

2009

***WASHINGTON-BALTIMORE
REGIONAL AIR PASSENGER
SURVEY***

Geographic Findings

November 2010

**NATIONAL CAPITAL REGION TRANSPORTATION PLANNING BOARD
METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS
in cooperation with
FEDERAL AVIATION ADMINISTRATION**

ABSTRACT

TITLE: 2009 Washington-Baltimore Regional Air Passenger Survey Geographic Findings	
	DATE: November, 2010
	NUMBER OF PAGES:
AUTHORS: Timothy Canan, AICP, MWCOG, Principal Planner Abdurahman Mohammed, Senior Transportation Engineer Clara Reschovsky, Survey Analyst	
AGENCY: The Metropolitan Washington Council of Governments (COG) 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 geographic findings of the 2009 Washington-Baltimore Regional Air Passenger Survey, which included responses from approximately 21,000 air passengers at Ronald Reagan Washington National, Baltimore Washington International Thurgood Marshall and Washington Dulles International Airports. Topics of analysis include satisfaction with airport use, trip purpose, trip originations, mode of access, trip destinations, passenger household income, trip pattern by time-of-day and characteristics of air passengers originating from Washington D.C and surrounding core areas and Baltimore city core areas.	
SUBJECT: 2009 Washington-Baltimore Regional Air Passenger Survey Geographic Findings.	
PRECEDING REPORTS: 1992 Washington-Baltimore Regional Air Passenger Survey Geographic Findings. 2005 Washington-Baltimore Regional Air Passenger Survey Geographic Findings. 2007 Washington-Baltimore Regional Air Passenger Survey Geographic Findings.	
ORDER COPIES FROM: COPYRIGHT 2010 METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS	

METROPOLITAN WASHINGTON COUNCIL OF GOVERNMENTS

- CREDITS -

Policy Guidance

National Capital Region Transportation Planning Board

Technical Oversight

Aviation Technical Subcommittee
of the Transportation Planning Board Technical Committee

Director, Department of Transportation Planning

Ronald F. Kirby

Program Director

Robert E. Griffiths, Technical Services Director

CASP Programs

Timothy Canan, AICP, Principal Planner

Data Processing and Report Authors

Abdurahman Mohammed, Senior Transportation Engineer

Clara Reschovsky, Survey Analyst

EXECUTIVE SUMMARY

In October 2009, the Metropolitan Washington Council of Governments conducted a regional air passenger survey jointly funded by the Metropolitan Washington Airports Authority (MWAA) and the Maryland Aviation Administration (MAA) of the Maryland Department of Transportation (MDOT), at the three major commercial airports in the Washington-Baltimore Region: Ronald Reagan Washington National (Reagan National), Washington Dulles International (Dulles), and Baltimore/Washington International Thurgood Marshall Airports (BWI Marshall). Approximately 29,700 passengers out of a total of 59,300 enplaning passengers on 679 selected flights were interviewed as they waited to board their planes, an overall response rate of 50 percent. More than 20,900 completed survey questionnaires representing the responses of these 29,700 passengers were collected, processed and tabulated. The survey included questions regarding the passengers' air travel trip, trip to the airport, airport choice, and certain demographic characteristics. The 2009 regional air passenger survey was the ninth in a series of regional air passenger surveys conducted since 1981. Prior surveys were conducted in 1981/82, 1987, 1992, 1998, 2000, 2002, 2005 and 2007. Data from the air passenger surveys provide the basis for analysis of major changes in airport use in the region. These surveys are an essential component of the air systems planning and master planning processes.

This report summarizes the findings regarding patterns of airport use, trip purpose, origin activity, mode of access, household income, and destination of air passengers and analyzes these data based on their geographic distribution. 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 geographical patterns of airport use in the Washington-Baltimore region are as follows:

Airport Use:

- Approximately 23.8 million air passengers originated in the Washington-Baltimore region in 2009, an increase of slightly less than one percent over the 23.6 million passenger originations in 2007.
- The total number of passengers (including connecting passengers) declined 4 percent between 2007 and 2009.
- The Maryland suburbs of the District of Columbia (D.C.) experienced a modest increase of 5 percent in air passenger originations, while the Baltimore Metropolitan Area increased by an even more modest 1 percent when compared with 2007.
- Air passenger originations from D.C. decreased by 20 percent, while originations from the Virginia suburbs increased by 20 percent.

Airport Preference:

- Across the region, 81 percent of passengers are satisfied with their airport choice.
- All of the jurisdictions that indicated 90 percent or higher level of satisfaction with their airport choice originated in the Baltimore region.

Trip Purpose and Origin Activity:

- In 2009, the percentage of locally originating passengers traveling for business dropped to 38 percent down from 41 percent in 2007. 24 percent of locally originating passengers were traveling for vacation and 29 percent were traveling for personal or family affairs.
- While 38 percent of air passengers originating from Washington-Baltimore region are business travelers, only 10 percent of the total number of passengers leave a place of business and travel directly to the airport.
- Over half of all air passengers leave for the airport from a private residence and nearly a third (29 percent of the total) leave from a hotel or motel.

Mode of Access:

- For the Washington-Baltimore region as a whole, the most common mode of access to the airports in 2009 was the automobile. Private vehicles or rental cars accounted for 60 percent of travel trips to the airport. An additional 16 percent utilized taxicabs.
- Seven percent of originating air passengers regionally used public transportation, such as the Metrorail to Reagan National, or light rail or Amtrak/MARC services to BWI Marshall. Within the Washington Downtown Center that percentage was double the regional average and for the Baltimore Downtown center it was about two-and-a-half times the average.

Air Passenger Destinations:

- Among domestic travelers, destinations in the western region of the country were most prevalent, followed by the southeast region. Combined, these regions account for 64 percent of all domestic passenger travel from the region.
- The distribution of travel to all regions remains almost the same as the 2007 levels.
- Dulles International Airport, as the main international airport for the region, had the largest proportion of international travelers.

Washington and Baltimore Downtown Centers:

- Although air passengers from the Baltimore downtown center account for only five percent of the regional total, they represent nearly 26 percent of all passengers from the Baltimore metropolitan area.
- Washington D.C. and surrounding downtown activity centers of Arlington County and City of Alexandria generated 7.9 million air passengers in 2009. 64 percent of these passengers traveled through Reagan National Airport.
- Business travel accounts for 47 percent of passengers from the Baltimore downtown center and 42 percent of the passengers from the Washington downtown and surrounding activity centers.
- Both Washington and its surrounding downtown activity centers of Arlington County and City of Alexandria and Baltimore City had a significant percent of passengers traveling to

the airport from a hotel or motel – 48 percent from the Washington activity center and 41 percent in the Baltimore activity center.

- Places of employment or other business locations generated 12 percent of passenger ground access trips from the Washington downtown activity center and 11 percent of trips from the Baltimore downtown activity center.
- Taxicabs accounted for 17 percent of airport trips from the Baltimore downtown center and 34 percent of trips from the Washington downtown and surrounding activity centers.
- Use of airport limousine service from both downtown centers was at a higher rate, 17 percent for Baltimore and 15 percent for Washington, than the regional average of nine percent.
- From the Washington downtown and surrounding activity centers 16 percent of passengers used public transportation to travel to Reagan National and 17 percent of passengers overall utilized Metrorail to travel to Reagan National airport.

TABLE OF CONTENTS

I. INTRODUCTION	1
II. FINDINGS	4
GEOGRAPHIC PATTERNS OF AIRPORT USE	6
Ronald Reagan Washington National Airport	12
Washington Dulles International Airport	14
Baltimore/Washington International Airport	16
Satisfaction with Airport Use	18
Trip Purpose	21
Trip Origin Activity	23
Mode of Access	25
Household Income	28
Destination of Air Passengers	29
Departures by Time of Day	32
Washington and Baltimore Region Downtown Centers	34
APPENDIX A: List of Aviation Analysis Zones	38
APPENDIX B: Air Passenger Originations by AAZ	44
APPENDIX C: Air Passenger Originations	
Home and Non-Home by AAZ	47
APPENDIX D: Air Passenger Originations	
Work and Non-Work Purpose by AAZ	50
APPENDIX E: Air Passenger Originations	
Airport Access Mode by AAZ	53
APPENDIX F: Air Passenger Originations	
Air Passenger Resident and Non-Resident	
Status by AAZ	58

LIST OF TABLES

Table 1: 2009 Washington Baltimore Air Passenger Survey Trip Originations by Airport	6
Table 2: 2009 Washington Baltimore Air Passenger Survey Internal/External Trip Originations by Airport	6
Table 3: Originating Passengers by Jurisdiction	10
Table 4: Departing Air Passengers Satisfaction by Jurisdiction	19
Table 5: Originating Air Passengers Destinations by Region	30
Table 6: Originating Air Passengers Destinations by Airport	35
Table 7: Airport Usage from Major Activity Centers	35
Table 8: Trip Purpose from Major Activity Centers	35
Table 9: Trip Origin Activity from Major Activity Centers	36
Table 10: Mode of Access from Major Activity Centers	37
Table A-1: List of Aviation Analysis Zones	39
Table B-1: Air Passenger Originations by AAZ	45
Table C-1: Air Passenger Originations Home and Non-Home by AAZ	48
Table D-1: Air Passenger Originations Work and Non-Work by AAZ	51
Table E-1: Air Passenger Airport Access Mode by AAZ	54
Table F-1: Air Passenger Originations Resident and Non-Resident by AAZ	59

LIST OF FIGURES

Figure 1: The Washington-Baltimore Air System Planning Region	2
Figure 2: Aviation Analysis Zones	5
Figure 3: 2007 and 2009 Annual Passenger Originations	8
Figure 4: Percent of Resident and Nonresident Departing Passengers	9
Figure 5: Airport Service Areas	11
Figure 6: 2009 Annual Passenger Originations, Reagan National Airport	13
Figure 7: Percentage of Passengers Using Reagan National Airport	13
Figure 8: 2009 Annual Passenger Originations, Dulles Airport	15
Figure 9: Percentage of Passengers Using Dulles Airport	15
Figure 10: 2009 Annual Passenger Originations, BWI Airport	17
Figure 11: Percentage of Passengers Using BWI Airport	17
Figure 12: Percentage of Passengers Satisfied With Airport Use	20
Figure 13: Percentage of Passengers Traveling on Business	22
Figure 14: Percentage of Passengers Leaving a Place of Business	24
Figure 15: Percentage of Passengers Leaving a Hotel or Motel	24
Figure 16: Percentage of Passengers Using a Taxicab	26
Figure 17: Percentage of Passengers Using an Airport Limousine	26
Figure 18: Percentage of Passengers Using Metrorail at National Airport	27
Figure 19: Percentage of Passengers Household Income	28
Figure 20: Passengers Domestic and International Destinations Distribution	30
Figure 21: Diurnal Passenger Distribution at National Airport	32
Figure 22: Diurnal Passenger Distribution at Dulles Airport	33
Figure 23: Diurnal Passenger Distribution at BWI Airport	33

I. Introduction

This report presents the geographic and temporal findings from the 2009 Washington-Baltimore Regional Air Passenger Survey, conducted concurrently at Ronald Reagan Washington National (Reagan National), Washington Dulles International (Dulles), and Baltimore/Washington International Thurgood Marshall Airports (BWI Marshall). The survey was conducted as part of the Metropolitan Washington Council of Governments' 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 make up the Washington/Baltimore Air System Planning Region, and locates the three commercial airports.¹

The 2009 Air Passenger Survey was conducted between October 11th and October 24th. To ensure the quality of the data, a small number of flights were resurveyed during the weeks of October 25th to November 7th. Approximately 29,700 passengers out of a total of 59,300 enplaning passengers on 679 flights (617 domestic and 62 international) were interviewed as they waited to board their flights, an overall response rate of 50 percent. Nearly 21,100 completed survey questionnaires representing the responses of these 29,700 passengers were collected, processed, and tabulated.

This report presents geographic findings regarding patterns of airport usage, trip purpose, origin activity, mode of access, household income, and destination of passengers. Where appropriate, the 2009 data is compared with the results from a similar survey conducted in 2007.

¹ Note: Only the northern parts of Spotsylvania County, VA are shown on all maps in this document.

Figure 1
Washington / Baltimore Air System Planning Region



The survey instrument contained questions regarding the passengers' trip (i.e. destination, trip purpose), trip to the airport (i.e. origination, mode of access), 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.

One of the objectives of the air passenger survey program is to collect data on the travel characteristics of all air passengers traveling through the three major commercial airports in the region. It should be noted that 64 percent of the survey respondents (passengers originating their air travel from within the Washington-Baltimore Air System Planning Region) were not residents of the region. Therefore, the geographic findings are not representative of the characteristics of residents of a particular jurisdiction, but rather reflect characteristics of residents and non-residents (persons living outside the region), who originated their ground trip to the airport from one of the jurisdictions within the Washington/Baltimore Air System Planning Region.

The 2009 Regional Air Passenger Survey was conducted by the National Capital Transportation Planning Board (TPB) of the Metropolitan Washington Council of Governments, 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.

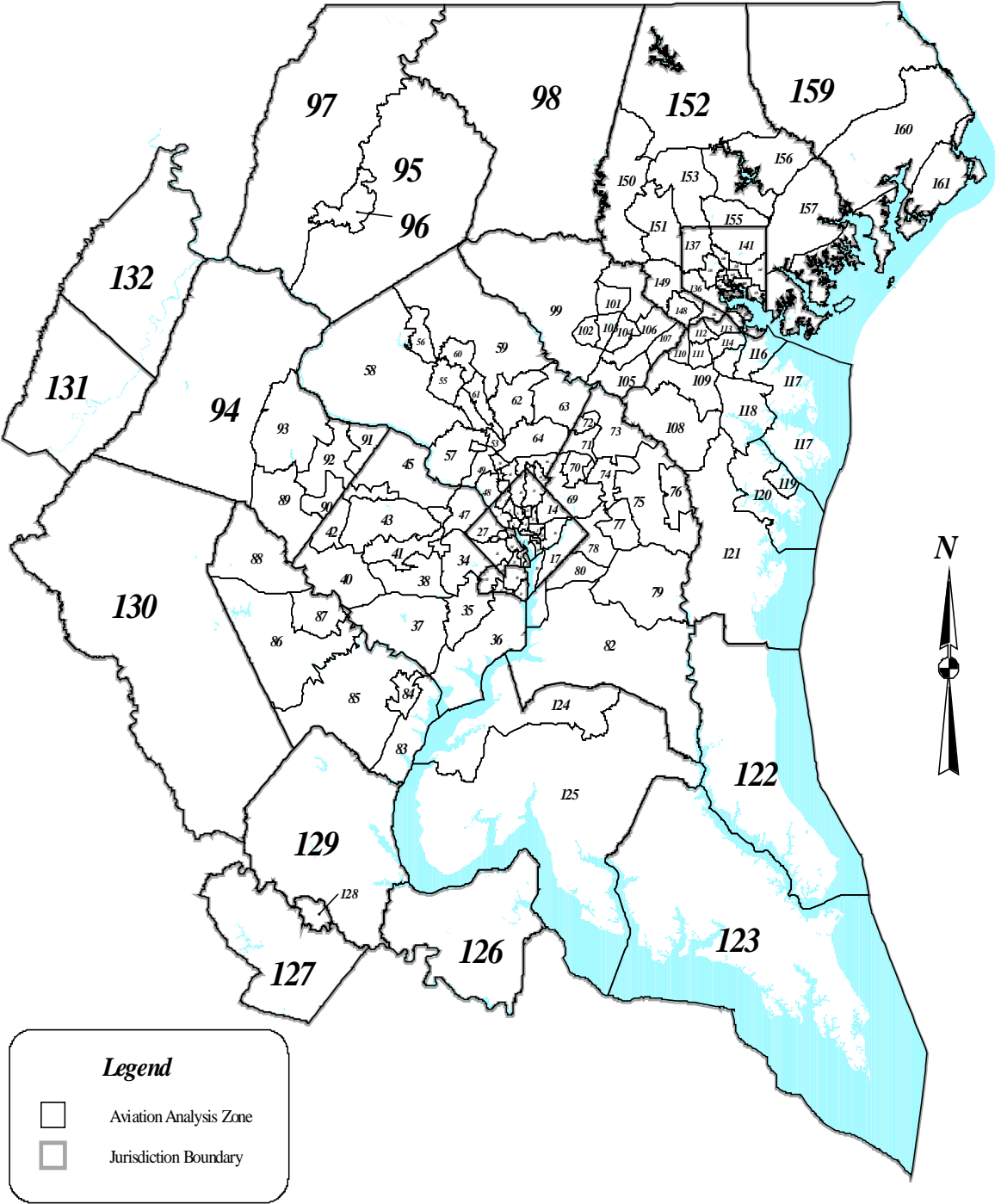
II. Findings

This chapter summarizes the results of the 2009 Washington-Baltimore Regional Air Passenger Survey results regarding the geographic and temporal characteristics of originating passengers using the region's three major airports. The survey data were collected over the course of a four week period during October and November 2009.

The total enplanements found in this report for the region and for each airport have been "annualized," using the survey sample, the data have been factored up to represent an estimate of annual enplanements and do not necessarily equate to the actual observed enplanements for each airport. Expansion of the survey data to calendar year 2009 (or any other annual period) requires the assumption that the characteristics observed during the survey apply to the period to which they are being expanded. This is a judgmental rather than a statistical assumption. 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.

The survey results are aggregated by Aviation Analysis Zone (AAZ). These zones are composed of aggregations of smaller TPB Transportation Analysis Zones (TAZs) in the Washington metropolitan region, and TAZs identified by the Baltimore Metropolitan Council in the Baltimore metropolitan region. AAZs are based on transportation geography, defined by jurisdictional boundaries, major highways, and barriers to travel, such as rivers. These are relatively fixed zones, are not intended to be adjusted due to demographic changes, and, thus provide a consistent geographic basis to measure changes over time. The AAZs for the Washington-Baltimore Air System Planning region are displayed in Figure 2. There are 53 zones in the Baltimore metropolitan areas (numbers 98 through 121 and 133 through 161) and 108 zones in the Washington metropolitan area (1 through 97 and 122 through 132, see Appendix A Table A-1, for more detailed description of the AAZ system). In addition, there are five zones that represent areas outside the immediate Washington-Baltimore region.

Figure 2
Washington / Baltimore
Air System Planning Region
Aviation Analysis Zone System



Geographic Patterns of Airport Use

Approximately 23.8 million air passengers originated in the Washington-Baltimore Region in 2009, an increase of slightly less than one percent over the 23.6 million passenger originations in 2007 (See Table 1). Air passenger originations are further grouped into internal (local originating air passenger trips within the Washington-Baltimore Air System Planning Region), and external (local originating air passenger trips from areas outside the Washington-Baltimore Air System Planning Region), and are presented in Table 2.

Table 1
2009 Washington-Baltimore Regional Air Passenger Survey
Annual Trip Originations by Airport (in Thousands)

Enplanement Type		BWI		Dulles		National		Region	
		2007	2009	2007	2009	2007	2009	2007	2009
Local origination	<i>Number</i>	8,790	8,896	6,480	6,895	8,335	8,050	23,606	23,841
- (Came by ground transportation)	<i>Percent</i>	84%	85%	53%	60%	89%	91%	74%	77%
Connected from another Flight	<i>Number</i>	1,663	1,581	5,783	4,644	1,000	798	8,446	7,023
- (Local and/or International)	<i>Percent</i>	16%	15%	47%	40%	11%	9%	26%	23%
Total Enplanements		10,454	10,477	12,263	11,539	9,335	8,848	32,052	30,864
Percent of Region		33%	34%	38%	37%	29%	29%	100%	100%

Source: 2007 and 2009 Washington-Baltimore Regional Air Passenger Survey

Table 2
2009 Washington-Baltimore Regional Air Passenger Survey
Annual Internal/External Trip Originations by Airport (in Thousands)

Enplanement Type		BWI		Dulles		National		Region	
		2007	2009	2007	2009	2007	2009	2007	2009
Within Air System Planning Region	<i>Number</i>	7,465	7,624	5,736	6,095	8,054	7,816	21,254	21,535
- (Internal)	<i>Percent</i>	85%	86%	89%	88%	97%	97%	90%	90%
Outside Air System Planning Region	<i>Number</i>	1,325	1,272	744	800	282	233	2,351	2,305
- (External)	<i>Percent</i>	15%	14%	11%	12%	3%	3%	10%	10%
Total Enplanements		8,790	8,896	6,480	6,895	8,335	8,050	23,606	23,841

Internal originating trips are local originating trips within the Washington-Baltimore Air System Planning Area.

External originating trips are trips originating from PA, DE, WV, NJ or external VA and MD

Source: 2007 and 2009 Washington-Baltimore Regional Air Passenger Survey

The geographic distribution of the air passenger originations in both 2007 and 2009 is illustrated in Figure 3. As shown, the majority of air passengers originated in the core and inner suburbs of the metropolitan Washington area, including the District of Columbia (D.C.), Arlington, Fairfax,

Prince George's, and Montgomery Counties, and the City of Alexandria. A significant number of passengers also originated in Anne Arundel, and Baltimore Counties; and Baltimore City. The 2009 geographic distribution is almost identical to the distribution of air passengers in 2007. Figure 4 illustrates the distribution of passenger originations by residents and non-residents. The outer counties tend to generate a larger proportion of travel by residents, while central jurisdictions and regional activity centers reflect a more even divide between resident and non-resident air travelers.

Table 3 shows air passenger trip originations by jurisdiction. The total number of passengers experienced an increase of only 1 percent between 2007 and 2009, primarily due to growth in the many of the Virginia suburbs which offset decreases in D.C., which experienced a decline of 20 percent in originating air passengers. The Baltimore Metropolitan Area also had an overall one percent increase. Originations from the Maryland suburbs of D.C. had a modest 5 percent increase when compared with 2007. Decreases in originating air passengers were observed in most of the jurisdictions in air passenger originations between 2007 and 2009, reflecting an overall decrease in regional air travel during that time.

Illustrated in Figure 5 are the 2009 service areas for each airport, defined as zones in which 50 percent or more of all originating passengers in that zone travelled from one of the three regional airports. Historically, airport preferences in the inner jurisdictions have been stable, while outer jurisdictions tend to shift. Recent improvements in geocoding have resulted in more accurate analysis of each passenger's origination point. However, due to the small sample size of travelers from outer jurisdictions, the continuity of preference data for these jurisdictions is less reliable. Despite these challenges, residential location is the biggest predictor of airport choice, particularly for BWI Marshall and Dulles. BWI Marshall draws a large proportion of its locally originating passengers from the eastern half of the Washington-Baltimore region, as shown in Figures 10 and 11, and Dulles draws a large proportion of its passengers from the western half of the region, as shown in Figures 8 and 9. Reagan National, which is more centrally located and is further south than the other two airports, as shown in Figures 6 and 7, attracts passengers from the middle and southern portions of the region. These findings correlate with the 'Most Important Reason for Choosing Airport Used,' indicated by passengers in the main Air

Passenger Survey report. In 2009, 61 percent of passengers chose the closest airport from their origination point for their air travel (the same percentage as the 2007 survey). The next most selected reason for airport choice, at 17 percent, was least expensive airfare.

*Figure 3
Washington / Baltimore Air System Planning Region
2007 and 2009 Annual Air Passenger Originations
by Jurisdiction*

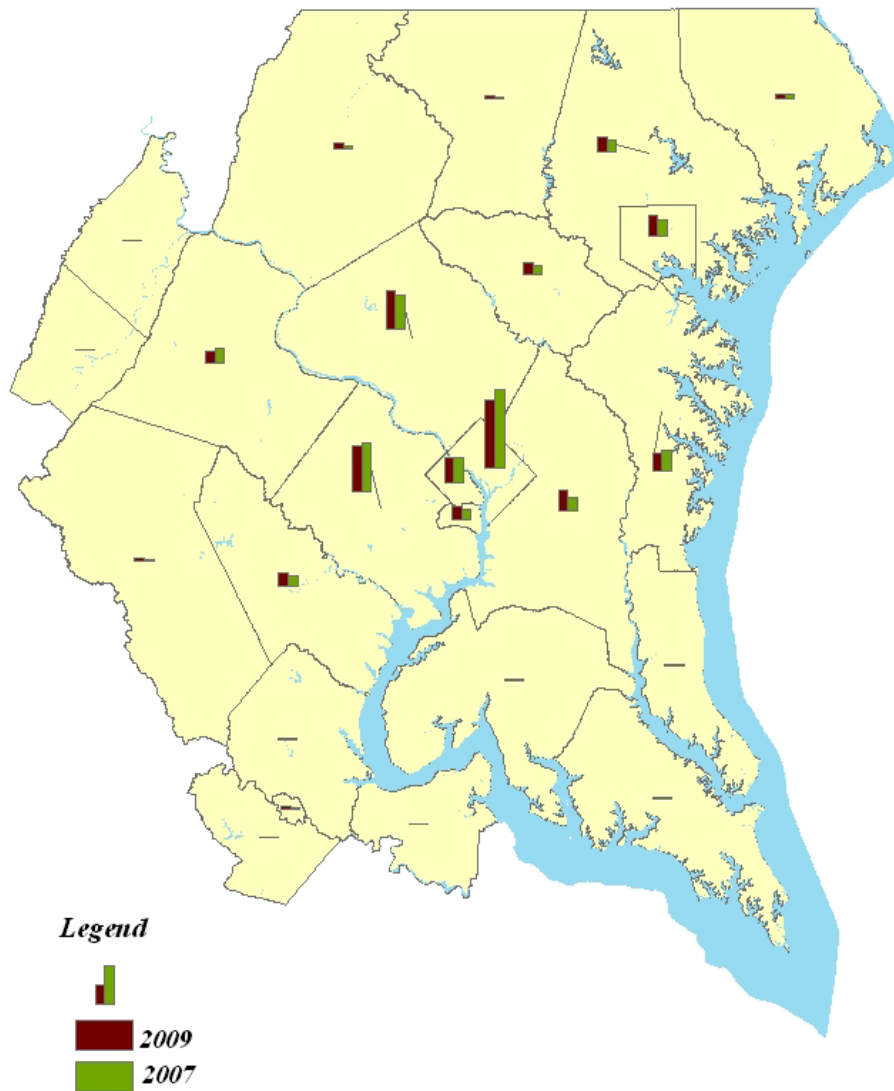


Figure 4
Washington / Baltimore Air System Planning Region
Percent Resident and Non-Resident Departing Passengers - 2009



Washington-Baltimore Air System Planning 2009 Region Air Passenger Survey Geographic Findings

Table 3
Washington-Baltimore Air System Planning Region
Change in Originating Air Passengers by Jurisdiction 2007 - 2009
(in Thousands)

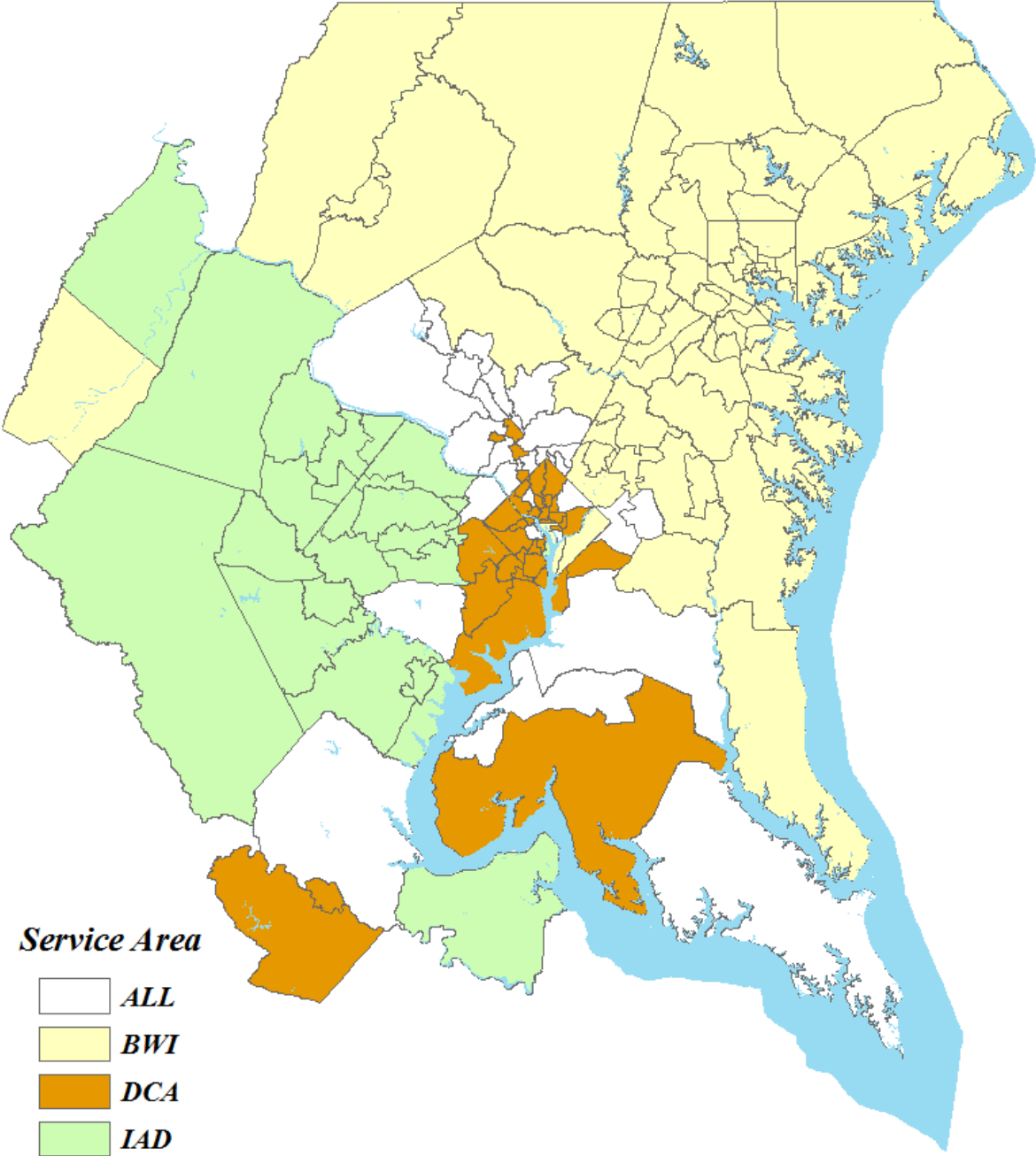
ORIGIN COUNTY	BWI				Dulles				National				Region			
	2007	2009	07-09	% Change	2007	2009	07-09	% Change	2007	2009	07-09	% Change	2007	2009	07-09	% Change
<i>Anne Arundel Co.</i>	1,036	1,336	300	29%	44	79	35	80%	31	45	14	44%	1,111	1,460	349	31%
<i>Baltimore City</i>	1,386	1,069	-317	-23%	46	51	5	11%	30	33	3	10%	1,462	1,153	-309	-21%
<i>Baltimore Co.</i>	871	871	0	0%	29	14	-15	-51%	5	6	1	26%	905	891	-14	-2%
<i>Carroll Co.</i>	131	130	-1	-1%	17	10	-7	-42%	3	1	-2	-67%	152	141	-11	-7%
<i>Harford Co.</i>	271	251	-20	-7%	12	11	-1	-9%	0	1	1	100%	283	263	-20	-7%
<i>Howard Co.</i>	482	527	45	9%	20	40	20	95%	14	10	-4	-28%	516	577	61	12%
SUBTOTAL BALTIMORE METRO AREA	4,177	4,184	7	0%	168	205	37	22%	83	96	13	16%	4,429	4,485	56	1%
<i>Calvert Co.</i>	76	68	-8	-10%	14	0	-14	-100%	26	37	11	42%	115	105	-10	-9%
<i>Charles Co.</i>	55	44	-11	-20%	25	25	0	1%	44	48	4	10%	124	117	-7	-5%
<i>Frederick Co.</i>	185	172	-13	-7%	72	68	-4	-6%	20	31	11	52%	278	271	-7	-3%
<i>Montgomery Co.</i>	839	815	-24	-3%	622	727	105	17%	831	831	0	0%	2,291	2,373	82	4%
<i>Prince Georges Co.</i>	575	568	-7	-1%	101	96	-5	-5%	182	305	123	67%	858	969	111	13%
SUBTOTAL MARYLAND SUBURBS OF DC	1,730	1,667	-63	-4%	833	916	83	10%	1,103	1,252	149	13%	3,666	3,835	169	5%
<i>Alexandria</i>	95	77	-18	-19%	147	119	-28	-19%	610	495	-115	-19%	852	691	-161	-19%
<i>Arlington Co.</i>	82	177	95	117%	279	370	91	32%	1,158	1,243	85	7%	1,519	1,790	271	18%
<i>Fairfax Co.</i>	143	358	215	150%	1,600	1,999	399	25%	743	1,003	260	35%	2,486	3,360	874	35%
<i>Loudoun Co.</i>	43	82	39	90%	583	704	121	21%	35	46	11	31%	661	832	171	26%
<i>Prince William Co.</i>	48	66	18	36%	339	416	77	23%	188	173	-15	-8%	575	655	80	14%
<i>Stafford Co.</i>	11	21	10	91%	36	41	5	13%	48	43	-5	-11%	96	105	9	10%
SUBTOTAL VIRGINIA SUBURBS OF DC	422	781	359	85%	2,985	3,649	664	22%	2,783	3,003	220	8%	6,190	7,433	1,243	20%
<i>District of Columbia</i>	1,117	887	-230	-21%	1,630	1,210	-420	-26%	4,026	3,336	-690	-17%	6,773	5,433	-1,340	-20%
<i>Outlying Areas</i>	1,345	1,375	30	2%	863	916	53	6%	340	363	23	7%	2,548	2,654	106	4%
Total	8,790	8,894	104	1%	6,480	6,896	416	6%	8,335	8,050	-285	-3%	23,606	23,840	234	1%

Data for the Cities of Fairfax and Falls Church are included in the Fairfax County totals, and data for the Cities of Manassas and Manassas Park are included in the Prince William County totals.





Outlying Areas include Clarke, Fauquier, King George, and Spotsylvania Counties in VA, the City of Fredericksburg VA, St. Mary's County in MD, and Jefferson County WV, and jurisdictions outside the air system planning region.

Source: 2007 and 2009 Washington-Baltimore Regional Air Passenger Surveys

Figure 5
Washington / Baltimore Air System Planning Region
Airport Service Area by AAZ - 2009



Service Area

-  **ALL**
-  **BWI**
-  **DCA**
-  **IAD**

AAZ = Aviation Analysis Zone

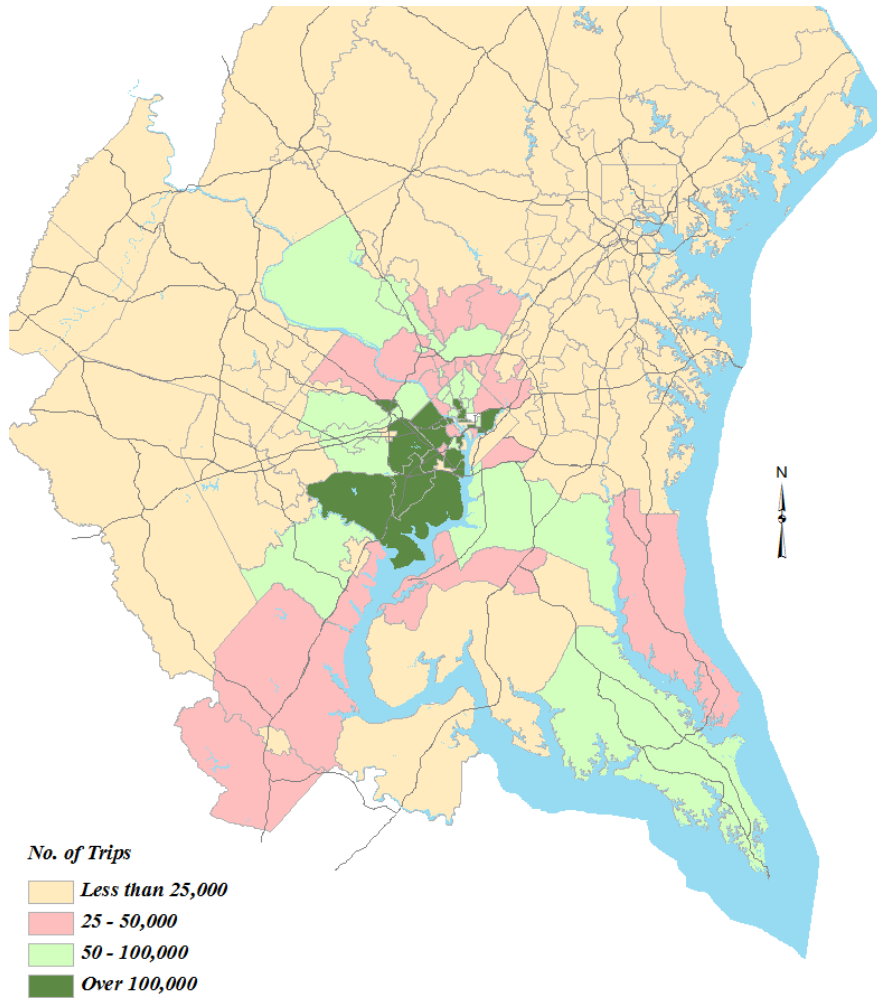
Ronald Reagan Washington National Airport

Annual air passenger originations at Ronald Reagan Washington National Airport decreased by three percent between 2007 and 2009. Figure 6 shows annual air passenger volumes and Figure 7 shows the percent distribution of originations by AAZ to Reagan National Airport in 2009. 61 percent of Reagan National's passengers began their trip in D.C and 69 percent of Arlington County's, 72 percent of Alexandria's and 41 percent of D.C.'s air passengers chose Reagan National for their air trip. Significant numbers of passengers who used Reagan National airport also originated from the inner Virginia suburbs, sections of southern Montgomery and Prince George's Counties in northern Maryland, the southern Maryland counties of St. Mary's, and Calvert, and in the South I-95 corridor of Prince William and Stafford Counties account. Though the percentage of Reagan National passengers originating in Anne Arundel, Baltimore, Harford, Calvert, and Loudoun Counties grew, the majority of travelers from these jurisdictions used either BWI Marshall or Dulles (see Figure 5).

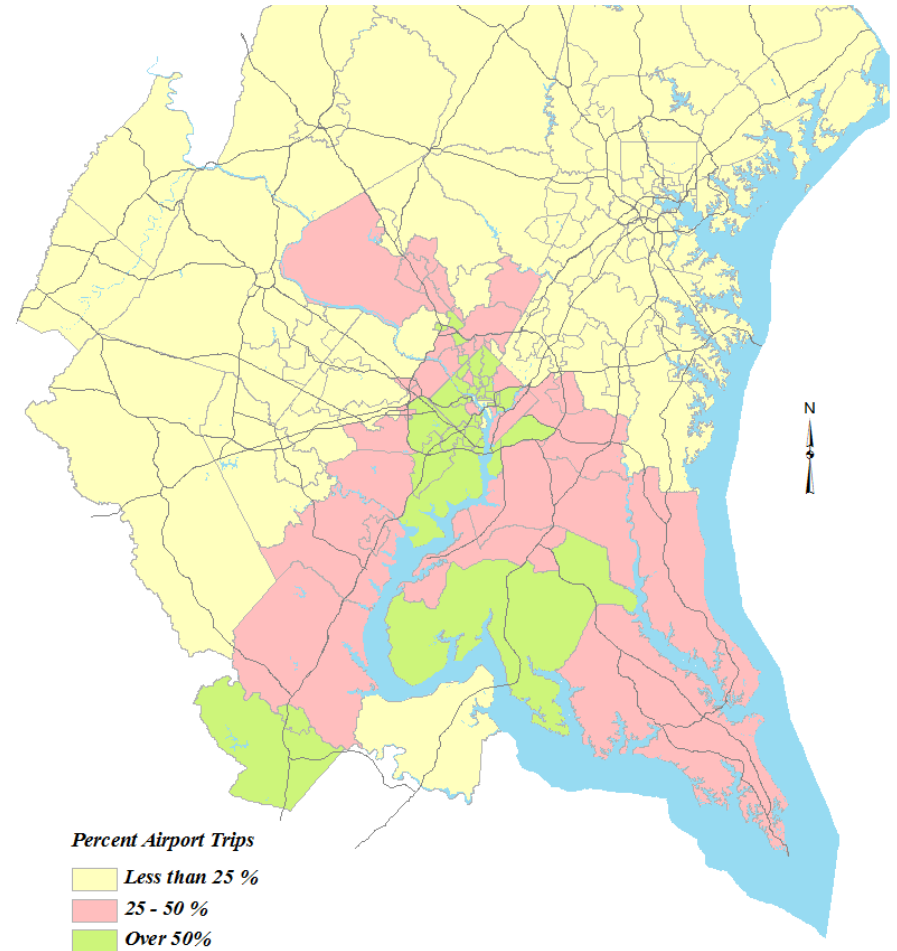
The size of Reagan National's service area is much smaller than that of the other airports, but it is surrounded by areas that are not predominated by one airport's service area. Though some of the AAZ's within Montgomery County and the District of Columbia show the greatest share of airport trips going to BWI Marshall, overall Reagan National was utilized by 35 percent and 61 percent of these areas' passengers, respectively. In addition, Reagan National Airport attracted more trips overall from Eastern Fairfax County in AAZ's along the I-95 and US 1 corridor.

**Washington / Baltimore Air System Planning Region
Air Passenger Trip Originations – DCA Airport 2009**

**Figure 6
Annual Originations**



**Figure 7
Percent Originations**



Washington Dulles International Airport

Overall air passenger originations to Washington Dulles International Airport experienced an increase of 6 percent. Despite the total increase, there was a significant drop in trip originations from certain jurisdictions within the air system region between 2007 and 2009. Specifically, travelers from the District of Columbia to Dulles dropped by 26 percent. As illustrated in Table 3, 67 percent of all Dulles' passengers originate from Fairfax and Loudoun Counties in Virginia, the District of Columbia, and Montgomery County in Maryland. Trips to Dulles increased by 22 percent from the Virginia suburbs and by 10 percent from the Maryland suburbs, when compared with 2007. In contrast, air passenger originations from the Baltimore metropolitan area to Dulles were down by 22 percent.

Dulles Airport's service area has remained fairly stable since 1987. However, it is notable that AAZs in Arlington (Fort Myer and Pentagon) and the Crystal City area are now included in the Dulles service area despite their close proximity to Reagan National (see Figure 5). This is likely due to the availability of cheaper airfares, passengers transferring to Dulles flights from Reagan National, and federal government employees flying cheaper contract carriers that serve Dulles. Figure 8 shows annual air passenger volume and Figure 9 shows the percentage distribution of originations by AAZ to Dulles.

Washington / Baltimore Air System Planning Region
Air Passenger Trip Originations – IAD Airport 2009

Figure 8
Annual Originations

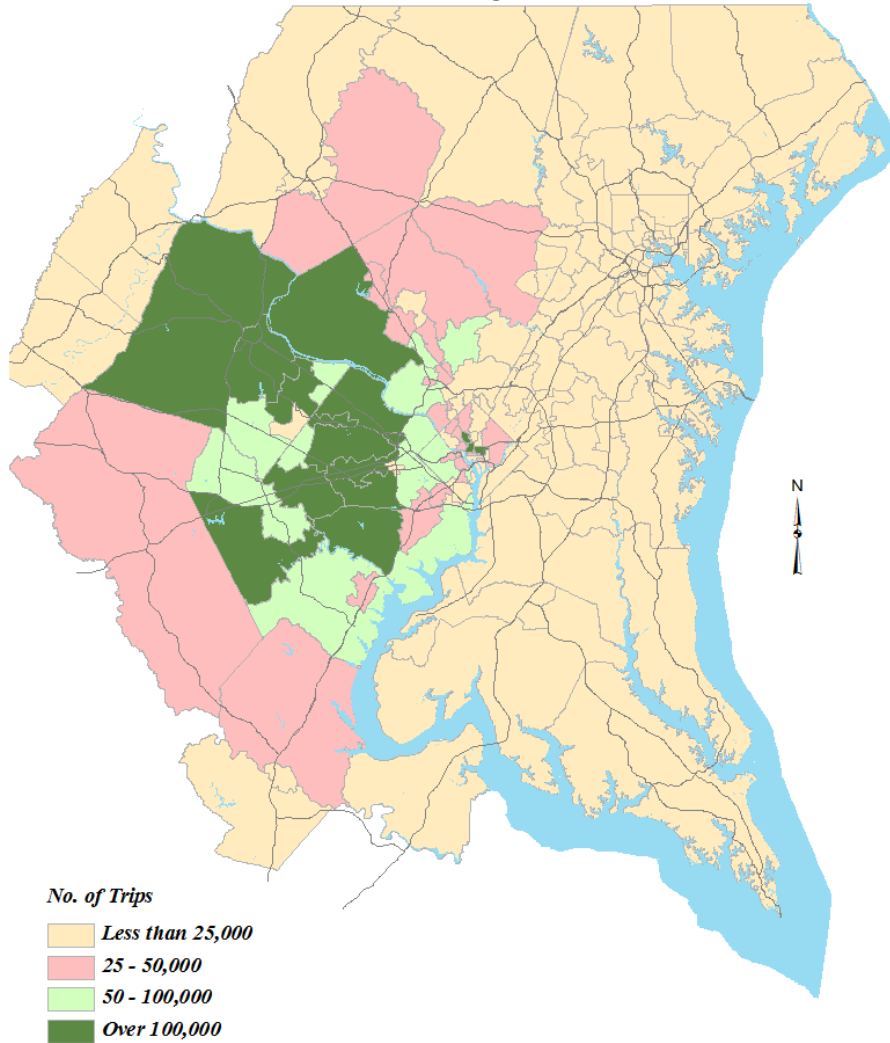
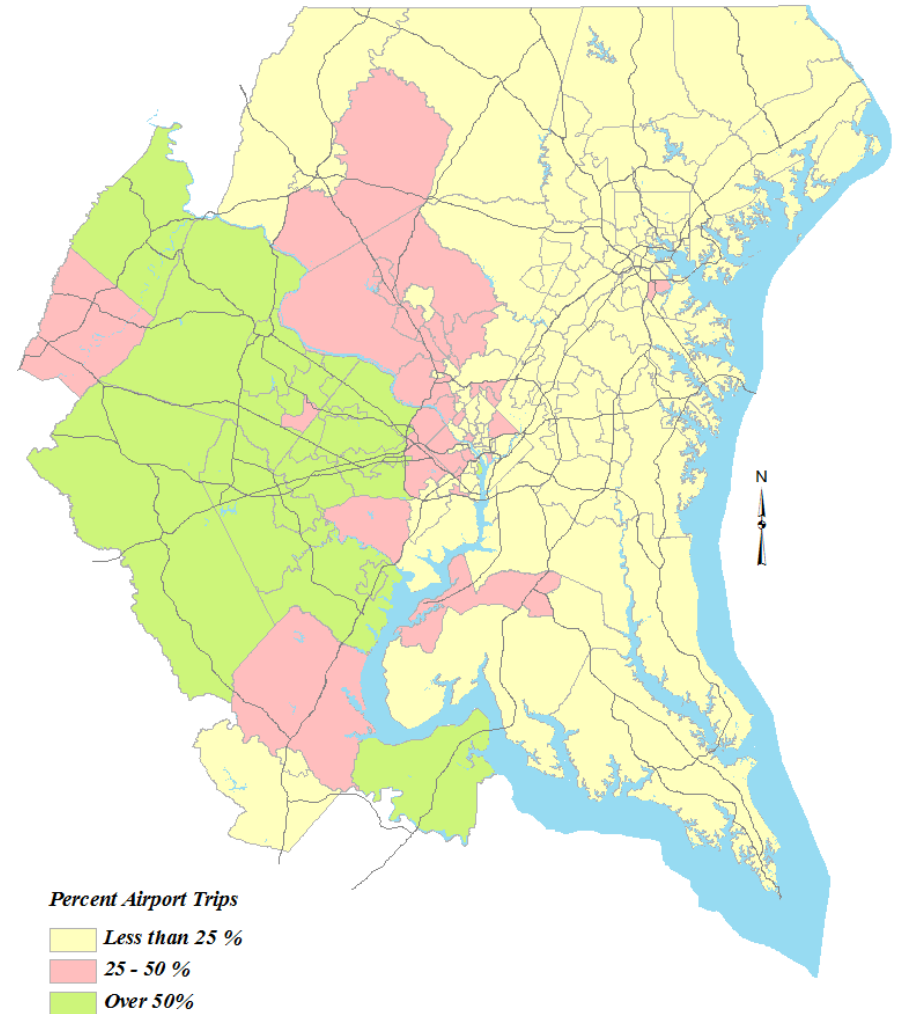


Figure 9
Percent Originations



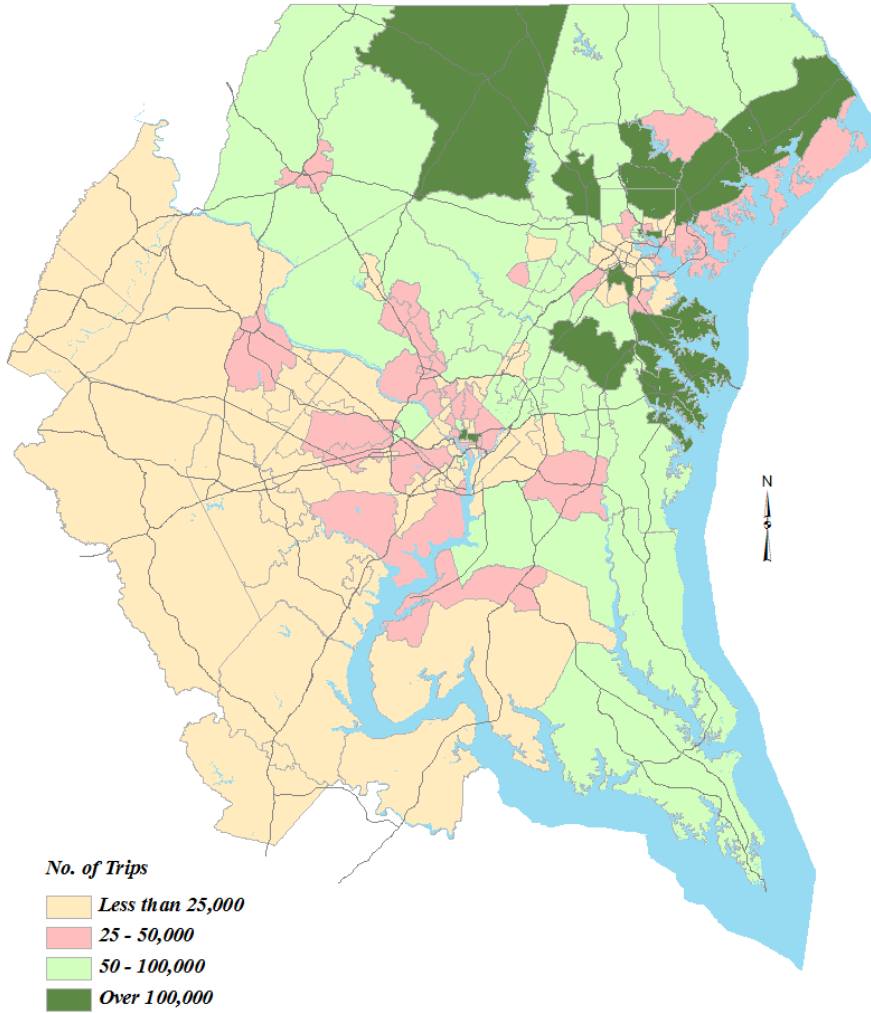
Baltimore/Washington International Thurgood Marshall Airport

Between 2007 and 2009, the percentage of regional passengers travelling from Baltimore/Washington International Thurgood Marshall Airport grew by just 1 percent, similar to the growth observed between 2005 and 2007 (Table 3). The most significant change at BWI Marshall was observed from percentage of passengers from the Virginia suburbs which grew by 85 percent when compared with 2007. In contrast, the airport's passengers from the Maryland suburbs dropped by 4 percent and passengers originating in the District of Columbia decreased by 21 percent. There was little change (up 2 percent) among trip originations from outlying areas. Nearly half (47 percent) of all passengers using BWI Marshall were from the Baltimore metropolitan area, and from within that area, 32 percent of originations were from Anne Arundel County and 26 percent were from Baltimore County.

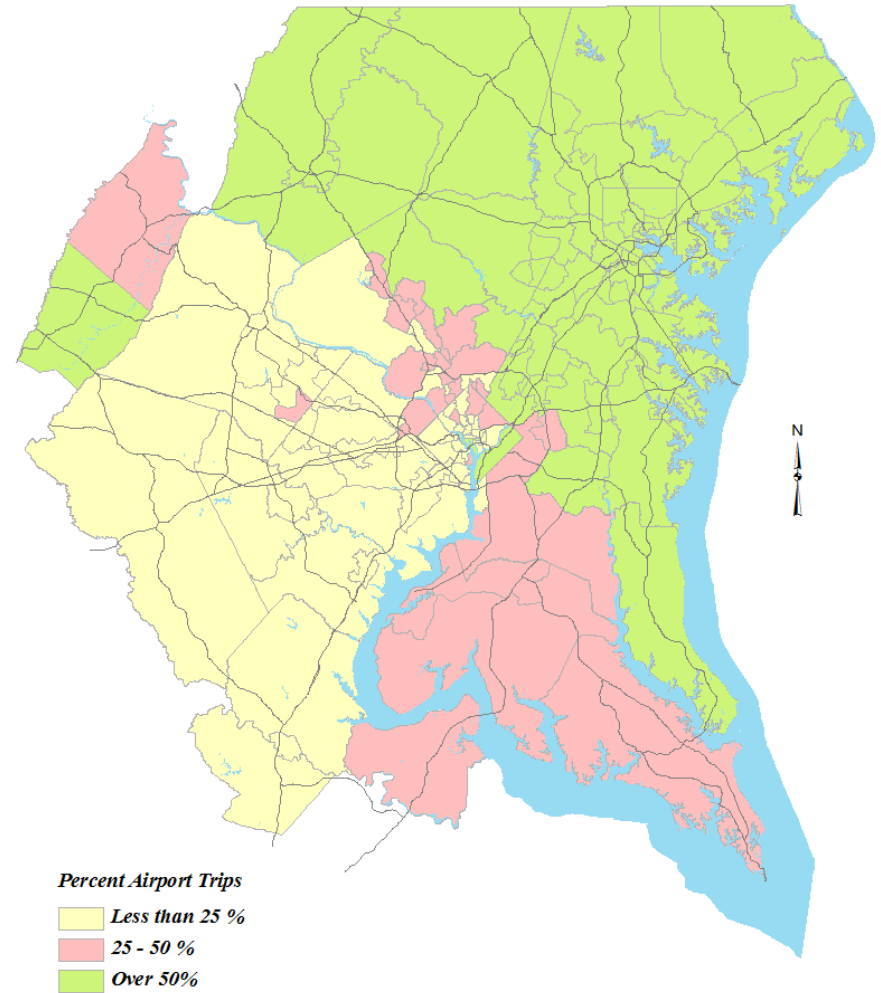
Figure 10 maps the annual air passengers by volume for BWI Marshall in 2009. The BWI Marshall service area is predictably concentrated in the eastern half of the region. It does extend to areas along the border of D.C. and to Prince George's County. The addition of Clarke County, Virginia is likely a result of improved geocoding of originations and the small sample of passengers who began their trip there. Figure 11 shows the distribution of originations by AAZ by the percentage of passengers who used BWI Marshall in 2009.

**Washington / Baltimore Air System Planning Region
Air Passenger Trip Originations – BWI Airport 2009**

**Figure 10
Annual Originations**



**Figure 11
Percent Originations**



Satisfaction with Airport Used

Overall, the survey indicates that passengers in the Washington-Baltimore region have a high level of satisfaction with the airport they used. Table 4 shows passenger satisfaction levels by jurisdiction. Across the region, 81 percent of passengers were satisfied with their airport choice. The overall percentage of satisfied passengers in 2009 was much higher than the 2005 rate of 76 percent, but slipped from the 2007 rate of 83 percent. Jurisdictions in the Baltimore metropolitan area, served by BWI Marshall, showed the highest passengers satisfaction rates in the region, at 90 percent or more. Passengers departing from a number of jurisdictions also showed a higher satisfaction rate when using Reagan National. Air passengers originating from Charles County in Maryland had an overall satisfaction rate of 71 percent, while those who took their trip from Reagan National had an 87 percent satisfaction rate and passengers originating from Alexandria had an overall satisfaction of 77 percent compared with 94 percent of those who departed from Reagan National. Passengers from Stafford County in Virginia also show a higher preference for Reagan National for their departing trip. Passengers from Fairfax and Prince William counties in Virginia indicated almost the same preference for Reagan National and Dulles airports.

Figure 12 displays the percentage distribution of departing air passengers' satisfaction for each AAZ.

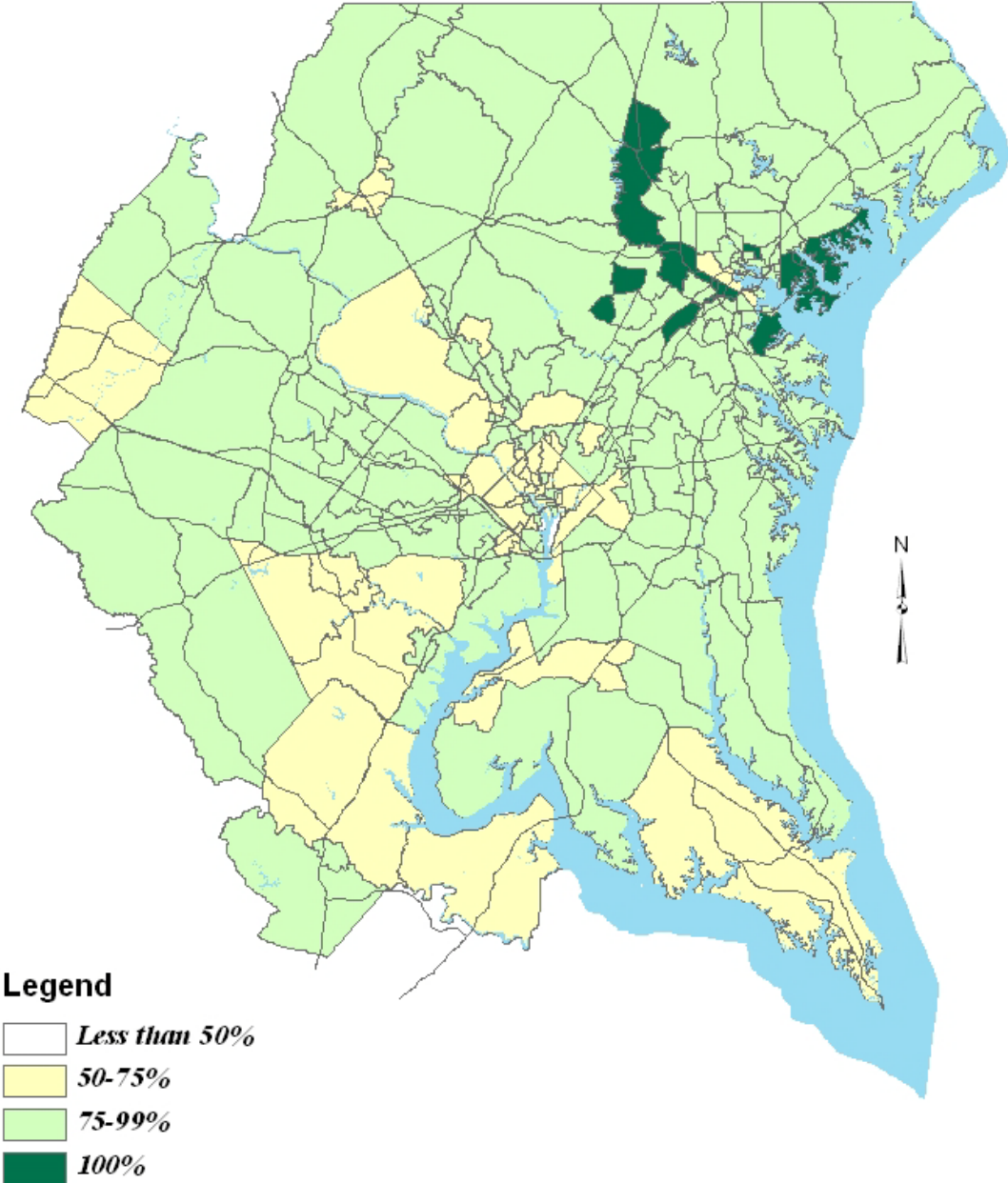
Table 4
Annual Departing Air Passengers Satisfaction With Airport
by Jurisdiction
2009

JURISDICTION	Total Originating Trips	Percent Satisfied with Airport Choice	Preference by Airport		
			BWI	DCA	IAD
Anne Arundel Co.	1,460,179	90%	95%	35%	36%
Baltimore City	1,152,959	91%	97%	15%	13%
Baltimore Co.	890,505	95%	97%	0%	19%
Carroll Co.	141,413	97%	99%	100%	71%
Hartford Co.	262,338	94%	98%	0%	12%
Howard Co.	575,899	92%	96%	54%	47%
SUBTOTAL BALTIMORE METRO AREA	4,483,293	92%	96%	28%	32%
Calvert Co.	105,069	95%	98%	90%	0%
Charles Co.	116,752	71%	76%	87%	29%
Frederick Co.	271,082	82%	91%	56%	71%
Montgomery Co.	2,373,284	76%	72%	89%	68%
Prince Georges Co.	969,180	82%	84%	91%	44%
SUBTOTAL MARYLAND SUBURBS OF DC	3,835,367	79%	79%	88%	64%
Alexandria	691,563	77%	41%	94%	30%
Arlington Co.	1,790,031	77%	28%	94%	43%
Fairfax Co.	3,359,003	79%	36%	84%	84%
Loudoun Co.	832,813	83%	40%	22%	92%
Prince William Co.	655,413	70%	23%	68%	79%
Stafford Co.	105,530	67%	15%	96%	65%
SUBTOTAL VIRGINIA SUBURBS OF DC	7,434,353	78%	33%	88%	79%
District of Columbia	5,433,179	76%	39%	96%	48%
Outlying Areas	2,654,322	87%	89%	77%	86%
Total	23,840,514	81%	81%	90%	71%

Note: Fairfax City, City of Falls Church, Manassas Park and Manassas City are included in their respective county totals.

Source: 2009 Washington-Baltimore Regional Air Passenger Survey

Figure 12
Washington / Baltimore Air System Planning Region
Percentage of Passengers Satisfied With Airport Use
2009

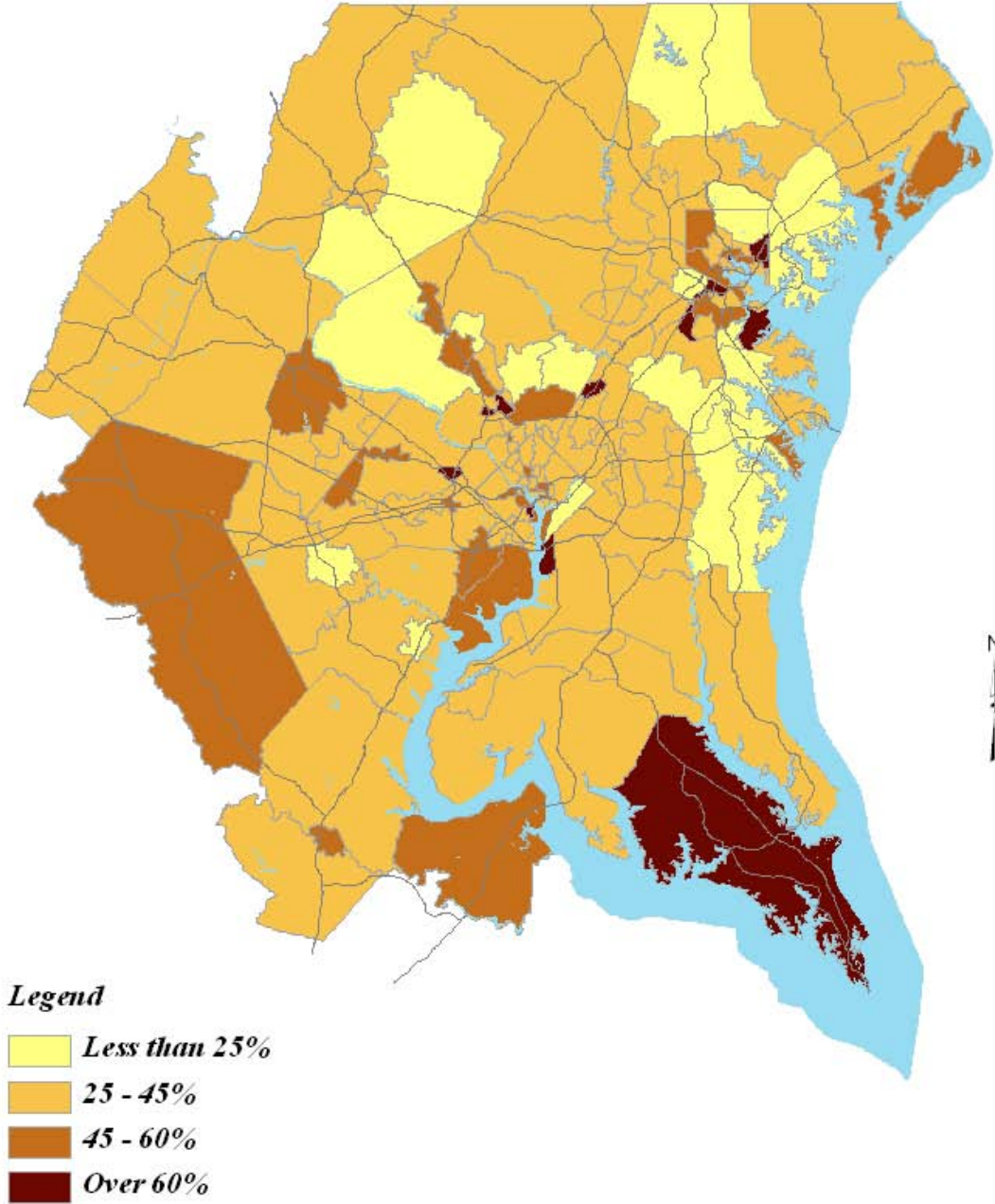


Trip Purpose

In past air passenger surveys, business travel accounted for almost half of the trips made by air passengers originating in the Washington-Baltimore region. That number dropped to 41 percent in 2007 and in 2009, it dropped further to 38 percent. Vacation was the trip purpose for 24 percent of locally originating passengers and personal or family affairs represented a further 29 percent.

Figure 13 maps regional origination patterns by AAZ among business travelers (including those travelling for military purposes). Within downtown core areas of Washington D.C. between 50 and 75 percent of air passengers were travelling on business. The percentage of business travelers was also high from the Downtown Baltimore to the BWI Marshall Airport area. Other significant concentrations of business travelers' originations include large employment centers throughout the region, including St. Mary's County, where the Patuxent River Naval Air Station is located.

Figure 13
Washington / Baltimore Air System Planning Region
Percentage of Passengers Traveling on Business
2009



Trip Origin Activity

While 38 percent of air passengers originating in the Washington-Baltimore region are business travelers, only 10 percent leave directly from a place of business to go to the airport. Figure 14 shows that concentrations of these business travelers are somewhat scattered throughout the region with significant concentrations originating from downtown Washington and Baltimore and regional activity centers. Some AAZ's with relatively high levels of originations from employment centers are near the BWI Marshall Airport and northeast of Baltimore at the Aberdeen Proving Grounds.

While over half of all air passengers leave for the airport from a private home, nearly one-third (29 percent) leave from a hotel or motel. Figure 15 displays the geographic pattern for locally originating passengers in the Washington-Baltimore region traveling to the airport from a hotel or motel. As with passengers leaving from a place of business, there are concentrations in the downtown areas, but among this subset of passengers there are also major concentrations originating close to the airports, particularly at BWI Marshall and Dulles.

For Reagan National, trip origination patterns reflect the airport's proximity to downtown Washington and major activity centers of Arlington and Alexandria. As a result, the AAZs with the highest concentrations of air passengers leaving for the airport from hotels was around the downtown area of D.C., particularly around the Mall, and from hotels in Crystal City in Arlington and Alexandria. Among passengers who left for the airport directly from a place of business, there were also particularly high numbers in the AAZ that includes the Mall. These zones are not only close to the airport, but also have good access to public transportation including airport limousines. The data also shows that between 2007 and 2009, there was a significantly higher number of passengers departing the airport from hotels at National Harbor in Prince George's County's waterfront area, where a major hotel development was recently completed, and the I-95 corridor in Woodbridge along the Dulles Access Road in Reston and Herndon, White Marsh area in North-East Baltimore County, and I-66 corridor in Fairfax County.

Figure 14
 Washington / Baltimore Air System Planning Region
 Percentage of Passengers Leaving from Work or Other Business Locations
 2009

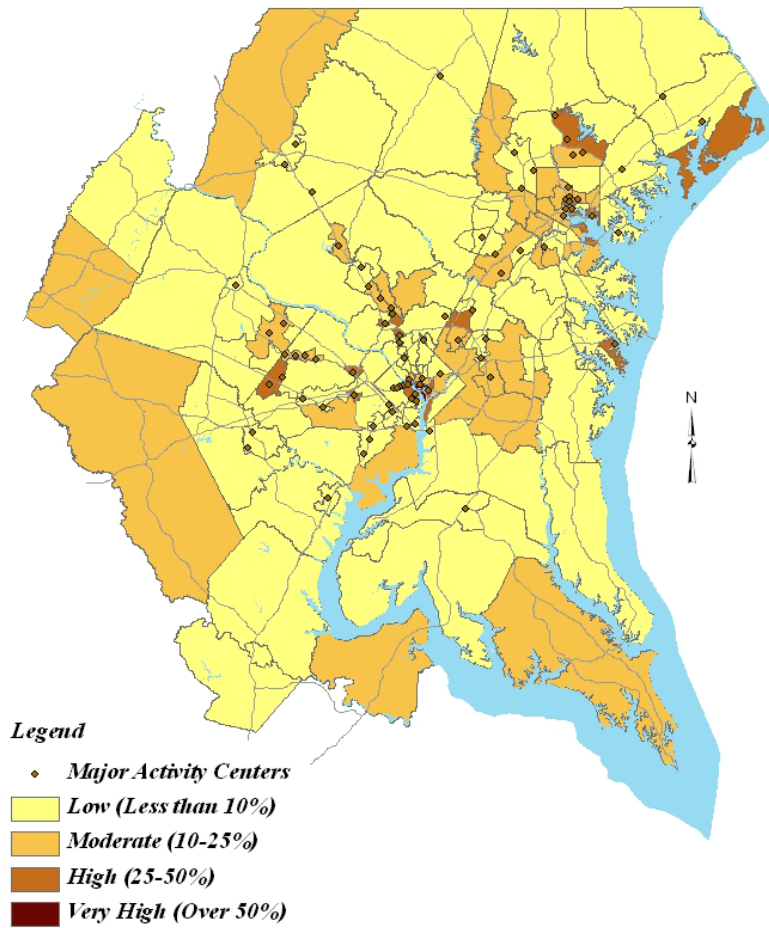
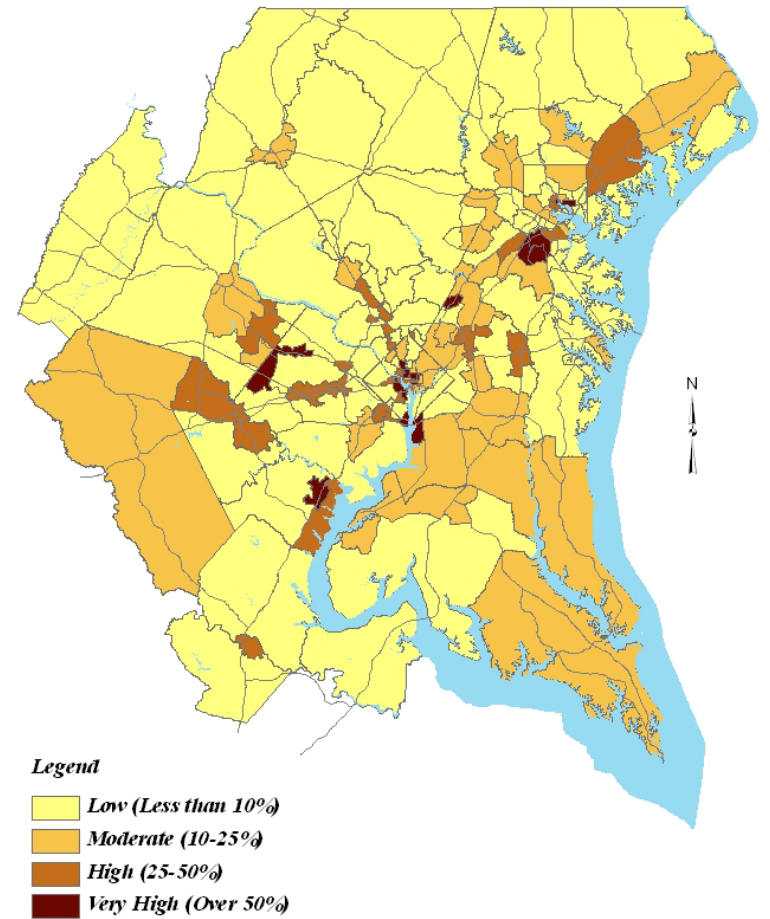


Figure 15
 Washington / Baltimore Air System Planning Region
 Percentage of Passengers Leaving from Hotel or Motel Locations
 2009



Mode of Access

For the Washington-Baltimore region as a whole, the most common mode of access to the airports, in 2009, was by private autos or rental cars, accounting for 60 percent of originating air passengers. Taxicabs were used by the second highest percentage of local air passengers (16 percent). Figure 16 displays the zones from which passengers used taxicabs to access the airports. D.C. and downtown Baltimore have the highest concentrations of taxi usage.

Figure 17 shows where passengers departing from the region utilize airport limousine services most often to arrive at the airport. As illustrated, the usage of this mode is low throughout the region, except in downtown Washington, central Baltimore City, the BWI Marshall Airport area, Crystal City and the Pentagon in Arlington, and the Dulles airport area of Reston, Herndon, Sterling, and Chantilly in Fairfax and Loudoun Counties.

Seven percent of air passengers used public transportation, such as the Metrorail to Reagan National and light rail or Amtrak/MARC services to BWI Marshall. However, within the Washington Downtown Center usage of public transportation was double the regional average and about two-and-a-half times that of the Baltimore Downtown center originations. Region-wide, 14 percent of originating air passengers use Metrorail to Reagan National. Metrorail usage is concentrated in the District of Columbia and the surrounding core areas of Arlington, Fairfax, Montgomery, and Prince George's Counties and the City of Alexandria, which are all directly served by Metrorail. Portions of the Annapolis area in Anne Arundel County in Maryland and southern Fairfax, Loudoun, Prince William, Spotsylvania Counties and City of Fredericksburg in Virginia also show a significant number of passengers using rail to access the airports, which could be attributed to passengers using public transportation for the last leg of their trip to the airport. Currently six percent of downtown Baltimore passengers are using public transportation to access the airport, presumably Baltimore's light rail station at BWI Marshall Airport. Planned service to BWI Marshall and Dulles will further change patterns of public transportation usage in the future.

Figure 16
Washington / Baltimore Air System Planning Region
Percentage of Passengers Using Taxicabs
2009



Figure 17
Washington / Baltimore Air System Planning Region
Percentage of Passengers Airport Bus/Van/Limousines
2009

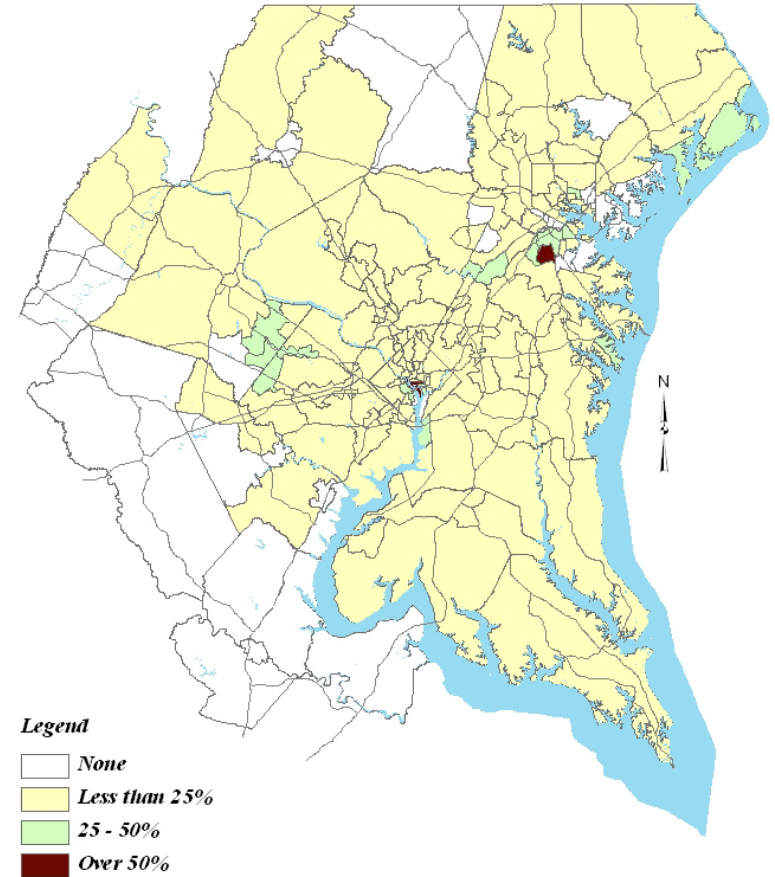
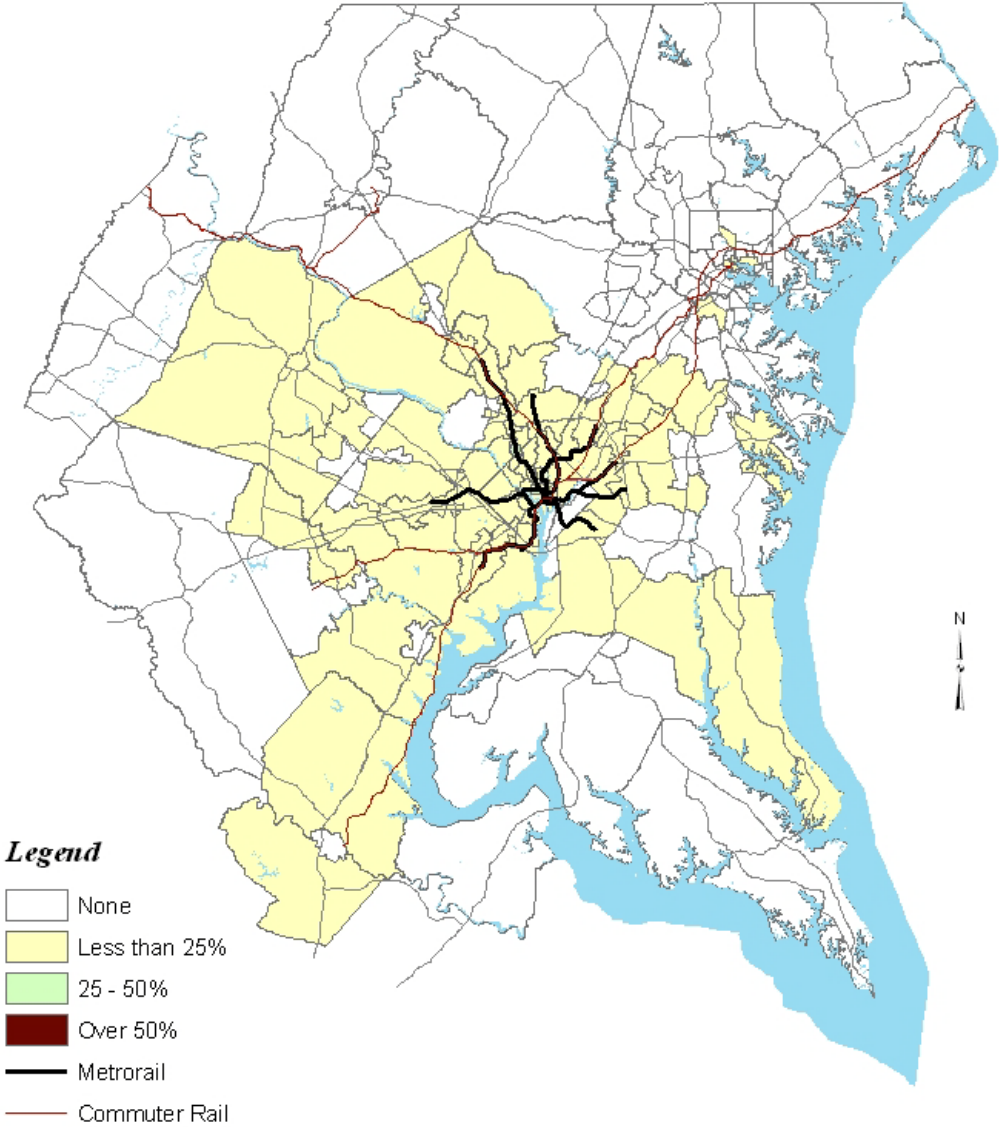


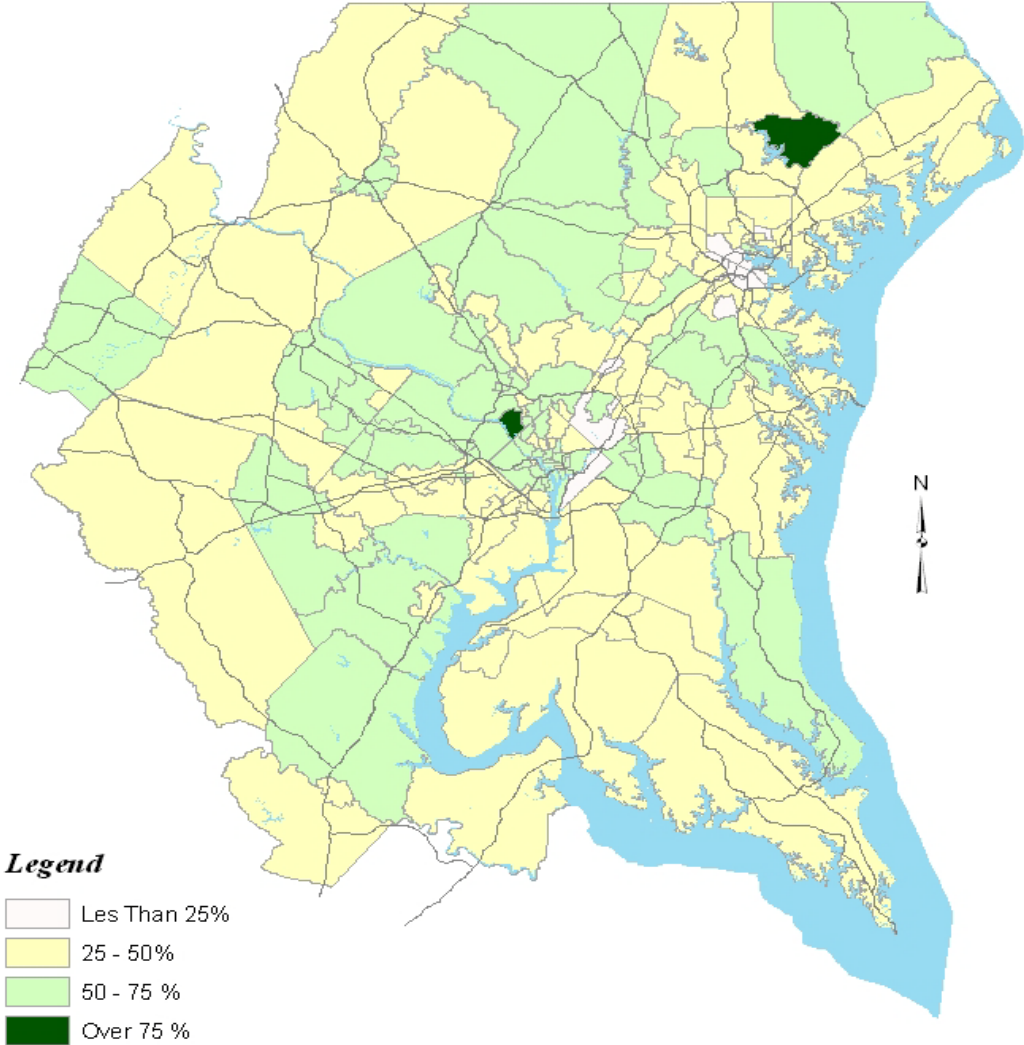
Figure 18
Washington / Baltimore Air System Planning Region
Percentage of Passengers Using Metrorail
2009



Household Income

The number of air passenger trips often correlates directly to household income levels. Figure 19 shows the origination zones for passengers with incomes of \$120,000 or more. The areas with high concentrations of passengers in the upper income bracket are widespread. In fact there are only a handful of zones in the region, where fewer than 25 percent of the air passengers are within this income range. This correlates with the fact that close to 71 percent of all departing air passengers from this region, which include non-residents, have household incomes of more than \$80,000 or more. This high income level is not surprising given that the median household income for the Washington-Baltimore-Northern Virginia DC-MD-VA-WV Combined Statistical Area is \$93,659 according to the 2009 American Community Survey from the US Census Bureau.

Figure 19
Washington / Baltimore Air System Planning Region
Percentage of Passengers With Household Income of \$120,000 or more
2009



Destination of Air Passengers

The Washington-Baltimore Regional Air Passenger Survey sample included flights from 33 airlines, including 15 international and 18 domestic carriers. The sample flights were grouped into seven regional destination clusters consisting of a total of 116 destinations, 30 international and 86 domestic. The survey questionnaire asked passengers to provide the final destination of their trip in order to determine the passenger's destination region. The destination region data is summarized by the local origination region in Table 5. In 2009, trips destined to the western United States accounted for the largest percentage of trips at 34 percent, followed by the Southeast with 30 percent.

The vast majority of all departing air passengers were destined for a domestic location accounting for 91 percent of all trips from the Washington/Baltimore air system region. BWI Marshall and Reagan National had a 40 and 36 percent share respectively of domestic flights. From BWI Marshall, at least half of the passengers were destined for the Great Lakes, Mid-Atlantic, and New England regions, and 63 percent of trips from Reagan National went to the New York City metropolitan region. While trips originating from the central jurisdictions of Montgomery, Prince Georges, Arlington, and Fairfax Counties; along with the City of Alexandria and the District of Columbia accounted for 70 percent of total trips originating from the Washington-Baltimore Air System Region, they accounted for almost 85 percent of trips destined to New York.

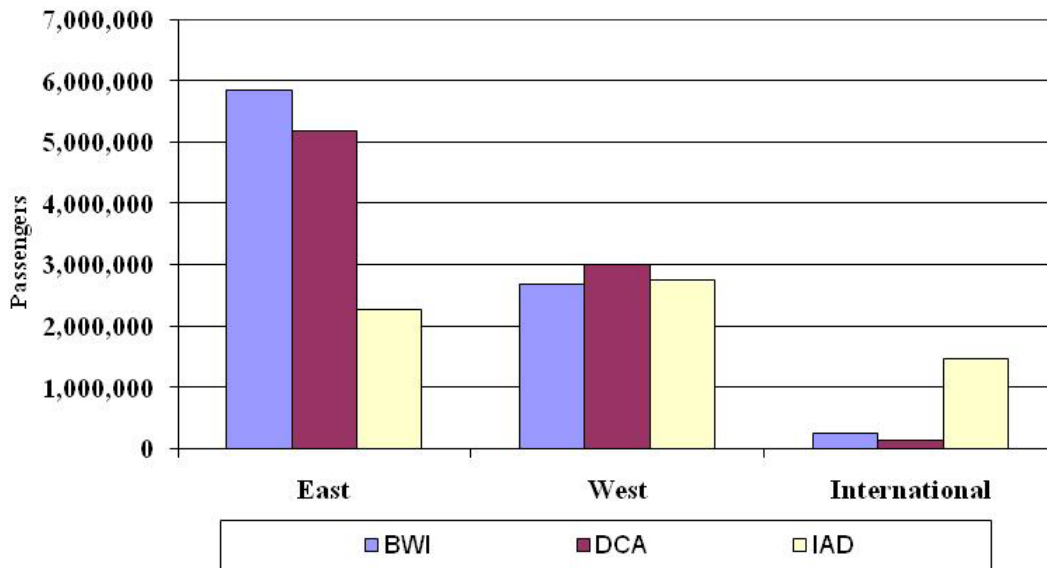
Figure 20 displays the number of passengers destined to the eastern, western US, as well as those with international destinations by airport. Dulles, which is the main long-haul airport with international service for the region had a disproportionate number of passengers heading to international destinations, accounting for 83 percent of total international departures. For domestic destinations, passengers leaving from Dulles were about evenly divided between the eastern US and the western US. Reagan National and BWI airports showed heavier concentrations of passengers destined to the eastern US, again, as a result of the types of service they provide and certain regulations. For example, by federal regulation Reagan National operations are subject to a perimeter rule that limits aircraft flights to nonstop distances of 1,250 miles or less, with the exception of six round-trip flights authorized to points outside the perimeter. While BWI Marshall mainly provides domestic, low cost carrier service to the region.

Table 5
Washington-Baltimore Air System Region
Departing Air Passengers Destinations by Region
(in thousands)

Destination Region	Baltimore		Maryland		Virginia		Washington		Outlying		Total	
	Suburbs	Suburbs	Suburbs	Suburbs	Suburbs	Suburbs	D.C.	D.C.	Region	Region	No.	%
Mid-Atlantic	461	33	205	15	331	24	272	19	126	9	1,395	6
New York	92	9	163	15	375	35	370	35	67	6	1,067	4
New England	374	18	364	18	584	29	525	26	183	9	2,030	9
Great Lakes	426	22	278	14	531	27	476	25	231	12	1,942	8
South-East	1,605	22	1,254	17	2,071	29	1,381	19	931	13	7,242	30
West	1,287	16	1,203	15	2,743	34	1,961	24	875	11	8,069	34
Sub-Total	4,245	20	3,467	16	6,635	31	4,985	23	2,413	11	21,745	91
International	238	11	368	18	799	38	449	21	243	12	2,097	9
Total	4,483	19	3,835	16	7,434	31	5,434	23	2,656	11	23,842	100

Source: 2009 Washington-Baltimore Regional Air Passenger Survey

Figure 20
Departing Air Passengers Domestic and International Destinations
2009



Source:- 2009 Washington-Baltimore Regional Air Passenger Survey

Table 6
Annual Departing Air Passengers by Destination Region by Airport
(in thousands)

Destination Region	BWI		DCA		IAD		TOTAL		Airport Share of Trips to Destination Region		
	No.	%	No.	%	No.	%	No.	%	BWI	DCA	IAD
Mid-Atlantic	878	10%	334	4%	182	3%	1,395	6%	63%	24%	13%
New York	164	2%	673	8%	230	3%	1,067	4%	15%	63%	22%
New England	1,070	12%	596	7%	365	5%	2,030	9%	53%	29%	18%
Great Lakes	965	11%	730	9%	247	4%	1,942	8%	50%	38%	13%
South-East	3,052	34%	2,768	34%	1,422	21%	7,242	30%	42%	38%	20%
West	2,550	29%	2,810	35%	2,709	39%	8,068	34%	32%	35%	34%
Domestic Subtotal	8,680	98%	7,911	98%	5,153	75%	21,744	91%	40%	36%	24%
Eastern U.S.	6,130	69%	5,101	63%	2,445	35%	13,676	57%	45%	37%	18%
Western U.S.	2,550	29%	2,810	35%	2,709	39%	8,068	34%	32%	35%	34%
Domestic Subtotal	8,680	98%	7,911	98%	5,153	75%	21,744	91%	40%	36%	24%
International	216	2%	139	2%	1,742	25%	2,097	9%	10%	7%	83%
Total	8,896	100%	8,050	100%	6,895	100%	23,841	100%	37%	34%	29%

Source: 2009 Washington-Baltimore Regional Air Passenger Survey

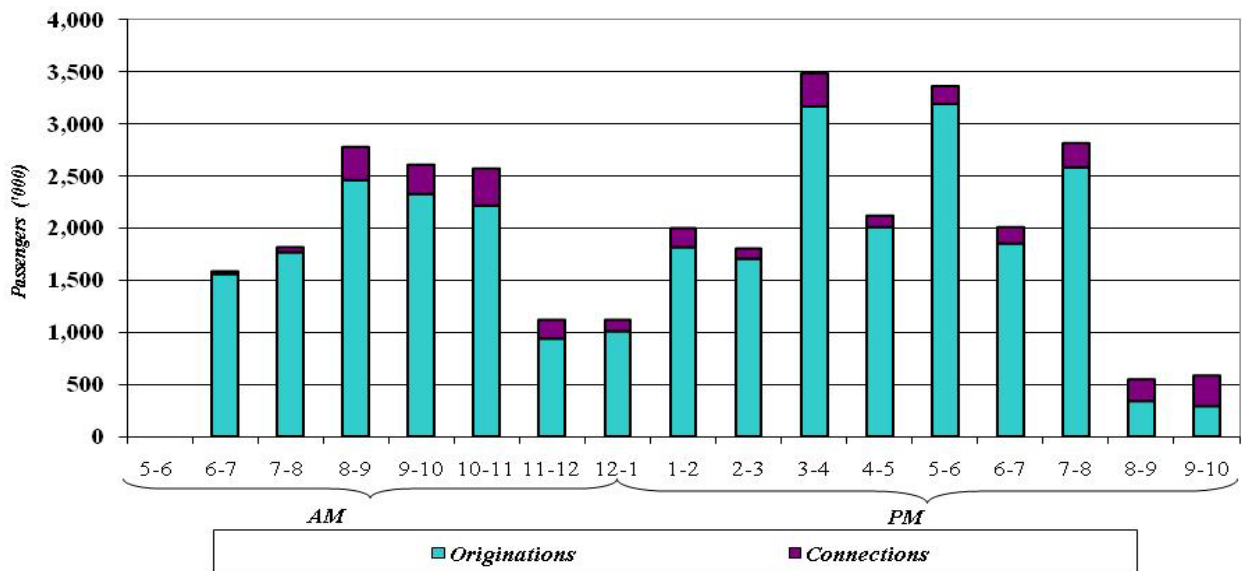
Departures by Time of Day

The distributions of passenger departures by time of day at the three airports in the Washington-Baltimore region are displayed in Figures 21, 22, and 23. These diurnal time distributions are indicative of the different roles played by these airports in the aviation system in the region.

Reagan National’s daily activity is characteristic of a typical short-haul, origin and destination airport – one that is used mainly by passengers beginning or ending their air trip at that airport, rather than connecting to another flight. This is indicated by the low number of connecting passengers as well as the high number of passengers departing between 8:00 AM and 11:00 AM., and 3:00 P.M. and 8:00 P.M.

The generally high number of departing passengers every hour between 8:00 AM and 6:00 PM reflects the federal High Density, or “slot” rule that is in effect at Reagan National. The regulation limits the number of airport operations per hour, and flattens out the peak hour of activity throughout the day. There were six hours during which Reagan National handled between 2,000 and 3,500 passengers, although the overall peak hour was 3–4 PM when almost 3,500 passengers departed.

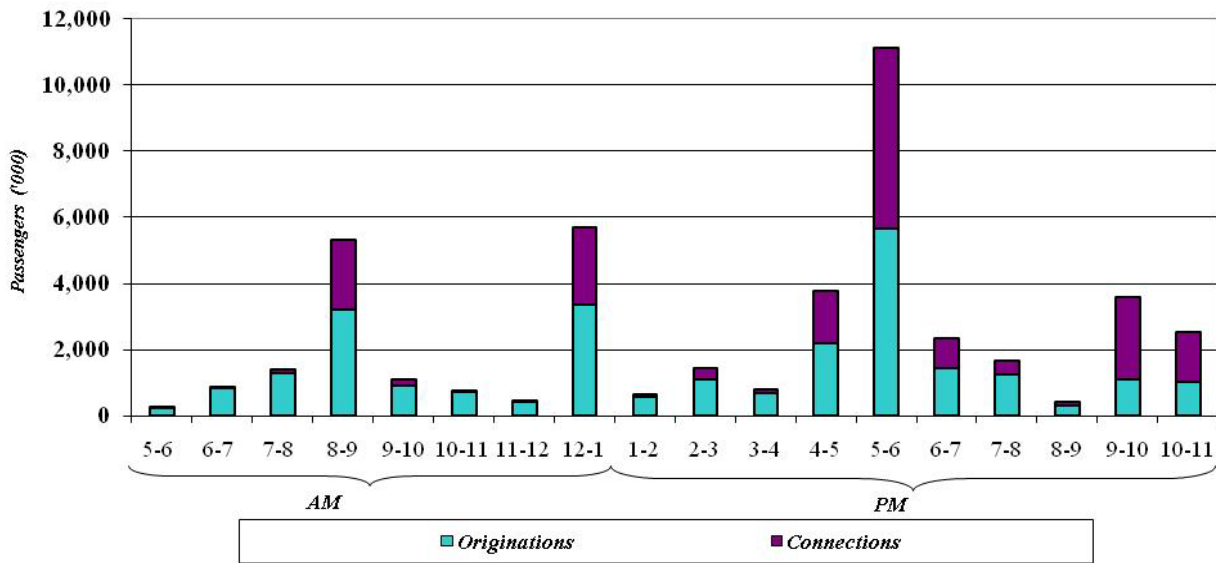
Figure 21
*Diurnal Passenger Distribution at National Airport
2009*



Source:- 2009 Washington-Baltimore Regional Air Passenger Survey

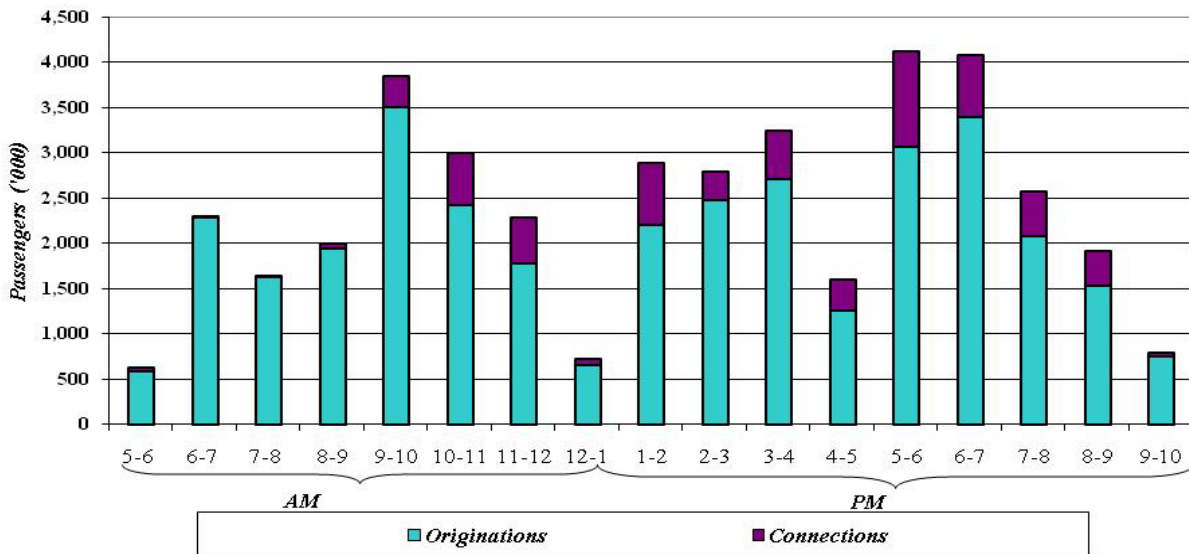
The distributions for both Dulles and BWI Marshall, however, characterize airports that are dominated by hub-style activity. The peaks and valleys indicate the phenomenon of inbound flights from the airlines’ “spoke” cities are arriving and then departures occurring en masse. The morning peak occurs once connections have been made and the first “bank” of flights departs. Both airports exhibited several additional peaks throughout the day as other “banks” of flights departed.

Figure 22
Diurnal Passenger Distribution at Dulles Airport
2009



Source:- 2009 Washington-Baltimore Regional Air Passenger Survey

Figure 23
Diurnal Passenger Distribution at BWI Airport
2009



Source:- 2009 Washington-Baltimore Regional Air Passenger Survey

The overall peak for Dulles was between 5-6 PM, when more than 10,000 passengers departed. Note that during the hours before this afternoon peak (4-5 PM), there was very little departing passenger activity at Dulles. This is indicative of the high number of long haul flights that serve Dulles. These flights (typically to and from the west coast and international destinations) normally arrive in the early afternoon and depart during the late afternoon peak. This high level of activity in the late afternoon at Dulles (between 4:00 PM and 8:00 PM) is characteristic of airports that handle significant amounts of long-haul activity.

BWI Marshall Airport also displays characteristics of a hub airport with significant amounts of long-haul activity, but the activity is more widely dispersed through the day than at Dulles. Periods of low activity preceded late afternoon peak hours (between 4:00 and 5:00 PM). The AM peak hour at BWI Marshall was 9:00-10:00 AM, during which nearly 4,000 passengers departed, and the PM peak hours between 5:00-7:00 PM with more than 4,000 departures per hour. There were “banks” of flights at 9:00-11:00 AM, 1:00-4:00 PM and 7:00-9:00 PM.

Washington and Baltimore Downtown Centers

The characteristics of air passengers originating in the major downtown centers in Baltimore and the Washington, D.C. area are analyzed in this section. The Baltimore downtown center includes all of the City of Baltimore, and the Washington downtown center includes the District of Columbia, Arlington County, and the City of Alexandria.

In Baltimore, the zones that make up the downtown activity center are the Metro Center zone plus East Baltimore, and West Baltimore. Table 7 displays airport use by originating passengers from the two activity centers and the remaining zones in the region. Although the number of air passengers from the Baltimore downtown center accounts for only five percent of the regional total, it is nearly 46 percent of all passengers from the Baltimore metropolitan area. The vast majority of air passenger originations, 93%, from downtown Baltimore used BWI Marshall for their departing trips. The Washington D.C. activity center includes the downtown and surrounding areas, the K Street corridor, areas around Union Station, L’Enfant Plaza, Georgetown, Rosslyn, the Pentagon, and Crystal City. The Washington downtown core generated 7.9 million air passengers in 2009, 64 percent of whom used Reagan National Airport.

In contrast to Baltimore, more downtown Washington passengers utilized the other regional airports, which are further away. This is a result of higher ticket prices and fewer flight options at Reagan National.

Table 7
Washington-Baltimore Air System Region
Airport Usage From Major Downtown Activity Centers
(in thousands)

Airport Used	Baltimore Downtown Center		Washington Downtown Center		All Other		Region	
	No.	%	No.	%	No.	%	No.	%
BWI	1,069	93%	1,141	14%	6,686	45%	8,896	37%
DCA	33	3%	5,075	64%	2,942	20%	8,050	34%
IAD	51	4%	1,700	21%	5,145	35%	6,895	29%
Total	1,153	100%	7,915	100%	14,773	100%	23,841	100%

Note: The Washington downtown center includes the District of Columbia, Arlington County and City of Alexandria.

The Baltimore downtown center includes the City of Baltimore.

All Other includes externals outside the Washington-Baltimore Air System Planning Region.

Source: 2009 Washington-Baltimore Regional Air Passenger Survey

Business travel is the trip purpose for 47 percent of the passengers from the Baltimore downtown center and 42 percent of the passengers from the Washington downtown center. Table 8 displays a breakdown of trip purpose for passengers from these centers. Business related trips from these two downtown centers are higher than the regional average of 38 percent, primarily due to the high concentration of government (Federal, state, and local) and private sector employment that is located within the activity centers.

Table 8
Washington-Baltimore Air System Region
Trip Purpose from Major Downtown Activity Centers
(in thousands)

Trip Purpose	Baltimore		Washington		All Other		Region	
	Downtown Center		Downtown Center					
	No.	%	No.	%	No.	%	No.	%
Business (Feds)	151	13%	1,457	18%	2,156	15%	3,764	16%
Business (St./Local)	30	3%	196	2%	204	1%	430	2%
Business (Non-Govt)	357	31%	1,681	21%	2,730	18%	4,768	20%
Vacation	248	21%	1,913	24%	3,602	24%	5,762	24%
Personal	260	23%	1,784	23%	4,767	32%	6,810	29%
Student	67	6%	411	5%	635	4%	1,113	5%
Other	41	4%	474	6%	678	5%	1,192	5%
Total	1,153	100%	7,915	100%	14,773	100%	23,841	100%

Note: The Washington downtown center includes the District of Columbia, Arlington County and City of Alexandria.

The Baltimore downtown center includes the City of Baltimore.

All Other includes externals outside the Washington-Baltimore Air System Planning Region.

Source: 2009 Washington-Baltimore Regional Air Passenger Survey

As seen in Table 9 below, the Washington and Baltimore downtown centers display higher percentages of passengers leaving hotels and motels than the region as a whole and much lower percentages leaving from a private residence. Both downtown centers had a majority of passengers traveling to the airport from a hotel or motel, 41 percent in the Baltimore and 48 percent in the Washington downtown center, compared with only 18 percent of passengers originating from the rest of the region. Air passengers leaving from private residences followed the opposite pattern with 68 percent of non-downtown passengers leaving from a home and 39 and 33 percent of passengers leaving from Baltimore and Washington. Places of employment or other business locations generated 12 percent of the passengers from the Washington activity center and 11 percent from the Baltimore activity center. The regional average was 10 percent.

Table 9
Washington-Baltimore Air System Region
Trip Origin Activity from Major Downtown Activity Centers
(in thousands)

Origin Activity	Baltimore		Washington		All		Region	
	Downtown Center		Downtown Center		Other		No.	%
	No.	%	No.	%	No.	%	No.	%
Private Residence	451	39%	2,635	33%	10,030	68%	13,116	55%
Hotel/Motel	477	41%	3,813	48%	2,590	18%	6,880	29%
Regular Employment	62	5%	497	6%	581	4%	1,140	5%
Other Business	70	6%	497	6%	687	5%	1,254	5%
Other	93	8%	473	6%	885	6%	1,451	6%
Total	1,153	100%	7,915	100%	14,773	100%	23,841	100%

Note: The Washington downtown center includes the District of Columbia, Arlington County and City of Alexandria.

The Baltimore downtown center includes the City of Baltimore.

All Other includes externals outside the Washington-Baltimore Air System Planning Region.

Source: 2009 Washington-Baltimore Regional Air Passenger Survey

Taxicabs are the most heavily used mode of access to the airports from Washington and the second most heavily used mode from Baltimore. Washington differs significantly from the region as a whole, where only 31 percent of total passengers used automobiles (private and rental) to access the airports. Table 10 illustrates the mode of access breakdown. In the Baltimore center, 17 percent of the passengers used taxicabs, and this figure is dwarfed by the 34 percent in the Washington center. Passengers from both activity centers also used the airport limousine service at a higher rate (17 and 15 percent respectively) than in other parts of the region (9 percent). The use of mass transit from the Washington center reflects the same figure (16 percent) of overall Metrorail usage at Reagan National airport. This is likely due to the extensive coverage provided by the Metrorail system in the activity center area.

Table 10
Washington-Baltimore Air System Region
Mode of Access from Major Downtown Activity Centers
(in thousands)

Mode of Access	Baltimore Downtown Center		Washington Downtown Center		All Other		Region	
	No.	%	No.	%	No.	%	No.	%
Private Auto	518	45%	1,843	23%	8,889	60%	11,249	47%
Rental Auto	146	13%	596	8%	2,406	16%	3,149	13%
Taxicab	201	17%	2,684	34%	988	7%	3,873	16%
Public Transportation	69	6%	1,264	16%	367	2%	1,700	7%
Airport Bus or Limousine	193	17%	1,214	15%	1,325	9%	2,733	11%
Other	26	2%	314	4%	797	5%	1,137	5%
Total	1,153	100%	7,915	100%	14,773	100%	23,841	100%

Note: The Washington downtown center includes the District of Columbia, Arlington County and City of Alexandria.

The Baltimore downtown center includes the City of Baltimore.

All Other includes externals outside the Washington-Baltimore Air System Planning Region.

Source: 2009 Washington-Baltimore Regional Air Passenger Survey

APPENDIX A

List of Aviation Analysis Zones

Table A-1
Washington / Baltimore Air System Planning Region
Aviation Analysis Zone System

AAZ	Jurisdiction	Place Name
1	District of Columbia	The Mall
2	District of Columbia	The White House, Federal Triangle, Foggy Bottom
3	District of Columbia	Franklin Square, Mt. Vernon, Gallery Place
4	District of Columbia	Dupont Circle, Adams Morgan
5	District of Columbia	Georgetown
6	District of Columbia	Cleveland Park
7	District of Columbia	Foxhall, Sutton Place, Cathedral Heights, Senate Heights, Glover Park, Foxhall Village, Canal View
8	District of Columbia	Tenleytown, American University
9	District of Columbia	Westover Place, Embassy Park, Wesley Heights, McLean Gardens
10	District of Columbia	Chevy Chase, Friendship Heights, Western Rock Creek Park
11	District of Columbia	Colonial Village, Rock Creek Gardens, Shepherd Park, Walter Reed, Takoma, Petworth, Hampshire Knolls, Crestwood, Eastern Rock Creek Park
12	District of Columbia	Mount Pleasant, North Adams Morgan
13	District of Columbia	Shaw, Howard University
14	District of Columbia	Riggs Park, Michigan Park, Catholic University, Brookland, Fort Lincoln, Langdon, Brentwood, Edgewood, Eckington, Washington Hospital Center
15	District of Columbia	The Capitol
16	District of Columbia	National Arboretum, Gallaudet University, Trinidad, Lincoln Park, Eastern Market, Capitol South, Navy Yard, Stadium Armory
17	District of Columbia	Anacostia, Benning, Fort Dupont, Capitol View, Deanwood, Capitol Heights
18	District of Columbia	L'Enfant Plaza, Federal Center SW, Waterfront
19	District of Columbia	Buzzard Point
20	District of Columbia	Bolling Air Force Base
21	Arlington County, VA	Ronald Reagan National Airport
22	Arlington County, VA	Pentagon City, Crystal City
23	Arlington County, VA	The Ridge, Forest Hills Commons, Avalon Bay
24	Arlington County, VA	Arlington National Cemetery, The Pentagon
25	Arlington County, VA	Rosslyn
26	Arlington County, VA	Clarendon, Colonial Village
27	Arlington County, VA	East Falls Church, North Arlington
28	Arlington County, VA	Ballston, Buckingham, Glencarlyn, Barcroft
29	Arlington County, VA	Shirlington
30	City of Alexandria, VA	Beverly Hills, Potomac Yards, Braddock Heights, Timber Branch Park, Rosemont, Quaker Hill, Ivy Hill
31	City of Alexandria, VA	Old Town, Alexandria
32	City of Alexandria, VA	Cameron Park, Eisenhower Avenue
33	City of Alexandria, VA	Landmark
34	Fairfax County, VA	Falls Church, Fairview Park, Annandale, Lincoln
35	Fairfax County, VA	Shirley/Edsal Industrial Park, Springfield, Franconia, Kingstowne, Fort Belvoir Proving Ground, Newington

Table A-1
Washington / Baltimore Air System Planning Region
Aviation Analysis Zone System

AAZ	Jurisdiction	Place Name
36	Fairfax County, VA	Huntington, Rose Hill, Hybla Valley, Fort Hunt, Mount Vernon, Woodlawn, Fort Belvoir, Lorton, Mason Neck
37	Fairfax County, VA	Lorton
38	Fairfax County, VA	Ravensthorpe, Burke, Fairfax Station, Burke Center, George Mason University
39	Fairfax County, VA	Merrifield
40	Fairfax County, VA	Centerville, Sully Station, Clifton
41	Fairfax County, VA	Fair Oaks, Fairfax City
42	Fairfax County, VA	Chantilly
43	Fairfax County, VA	Reston, Franklin Farm, Vienna
44	Fairfax County, VA	Woodland Park, Dulles Technology Center
45	Fairfax County, VA	Herndon, Great Falls
46	Fairfax County, VA	Tysons Corner
47	Fairfax County, VA	McLean
48	Montgomery County, MD	Glen Echo
49	Montgomery County, MD	Cabin John, Oakmont
50	Montgomery County, MD	Medical Center
51	Montgomery County, MD	Chevy Chase
52	Montgomery County, MD	Bethesda
53	Montgomery County, MD	Rock Spring, White Flint
54	Montgomery County, MD	West I-270 Rockville
55	Montgomery County, MD	Gaithersburg, Washington Grove
56	Montgomery County, MD	Germantown
57	Montgomery County, MD	Potomac
58	Montgomery County, MD	Dickerson, Barnsville, Poolsville, Dowsonville, Quince Orchard, Darnestown, North Potomac
59	Montgomery County, MD	Damascus, Cedar Grove, Woodfield, Clarksburg, Laytonsville, Brookeville
60	Montgomery County, MD	Montgomery Village
61	Montgomery County, MD	East I-270 Rockville
62	Montgomery County, MD	Aspen Hill, Layhill, Norbeck, Olney
63	Montgomery County, MD	Cloverly, Collesville, Spencerville, Burtonsville, Fairland
64	Montgomery County, MD	Glenmont, White Oak, Wheaton, Four Corners, Hillandale, Forest Glen
65	Montgomery County, MD	North Chevy Chase
66	Montgomery County, MD	Forest Glen Park, North Silver Spring
67	Montgomery County, MD	Downtown Silver Spring
68	Montgomery County, MD	Takoma Park
69	Prince George's County, MD	Langley Park, Adelphi, Chillum, Hyattsville, Mount Rainer, Brentwood, Cottage City, Bladensburg, Edmonton, Berwyn Heights, Cheverly
70	Prince George's County, MD	College Park, University Park, University of Maryland
71	Prince George's County, MD	Beltville
72	Prince George's County, MD	Calverton
73	Prince George's County, MD	Laurel, Montpelier

Table A-1
Washington / Baltimore Air System Planning Region
Aviation Analysis Zone System

AAZ	Jurisdiction	Place Name
74	Prince George's County, MD	Greenbelt, Godard Space Center, New Carrollton
75	Prince George's County, MD	North Bowie, Woodmore, Kettering
76	Prince George's County, MD	Bowie
77	Prince George's County, MD	Glenarden, Kentland
78	Prince George's County, MD	Seat Pleasant, Fairmount Heights, Capitol Heights, District Heights, Forestville
79	Prince George's County, MD	Andrews Air Force Base, Melwood, Woodyard, Upper Marlboro, Croom, Marlton
80	Prince George's County, MD	Hillcrest Heights, Morningside, Suitland, Temple Hills, Forest Heights
81	Prince George's County, MD	National Harbor
82	Prince George's County, MD	Friendly, Camp Springs, Clinton, Tantallon, Piscataway, Brandywine, Accokeek, Cedarville, Baden, Westwood, Eagle Harbor, Nottingham
83	Prince William County, VA	Woodbridge, Dumfries
84	Prince William County, VA	Woodbridge, Potomac Mills
85	Prince William County, VA	Dale City, Occoquan, Lake Ridge, Occoquan Marine Corps Base
86	Prince William County, VA	Nokesville, Lake Jackson, Gainsville, Haymarket
87	Prince William County, VA	Manassas, Manassas Park
88	Prince William County, VA	Sudley, Manassas Battle Field, Haymarket
89	Loudoun County, VA	South Riding, Arcola
90	Loudoun County, VA	Washington Dulles International Airport
91	Loudoun County, VA	Cascades, Sugarland Run, Lowes Island
92	Loudoun County, VA	Sterling Park, Sterling, Dulles, Ashburn
93	Loudoun County, VA	Leesburg, Ashburn
94	Loudoun County, VA	Lovettsville, Hillsboro, Round Hill, Purcellville, Hamilton, Lucketts, Bluemont, Philomont, Saint Louis, Western Loudoun
95	Frederick County, MD	Woodsboro, Libertytown, Oldfield, New Market, Urbana, Point of Rock, Walkesville, Mount Airy
96	Frederick County, MD	City of Frederick
97	Frederick County, MD	Thurmont, Emmitsburg, Myersville, Middletown, Burkittsville, Brunswick
98	Carroll County, MD	Carroll County, MD
99	Howard County, MD	Lisbon, Cooksville, Glenwood, Glenelg, West Friendship, Dayton, Highland, Clarkesville
100	Howard County, MD	North Ellicott City
101	Howard County, MD	South Ellicott City
102	Howard County, MD	Village of River Hill (Columbia)
103	Howard County, MD	Village of Harpers Choice, Village of Hickory Ridge, Simpsonville, Village of Wilde Lake, Village of Dorseys Search
104	Howard County, MD	Village of Oakland Mills, Village of Owen Brown, Village of Kings Contrivance, Village of Long Reach
105	Howard County, MD	Scaggsville, Dickinson, Laurel, Savage
106	Howard County, MD	Village of Kings Contrivance, Columbia Gateway
107	Howard County, MD	Elkridge, Dorsey

Table A-1
Washington / Baltimore Air System Planning Region
Aviation Analysis Zone System

AAZ	Jurisdiction	Place Name
108	Anne Arundel County, MD	Laurel, Odenton, Piney Orchard, Woodwardville, Gambrills, Crofton, Jessup
109	Anne Arundel County, MD	Jessup, Severn, Arundel Mills
110	Anne Arundel County, MD	Dorsey
111	Anne Arundel County, MD	Baltimore/Washington International Thurgood Marshall Airport
112	Anne Arundel County, MD	Linthicum
113	Anne Arundel County, MD	North Linthicum
114	Anne Arundel County, MD	Glen Burnie
115	Anne Arundel County, MD	Glen Burnie, Harundale
116	Anne Arundel County, MD	Harundale
117	Anne Arundel County, MD	Lake Shore, Gibson Island, Arnold, Cape Saint Claire, US Naval Station
118	Anne Arundel County, MD	Severna Park
119	Anne Arundel County, MD	Annapolis
120	Anne Arundel County, MD	Heritage Harbor, Edgewater, Woodland Beach, Mayo, Highland Beach
121	Anne Arundel County, MD	Crofton, Davidsonville, Harwood, Lothian, Bayard, Owensville, Gallesville, Shady Side, Tracys Landing, Deale Churchton, Friendship
122	Calvert County, MD	Calvert County
123	St. Mary's County, MD	St. Mary's County
124	Charles County, MD	Pinefield, Waldorf, Cedarville, Indian Head, Glaymont, Marbury, Bryans Road, St. Charles
125	Charles County, MD	White Plains, Pomfret, La Plata, Doncaster, Pisgah, Ironsides, Port Tobacco, Bryantown, Hughesville, Benedict, Nanjemoy, Welcome, Bel Alton, Faulkner, Charlotte Hall, Mechanicsville, Newburg
126	King George County, VA	King George County
127	Spotsylvania County, VA	Northern Spotsylvania County
128	Fredericksburg, VA	City of Fredericksburg
129	Stafford County, VA	Stafford County
130	Fauquier County, VA	Fauquier County
131	Clarke County, VA	Clarke County
132	Jefferson County, WV	Jefferson County
133	Baltimore City, MD	Downtown Inner Harbor
134	Baltimore City, MD	Locust Point, Orioles Park
135	Baltimore City, MD	Canton Waterfront
136	Baltimore City, MD	Brooklyn, Cherry Hill, Loudon Park
137	Baltimore City, MD	Arlington, Pimlico, Gwynns Falls Park, Park Heights, North West Baltimore
138	Baltimore City, MD	Walbrook, Rosemont, Druid Hill Park
139	Baltimore City, MD	University of MD Baltimore-area
140	Baltimore City, MD	Hampden
141	Baltimore City, MD	Ronald Park, Govans, Hamilton, Waverly, Herring Run Park, Belair-Edison
142	Baltimore City, MD	Collington Square

Table A-1
Washington / Baltimore Air System Planning Region
Aviation Analysis Zone System

AAZ	Jurisdiction	Place Name
143	Baltimore City, MD	Mount Vernon
144	Baltimore City, MD	Lafayette Courts, Little Italy, Inner Harbor East, Fells Point, Washington Hill, Butchers Hill
145	Baltimore City, MD	East Baltimore
146	Baltimore County, MD	Halethorpe
147	Baltimore County, MD	North Arbutus
148	Baltimore County, MD	Arbutus
149	Baltimore County, MD	Catonsville, Westview Park, Woodlawn
150	Baltimore County, MD	Upperco, Boring, Reisterstown, Glyndon, Snowy
151	Baltimore County, MD	Garrison, Owings Mills, Pikesville, Randallstown, Woodlawn
152	Baltimore County, MD	Freeland, Maryland Line, Middletown, Gunpowder Falls, Butler, Belfast, Cooperstown, Dover
153	Baltimore County, MD	Stevenson, Brooklandville
154	Baltimore County, MD	Lutherville, Cockeysville, Timonium, Carney
155	Baltimore County, MD	Towson, Parkville
156	Baltimore County, MD	Long Green, Glen Park, Baldwin, Fork
157	Baltimore County, MD	Fullerton, Perry Hall, Bradshaw, Rosedale, Middle River, White Marsh
158	Baltimore County, MD	Essex, Dundalk, Sparrows Point, Edgemere, East Baltimore County
159	Harford County, MD	Norrisville, Whiteford, Cardiff, Pylesville, Broad Creek, Dublin, Jarrettsville, Forest Hill, Darlington
160	Harford County, MD	Bel Air, Churchville, Fountain Green, Creswell, Level, Aberdeen, Harve De Grace, Joppatowne
161	Harford County, MD	Aberdeen Proving Ground

APPENDIX B

Air Passenger Originations by AAZ

Table B-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations by AAZ

AAZ	BWI		DCA		IAD		Total
	No.	%	No.	%	No.	%	
1	25,336	69	8,827	24	2,693	7	36,856
2	9,602	7	104,322	72	30,866	21	144,790
3	220,873	11	1,248,777	65	452,325	24	1,921,975
4	176,746	15	705,568	61	277,481	24	1,159,795
5	36,352	21	85,916	50	47,883	28	170,151
6	75,956	18	245,759	58	102,484	24	424,199
7	12,607	19	43,519	64	11,956	18	68,082
8	16,276	17	54,155	56	25,757	27	96,188
9	44,932	31	67,984	47	31,023	22	143,939
10	29,681	20	88,655	61	27,879	19	146,215
11	33,984	34	55,022	55	11,445	11	100,451
12	16,539	14	77,138	65	24,478	21	118,155
13	19,084	17	66,913	61	24,025	22	110,022
14	37,943	32	49,797	43	29,403	25	117,143
15	32,181	22	95,185	64	21,464	14	148,830
16	47,049	22	126,147	59	38,928	18	212,124
17	12,687	56	10,075	44	0	0	22,762
18	16,431	8	162,368	79	27,285	13	206,084
19	10,392	16	30,265	48	22,852	36	63,509
20	12,137	55	9,772	45	0	0	21,909
21	4,991	40	0	0	7,610	60	12,601
22	53,244	9	489,884	79	79,397	13	622,525
23	10,793	10	71,202	67	25,067	23	107,062
24	3,628	6	26,512	46	27,460	48	57,600
25	19,473	10	135,856	68	45,129	23	200,458
26	19,158	7	225,104	80	38,417	14	282,679
27	23,994	13	109,224	58	54,203	29	187,421
28	34,681	13	158,628	58	79,805	29	273,114
29	6,564	14	26,907	58	13,100	28	46,571
30	7,471	6	103,812	81	17,254	13	128,537
31	39,080	11	256,829	73	54,739	16	350,648

AAZ	BWI		DCA		IAD		Total
	No.	%	No.	%	No.	%	
32	6,969	16	23,179	52	14,726	33	44,874
33	23,693	14	111,298	66	32,513	19	167,504
34	27,932	11	136,623	53	94,225	36	258,780
35	18,591	11	120,605	69	35,304	20	174,500
36	37,167	14	172,620	63	64,066	23	273,853
37	26,181	10	116,841	43	128,288	47	271,310
38	12,512	7	54,494	29	119,389	64	186,395
39	3,454	8	16,864	38	24,468	55	44,786
40	13,845	7	11,769	6	162,003	86	187,617
41	39,974	15	66,626	25	161,027	60	267,627
42	2,030	2	0	0	81,128	98	83,158
43	31,335	7	76,714	17	340,301	76	448,350
44	20,380	6	11,582	3	325,455	91	357,417
45	16,389	7	32,548	14	184,258	79	233,195
46	48,758	13	122,827	32	208,063	55	379,648
47	58,953	31	62,462	32	70,952	37	192,367
48	28,913	34	28,154	33	27,498	33	84,565
49	26,134	22	40,504	35	50,501	43	117,139
50	21,760	31	37,233	54	10,181	15	69,174
51	14,791	25	35,048	60	8,295	14	58,134
52	27,270	24	51,476	46	33,294	30	112,040
53	37,623	27	74,225	53	26,968	19	138,816
54	27,353	20	52,005	38	56,966	42	136,324
55	43,861	31	51,958	36	47,261	33	143,080
56	24,442	32	14,848	19	37,401	49	76,691
57	48,153	33	32,384	22	65,273	45	145,810
58	64,343	24	94,491	36	104,083	40	262,917
59	66,086	58	19,038	17	28,925	25	114,049
60	35,379	46	22,275	29	18,762	25	76,416
61	29,998	29	28,748	28	45,504	44	104,250
62	84,984	49	26,494	15	63,323	36	174,801

Table B-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations by AAZ

AAZ	BWI		DCA		IAD		Total
	No.	%	No.	%	No.	%	
63	55,882	62	27,395	30	7,529	8	90,806
64	74,747	43	76,834	44	21,783	13	173,364
65	26,748	29	43,016	47	21,341	23	91,105
66	15,559	23	31,053	45	22,531	33	69,143
67	33,186	43	33,965	44	9,472	12	76,623
68	24,854	45	10,309	19	19,748	36	54,911
69	76,944	66	26,386	23	13,790	12	117,120
70	52,411	64	16,708	20	13,401	16	82,520
71	21,435	85	1,258	5	2,644	10	25,337
72	15,455	100	0	0	0	0	15,455
73	51,322	74	11,255	16	6,847	10	69,424
74	59,203	79	10,988	15	5,045	7	75,236
75	67,487	82	14,409	17	728	1	82,624
76	54,004	98	0	0	1,193	2	55,197
77	18,312	48	18,423	48	1,424	4	38,159
78	16,713	49	13,380	39	4,199	12	34,292
79	38,505	59	22,250	34	4,706	7	65,461
80	13,652	29	25,306	54	7,828	17	46,786
81	23,185	19	84,059	70	12,335	10	119,579
82	62,919	43	60,529	42	21,668	15	145,116
83	14,564	10	43,977	30	88,573	60	147,114
84	3,782	8	17,133	35	28,254	57	49,169
85	6,785	5	60,101	40	82,935	55	149,821
86	9,070	7	24,599	18	105,385	76	139,054
87	20,238	20	21,323	22	57,228	58	98,789
88	11,501	16	6,113	9	53,852	75	71,466
89	4,516	4	6,009	6	90,099	90	100,624
90	12,432	38	5,074	16	14,876	46	32,382
91	14,565	13	2,537	2	94,448	85	111,550
92	5,167	2	20,286	10	184,262	88	209,715
93	35,540	15	9,815	4	191,110	81	236,465

AAZ	BWI		DCA		IAD		Total
	No.	%	No.	%	No.	%	
94	10,259	7	2,589	2	129,229	91	142,077
95	71,724	55	15,341	12	44,499	34	131,564
96	32,681	72	7,828	17	4,775	11	45,284
97	67,625	72	8,006	8	18,603	20	94,234
98	130,395	92	624	0	10,394	7	141,413
99	86,272	74	2,797	2	27,267	23	116,336
100	86,187	89	0	0	10,413	11	96,600
101	19,811	100	0	0	0	0	19,811
102	32,993	100	0	0	0	0	32,993
103	63,772	91	6,207	9	0	0	69,979
104	67,317	97	0	0	1,837	3	69,154
105	57,619	100	0	0	0	0	57,619
106	74,629	99	686	1	0	0	75,315
107	38,092	100	0	0	0	0	38,092
108	149,264	88	8,161	5	12,487	7	169,912
109	97,993	93	4,502	4	2,891	3	105,386
110	15,335	100	0	0	0	0	15,335
111	18,836	100	0	0	0	0	18,836
112	413,872	94	10,271	2	13,949	3	438,092
113	12,418	100	0	0	0	0	12,418
114	14,541	72	0	0	5,580	28	20,121
115	40,195	100	0	0	0	0	40,195
116	6,335	100	0	0	0	0	6,335
117	102,702	91	6,623	6	3,322	3	112,647
118	122,538	98	676	1	1,519	1	124,733
119	144,472	87	6,321	4	16,088	10	166,881
120	125,289	85	7,319	5	15,663	11	148,271
121	72,385	89	998	1	7,634	9	81,017
122	68,396	65	36,673	35	0	0	105,069
123	53,890	43	61,714	49	10,188	8	125,792
124	27,512	35	28,508	36	22,520	29	78,540

Table B-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations by AAZ

AAZ	BWI		DCA		IAD		Total
	No.	%	No.	%	No.	%	
125	16,914	44	19,255	50	2,043	5	38,212
126	8,487	28	1,705	6	20,408	67	30,600
127	5,479	12	29,089	66	9,311	21	43,879
128	7,502	21	21,801	62	5,787	16	35,090
129	21,245	20	43,415	41	40,870	39	105,530
130	11,765	17	11,342	17	44,559	66	67,666
131	6,908	53	1,320	10	4,764	37	12,992
132	9,519	29	2,703	8	20,755	63	32,977
133	324,070	95	7,097	2	10,710	3	341,877
134	53,646	91	5,557	9	0	0	59,203
135	49,117	100	0	0	0	0	49,117
136	24,764	83	1,112	4	3,987	13	29,863
137	56,836	85	4,490	7	5,478	8	66,804
138	33,949	89	4,159	11	0	0	38,108
139	61,955	87	5,126	7	4,138	6	71,219
140	99,376	98	0	0	1,816	2	101,192
141	118,954	88	2,204	2	13,579	10	134,737
142	5,217	100	0	0	0	0	5,217
143	45,955	87	3,367	6	3,391	6	52,713
144	180,430	97	0	0	5,399	3	185,829

AAZ	BWI		DCA		IAD		Total
	No.	%	No.	%	No.	%	
145	14,965	88	0	0	2,115	12	17,080
146	4,489	100	0	0	0	0	4,489
147	5,422	100	0	0	0	0	5,422
148	20,382	100	0	0	0	0	20,382
149	67,788	100	0	0	0	0	67,788
150	50,561	100	0	0	0	0	50,561
151	124,724	94	0	0	7,592	6	132,316
152	67,051	100	0	0	0	0	67,051
153	77,097	93	4,237	5	1,776	2	83,110
154	124,699	98	0	0	2,644	2	127,343
155	124,263	100	0	0	0	0	124,263
156	27,492	100	0	0	0	0	27,492
157	136,432	98	1,352	1	2,000	1	139,784
158	40,504	100	0	0	0	0	40,504
159	78,898	100	0	0	0	0	78,898
160	146,687	93	0	0	11,124	7	157,811
161	25,068	98	561	2	0	0	25,629
Total	7,623,760	35	7,816,281	36	6,095,147	28	21,535,188

APPENDIX C

Air Passenger Originations

Home and Non-Home by AAZ

Table C-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Home and Non-Home by AAZ

AAZ	Home		Non-Home		Total	AAZ	Home		Non-Home		Total
	No.	%	No.	%			No.	%	No.	%	
1	0	0	36,856	100	36,856	49	115,325	98	1,814	2	117,139
2	22,682	16	122,108	84	144,790	50	24,317	35	44,857	65	69,174
3	179,513	9	1,742,462	91	1,921,975	51	33,105	57	25,029	43	58,134
4	175,655	15	984,140	85	1,159,795	52	29,808	27	82,232	73	112,040
5	59,408	35	110,743	65	170,151	53	56,550	41	82,266	59	138,816
6	88,061	21	336,138	79	424,199	54	72,835	53	63,489	47	136,324
7	58,420	86	9,662	14	68,082	55	96,300	67	46,780	33	143,080
8	64,623	67	31,565	33	96,188	56	45,715	60	30,976	40	76,691
9	123,773	86	20,166	14	143,939	57	138,210	95	7,600	5	145,810
10	115,834	79	30,381	21	146,215	58	256,263	97	6,654	3	262,917
11	81,314	81	19,137	19	100,451	59	113,424	99	625	1	114,049
12	114,786	97	3,369	3	118,155	60	71,341	93	5,075	7	76,416
13	84,727	77	25,295	23	110,022	61	68,151	65	36,099	35	104,250
14	73,850	63	43,293	37	117,143	62	110,354	63	64,447	37	174,801
15	41,027	28	107,803	72	148,830	63	89,873	99	933	1	90,806
16	128,616	61	83,508	39	212,124	64	149,159	86	24,205	14	173,364
17	22,762	100	0	0	22,762	65	61,979	68	29,126	32	91,105
18	4,152	2	201,932	98	206,084	66	58,640	85	10,503	15	69,143
19	33,184	52	30,325	48	63,509	67	31,351	41	45,272	59	76,623
20	13,040	60	8,869	40	21,909	68	52,543	96	2,368	4	54,911
21	0	0	12,601	100	12,601	69	79,180	68	37,940	32	117,120
22	58,988	9	563,537	91	622,525	70	40,173	49	42,347	51	82,520
23	65,751	61	41,311	39	107,062	71	14,351	57	10,986	43	25,337
24	4,480	8	53,120	92	57,600	72	676	4	14,779	96	15,455
25	66,832	33	133,626	67	200,458	73	56,198	81	13,226	19	69,424
26	119,935	42	162,744	58	282,679	74	44,743	59	30,493	41	75,236
27	175,123	93	12,298	7	187,421	75	67,974	82	14,650	18	82,624
28	234,563	86	38,551	14	273,114	76	32,248	58	22,949	42	55,197
29	39,182	84	7,389	16	46,571	77	21,167	55	16,992	45	38,159
30	126,499	98	2,038	2	128,537	78	25,165	73	9,127	27	34,292
31	136,139	39	214,509	61	350,648	79	45,539	70	19,922	30	65,461
32	21,922	49	22,952	51	44,874	80	33,278	71	13,508	29	46,786
33	100,461	60	67,043	40	167,504	81	9,358	8	110,221	92	119,579
34	225,360	87	33,420	13	258,780	82	108,904	75	36,212	25	145,116
35	126,772	73	47,728	27	174,500	83	61,838	42	85,276	58	147,114
36	197,433	72	76,420	28	273,853	84	12,318	25	36,851	75	49,169
37	263,169	97	8,141	3	271,310	85	148,885	99	936	1	149,821
38	151,611	81	34,784	19	186,395	86	127,360	92	11,694	8	139,054
39	13,649	30	31,137	70	44,786	87	63,451	64	35,338	36	98,789
40	162,865	87	24,752	13	187,617	88	50,407	71	21,059	29	71,466
41	173,117	65	94,510	35	267,627	89	100,624	100	0	0	100,624
42	6,793	8	76,365	92	83,158	90	0	0	32,382	100	32,382
43	419,220	94	29,130	6	448,350	91	90,112	81	21,438	19	111,550
44	63,016	18	294,401	82	357,417	92	80,364	38	129,351	62	209,715
45	193,286	83	39,909	17	233,195	93	164,821	70	71,644	30	236,465
46	46,988	12	332,660	88	379,648	94	114,481	81	27,596	19	142,077
47	156,423	81	35,944	19	192,367	95	129,281	98	2,283	2	131,564
48	82,244	97	2,321	3	84,565	96	32,935	73	12,349	27	45,284

Table C-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Home and Non-Home by AAZ

AAZ	Home		Non-Home		Total	AAZ	Home		Non-Home		Total
	No.	%	No.	%			No.	%	No.	%	
97	66,678	71	27,556	29	94,234	131	7,762	60	5,230	40	12,992
98	119,048	84	22,365	16	141,413	132	26,049	79	6,928	21	32,977
99	96,087	83	20,249	17	116,336	133	27,099	8	314,778	92	341,877
100	79,771	83	16,829	17	96,600	134	30,851	52	28,352	48	59,203
101	19,811	100	0	0	19,811	135	16,030	33	33,087	67	49,117
102	32,993	100	0	0	32,993	136	22,169	74	7,694	26	29,863
103	55,428	79	14,551	21	69,979	137	53,152	80	13,652	20	66,804
104	55,257	80	13,897	20	69,154	138	27,624	72	10,484	28	38,108
105	34,844	60	22,775	40	57,619	139	25,643	36	45,576	64	71,219
106	50,873	68	24,442	32	75,315	140	62,618	62	38,574	38	101,192
107	24,593	65	13,499	35	38,092	141	102,698	76	32,039	24	134,737
108	144,291	85	25,621	15	169,912	142	2,316	44	2,901	56	5,217
109	67,918	64	37,468	36	105,386	143	10,621	20	42,092	80	52,713
110	2,978	19	12,357	81	15,335	144	57,312	31	128,517	69	185,829
111	0	0	18,836	100	18,836	145	12,856	75	4,224	25	17,080
112	30,223	7	407,869	93	438,092	146	4,489	100	0	0	4,489
113	7,523	61	4,895	39	12,418	147	3,505	65	1,917	35	5,422
114	16,668	83	3,453	17	20,121	148	12,124	59	8,258	41	20,382
115	36,392	91	3,803	9	40,195	149	51,337	76	16,451	24	67,788
116	4,787	76	1,548	24	6,335	150	44,381	88	6,180	12	50,561
117	111,161	99	1,486	1	112,647	151	111,051	84	21,265	16	132,316
118	119,414	96	5,319	4	124,733	152	59,140	88	7,911	12	67,051
119	37,533	22	129,348	78	166,881	153	77,578	93	5,532	7	83,110
120	115,739	78	32,532	22	148,271	154	59,082	46	68,261	54	127,343
121	80,300	99	717	1	81,017	155	92,786	75	31,477	25	124,263
122	87,167	83	17,902	17	105,069	156	27,492	100	0	0	27,492
123	53,936	43	71,856	57	125,792	157	87,644	63	52,140	37	139,784
124	59,953	76	18,587	24	78,540	158	38,936	96	1,568	4	40,504
125	38,212	100	0	0	38,212	159	74,706	95	4,192	5	78,898
126	20,206	66	10,394	34	30,600	160	114,859	73	42,952	27	157,811
127	42,725	97	1,154	3	43,879	161	8,853	35	16,776	65	25,629
128	19,046	54	16,044	46	35,090						
129	95,472	90	10,058	10	105,530						
130	31,812	47	35,854	53	67,666						
						Total	11,559,924	54	9,975,264	46	21,535,188

APPENDIX D

Air Passenger Originations

Work and Non-Work Purpose by AAZ

Table D-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Work and Non-Work Purpose by AAZ

AAZ	Work		Non-Work		Total	AAZ	Work		Non-Work		Total
	No.	%	No.	%			No.	%			
1	9,905	27	26,951	73	36,856	44	180,865	51	176,552	49	357,417
2	72,540	50	72,250	50	144,790	45	79,653	34	153,542	66	233,195
3	894,501	47	1,027,474	53	1,921,975	46	223,444	59	156,204	41	379,648
4	481,394	42	678,401	58	1,159,795	47	51,076	27	141,291	73	192,367
5	46,732	27	123,419	73	170,151	48	28,949	34	55,616	66	84,565
6	207,007	49	217,192	51	424,199	49	49,460	42	67,679	58	117,139
7	23,676	35	44,406	65	68,082	50	26,850	39	42,324	61	69,174
8	41,904	44	54,284	56	96,188	51	23,639	41	34,495	59	58,134
9	38,259	27	105,680	73	143,939	52	52,282	47	59,758	53	112,040
10	54,530	37	91,685	63	146,215	53	85,061	61	53,755	39	138,816
11	32,499	32	67,952	68	100,451	54	64,992	48	71,332	52	136,324
12	34,800	29	83,355	71	118,155	55	65,737	46	77,343	54	143,080
13	26,923	24	83,099	76	110,022	56	35,109	46	41,582	54	76,691
14	31,245	27	85,898	73	117,143	57	38,765	27	107,045	73	145,810
15	57,519	39	91,311	61	148,830	58	54,395	21	208,522	79	262,917
16	87,648	41	124,476	59	212,124	59	33,815	30	80,234	70	114,049
17	4,073	18	18,689	82	22,762	60	12,067	16	64,349	84	76,416
18	99,642	48	106,442	52	206,084	61	36,784	35	67,466	65	104,250
19	24,223	38	39,286	62	63,509	62	31,539	18	143,262	82	174,801
20	10,368	47	11,541	53	21,909	63	18,301	20	72,505	80	90,806
21	5,654	45	6,947	55	12,601	64	78,910	46	94,454	54	173,364
22	366,307	59	256,218	41	622,525	65	34,116	37	56,989	63	91,105
23	46,567	43	60,495	57	107,062	66	21,896	32	47,247	68	69,143
24	25,898	45	31,702	55	57,600	67	25,330	33	51,293	67	76,623
25	84,646	42	115,812	58	200,458	68	21,430	39	33,481	61	54,911
26	133,117	47	149,562	53	282,679	69	42,163	36	74,957	64	117,120
27	54,296	29	133,125	71	187,421	70	23,238	28	59,282	72	82,520
28	68,022	25	205,092	75	273,114	71	9,253	37	16,084	63	25,337
29	19,355	42	27,216	58	46,571	72	12,893	83	2,562	17	15,455
30	33,735	26	94,802	74	128,537	73	19,654	28	49,770	72	69,424
31	148,561	42	202,087	58	350,648	74	18,350	24	56,886	76	75,236
32	15,259	34	29,615	66	44,874	75	22,466	27	60,158	73	82,624
33	52,757	31	114,747	69	167,504	76	14,046	25	41,151	75	55,197
34	92,820	36	165,960	64	258,780	77	13,823	36	24,336	64	38,159
35	82,321	47	92,179	53	174,500	78	11,090	32	23,202	68	34,292
36	134,486	49	139,367	51	273,853	79	21,173	32	44,288	68	65,461
37	100,064	37	171,246	63	271,310	80	19,949	43	26,837	57	46,786
38	79,385	43	107,010	57	186,395	81	95,490	80	24,089	20	119,579
39	24,365	54	20,421	46	44,786	82	44,651	31	100,465	69	145,116
40	54,294	29	133,323	71	187,617	83	50,979	35	96,135	65	147,114
41	97,980	37	169,647	63	267,627	84	6,252	13	42,917	87	49,169
42	48,850	59	34,308	41	83,158	85	47,706	32	102,115	68	149,821
43	141,743	32	306,607	68	448,350	86	33,940	24	105,114	76	139,054

Table D-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Work and Non-Work Purpose by AAZ

AAZ	Work		Non-Work		Total	AAZ	Work		Non-Work		Total
	No.	%	No.	%			No.	%			
87	18,679	19	80,110	81	98,789	126	13,873	45	16,727	55	30,600
88	21,236	30	50,230	70	71,466	127	12,999	30	30,880	70	43,879
89	29,550	29	71,074	71	100,624	128	17,267	49	17,823	51	35,090
90	7,300	23	25,082	77	32,382	129	37,551	36	67,979	64	105,530
91	40,923	37	70,627	63	111,550	130	36,763	54	30,903	46	67,666
92	76,913	37	132,802	63	209,715	131	3,824	29	9,168	71	12,992
93	102,752	43	133,713	57	236,465	132	8,565	26	24,412	74	32,977
94	55,961	39	86,116	61	142,077	133	225,341	66	116,536	34	341,877
95	21,300	16	110,264	84	131,564	134	23,591	40	35,612	60	59,203
96	18,486	41	26,798	59	45,284	135	19,037	39	30,080	61	49,117
97	35,643	38	58,591	62	94,234	136	14,805	50	15,058	50	29,863
98	57,632	41	83,781	59	141,413	137	29,529	44	37,275	56	66,804
99	31,870	27	84,466	73	116,336	138	11,522	30	26,586	70	38,108
100	27,972	29	68,628	71	96,600	139	36,085	51	35,134	49	71,219
101	7,788	39	12,023	61	19,811	140	28,468	28	72,724	72	101,192
102	10,076	31	22,917	69	32,993	141	24,564	18	110,173	82	134,737
103	18,254	26	51,725	74	69,979	142	2,276	44	2,941	56	5,217
104	25,307	37	43,847	63	69,154	143	29,368	56	23,345	44	52,713
105	22,783	40	34,836	60	57,619	144	83,602	45	102,227	55	185,829
106	24,279	32	51,036	68	75,315	145	10,100	59	6,980	41	17,080
107	12,259	32	25,833	68	38,092	146	2,654	59	1,835	41	4,489
108	39,477	23	130,435	77	169,912	147	574	11	4,848	89	5,422
109	26,761	25	78,625	75	105,386	148	3,577	18	16,805	82	20,382
110	9,774	64	5,561	36	15,335	149	17,198	25	50,590	75	67,788
111	6,497	34	12,339	66	18,836	150	15,115	30	35,446	70	50,561
112	218,984	50	219,108	50	438,092	151	43,558	33	88,758	67	132,316
113	3,299	27	9,119	73	12,418	152	15,759	24	51,292	76	67,051
114	9,573	48	10,548	52	20,121	153	26,196	32	56,914	68	83,110
115	7,574	19	32,621	81	40,195	154	48,042	38	79,301	62	127,343
116	3,844	61	2,491	39	6,335	155	29,677	24	94,586	76	124,263
117	30,293	27	82,354	73	112,647	156	9,204	33	18,288	67	27,492
118	28,516	23	96,217	77	124,733	157	23,912	17	115,872	83	139,784
119	76,855	46	90,026	54	166,881	158	8,814	22	31,690	78	40,504
120	35,363	24	112,908	76	148,271	159	22,895	29	56,003	71	78,898
121	19,038	23	61,979	77	81,017	160	55,542	35	102,269	65	157,811
122	33,351	32	71,718	68	105,069	161	14,796	58	10,833	42	25,629
123	77,886	62	47,906	38	125,792						
124	32,570	41	45,970	59	78,540						
125	12,352	32	25,860	68	38,212	Total	8,417,064	39	13,118,124	61	21,535,188

APPENDIX E

Air Passenger Originations

Airport Access Mode

By

AAZ

Table E-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Airport Access Mode by AAZ

AAZ	Private Car		Rental Car		Taxi		Public Transportation		Airport/Hotel Bus/Limo		Other		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
1	3,144	9	1,332	4	863	2	3,244	9	25,144	68	3,129	8	36,856
2	17,113	12	9,357	6	54,288	37	41,565	29	3,522	2	18,945	13	144,790
3	222,569	12	134,335	7	907,932	47	312,458	16	297,444	15	47,237	2	1,921,975
4	141,539	12	78,860	7	522,949	45	196,519	17	156,090	13	63,838	6	1,159,795
5	48,339	28	8,875	5	65,736	39	27,914	16	15,592	9	3,695	2	170,151
6	52,577	12	39,502	9	172,533	41	72,707	17	67,693	16	19,187	5	424,199
7	37,303	55	6,987	10	10,413	15	7,494	11	5,885	9	0	0	68,082
8	22,965	24	4,200	4	36,193	38	22,212	23	8,516	9	2,102	2	96,188
9	70,337	49	0	0	35,031	24	23,771	17	14,800	10	0	0	143,939
10	58,331	40	10,482	7	41,009	28	17,704	12	18,689	13	0	0	146,215
11	52,480	52	1,733	2	28,942	29	15,149	15	1,102	1	1,045	1	100,451
12	45,277	38	7,511	6	33,407	28	26,308	22	5,652	5	0	0	118,155
13	41,945	38	584	1	43,850	40	16,620	15	4,349	4	2,674	2	110,022
14	55,323	47	9,848	8	11,868	10	11,877	10	15,651	13	12,576	11	117,143
15	35,971	24	4,818	3	44,413	30	45,647	31	14,665	10	3,316	2	148,830
16	92,134	43	8,728	4	46,592	22	39,055	18	22,620	11	2,995	1	212,124
17	19,355	85	225	1	1,404	6	0	0	1,112	5	666	3	22,762
18	22,335	11	19,806	10	57,060	28	17,913	9	55,729	27	33,241	16	206,084
19	19,501	31	4,413	7	12,393	20	9,013	14	15,706	25	2,483	4	63,509
20	5,491	25	11,128	51	4,273	20	748	3	0	0	269	1	21,909
21	502	4	0	0	10,143	80	1,956	16	0	0	0	0	12,601
22	61,302	10	77,153	12	114,188	18	74,667	12	280,858	45	14,357	2	622,525
23	40,578	38	15,684	15	21,957	21	16,042	15	12,801	12	0	0	107,062
24	9,957	17	9,128	16	3,015	5	11,572	20	22,165	38	1,763	3	57,600
25	54,148	27	8,589	4	53,528	27	45,786	23	37,603	19	804	0	200,458
26	71,833	25	26,087	9	63,150	22	60,863	22	18,006	6	42,740	15	282,679
27	118,402	63	6,662	4	45,114	24	3,211	2	4,612	2	9,420	5	187,421
28	161,858	59	9,894	4	47,350	17	32,760	12	11,497	4	9,755	4	273,114
29	24,452	53	3,647	8	13,173	28	4,561	10	738	2	0	0	46,571
30	60,205	47	1,050	1	43,694	34	12,817	10	1,393	1	9,378	7	128,537
31	83,100	24	47,268	13	94,437	27	72,803	21	46,035	13	7,005	2	350,648
32	26,463	59	4,786	11	3,592	8	4,055	9	5,978	13	0	0	44,874
33	66,330	40	23,152	14	39,209	23	15,218	9	22,649	14	946	1	167,504
34	164,113	63	18,199	7	50,347	19	14,077	5	12,044	5	0	0	258,780
35	98,739	57	33,679	19	25,481	15	12,993	7	3,608	2	0	0	174,500
36	160,699	59	31,503	12	25,520	9	15,309	6	4,996	2	35,826	13	273,853
37	194,832	72	14,862	5	24,586	9	27,177	10	5,622	2	4,231	2	271,310
38	132,486	71	31,495	17	14,343	8	1,643	1	4,428	2	2,000	1	186,395
39	16,631	37	13,346	30	10,328	23	655	1	1,011	2	2,815	6	44,786
40	136,387	73	12,506	7	29,912	16	1,268	1	1,947	1	5,597	3	187,617
41	141,248	53	42,979	16	34,483	13	13,177	5	18,699	7	17,041	6	267,627
42	18,793	23	18,541	22	12,457	15	0	0	27,458	33	5,909	7	83,158
43	343,653	77	19,548	4	64,865	14	748	0	10,135	2	9,401	2	448,350

Table E-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Airport Access Mode by AAZ

AAZ	Private Car		Rental Car		Taxi		Public Transportation		Airport/Hotel Bus/Limo		Other		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
44	103,973	29	88,050	25	43,105	12	0	0	109,179	31	13,110	4	357,417
45	160,667	69	15,565	7	34,787	15	1,261	1	13,773	6	7,142	3	233,195
46	85,998	23	155,952	41	52,700	14	7,070	2	45,803	12	32,125	8	379,648
47	102,616	53	45,703	24	28,534	15	8,540	4	2,566	1	4,408	2	192,367
48	66,603	79	881	1	7,440	9	6,374	8	3,267	4	0	0	84,565
49	76,416	65	5,966	5	22,260	19	9,119	8	1,769	2	1,609	1	117,139
50	32,518	47	9,151	13	2,568	4	7,933	11	6,719	10	10,285	15	69,174
51	14,736	25	5,453	9	14,109	24	14,489	25	6,405	11	2,942	5	58,134
52	32,464	29	14,765	13	17,303	15	21,566	19	12,136	11	13,806	12	112,040
53	52,737	38	22,286	16	28,041	20	15,690	11	17,158	12	2,904	2	138,816
54	54,105	40	23,493	17	17,777	13	14,187	10	20,363	15	6,399	5	136,324
55	80,994	57	22,388	16	14,990	10	7,761	5	16,947	12	0	0	143,080
56	42,432	55	10,521	14	4,475	6	0	0	4,493	6	14,770	19	76,691
57	101,817	70	3,479	2	10,104	7	0	0	27,090	19	3,320	2	145,810
58	211,921	81	10,908	4	11,968	5	7,860	3	16,247	6	4,013	2	262,917
59	98,233	86	3,792	3	1,620	1	863	1	5,514	5	4,027	4	114,049
60	64,481	84	6,071	8	0	0	1,871	2	3,178	4	815	1	76,416
61	51,019	49	9,781	9	5,970	6	7,704	7	8,079	8	21,697	21	104,250
62	110,644	63	6,083	3	9,626	6	8,234	5	17,863	10	22,351	13	174,801
63	69,564	77	1,835	2	3,493	4	0	0	13,762	15	2,152	2	90,806
64	115,996	67	7,584	4	16,823	10	12,706	7	14,725	8	5,530	3	173,364
65	50,438	55	5,024	6	9,504	10	2,256	2	7,113	8	16,770	18	91,105
66	44,095	64	1,903	3	3,417	5	6,575	10	4,553	7	8,600	12	69,143
67	28,698	37	14,210	19	12,590	16	11,543	15	9,582	13	0	0	76,623
68	37,164	68	0	0	4,949	9	5,157	9	7,641	14	0	0	54,911
69	56,924	49	6,627	6	5,441	5	8,128	7	8,298	7	31,702	27	117,120
70	37,034	45	26,360	32	3,633	4	9,097	11	5,616	7	780	1	82,520
71	14,774	58	3,423	14	963	4	1,760	7	3,392	13	1,025	4	25,337
72	676	4	12,248	79	1,127	7	0	0	1,404	9	0	0	15,455
73	49,069	71	13,294	19	2,886	4	974	1	3,201	5	0	0	69,424
74	44,001	58	19,489	26	0	0	3,328	4	4,090	5	4,328	6	75,236
75	61,299	74	12,035	15	584	1	1,414	2	7,292	9	0	0	82,624
76	26,013	47	22,509	41	3,530	6	0	0	2,264	4	881	2	55,197
77	16,262	43	15,577	41	3,164	8	2,111	6	1,045	3	0	0	38,159
78	29,054	85	2,070	6	0	0	790	2	2,378	7	0	0	34,292
79	39,408	60	5,645	9	7,063	11	0	0	12,566	19	779	1	65,461
80	24,022	51	9,389	20	3,293	7	1,705	4	5,362	11	3,015	6	46,786
81	20,887	17	31,580	26	22,937	19	0	0	43,529	36	646	1	119,579
82	95,852	66	20,979	14	11,148	8	3,743	3	11,761	8	1,633	1	145,116
83	62,633	43	68,971	47	3,405	2	2,890	2	0	0	9,215	6	147,114
84	18,358	37	27,823	57	0	0	0	0	0	0	2,988	6	49,169
85	133,038	89	6,374	4	5,449	4	1,196	1	2,215	1	1,549	1	149,821
86	125,209	90	9,072	7	4,149	3	0	0	0	0	624	0	139,054

Table E-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Airport Access Mode by AAZ

AAZ	Private Car		Rental Car		Taxi		Public Transportation		Airport/Hotel Bus/Limo		Other		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
87	54,893	56	23,468	24	9,393	10	4,440	4	1,443	1	5,152	5	98,789
88	47,831	67	20,374	29	1,682	2	738	1	841	1	0	0	71,466
89	69,792	69	3,891	4	14,313	14	2,669	3	0	0	9,959	10	100,624
90	1,522	5	12,110	37	5,074	16	0	0	11,100	34	2,576	8	32,382
91	62,645	56	3,169	3	21,470	19	0	0	5,878	5	18,388	16	111,550
92	73,135	35	45,740	22	35,022	17	801	0	55,017	26	0	0	209,715
93	134,420	57	32,989	14	25,934	11	3,875	2	16,881	7	22,366	9	236,465
94	101,188	71	19,736	14	2,315	2	1,674	1	6,534	5	10,630	7	142,077
95	108,083	82	13,857	11	5,630	4	0	0	3,994	3	0	0	131,564
96	30,669	68	13,148	29	0	0	0	0	0	0	1,467	3	45,284
97	59,274	63	14,018	15	0	0	0	0	8,360	9	12,582	13	94,234
98	113,357	80	23,352	17	0	0	0	0	0	0	4,704	3	141,413
99	83,569	72	27,813	24	1,220	1	0	0	2,460	2	1,274	1	116,336
100	80,210	83	11,264	12	1,301	1	0	0	3,825	4	0	0	96,600
101	16,747	85	1,220	6	1,844	9	0	0	0	0	0	0	19,811
102	26,115	79	5,853	18	0	0	0	0	1,025	3	0	0	32,993
103	49,768	71	11,796	17	0	0	0	0	7,636	11	779	1	69,979
104	50,860	74	15,834	23	0	0	0	0	0	0	2,460	4	69,154
105	36,231	63	6,013	10	0	0	0	0	15,375	27	0	0	57,619
106	48,023	64	14,738	20	2,787	4	0	0	6,908	9	2,859	4	75,315
107	23,589	62	5,822	15	2,521	7	0	0	6,160	16	0	0	38,092
108	126,380	74	13,477	8	2,450	1	697	0	14,199	8	12,709	7	169,912
109	55,728	53	16,992	16	4,922	5	0	0	14,995	14	12,749	12	105,386
110	5,906	39	543	4	0	0	1,517	10	7,369	48	0	0	15,335
111	1,445	8	2,869	15	0	0	0	0	14,522	77	0	0	18,836
112	73,761	17	101,012	23	16,438	4	11,090	3	213,352	49	22,439	5	438,092
113	7,523	61	717	6	420	3	0	0	3,758	30	0	0	12,418
114	12,794	64	1,260	6	4,386	22	0	0	1,681	8	0	0	20,121
115	34,484	86	4,459	11	1,041	3	0	0	0	0	211	1	40,195
116	5,638	89	697	11	0	0	0	0	0	0	0	0	6,335
117	90,538	80	10,495	9	3,106	3	0	0	8,508	8	0	0	112,647
118	104,919	84	10,802	9	5,455	4	0	0	2,573	2	984	1	124,733
119	34,488	21	27,480	16	5,529	3	0	0	64,537	39	34,847	21	166,881
120	117,301	79	20,770	14	3,234	2	1,362	1	5,604	4	0	0	148,271
121	68,417	84	12,221	15	0	0	0	0	379	0	0	0	81,017
122	81,749	78	17,026	16	0	0	2,266	2	2,901	3	1,127	1	105,069
123	59,152	47	54,729	44	0	0	0	0	9,911	8	2,000	2	125,792
124	48,321	62	18,490	24	1,414	2	0	0	10,315	13	0	0	78,540
125	30,284	79	3,853	10	0	0	0	0	2,931	8	1,144	3	38,212
126	21,149	69	4,407	14	2,468	8	0	0	0	0	2,576	8	30,600
127	38,510	88	1,154	3	1,491	3	2,724	6	0	0	0	0	43,879
128	18,488	53	11,304	32	0	0	0	0	0	0	5,298	15	35,090
129	94,860	90	8,480	8	0	0	2,190	2	0	0	0	0	105,530

Table E-1
2009 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Airport Access Mode by AAZ

AAZ	Private Car		Rental Car		Taxi		Public Transportation		Airport/Hotel Bus/Limo		Other		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
130	36,483	54	19,179	28	2,760	4	0	0	0	0	9,244	14	67,666
131	9,292	72	3,700	28	0	0	0	0	0	0	0	0	12,992
132	23,487	71	6,127	19	471	1	348	1	2,544	8	0	0	32,977
133	57,551	17	66,225	19	82,899	24	37,651	11	89,208	26	8,343	2	341,877
134	26,184	44	5,205	9	9,460	16	5,815	10	12,303	21	236	0	59,203
135	20,016	41	5,587	11	5,654	12	840	2	11,745	24	5,275	11	49,117
136	25,193	84	799	3	499	2	0	0	3,372	11	0	0	29,863
137	46,390	69	5,024	8	2,982	4	0	0	8,749	13	3,659	5	66,804
138	28,825	76	0	0	625	2	4,467	12	2,828	7	1,363	4	38,108
139	50,309	71	0	0	5,028	7	4,315	6	7,513	11	4,054	6	71,219
140	55,463	55	11,955	12	10,588	10	9,205	9	13,981	14	0	0	101,192
141	104,686	78	6,130	5	14,728	11	0	0	9,193	7	0	0	134,737
142	2,378	46	0	0	523	10	0	0	2,316	44	0	0	5,217
143	22,915	43	6,866	13	8,076	15	1,332	3	11,352	22	2,172	4	52,713
144	62,093	33	37,238	20	59,754	32	4,954	3	20,888	11	902	0	185,829
145	15,645	92	1,435	8	0	0	0	0	0	0	0	0	17,080
146	4,489	100	0	0	0	0	0	0	0	0	0	0	4,489
147	4,438	82	984	18	0	0	0	0	0	0	0	0	5,422
148	18,478	91	0	0	1,712	8	0	0	192	1	0	0	20,382
149	51,643	76	11,408	17	3,138	5	0	0	1,599	2	0	0	67,788
150	41,358	82	4,079	8	0	0	0	0	4,530	9	594	1	50,561
151	100,409	76	16,602	13	943	1	830	1	8,599	6	4,933	4	132,316
152	50,970	76	14,390	21	0	0	0	0	1,691	3	0	0	67,051
153	66,097	80	5,985	7	3,382	4	830	1	2,604	3	4,212	5	83,110
154	76,288	60	42,073	33	2,268	2	2,788	2	2,747	2	1,179	1	127,343
155	97,274	78	18,348	15	1,527	1	1,948	2	4,162	3	1,004	1	124,263
156	27,492	100	0	0	0	0	0	0	0	0	0	0	27,492
157	89,930	64	24,882	18	1,554	1	0	0	21,032	15	2,386	2	139,784
158	35,169	87	3,146	8	0	0	0	0	0	0	2,189	5	40,504
159	67,827	86	6,097	8	0	0	0	0	3,167	4	1,807	2	78,898
160	113,271	72	23,529	15	6,560	4	799	1	5,893	4	7,759	5	157,811
161	10,830	42	3,771	15	2,942	11	0	0	7,164	28	922	4	25,629
Total	9,842,211	46	2,656,997	12	3,843,879	18	1,679,336	8	2,604,926	12	907,839	4	21,535,188

APPENDIX F

Air Passenger Originations

Air Passenger Resident and Non-Resident Status

by

AAZ

Table F-1
2009 Washington-Baltimore Air Passenger Survey
Air Passengers Resident Non-Resident Status by AAZ

AAZ	Resident		Non-Resident		Total	AAZ	Resident		Non-Resident		Total
	No.	%	No.	%			No.	%			
1	2,186	6	34,670	94	36,856	42	17,904	22	65,254	78	83,158
2	34,654	24	110,136	76	144,790	43	271,282	61	177,068	39	448,350
3	259,760	14	1,662,215	86	1,921,975	44	58,020	16	299,397	84	357,417
4	189,682	16	970,113	84	1,159,795	45	118,989	51	114,206	49	233,195
5	36,734	22	133,417	78	170,151	46	53,391	14	326,257	86	379,648
6	54,581	13	369,618	87	424,199	47	114,488	60	77,879	40	192,367
7	32,542	48	35,540	52	68,082	48	61,866	73	22,699	27	84,565
8	44,323	46	51,865	54	96,188	49	76,857	66	40,282	34	117,139
9	63,410	44	80,529	56	143,939	50	29,526	43	39,648	57	69,174
10	72,710	50	73,505	50	146,215	51	28,939	50	29,195	50	58,134
11	50,719	50	49,732	50	100,451	52	21,278	19	90,762	81	112,040
12	62,049	53	56,106	47	118,155	53	46,231	33	92,585	67	138,816
13	53,912	49	56,110	51	110,022	54	51,278	38	85,046	62	136,324
14	38,842	33	78,301	67	117,143	55	67,677	47	75,403	53	143,080
15	40,523	27	108,307	73	148,830	56	26,002	34	50,689	66	76,691
16	99,931	47	112,193	53	212,124	57	82,369	56	63,441	44	145,810
17	14,519	64	8,243	36	22,762	58	183,475	70	79,442	30	262,917
18	18,677	9	187,407	91	206,084	59	77,849	68	36,200	32	114,049
19	16,983	27	46,526	73	63,509	60	36,949	48	39,467	52	76,416
20	8,412	38	13,497	62	21,909	61	60,282	58	43,968	42	104,250
21	4,339	34	8,262	66	12,601	62	71,947	41	102,854	59	174,801
22	78,576	13	543,949	87	622,525	63	53,338	59	37,468	41	90,806
23	41,406	39	65,656	61	107,062	64	94,601	55	78,763	45	173,364
24	5,961	10	51,639	90	57,600	65	37,630	41	53,475	59	91,105
25	44,005	22	156,453	78	200,458	66	37,610	54	31,533	46	69,143
26	89,059	32	193,620	68	282,679	67	19,952	26	56,671	74	76,623
27	111,435	59	75,986	41	187,421	68	27,193	50	27,718	50	54,911
28	161,035	59	112,079	41	273,114	69	33,588	29	83,532	71	117,120
29	20,941	45	25,630	55	46,571	70	26,361	32	56,159	68	82,520
30	72,063	56	56,474	44	128,537	71	12,427	49	12,910	51	25,337
31	93,937	27	256,711	73	350,648	72	676	4	14,779	96	15,455
32	9,781	22	35,093	78	44,874	73	36,518	53	32,906	47	69,424
33	64,172	38	103,332	62	167,504	74	31,771	42	43,465	58	75,236
34	129,650	50	129,130	50	258,780	75	40,674	49	41,950	51	82,624
35	86,209	49	88,291	51	174,500	76	25,783	47	29,414	53	55,197
36	123,031	45	150,822	55	273,853	77	9,957	26	28,202	74	38,159
37	179,581	66	91,729	34	271,310	78	21,072	61	13,220	39	34,292
38	97,305	52	89,090	48	186,395	79	37,887	58	27,574	42	65,461
39	17,059	38	27,727	62	44,786	80	24,979	53	21,807	47	46,786
40	117,344	63	70,273	37	187,617	81	5,324	4	114,255	96	119,579
41	111,145	42	156,482	58	267,627	82	74,633	51	70,483	49	145,116

Table F-1
2009 Washington-Baltimore Air Passenger Survey
Air Passengers Resident Non-Resident Status by AAZ

AAZ	Resident		Non-Resident		Total	AAZ	Resident		Non-Resident		Total
	No.	%	No.	%			No.	%			
83	38,158	26	108,956	74	294,228	124	39,246	50	39,294	50	78,540
84	13,340	27	35,829	73	98,338	125	12,724	33	25,488	67	38,212
85	91,414	61	58,407	39	299,642	126	21,536	70	9,064	30	30,600
86	82,485	59	56,569	41	278,108	127	35,787	82	8,092	18	43,879
87	33,845	34	64,944	66	197,578	128	12,372	35	22,718	65	35,090
88	30,881	43	40,585	57	142,932	129	66,083	63	39,447	37	105,530
89	46,414	46	54,210	54	201,248	130	17,581	26	50,085	74	67,666
90	924	3	31,458	97	64,764	131	3,710	29	9,282	71	12,992
91	54,733	49	56,817	51	223,100	132	13,977	42	19,000	58	32,977
92	64,860	31	144,855	69	419,430	133	25,511	7	316,366	93	341,877
93	97,301	41	139,164	59	472,930	134	19,443	33	39,760	67	59,203
94	57,659	41	84,418	59	284,154	135	10,743	22	38,374	78	49,117
95	59,632	45	71,932	55	263,128	136	15,685	53	14,178	47	29,863
96	22,106	49	23,178	51	90,568	137	33,021	49	33,783	51	66,804
97	38,344	41	55,890	59	188,468	138	21,642	57	16,466	43	38,108
98	62,864	44	78,549	56	282,826	139	30,420	43	40,799	57	71,219
99	36,316	31	80,020	69	232,672	140	42,357	42	58,835	58	101,192
100	56,782	59	39,818	41	193,200	141	73,999	55	60,738	45	134,737
101	14,819	75	4,992	25	39,622	142	625	12	4,592	88	5,217
102	20,744	63	12,249	37	65,986	143	12,614	24	40,099	76	52,713
103	35,461	51	34,518	49	139,958	144	34,690	19	151,139	81	185,829
104	27,296	39	41,858	61	138,308	145	12,474	73	4,606	27	17,080
105	28,562	50	29,057	50	115,238	146	1,835	41	2,654	59	4,489
106	43,000	57	32,315	43	150,630	147	4,100	76	1,322	24	5,422
107	11,398	30	26,694	70	76,184	148	9,120	45	11,262	55	20,382
108	102,193	60	67,719	40	339,824	149	38,991	58	28,797	42	67,788
109	45,039	43	60,347	57	210,772	150	21,841	43	28,720	57	50,561
110	3,747	24	11,588	76	30,670	151	54,483	41	77,833	59	132,316
111	2,757	15	16,079	85	37,672	152	33,876	51	33,175	49	67,051
112	39,678	9	398,414	91	876,184	153	49,939	60	33,171	40	83,110
113	3,157	25	9,261	75	24,836	154	49,246	39	78,097	61	127,343
114	8,457	42	11,664	58	40,242	155	52,921	43	71,342	57	124,263
115	21,550	54	18,645	46	80,390	156	22,865	83	4,627	17	27,492
116	3,998	63	2,337	37	12,670	157	57,412	41	82,372	59	139,784
117	57,476	51	55,171	49	225,294	158	19,612	48	20,892	52	40,504
118	67,137	54	57,596	46	249,466	159	52,724	67	26,174	33	78,898
119	59,659	36	107,222	64	333,762	160	58,601	37	99,210	63	157,811
120	77,726	52	70,545	48	296,542	161	8,394	33	17,235	67	25,629
121	24,617	30	56,400	70	162,034						
122	42,544	40	62,525	60	210,138						
123	35,060	28	90,732	72	251,584						
Total	7,818,089	36	13,717,099	64	21,535,188						