	1,791	1,458	5,363	5,762	5,070
	<i>Percent</i>	23%	25%	21%	29%	25%	25%	17%	22%	18%	23%	24%	21%
Personal or family affairs	<i>Number</i>	3,234	2,990	2,873	1,680	1,997	1,878	2,016	1,822	1,877	6,930	6,809	6,628
	<i>Percent</i>	37%	34%	33%	26%	29%	26%	24%	23%	23%	30%	29%	28%
Student or school related	<i>Number</i>	362	567	244	194	199	221	374	347	202	930	1,113	667
	<i>Percent</i>	4%	6%	3%	3%	3%	3%	5%	4%	2%	4%	5%	3%
Other	<i>Number</i>	154	304	417	172	373	347	232	346	356	558	1,023	1,120
	<i>Percent</i>	2%	3%	5%	3%	5%	5%	3%	4%	4%	2%	4%	5%
SUBTOTAL -- Non-Business	<i>Number</i>	5,794	6,104	5,343	3,916	4,297	4,249	4,071	4,306	3,893	13,781	14,707	13,485
	<i>Percent</i>	66%	69%	62%	61%	63%	59%	49%	54%	48%	59%	62%	56%
TOTAL	<i>Number</i>	8,736	8,865	8,683	6,400	6,803	7,207	8,297	8,000	8,169	23,433	23,668	24,059
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-Respondents		60	29	74	95	90	286	45	50	47	200	169	407
Total Originations		8,796	8,894	8,757	6,495	6,893	7,493	8,342	8,050	8,216	23,633	23,837	24,466

Notes:

* Totals may not add due to rounding

Trip Origin (Survey Question B-1)

Table 7 summarizes the ground trip origin responses for the last three survey years. As shown, in the current and past surveys, most local passengers left for the airport from a private residence. Between 2009 and 2011, the percentage of air passengers beginning their trip from a private residence increased from 56% to 60%. Those leaving from a hotel or motel showed a slight decrease from 29% in 2009 to 27% in 2011. DCA continued to have the greatest percentage of passengers originating from a hotel or motel at 33%. 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.



Mode of Access (Survey Question B-7)

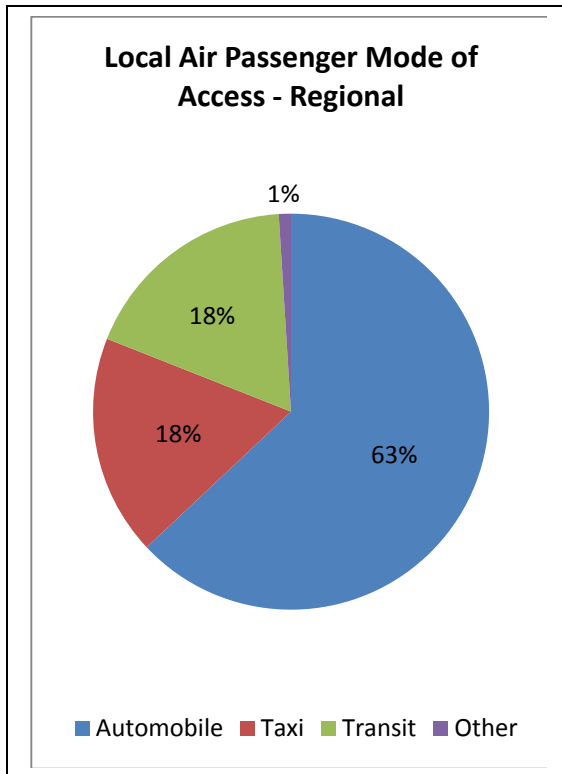


Table 8 provides a summary of mode of access to each airport and for the region. Regionally, as in previous surveys, the most common mode of access to the airports in 2011 was the automobile (both private autos and rental cars), accounting for 63% of all local originations. Taxicabs were used by 18% of the passengers, and public transportation⁵ carried 15% of passengers. Courtesy buses provided by hotels and motels accounted for only 4% of all local originations in 2011, the same as in 2009.

Metrorail usage by passengers traveling to DCA continues to be among the highest proportions of any airport in the nation, at 16%. However, access by private car to DCA showed a slight increase to 35% in 2011 from 32% in 2007 and 2009. The percentage of air passengers arriving by rental car at DCA remained unchanged at 8% compared with 2009 findings.

⁵ Metrorail, Metrobus / MTA bus, MTA light rail, MARC commuter rail, and airport buses, vans, and limousines.

Table 7: Annual Originating Air Passengers' Ground Trip Origin (000s)

Ground Trip Origin		BWI			IAD			DCA			REGION		
		2007	2009	2011	2007	2009	2011	2007	2009	2011	2007	2009	2011
Private residence	<i>Number</i>	5,769	5,376	5,740	3,895	4,026	4,570	3,627	3,614	4,127	13,291	13,016	14,437
	<i>Percent</i>	66%	61%	66%	62%	61%	64%	44%	46%	51%	57%	56%	60%
Hotel/motel	<i>Number</i>	1,893	2,073	1,811	1,676	1,813	1,885	3,288	2,992	2,708	6,857	6,878	6,404
	<i>Percent</i>	22%	24%	21%	27%	27%	26%	40%	38%	33%	30%	29%	27%
Passenger's regular place of employment	<i>Number</i>	409	436	463	296	242	272	465	464	476	1,170	1,142	1,211
	<i>Percent</i>	5%	5%	5%	5%	4%	4%	6%	6%	6%	5%	5%	5%
Another place of business	<i>Number</i>	410	446	418	281	268	252	668	541	631	1,359	1,255	1,301
	<i>Percent</i>	5%	5%	5%	4%	4%	4%	8%	7%	8%	6%	5%	5%
Other	<i>Number</i>	212	446	228	131	303	140	218	286	146	561	1,035	514
	<i>Percent</i>	2%	5%	3%	2%	5%	2%	3%	4%	2%	2%	4%	2%
TOTAL	<i>Number</i>	8,693	8,777	8,660	6,279	6,652	7,119	8,266	7,897	8,088	23,238	23,326	23,867
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-Respondents		96	121	96	197	246	377	70	154	123	363	521	596
Total Originations		8,789	8,898	8,756	6,476	6,898	7,496	8,336	8,051	8,211	23,601	23,847	24,463

Notes:

* Totals may not add due to rounding

Analyzing mode of access by resident status (as shown in Figure 7) reveals some interesting differences. While residents of the region overwhelmingly used the private auto to access an airport, air passengers visiting the region continued to be more evenly distributed among private autos (35%), rental cars (21%) and taxicabs (20%). This percentage split also occurred in both 2007 and 2009. Non-resident air passengers were also more likely than resident air travelers to use rail transit for ground access to the airport.

Table 8 through Table 12 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 7: Departing Passenger Mode of Access by Resident Status

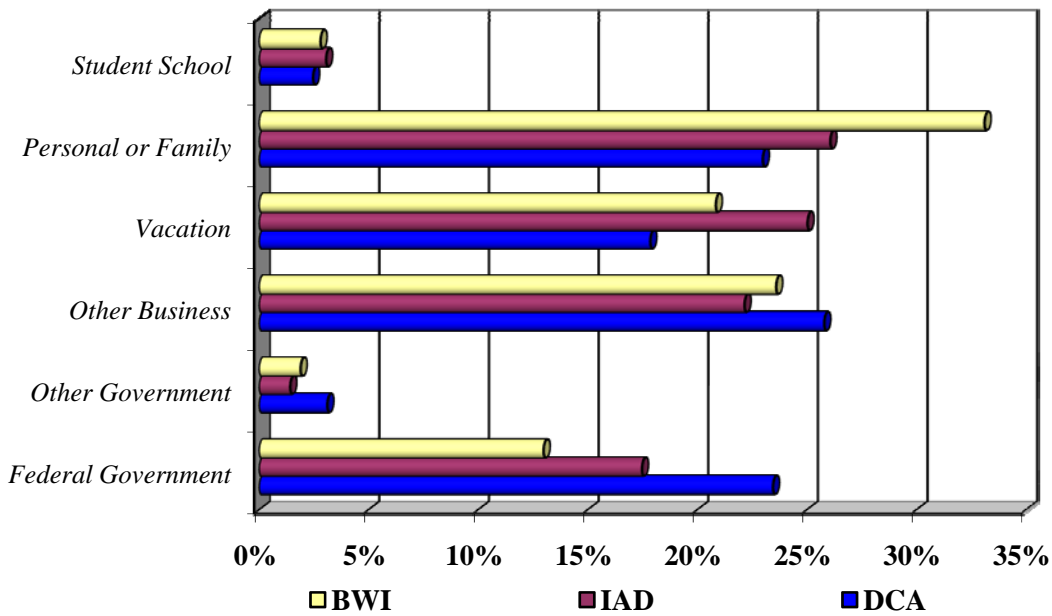


Table 8: Annual Originating Air Passenger Mode of Access (000s)

Mode of Access		BWI			IAD			DCA			REGION		
		2007	2009	2011	2007	2009	2011	2007	2009	2011	2007	2009	2011
Private car	Number	5,563	5,189	5,551	3,413	3,537	3,847	2,639	2,524	2,782	11,615	11,250	12,180
	Percent	64%	59%	64%	54%	53%	55%	32%	32%	35%	50%	48%	51%
Rental car	Number	1,478	1,480	1,217	908	1,017	923	793	652	655	3,179	3,149	2,795
	Percent	17%	17%	14%	14%	15%	13%	10%	8%	8%	14%	14%	12%
Taxi	Number	493	444	516	1,018	946	1,174	2,570	2,483	2,520	4,081	3,873	4,210
	Percent	6%	5%	6%	16%	14%	17%	31%	32%	31%	18%	17%	18%
Metrorail (DCA)	Number	25	60	29	74	77	35	1,116	1,284	1,275	1,215	1,421	1,339
	Percent	0%	1%	0%	1%	1%	0%	14%	16%	16%	5%	6%	6%
Rail service	Number	140	208	187	NA	NA	NA	5	5	9	145	213	196
	Percent	2%	2%	2%				0%	0%	0%	1%	1%	1%
Light Rail (BWI)	Number	24	66	74	NA	NA	NA	NA	NA	NA	24	66	74
	Percent	0%	1%	1%			0%			0%	0%	0%	0%
Airport bus / Van / Limo	Number	728	803	571	571	648	630	555	444	375	1,854	1,895	1,576
	Percent	8%	9%	7%	9%	10%	9%	7%	6%	5%	8%	8%	7%
Hotel / motel courtesy bus	Number	244	260	289	290	199	246	545	380	327	1,079	839	862
	Percent	3%	3%	3%	5%	3%	3%	7%	5%	4%	5%	4%	4%
Metrobus / MTA Bus	Number	NA	NA	79	NA	NA	142	NA	NA	53	NA	NA	274
	Percent			1%			2%			1%			1%
Other	Number	10	223	103	33	196	58	16	109	53	59	528	214
	Percent	0%	3%	1%	1%	3%	1%	0%	1%	1%	0%	2%	1%
TOTAL	Number	8,705	8,733	8,616	6,307	6,620	7,055	8,239	7,881	8,049	23,251	23,234	23,720
	Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-Respondents		86	164	140	174	275	441	101	169	162	361	608	743
Total Originations		8,791	8,897	8,756	6,481	6,895	7,496	8,340	8,050	8,211	23,612	23,842	24,463

Notes:

* Totals may not add due to rounding

Table 9: Annual Originating Air Passenger Mode of Access by Resident Status, BWI (000s)

Mode of Access		Non-Residents			Residents			TOTAL		
		2007	2009	2011	2007	2009	2011	2007	2009	2011
Private car	<i>Number</i>	1,841	2,001	2,006	3,035	2,547	3,234	4,876	4,548	5,240
	<i>Percent</i>	44%	42%	47%	87%	87%	84%	63%	59%	65%
Rental car	<i>Number</i>	1,300	1,321	1,110	33	43	42	1,333	1,364	1,152
	<i>Percent</i>	31%	27%	26%	1%	1%	1%	17%	18%	14%
Taxi	<i>Number</i>	323	305	330	108	65	136	431	370	466
	<i>Percent</i>	8%	6%	8%	3%	2%	4%	6%	5%	6%
Metrorail (DCA)	<i>Number</i>	11	47	14	11	11	14	22	58	28
	<i>Percent</i>	0%	1%	0%	0%	0%	0%	0%	1%	0%
Rail service	<i>Number</i>	76	122	91	57	69	80	133	191	171
	<i>Percent</i>	2%	3%	2%	2%	2%	2%	2%	2%	2%
Light Rail (BWI)	<i>Number</i>	14	45	44	10	12	24	24	57	68
	<i>Percent</i>	0%	1%	1%	0%	0%	1%	0%	1%	1%
Airport bus / Van / Limo	<i>Number</i>	419	573	370	227	140	166	646	713	536
	<i>Percent</i>	10%	12%	9%	6%	5%	4%	8%	9%	7%
Hotel / motel courtesy bus	<i>Number</i>	211	224	193	17	18	65	228	242	258
	<i>Percent</i>	5%	5%	5%	0%	1%	2%	3%	3%	3%
Metrobus / MTA Bus	<i>Number</i>	NA	NA	36	NA	NA	39	NA	NA	75
	<i>Percent</i>			1%			1%			1%
Other	<i>Number</i>	5	174	64	0	32	30	5	206	94
	<i>Percent</i>	0%	4%	2%	0%	1%	1%	0%	3%	1%
TOTAL	<i>Number</i>	4,200	4,812	4,258	3,498	2,937	3,830	7,698	7,749	8,088
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals do not include resident unknown, and non-respondents for mode of access.

Table 10: Annual Originating Passenger Mode of Access by Resident Status, DCA (000s)

Mode of Access		Non-Residents			Residents			TOTAL		
		2007	2009	2011	2007	2009	2011	2007	2009	2011
Private car	<i>Number</i>	876	861	838	1,413	1,353	1,747	2,289	2,214	2,585
	<i>Percent</i>	19%	19%	20%	55%	53%	55%	31%	32%	35%
Rental car	<i>Number</i>	679	581	575	62	15	33	741	596	608
	<i>Percent</i>	14%	13%	13%	2%	1%	1%	10%	9%	8%
Taxi	<i>Number</i>	1,739	1,555	1,541	584	653	758	2,323	2,208	2,299
	<i>Percent</i>	37%	35%	36%	23%	26%	24%	32%	32%	31%
Metrorail (DCA)	<i>Number</i>	602	722	740	421	444	476	1,023	1,166	1,216
	<i>Percent</i>	13%	16%	17%	16%	17%	15%	14%	17%	16%
Rail service	<i>Number</i>	0	3	5	0	1	2	0	4	7
	<i>Percent</i>	0%	0%	0%	0%	0%	0%	0%	0%	0%
Light Rail (BWI)	<i>Number</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA
	<i>Percent</i>									
Airport bus / Van / Limo	<i>Number</i>	401	301	210	99	67	128	500	368	338
	<i>Percent</i>	8%	7%	5%	4%	3%	4%	7%	5%	5%
Hotel / motel courtesy bus	<i>Number</i>	417	346	294	6	5	6	423	351	300
	<i>Percent</i>	9%	8%	7%	0%	0%	0%	6%	5%	4%
Metrobus / MTA Bus	<i>Number</i>	NA	NA	33	NA	NA	8	NA	NA	41
	<i>Percent</i>			1%			0%			1%
Other	<i>Number</i>	12	82	28	5	8	22	17	90	50
	<i>Percent</i>	0%	2%	1%	0%	0%	1%	0%	1%	1%
TOTAL	<i>Number</i>	4,726	4,451	4,264	2,590	2,546	3,180	7,316	6,997	7,444
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals do not include resident unknown, and non-respondents for mode of access.

Table 11: Annual Originating Air Passenger Mode of Access by Resident Status, IAD (000s)

Mode of Access		Non-Residents			Residents			TOTAL		
		2007	2009	2011	2007	2009	2011	2007	2009	2011
Private car	<i>Number</i>	876	1,170	1,096	1,914	1,774	2,348	2,790	2,944	3,444
	<i>Percent</i>	37%	40%	40%	76%	76%	76%	57%	56%	59%
Rental car	<i>Number</i>	711	796	711	27	15	39	738	811	750
	<i>Percent</i>	30%	27%	26%	1%	1%	1%	15%	15%	13%
Taxi	<i>Number</i>	331	358	387	413	380	483	744	738	870
	<i>Percent</i>	14%	12%	14%	16%	16%	16%	15%	14%	15%
Metrorail (DCA)	<i>Number</i>	39	43	10	11	17	14	50	60	24
	<i>Percent</i>	2%	1%	0%	0%	1%	0%	1%	1%	0%
Rail service	<i>Number</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA
	<i>Percent</i>									
Light Rail (BWI)	<i>Number</i>	NA	NA	NA	NA	NA	NA	NA	NA	NA
	<i>Percent</i>									
Airport bus / Van / Limo	<i>Number</i>	282	317	293	144	140	156	426	457	449
	<i>Percent</i>	12%	11%	11%	6%	6%	5%	9%	9%	8%
Hotel / motel courtesy bus	<i>Number</i>	115	137	171	10	3	21	125	140	192
	<i>Percent</i>	5%	5%	6%	0%	0%	1%	3%	3%	3%
Metrobus / MTA Bus	<i>Number</i>	NA	NA	47	NA	NA	22	NA	NA	69
	<i>Percent</i>			2%			1%			1%
Other	<i>Number</i>	13	120	31	0	13	15	13	133	46
	<i>Percent</i>	1%	4%	1%	0%	1%	0%	0%	3%	1%
TOTAL	<i>Number</i>	2,367	2,941	2,746	2,519	2,342	3,098	4,886	5,283	5,844
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals do not include resident unknown, and non-respondents for mode of access.

Table 12: Annual Originating Air Passenger Mode of Access by Resident Status, Region (000s)

Mode of Access		Non-Residents			Residents			TOTAL		
		2007	2009	2011	2007	2009	2011	2007	2009	2011
Private car	<i>Number</i>	3,593	4,033	3,940	6,362	5,674	7,329	9,955	9,706	11,269
	<i>Percent</i>	32%	33%	35%	74%	72%	73%	50%	48%	53%
Rental car	<i>Number</i>	2,690	2,698	2,396	122	73	114	2,812	2,771	2,510
	<i>Percent</i>	24%	22%	21%	1%	1%	1%	14%	14%	12%
Taxi	<i>Number</i>	2,393	2,218	2,258	1,105	1,098	1,377	3,498	3,316	3,635
	<i>Percent</i>	21%	18%	20%	13%	14%	14%	18%	17%	17%
Metrorail (DCA)	<i>Number</i>	652	812	764	443	472	502	1,095	1,284	1,268
	<i>Percent</i>	6%	7%	7%	5%	6%	5%	6%	6%	6%
Rail service	<i>Number</i>	76	126	96	57	70	82	133	195	178
	<i>Percent</i>	1%	1%	1%	1%	1%	1%	1%	1%	1%
Light Rail (BWI)	<i>Number</i>	14	45	44	10	12	24	24	57	68
	<i>Percent</i>	0%	0%	0%	0%	0%	0%	0%	0%	0%
Airport bus / Van / Limo	<i>Number</i>	1,102	1,191	873	470	347	450	1,572	1,538	1,323
	<i>Percent</i>	10%	10%	8%	5%	4%	4%	8%	8%	6%
Hotel / motel courtesy bus	<i>Number</i>	743	707	658	33	27	92	776	733	750
	<i>Percent</i>	7%	6%	6%	0%	0%	1%	4%	4%	4%
Metrobus / MTA Bus	<i>Number</i>	NA	NA	116	NA	NA	69	NA	NA	185
	<i>Percent</i>			1%			1%			1%
Other	<i>Number</i>	30	376	123	5	54	67	35	429	190
	<i>Percent</i>	0%	3%	1%	0%	1%	1%	0%	2%	1%
TOTAL	<i>Number</i>	11,293	12,206	11,268	8,607	7,827	10,106	19,900	20,029	21,376
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

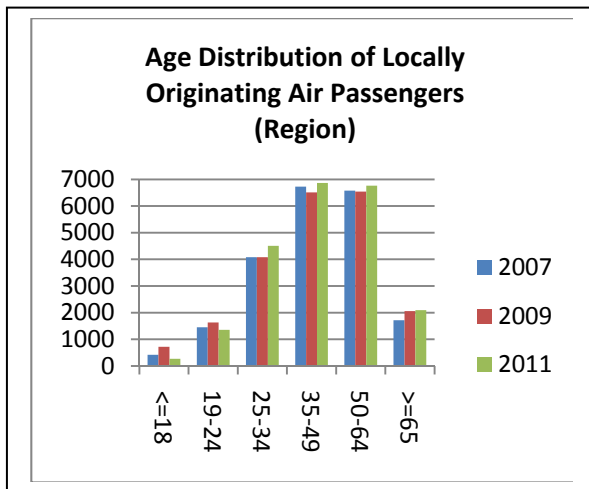
* Totals do not include resident unknown, and non-respondents for mode of access.

FINDINGS - AIR TRAVELER CHARACTERISTICS

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

Resident Status (Question D-1)

Table 13 summarizes resident status for locally originating air passengers in 2007, 2009, and 2011. While the expected 60% non-resident / 40% resident split was observed (similar to 2009, 2007, and pre-2005 survey results)⁶, in 2011 the share of resident trips increased from 39% percent in 2009 to 47% in 2011. A more significant drop in non-resident trip originations was observed at BWI.

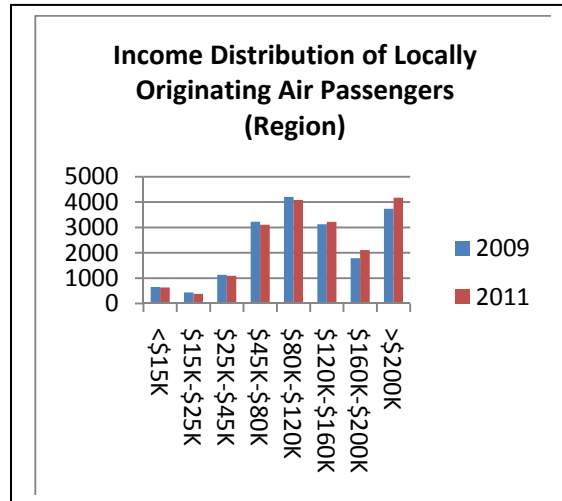


Age (Survey Question D-3)

Between 2007 and 2009, the percentage of locally originating air passengers under the age of 25 increased slightly to 11%; however, in 2011 this age group decreased to only 7% of local originations. Passengers between the ages of 25 and 49 show a slight increase from 49% in 2009 to 52% in 2011. Departing passengers over the age of 65 have remained unchanged between 2009 and 2011. Table 14 provides the detailed age distribution for passengers at the three airports and the region as a whole.

Income (Survey Question D-4)

Air travelers in the Washington-Baltimore region continue to have high household incomes. Table 15 shows originating air passengers household income data at the three airports and the region. The median household income for the region is \$78,040.⁷ The median household income for the U.S. is \$51,914.⁸ In 2011, a little over half of the region’s originating air passengers had household incomes of at least \$120,000, an increase when compared to the 2009 and 2007 findings. At BWI, the share of



⁶ The 2005 APS was conducted during spring rather than autumn, and the seasonal variation in air travel resulted in a 50/50 split between residents and non-residents for locally originating air passengers.

⁷ In 2010 inflation adjusted dollars for the Washington-Baltimore-Northern Virginia DC-MD-VA-WV Combined Statistical Area. Source: 2006-2010 American Community Survey

⁸ *Ibid.*

departing passengers with a household income of less than \$120,000 decreased from 58% in 2009 to 53% in 2011. A similar decrease was also observed at IAD while a smaller decrease occurred at DCA for the same income group. On average, air travelers at DCA had slightly higher household incomes than passengers at IAD and BWI.

Comparing between residents and non-residents shows that over half of area resident departing passengers have an annual household income over \$120,000 (see Table 16). Conversely, almost 54% of non-resident departing passengers have annual household incomes below that number. This finding demonstrates that air travelers from the Washington-Baltimore region are affluent relative to the regional and national distribution of household income.

Table 13: Annual Originating Air Passenger Resident Status (000s)

Resident Status		BWI			IAD			DCA			REGION		
		2007	2009	2011	2007	2009	2011	2007	2009	2011	2007	2009	2011
Resident	<i>Number</i>	3,524	2,969	3,835	2,544	2,365	3,103	2,604	2,579	3,178	8,672	7,913	10,116
	<i>Percent</i>	46%	38%	47%	51%	44%	52%	35%	36%	42%	43%	39%	47%
Non-Resident	<i>Number</i>	4,216	4,869	4,321	2,418	3,013	2,849	4,745	4,511	4,339	11,379	12,393	11,509
	<i>Percent</i>	54%	62%	53%	49%	56%	48%	65%	64%	58%	57%	61%	53%
TOTAL	<i>Number</i>	7,740	7,838	8,156	4,962	5,378	5,952	7,349	7,090	7,517	20,051	20,306	21,625
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals do not include non-respondents and resident unknown

* Totals may not add due to rounding

Table 14: Annual Originating Air Passenger Age (000s)

Age Group		BWI			IAD			DCA			REGION		
		2007	2009	2011	2007	2009	2011	2007	2009	2011	2007	2009	2011
18 or Younger	<i>Number</i>	238	416	90	107	210	83	77	96	99	422	722	272
	<i>Percent</i>	3%	5%	1%	2%	3%	1%	1%	1%	1%	2%	3%	1%
19 to 24 Years	<i>Number</i>	664	732	517	289	422	396	497	480	445	1,450	1,634	1,358
	<i>Percent</i>	8%	9%	7%	5%	7%	6%	7%	7%	6%	7%	8%	6%
25 to 34 Years	<i>Number</i>	1,472	1,414	1,538	1,083	1,058	1,407	1,528	1,607	1,559	4,083	4,079	4,504
	<i>Percent</i>	19%	18%	19%	20%	17%	22%	20%	22%	21%	19%	19%	21%
35 to 49 Years	<i>Number</i>	2,324	2,220	2,382	1,868	2,004	2,097	2,536	2,287	2,388	6,728	6,511	6,867
	<i>Percent</i>	30%	27%	30%	34%	33%	32%	34%	31%	32%	32%	30%	31%
50 to 64 Years	<i>Number</i>	2,523	2,500	2,524	1,694	1,783	1,924	2,358	2,257	2,317	6,575	6,540	6,765
	<i>Percent</i>	32%	31%	32%	31%	29%	30%	31%	31%	31%	31%	30%	31%
65 or Older	<i>Number</i>	652	796	885	510	627	594	553	637	618	1,715	2,060	2,097
	<i>Percent</i>	8%	10%	11%	9%	10%	9%	7%	9%	8%	8%	10%	10%
TOTAL	<i>Number</i>	7,873	8,078	7,936	5,551	6,104	6,501	7,549	7,364	7,426	20,973	21,546	21,863
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Non-Respondents		915	817	820	929	788	992	787	685	788	2,631	2,290	2,600
Total Originations		8,788	8,895	8,756	6,480	6,892	7,493	8,336	8,049	8,214	23,604	23,836	24,463

Notes:

* Totals may not add due to rounding

Table 15: Annual Originating Air Passenger Annual Household Income (000s)

Annual Household Income		BWI		IAD		DCA		TOTAL	
		2009	2011	2009	2011	2009	2011	2009	2011
Less than \$15,000	<i>Number</i>	296	234	190	192	164	208	650	634
	<i>Percent</i>	4%	3%	4%	4%	3%	3%	4%	3%
\$15,000 - \$24,999	<i>Number</i>	188	137	125	136	124	108	437	381
	<i>Percent</i>	3%	2%	2%	2%	2%	2%	2%	2%
\$25,000 - \$44,999	<i>Number</i>	440	429	336	330	353	336	1,129	1,095
	<i>Percent</i>	6%	6%	7%	6%	6%	5%	6%	6%
\$45,000 - \$79,999	<i>Number</i>	1,354	1,293	958	851	911	961	3,223	3,105
	<i>Percent</i>	20%	19%	19%	16%	15%	15%	18%	17%
\$80,000 - \$119,999	<i>Number</i>	1,678	1,564	1,128	1,180	1,394	1,338	4,200	4,082
	<i>Percent</i>	24%	23%	22%	22%	22%	21%	23%	22%
\$120,000 - \$159,999	<i>Number</i>	1,181	1,236	861	854	1,084	1,129	3,126	3,219
	<i>Percent</i>	17%	18%	17%	16%	17%	17%	17%	17%
\$160,000 - \$199,999	<i>Number</i>	593	686	519	629	674	791	1,786	2,106
	<i>Percent</i>	9%	10%	10%	12%	11%	12%	10%	11%
\$200,000 and up	<i>Number</i>	1,138	1,286	1,045	1,292	1,555	1,596	3,738	4,174
	<i>Percent</i>	17%	19%	20%	24%	25%	25%	20%	22%
TOTAL	<i>Number</i>	6,868	6,865	5,162	5,464	6,259	6,467	18,289	18,796
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%
Non-Respondents		2,034	1,895	1,733	2,026	1,788	1,746	5,555	5,667
Total Originations		8,902	8,760	6,895	7,490	8,047	8,213	23,844	24,463

Notes:

* Totals may not add due to rounding

Table 16: Annual Originating Air Passenger Household Income by Resident Status (000s)

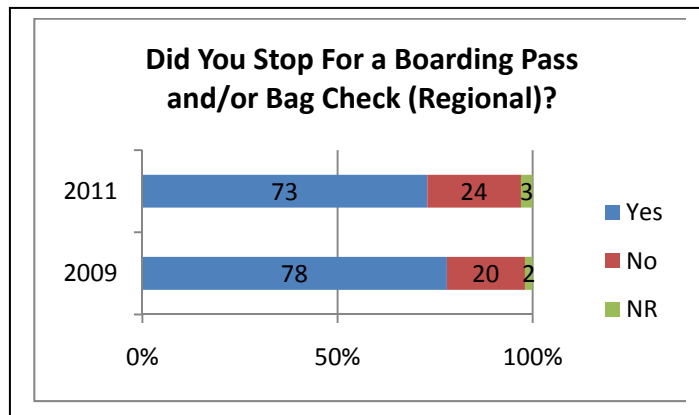
Annual Household Income		Resident	Non-Resident	Unknown	Total
Less than \$15,000	<i>Number</i>	220	302	112	634
	<i>Percent</i>	3%	3%	8%	3%
\$15,000 - \$24,999	<i>Number</i>	91	217	73	381
	<i>Percent</i>	1%	2%	5%	2%
\$25,000 - \$44,999	<i>Number</i>	340	654	101	1,095
	<i>Percent</i>	4%	7%	7%	6%
\$45,000 - \$79,999	<i>Number</i>	1,066	1,757	282	3,105
	<i>Percent</i>	13%	19%	20%	17%
\$80,000 - \$119,999	<i>Number</i>	1,704	2,083	295	4,082
	<i>Percent</i>	21%	22%	21%	22%
\$120,000 - \$159,999	<i>Number</i>	1,487	1,567	165	3,219
	<i>Percent</i>	18%	17%	12%	17%
\$160,000 - \$199,999	<i>Number</i>	1,020	956	130	2,106
	<i>Percent</i>	13%	10%	9%	11%
\$200,000 and up	<i>Number</i>	2,169	1,774	231	4,174
	<i>Percent</i>	27%	19%	17%	22%
TOTAL	<i>Number</i>	8,097	9,310	1,389	18,796
	<i>Percent</i>	100%	100%	100%	100%
Non-Respondents		2,023	2,197	1,447	5,667
Total Originations		10,120	11,507	2,836	24,463

Boarding Pass and Bag Checking (Question A-4)

As in the 2009 survey, passengers were asked where and if passengers had made a stop for a boarding pass and/or bag check at the following locations:

- Curbside agent for boarding pass
- Curbside agent for bag check
- E-ticket kiosk for boarding pass
- E-ticket kiosk for bag check
- Ticket agent in terminal for boarding pass
- Ticket agent in terminal for bag check
- None of the above

Table 17 shows the distribution of originating air passenger activities for boarding pass and bag checking at airport terminals. Overall, 73% of departing passengers reported stopping for a boarding pass and/or bag check: 74% at DCA, 72% at IAD, and 73% at BWI. Conversely, 24% percent of departing passengers reported to have made no stop for either a boarding pass and/or bag check: 24% at both DCA and BWI and 23% at IAD. When



compared with the 2009 findings, passengers who made a stop for a boarding pass and/or bag check decreased at all three airports. The reduction in stops for a boarding pass could be attributed to passengers having boarding pass printed before arriving at the airport. The decline in stops for bag checking is likely due to both the increased use of checked baggage fees by more airlines and increases in the fees themselves.

Among passengers who reported to have made a stop for boarding pass and/or bag check, 34% used the E-ticket Kiosk: 39% DCA, 27% at IAD, and 32% at BWI. Nineteen percent made a stop at the Terminal Ticket Agent: 18% at DCA, 27% at IAD, and 22% at BWI. Passengers have also used airport terminal airline curbside facilities for boarding pass and/or bag checking services. Overall, 7% of passengers reported using the curbside facilities for these services: 5% at DCA, 6% at IAD, and 12% at BWI.

Comparison of domestic and international departing passengers shows that among domestic departures overall, 73% stopped for a boarding pass and/or bag check: 74% at DCA, 69% at IAD, and 73% at BWI. Among international departures, 80% stopped for a boarding pass and/or bag check overall: 83% at DCA, 79% at IAD, and 84% at BWI. Table 18 shows departing passenger activities for boarding pass and bag checking at all three airport terminals by domestic and international travel. Table 19 breaks down the information by airport, for domestic travel only; Table 20 shows the same information but for international travel only.

Table 17: At-Airport Use of Boarding Pass and Bag Check Facilities

Passengers at Airport Boarding Pass and Bag Check		BWI		IAD		DCA		TOTAL	
		2009	2011	2009	2011	2009	2011	2009	2011
Only stopped at Curbside for Boarding Pass	<i>Number</i>	178	220	98	140	116	163	392	523
	<i>Percent</i>	2%	3%	1%	2%	1%	2%	2%	2%
Only stopped at Curbside for Bag Check	<i>Number</i>	486	537	179	163	206	175	871	875
	<i>Percent</i>	5%	6%	3%	2%	3%	2%	4%	4%
Only stopped at E-ticket Kiosk for Boarding Pass	<i>Number</i>	1,334	1,506	1,035	1,022	2,033	1,979	4,401	4,507
	<i>Percent</i>	15%	17%	15%	14%	25%	24%	18%	18%
Only stopped at E-ticket Kiosk for Bag Check	<i>Number</i>	781	544	593	424	455	395	1,830	1,363
	<i>Percent</i>	9%	6%	9%	6%	6%	5%	8%	6%
Only stopped at Ticket Agent for Boarding Pass	<i>Number</i>	625	581	600	702	653	631	1,879	1,914
	<i>Percent</i>	7%	7%	9%	9%	8%	8%	8%	8%
Only stopped at Ticket Agent for Bag Check	<i>Number</i>	746	861	449	729	416	484	1,611	2,074
	<i>Percent</i>	8%	10%	7%	10%	5%	6%	7%	8%
Stopped at Curbside for Boarding Pass and Bag Check	<i>Number</i>	386	479	153	197	388	304	928	980
	<i>Percent</i>	4%	5%	2%	3%	5%	4%	4%	4%
Stopped at E-ticket Kiosk for Boarding Pass and Bag Check	<i>Number</i>	723	438	501	418	821	538	2,045	1,394
	<i>Percent</i>	8%	5%	7%	6%	10%	7%	9%	6%
Stopped at Ticket Agent for Boarding Pass and Bag Check	<i>Number</i>	702	621	813	900	445	502	1,960	2,023
	<i>Percent</i>	8%	7%	12%	12%	6%	6%	8%	8%
Stopped at Curbside and E-ticket Kiosk for Boarding Pass and Bag Check	<i>Number</i>	10	4	12	10	18	23	40	37
	<i>Percent</i>	0%	0%	0%	0%	0%	0%	0%	0%
Stopped at Curbside and Ticket Agent for Boarding Pass and Bag Check	<i>Number</i>	6	9	36	28	13	24	55	61
	<i>Percent</i>	0%	0%	1%	0%	0%	0%	0%	0%
Stopped at E-ticket Kiosk and Ticket Agent for Boarding Pass and Bag Check	<i>Number</i>	58	45	60	57	65	50	183	152
	<i>Percent</i>	1%	1%	1%	1%	1%	1%	1%	1%
Stopped at more than place for Boarding Pass and Bag Check	<i>Number</i>	618	581	704	607	856	828	2,179	2,016
	<i>Percent</i>	7%	7%	10%	8%	11%	10%	9%	8%
Did Not stop for Boarding Pass or Bag Check	<i>Number</i>	2,099	2,119	1,372	1,705	1,409	1,940	4,880	5,764
	<i>Percent</i>	24%	24%	20%	23%	18%	24%	20%	24%
Non Respondents	<i>Number</i>	143	210	288	387	155	181	587	778
	<i>Percent</i>	2%	2%	4%	5%	2%	2%	2%	3%
Total	<i>Number</i>	8,896	8,755	6,895	7,489	8,050	8,217	23,841	24,461
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals may not add due to rounding

Table 18: At-Airport Use of Boarding Pass and Bag Check Facilities by Destination

Passengers at Airport Boarding Pass and Bag Check		Domestic		International		Total	
		2009	2011	2009	2011	2009	2011
Only stopped at Curbside for Boarding Pass	<i>Number</i>	355	429	38	94	392	523
	<i>Percent</i>	2%	2%	2%	4%	2%	2%
Only stopped at Curbside for Bag Check	<i>Number</i>	850	835	40		890	835
	<i>Percent</i>	4%	4%	2%	0%	4%	3%
Only stopped at E-ticket Kiosk for Boarding Pass	<i>Number</i>	4,282	4,337	120	170	4,401	4,507
	<i>Percent</i>	20%	20%	6%	7%	18%	18%
Only stopped at E-ticket Kiosk for Bag Check	<i>Number</i>	1,692	1,256	137	107	1,830	1,363
	<i>Percent</i>	8%	6%	6%	4%	8%	6%
Only stopped at Ticket Agent for Boarding Pass	<i>Number</i>	1,592	1,601	287	313	1,879	1,914
	<i>Percent</i>	7%	7%	14%	13%	8%	8%
Only stopped at Ticket Agent for Bag Check	<i>Number</i>	1,440	1,787	171	287	1,611	2,074
	<i>Percent</i>	7%	8%	8%	12%	7%	8%
Stopped at more than place for Boarding Pass and/or Bag Check	<i>Number</i>	6,450	5,695	940	1,003	7,390	6,698
	<i>Percent</i>	30%	26%	44%	41%	31%	27%
Did Not stop for Boarding Pass or Bag Check	<i>Number</i>	4,612	5,418	268	346	4,880	5,764
	<i>Percent</i>	21%	25%	13%	14%	20%	24%
Non Respondents	<i>Number</i>	472	622	115	156	587	778
	<i>Percent</i>	2%	3%	5%	6%	2%	3%
Total	<i>Number</i>	21,744	21,980	2,116	2,476	23,859	24,456
	<i>Percent</i>	100%	100%	100%	100%	100%	100%

Notes:

* Totals may not add due to rounding

For passengers who used the curbside facilities only, 82% stopped for both a bag check and boarding pass while 18% did so for a boarding pass only. For passengers who used the e-ticket

kiosk only, 47% stopped for both a bag check and boarding pass while 53% stopped for a boarding pass only. For passengers who used only a ticket agent 66% stopped for both a bag check and boarding pass while 34% did so for a boarding pass only.

Table 19: At-Airport Use of Boarding Pass and Bag Check Facilities by Airport, Domestic Departures

Passengers at Airport Boarding Pass and Bag Check		BWI		IAD		DCA		Total	
		2009	2011	2009	2011	2009	2011	2009	2011
Only stopped at Curbside for Boarding Pass	<i>Number</i>	177	214	63	52	114	163	355	429
	<i>Percent</i>	2%	3%	1%	1%	1%	2%	2%	2%
Only stopped at Curbside for Bag Check	<i>Number</i>	485	526	161	137	204	172	850	835
	<i>Percent</i>	6%	6%	3%	3%	3%	2%	4%	4%
Only stopped at E-ticket Kiosk for Boarding Pass	<i>Number</i>	1,333	1,499	937	874	2,012	1,964	4,282	4,337
	<i>Percent</i>	15%	18%	18%	16%	25%	24%	20%	20%
Only stopped at E-ticket Kiosk for Bag Check	<i>Number</i>	773	539	465	324	455	393	1,692	1,256
	<i>Percent</i>	9%	6%	9%	6%	6%	5%	8%	6%
Only stopped at Ticket Agent for Boarding Pass	<i>Number</i>	576	536	374	452	642	613	1,592	1,601
	<i>Percent</i>	7%	6%	7%	8%	8%	8%	7%	7%
Only stopped at Ticket Agent for Bag Check	<i>Number</i>	710	822	333	493	397	472	1,440	1,787
	<i>Percent</i>	8%	10%	6%	9%	5%	6%	7%	8%
Stopped at more than place for Boarding Pass and/or Bag Check	<i>Number</i>	2,420	2,097	1,493	1,380	2,536	2,218	6,450	5,695
	<i>Percent</i>	28%	25%	29%	26%	32%	27%	30%	26%
Did Not stop for Boarding Pass or Bag Check	<i>Number</i>	2,072	2,092	1,143	1,402	1,397	1,924	4,612	5,418
	<i>Percent</i>	24%	25%	22%	26%	18%	24%	21%	25%
Non Respondents	<i>Number</i>	135	200	183	244	153	178	472	622
	<i>Percent</i>	2%	2%	4%	5%	2%	2%	2%	3%
Total	<i>Number</i>	8,680	8,525	5,153	5,358	7,911	8,097	21,744	21,980
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals may not add due to rounding

Table 20: At-Airport Use of Boarding Pass and Bag Check Facilities by Airport, International Departures

Passengers at Airport Boarding Pass and Bag Check		BWI		IAD		DCA		Total	
		2009	2011	2009	2011	2009	2011	2009	2011
Only stopped at Curbside for Boarding Pass	<i>Number</i>	2	6	35	88	1	0	38	94
	<i>Percent</i>	1%	3%	2%	4%	1%	0%	2%	4%
Only stopped at Curbside for Bag Check	<i>Number</i>	2	11	18	26	2	3	21	40
	<i>Percent</i>	1%	5%	1%	1%	1%	3%	1%	2%
Only stopped at E-ticket Kiosk for Boarding Pass	<i>Number</i>	1	7	98	148	21	15	120	170
	<i>Percent</i>	0%	3%	6%	7%	15%	13%	6%	7%
Only stopped at E-ticket Kiosk for Bag Check	<i>Number</i>	9	5	129	100	0	2	137	107
	<i>Percent</i>	4%	2%	7%	5%	0%	2%	7%	4%
Only stopped at Ticket Agent for Boarding Pass	<i>Number</i>	50	45	226	250	11	18	287	313
	<i>Percent</i>	23%	20%	13%	12%	8%	16%	14%	13%
Only stopped at Ticket Agent for Bag Check	<i>Number</i>	37	39	116	236	18	12	171	287
	<i>Percent</i>	17%	17%	7%	11%	13%	10%	8%	12%
Stopped at more than place for Boarding Pass and/or Bag Check	<i>Number</i>	83	80	787	837	71	46	940	963
	<i>Percent</i>	38%	35%	45%	39%	51%	40%	45%	39%
Did Not stop for Boarding Pass or Bag Check	<i>Number</i>	26	27	230	303	12	16	268	346
	<i>Percent</i>	12%	12%	13%	14%	9%	14%	13%	14%
Non Respondents	<i>Number</i>	8	10	105	143	2	3	115	156
	<i>Percent</i>	3%	4%	6%	7%	2%	3%	5%	6%
Total	<i>Number</i>	216	230	1,742	2,131	139	115	2,097	2,476
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals may not add due to rounding

APPENDIX A: SURVEY METHODOLOGY

The following discussion is a brief summary of the methodology used to conduct the 2011 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 Airport (DCA), Washington Dulles International Airport (IAD) and Baltimore/Washington Thurgood Marshall International Airport (BWI). It was designed to be compatible with the previous surveying efforts, done in 1981/82, 1987, 1992, 1998, 2000, 2002, 2005, 2007 and 2009, so comparative analysis could be performed.

Changes in Survey Design for 2011

For surveys conducted through 2009, the samples for domestic flights were stratified by different regions of the United States: Northeast, New York Metropolitan Area, Mid-Atlantic, Southeast, Great Lakes, and West. For international flights, the samples were stratified into twenty four different regions of the world. However, for the 2011 survey, for both domestic and international flights were stratified by airline and destination frequencies (i.e., the higher the scheduled flight frequency to a destination the higher the number of flights sampled and vice versa). Therefore, for the 2011 sample selection there were 294 strata for domestic and 61 international destination respectively for all three airports combined. All flights selected for surveying were scheduled during a two-week period beginning Wednesday, November 2nd and extending through Tuesday November 15th, 2011. Flights that were missed and those that required resurveying due to insufficient response rates were surveyed again during the period ending November 22, 2011.⁹

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 MWAA. 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 686 flights, were drawn. Since each of the three airports had approximately the same number of domestic departures, 216 at BWI, 206 at DCA, and 185 domestic flights at IAD were selected. For international flight activity from the region, additional international flights were selected at each airport: 13 at BWI, 8 at DCA¹⁰, and 58 at IAD.

⁹ Previous surveys allowed for a two-week resurvey period; however, the resurvey period for this survey was truncated for the Thanksgiving holiday.

¹⁰ DCA provides service to Canadian and Caribbean destinations.

The sample was then reviewed by MWAA and MAA, and 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 a two-week period beginning Wednesday, November 2nd and extending through Tuesday November 15th, 2011. Flights that were missed and those that required resurveying due to insufficient response rates were surveyed again during the period ending November 22, 2011. 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 questionnaire is included in this report as Appendix B. A copy of the Survey Procedures for the 2011 Air Passenger Survey is included in this report as Appendix C.

Factoring the Survey Data

Since the survey was conducted over two weeks in November 2011, 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. 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.

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 QUESTIONNAIRE¹¹

¹¹ There were separate questionnaires for each airport: DCA, IAD, and BWI. The questionnaires are substantively identical. The only differences are on the questionnaire front page where the specific airport is identified and in questions where a specific airport is identified or omitted from the possible answers to eliminate illogical results. These places are illustrated with rectangles on the questionnaire image.

C. ABOUT YOUR AIRPORT CHOICE

1. Please rank the three most important reasons for choosing Washington Dulles International 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 non-stop 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. BWI 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. BWI Marshall
- 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)

- BWI 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
- b. 19-24
- c. 25-34
- d. 35-49
- e. 50-64
- 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
- b. \$15,000-24,999
- c. \$25,000-44,999
- d. \$45,000-79,999
- e. \$80,000-119,999
- f. \$120,000-159,999
- g. \$160,000-199,999
- 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
- b. \$100-199
- c. \$200-299
- d. \$300-399
- e. \$400-499
- f. \$500-749
- g. \$750-999
- h. \$1,000 or more

If your air travel begins from this airport please answer Questions #7 and #8 below, then proceed to section E.

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!

| -

2011 WASHINGTON-BALTIMORE REGIONAL AIR PASSENGER SURVEY

TO DETERMINE LOCAL AIRPORT NEEDS



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 Washington Dulles 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. Since your arrival at the airport, did you stop at any of the following? (Please circle ALL that apply)

- a. Curbside agent for boarding pass
- b. Curbside agent for bag check
- c. E-ticket kiosk for boarding pass
- d. E-ticket kiosk for bag check
- e. Ticket agent in terminal for boarding pass
- f. Ticket agent in terminal for bag check
- g. None of the above

B. ABOUT YOUR GROUND TRIP TO WASHINGTON DULLES INTERNATIONAL AIRPORT:

1. Where did you start your ground trip to this airport (IAD)?
(Please circle ONE answer)

- | | |
|-----------------------------------|------------------------------|
| a. Private residence | d. Another place of business |
| b. Hotel/Motel | e. Other _____ |
| c. My regular place of employment | (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 this flight? _____

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

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

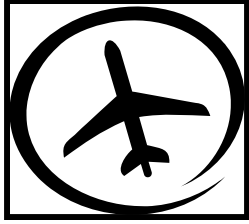
- a. Were you dropped off at the terminal curbside?
YES _____ NO _____

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

- | | |
|--|---|
| <ul style="list-style-type: none"> 1. It was not parked 2. Short term/hourly Parking Lot 3. Long term/daily parking garage 4. Long term/economy parking lot. 5. Valet Parking | <p>- For How Long?</p> <ul style="list-style-type: none"> a. For a few hours or less b. Until you return from this trip. |
|--|---|



APPENDIX C: SURVEY PROCEDURES MANUAL



*2011 Washington-Baltimore
Regional Air Passenger Survey*

SURVEY PROCEDURES MANUAL



Supervisor and Lead Assistant

November 2011

Metropolitan Washington Council of Governments



ABOUT THE 2011 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 tenth in a series of air passenger surveys. Previous surveys were conducted in 1982, 1987, 1992, 1998, 2000, 2002, 2005, 2007, and 2009.

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 2011 survey will begin on Wednesday, November 2nd and continue for fourteen consecutive days, ending on Tuesday, November 15th. Several surveyors may be needed during the period from November 16th through November 22nd, to survey flights that might have been missed, cancelled or under-surveyed.

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 than the surveys done in the past.





SURVEY ORGANIZATION

The *Metropolitan Washington Council of Governments (MWCOG)* is responsible for the overall management of the survey. MWCOG has contracted with **WB&A** to conduct the survey. **WB&A** 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, 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 **WB&A** staff 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.

PLEASE MAKE SURE DISTRIBUTORS
HAVE THE FOLLOWING ITEMS IN EACH
FLIGHT PACKAGE ENVELOPE





Questionnaires

C. ABOUT YOUR AIRPORT CHOICE

1. Please rank the three most important reasons for choosing Washington Dulles International 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 non-stop flights
- _____ Only airport that serves market
- _____ Frequent flyer specific airline
- _____ Other _____

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. BWI 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. BWI Marshall
- 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)

- _____ BWI Marshall
- _____ Washington Dulles International
- _____ Ronald Reagan Washington National

D. ABOUT YOURSELF

1. Please indicate the location of your current residence:

_____ City/Country _____ 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
 - b. 19-24
 - c. 25-34
 - d. 35-49
 - e. 50-64
 - 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
- b. \$15,000-24,999
- c. \$25,000-44,999
- d. \$45,000-79,999
- e. \$80,000-119,999
- f. \$120,000-159,999
- g. \$160,000-199,999
- 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
- b. \$100-199
- c. \$200-299
- d. \$300-399
- e. \$400-499
- f. \$500-749
- g. \$750-999
- h. \$1,000 or more

If your air travel begins from this airport please answer Questions #7 and #8 below, then proceed to section E.

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!

I -

2011 WASHINGTON-BALTIMORE REGIONAL AIR PASSENGER SURVEY

TO DETERMINE LOCAL AIRPORT NEEDS



IAD

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.



Gate Announcement

IAD

I091111AA149

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

(Valid for Flights between October 16, 2011, and November 12, 2011)

**LADIES AND GENTLEMEN,
THE PASSENGERS ON American Airlines, Flight Number 149 TO Los Angeles CA HAVE BEEN SELECTED TO PARTICIPATE IN AN AIR PASSENGER SURVEY BEING CONDUCTED IN THE WASHINGTON-BALTIMORE 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.

American Airlines AND DULLES INTERNATIONAL AIRPORT WOULD LIKE TO THANK YOU FOR YOUR COOPERATION.”

SUN 9/11/2011

Flight Log Sheet

2011 WASHINGTON / BALTIMORE REGIONAL AIR PASSENGER SURVEY FLIGHT RECORD

SAMPLE: I091111AA149

AIRPORT: IAD DESTINATION CITY: Los Angeles CA
DAY: SUN CARRIER: American Airlines
DATE: 9/11/2011 FLIGHT #: 149
DEPARTURE TIME: 8:55:00 AM
AIRCRAFT: 738 NO. SEATS: 160 OAG CODE: AA

QUESTIONNAIRES:

IN PACKET: BEGINNING # I60001 ENDING # I60160
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 or 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](#)

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.

**SURVEY SUPERVISOR
AND LEAD ASSISTANTS
AFTER A FLIGHT SURVEY IS COMPLETED
PLEASE MAKE SURE OF THE FOLLOWING**

- 1. Make sure Survey Interviewers (Distributors) have obtained revenue passenger count from airline personnel.**
- 2. Check if Survey Interviewers (Distributors) filled out the field Flight Log sheet appropriately.**
- 3. Complete entering number of Revenue Passengers, number of completed survey questionnaires (with passenger factors) actual number of completed surveys in the appropriate field in the spreadsheet provided.**
- 4. Determine if the flight is a success or not.**
- 5. If a flight is not a success, make sure to make arrangement for a resurvey date.**
- 6. Check and transcribe the information onto the second set of flight log sheet**