ITEM 11 – Information
December 21, 2016

2015 Washington—Baltimore Regional Air Passenger Survey Geographic Findings

Staff Recommendation: Briefing.

Issues: None

Background: The Board will be briefed on the results of the 2015 air passenger survey conducted simultaneously at Baltimore Washington International/Thurgood Marshall, Ronald Reagan Washington National, and Washington Dulles International Airports.

MEMORANDUM

TO: Transportation Planning Board

FROM: Rich Roisman, TPB Planning Data Program Manager

SUBJECT: Background for Agenda Item 11 -- 2015 Washington-Baltimore Air Passenger Survey Geographic Findings

DATE: December 15, 2016

At its December 21, 2016 meeting, the TPB will receive a briefing on the results of the 2015 Washington-Baltimore Regional Air Passenger Survey. The survey, performed every two years, provides the data foundation for other activities completed under the Continuous Airport System Planning (CASP) Program. Staff has prepared this memorandum for inclusion in the mail-out packet to provide TPB members with background information on the CASP Program and the 2015 Air Passenger Survey.

THE CASP PROGRAM

CASP has been part of the TPB work program since 1978. Funding for the program comes from the Federal Aviation Administration (FAA). These funds are used for air systems planning in the Washington-Baltimore region, which extends beyond the traditional TPB planning area and includes all three commercial service airports in the combined region: Ronald Reagan Washington National Airport (DCA), Washington Dulles International Airport (IAD), and Baltimore-Washington International Thurgood Marshall Airport (BWI [see shaded area of Figure 1, attached]).

The CASP Program provides a process that supports the planning, development and operation of airport facilities and the ground transportation facilities that serve the region's commercial airports in a systematic framework. This program is developed, implemented and monitored with the assistance of the Aviation Technical Subcommittee. The Subcommittee is composed of representatives from the District of Columbia Department of Transportation, the Metropolitan Washington Airports Authority (the owner and operator of both DCA and IAD), the Maryland Aviation Administration of the Maryland Department of Transportation (MAA, the owner and operator of BWI), as well as a representative from FAA and the Virginia Department of Aviation. While the primary focus of the CASP program is on our three commercial regional airports, smaller airports are represented on the Subcommittee by staff from the City of Frederick and City of Manassas, both of which operate general aviation airports in their respective cities. In addition to program oversight, the subcommittee is responsible for the integration of airport system planning with the regional surface transportation planning process, through completed work products.

The CASP airport system planning process consists of a continuous cycle that begins with a regional air passenger survey. The survey has been performed periodically since 1981 and since 2005 has been performed every two (2) years. The 2015 survey is the twelfth in the series. The results from the survey are then used with data from the FAA to develop forecasts of future air passenger travel and the ground travel of these air passengers to and from the region's three commercial airports.

These forecasts are then integrated with the regional travel demand forecasting model, and in turn lead to the development of a revised airport ground access plan for the region. The issues identified in the revised airport ground access plan are then integrated into the next update of the TPB's regional Constrained Long Range Plan.

In addition to the continuous planning cycle described above, periodically the CASP program also includes a regional analysis of air cargo and a study of highway travel times from regional activity centers to the three commercial airports. Both of these documents were updated this year. In the current CASP cycle, in addition to beginning preparations for the 2017 Air Passenger Survey, a comprehensive update to the regional air system plan (RASP) will also take place. A full RASP update has not occurred for nearly four decades, and while resource constraints dictate that the update will be broken into three phases, the first phase is beginning now in order to coincide with next year's quadrennial update of the regional (surface transportation) long range plan, both the constrained and unconstrained element.

THE WASHINGTON-BALTIMORE REGIONAL AIR PASSENGER SURVEY

The Regional Air Passenger Survey is conducted simultaneously at the three regional commercial service airports: Ronald Reagan Washington National Airport (DCA), Washington Dulles International Airport (IAD), and Baltimore-Washington International Thurgood Marshall Airport (BWI). The administration of the survey and a portion of the follow-up processing and analysis are directly funded by the airport operators: two-thirds by MWAA and one-third by BWI. The remainder of the survey analysis is funded under the annual FAA grant that supports the other aspects of the CASP program.

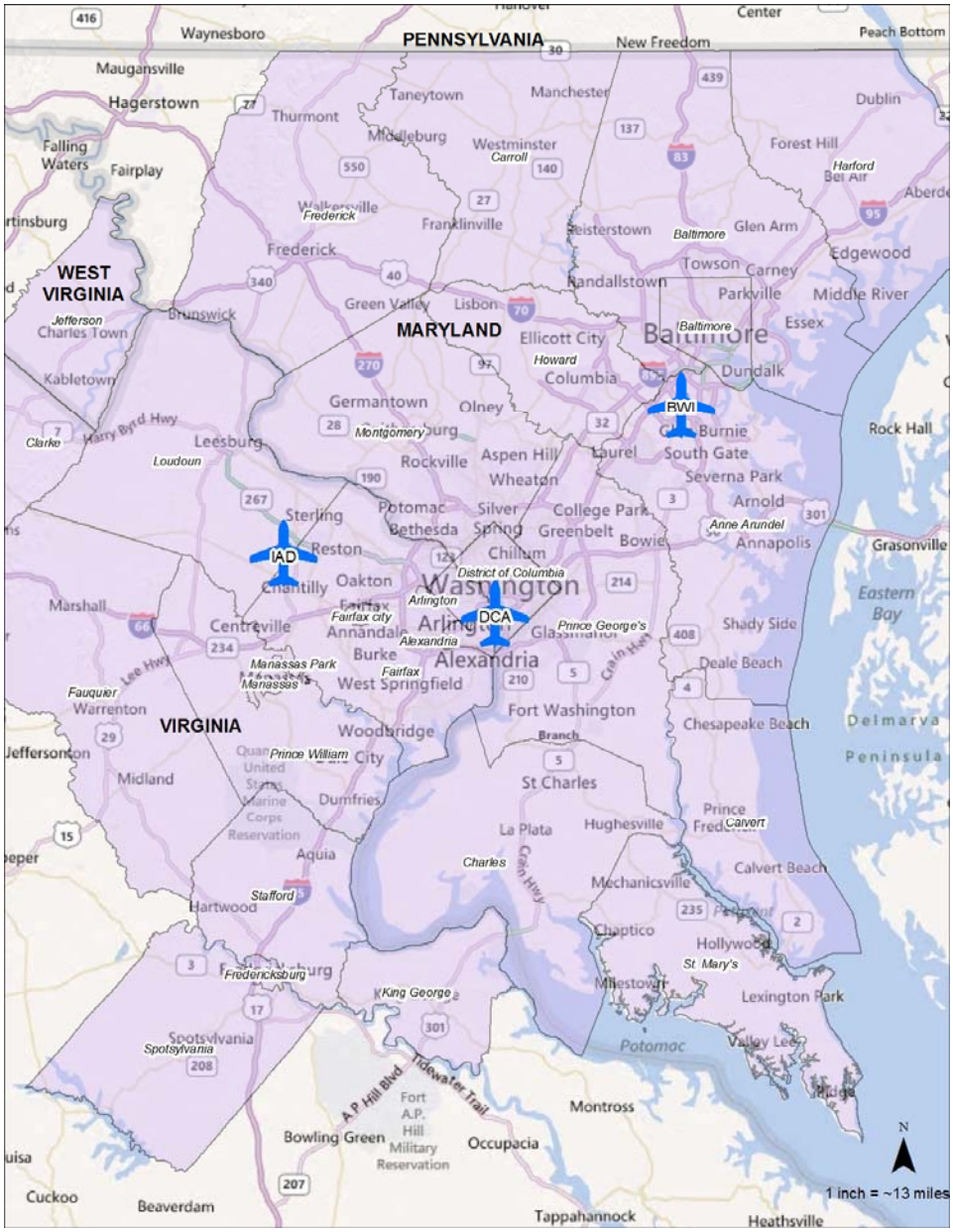
The survey is an at-gate survey of departing passengers on a random sample of domestic and international flights and is typically conducted during a two-week period in mid-to-late October. All passengers age 16 and older are asked to complete a survey questionnaire. For the 2015 survey, which was conducted from October 7 through October 20, the sample consisted of 683 flights (628 domestic and 55 international) representing approximately 79,000 enplanements (boardings). Approximately 25,000 air passengers participated in the survey, a response rate of 32 percent. The survey results are annualized to observed annual passengers for calendar year 2015.

The survey questionnaire, which only takes a few minutes to complete, contains questions about how the passenger traveled to the airport (means of transportation), from where and what time they began their trip to the airport, the purpose of their air travel, why they chose a particular airport, and basic demographic information such as location of residence, household size, age, and household income. Additional survey questions cover visitors to the area and use of ticketing and baggage services. In 2013 an on-line survey option was introduced for the first time along with the long-standing option of mailing back a completed survey in a pre-paid envelope, and these options were both continued in the 2015 survey. Finally, for the 2015 survey, transportation network companies (TNCs, e.g., Uber and Lyft) were added as a response option for means of transportation.

The 2015 survey results show annual regional air passenger enplanements (all three airports, combined) have increased from 32.3 million when the last survey was conducted in 2013 to 34.1 million in 2015. The distribution of those enplanements has shifted since 2013, with DCA now seeing a greater proportion of regional enplanements (34%) and IAD seeing a lesser proportion of regional enplanements (31%). BWI continues to see the highest proportion of regional enplanements (35%) and continues to experience has record-high passenger volumes, but their proportion of regional

enplanements has been basically flat between 2013 and 2015. Most of the enplanements (75% regionally) are passengers beginning their trip at one of the three airports rather than connecting from another flight; these passengers, which are called local originations, access the airport using the regional ground transportation network and thus are the focus of the survey analysis. Most of these locally originating passengers begin their trip to the airport at home, and most of them use a private car or rental car to get to the airport. Some of these travel characteristics vary between the three regional airports, and the presentation on December 21 will discuss some of these important differences.

Figure 1: Washington-Baltimore Air Systems Planning Region



2015 WASHINGTON-BALTIMORE REGIONAL AIR PASSENGER SURVEY

Geographic Findings

Richard I. Roisman, AICP
Manager, Planning Data Programs, Technical Assistance, and Special Projects

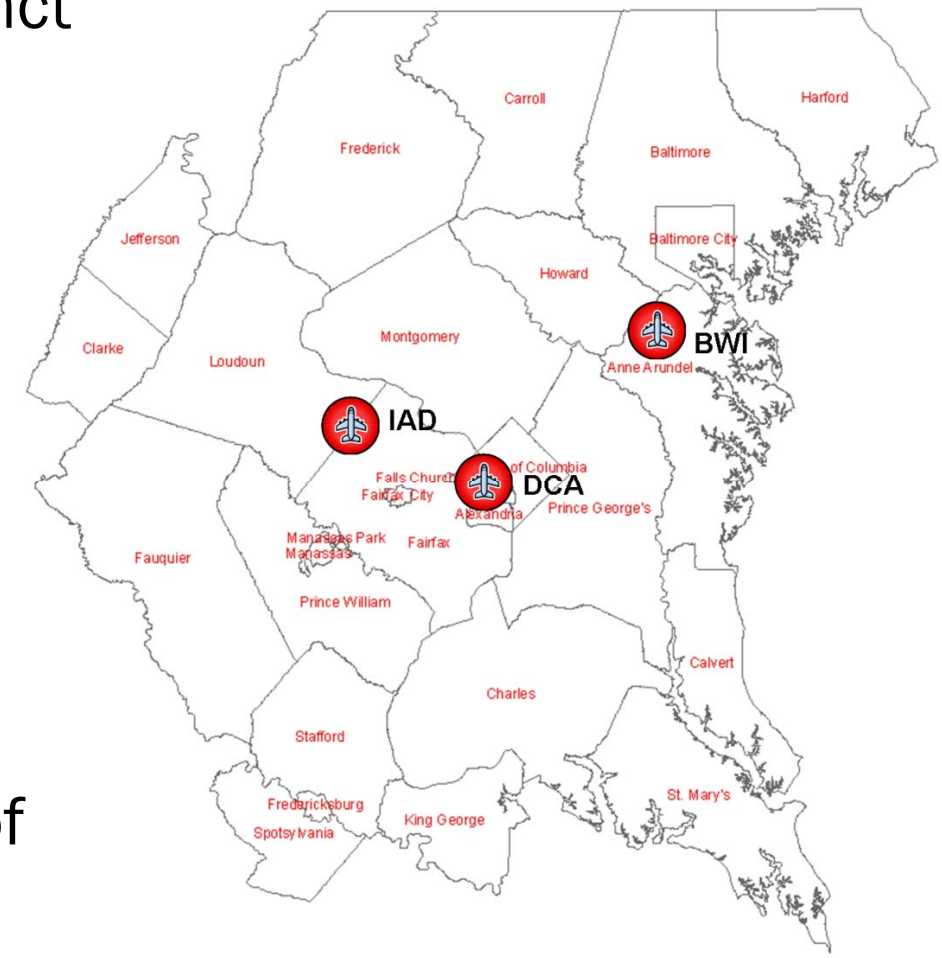
Transportation Planning Board
December 21, 2016

Agenda Item 11

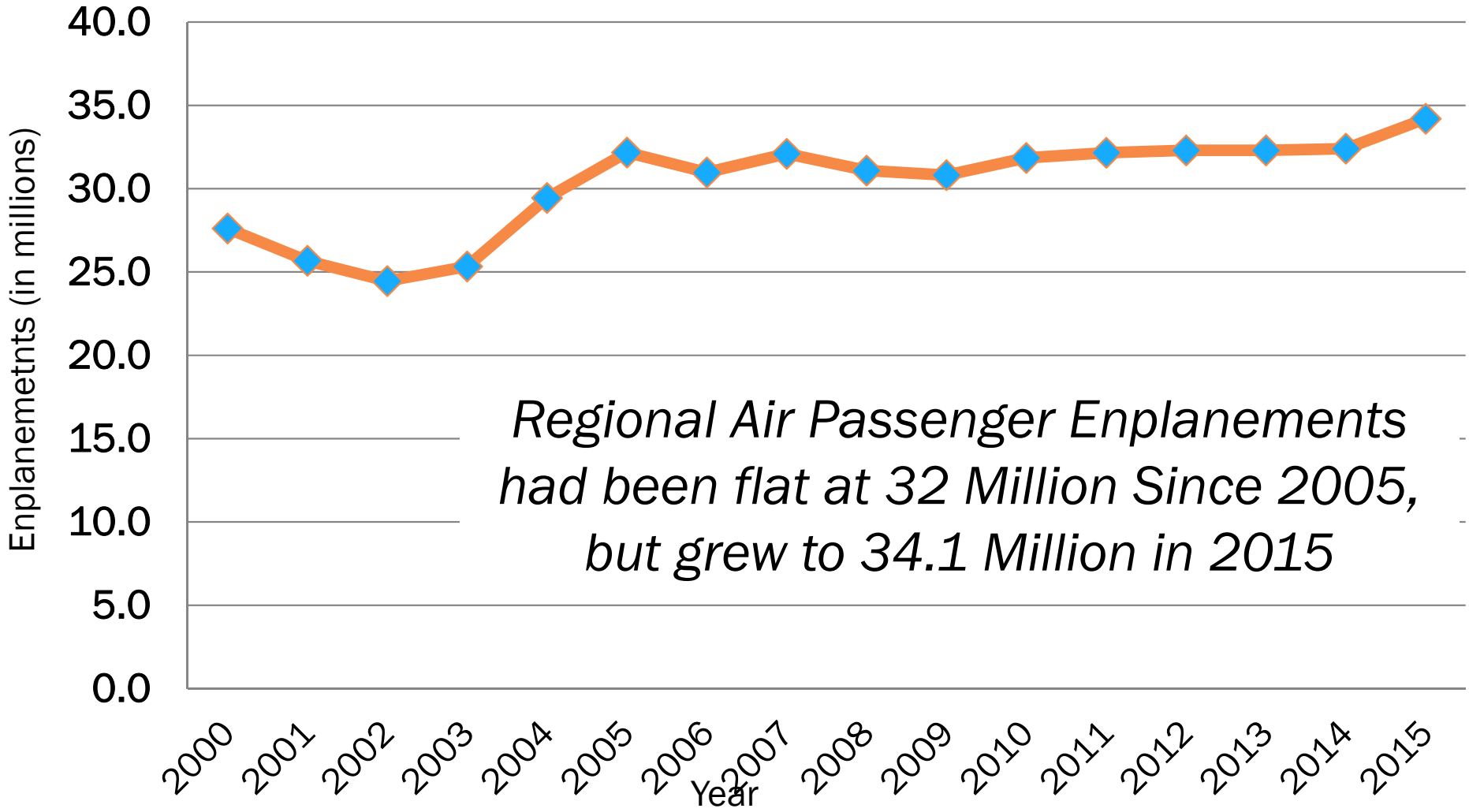
National Capital Region
Transportation Planning Board

Our Three Commercial Airports are a Key Regional Asset

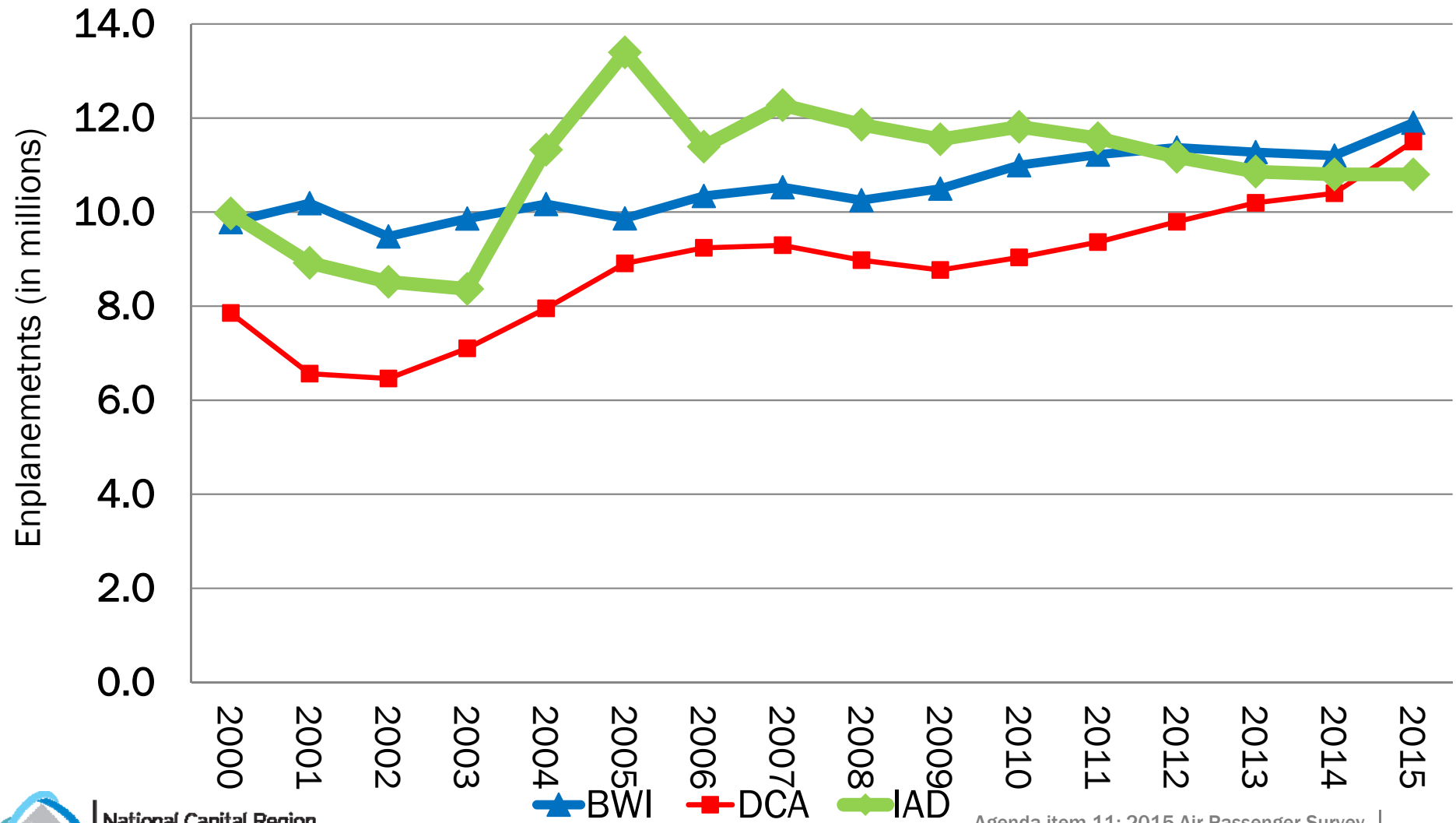
- Three airports with three distinct markets
- Serve air passengers and air cargo
- Multimodal ground access
- Regional air passenger survey every two years
- TPB Aviation Technical Subcommittee has oversight of the CASP Work Program



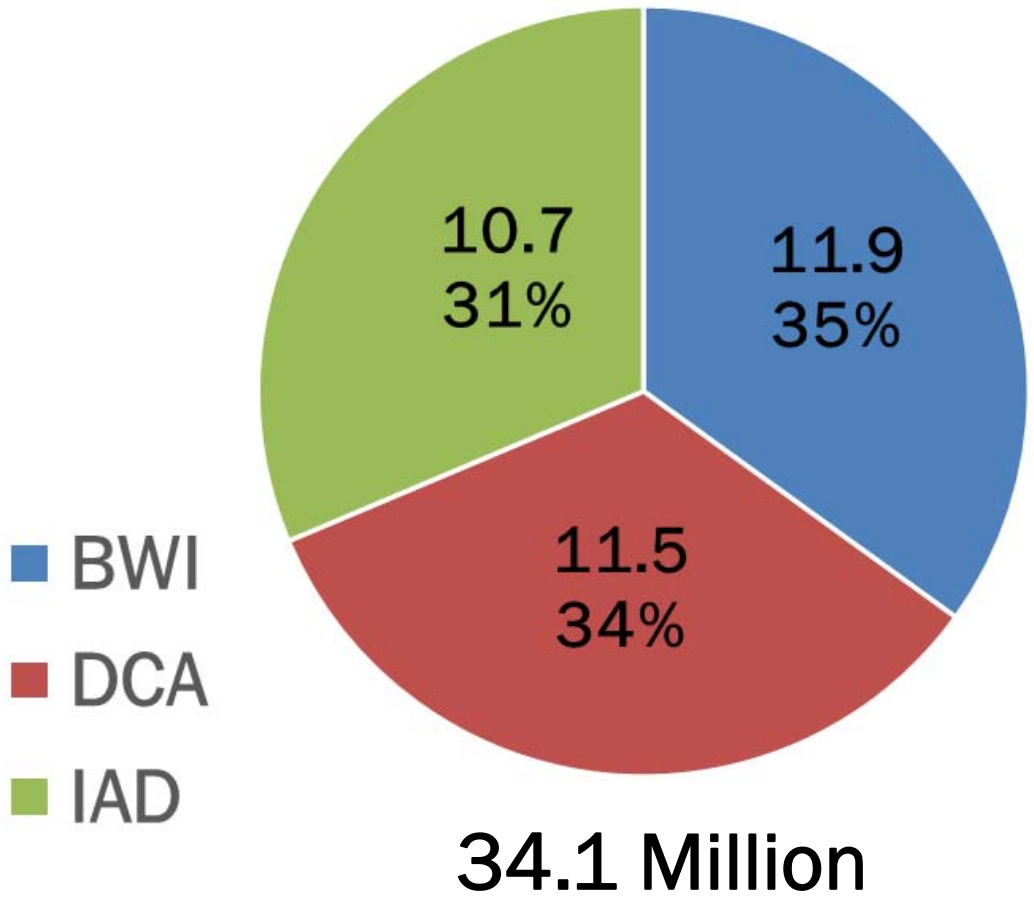
Regional Air Passenger Enplanements Trend (2000-2015)



Regional Air Passenger Enplanements Trend (2000-2015) by Airport



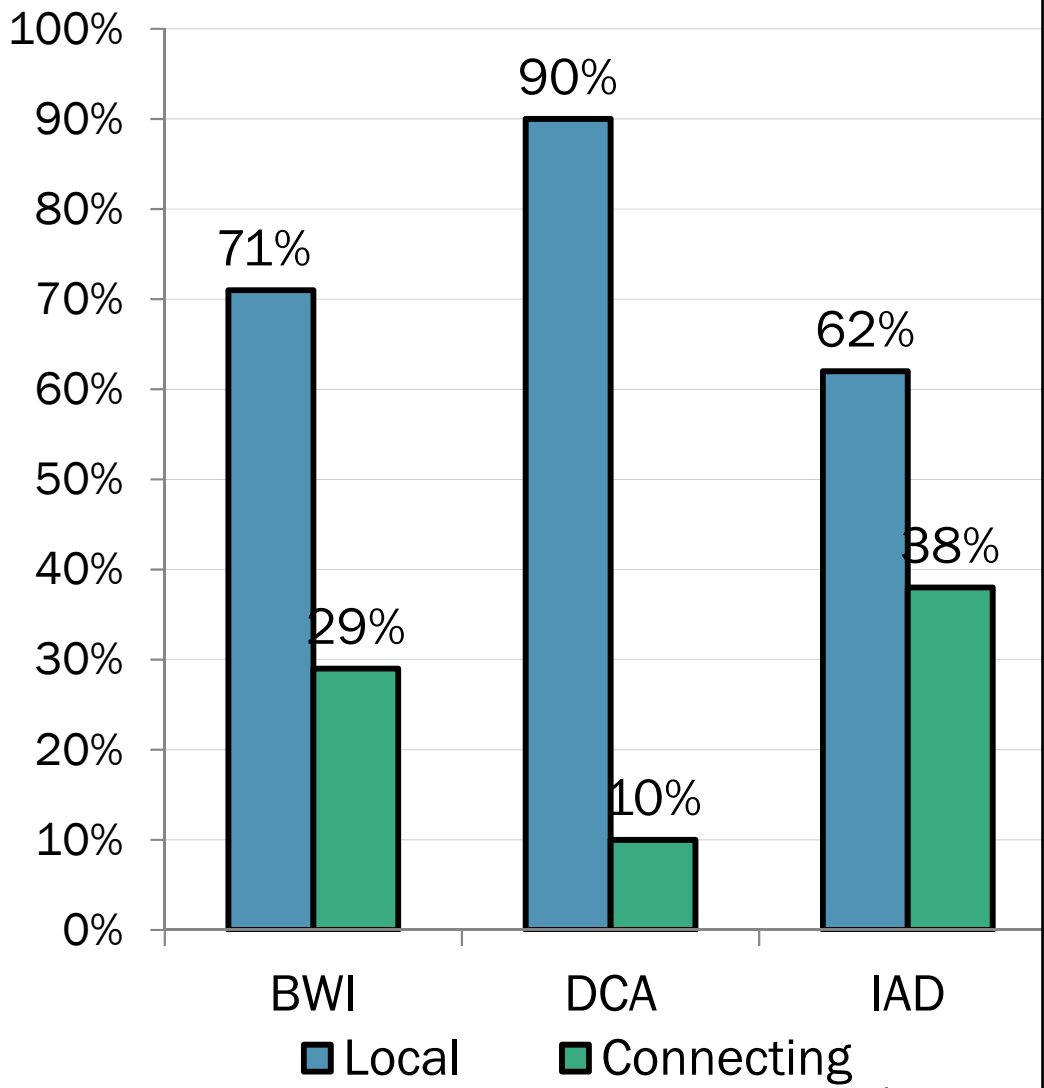
2015 Regional Air Passenger Enplanements by Airport



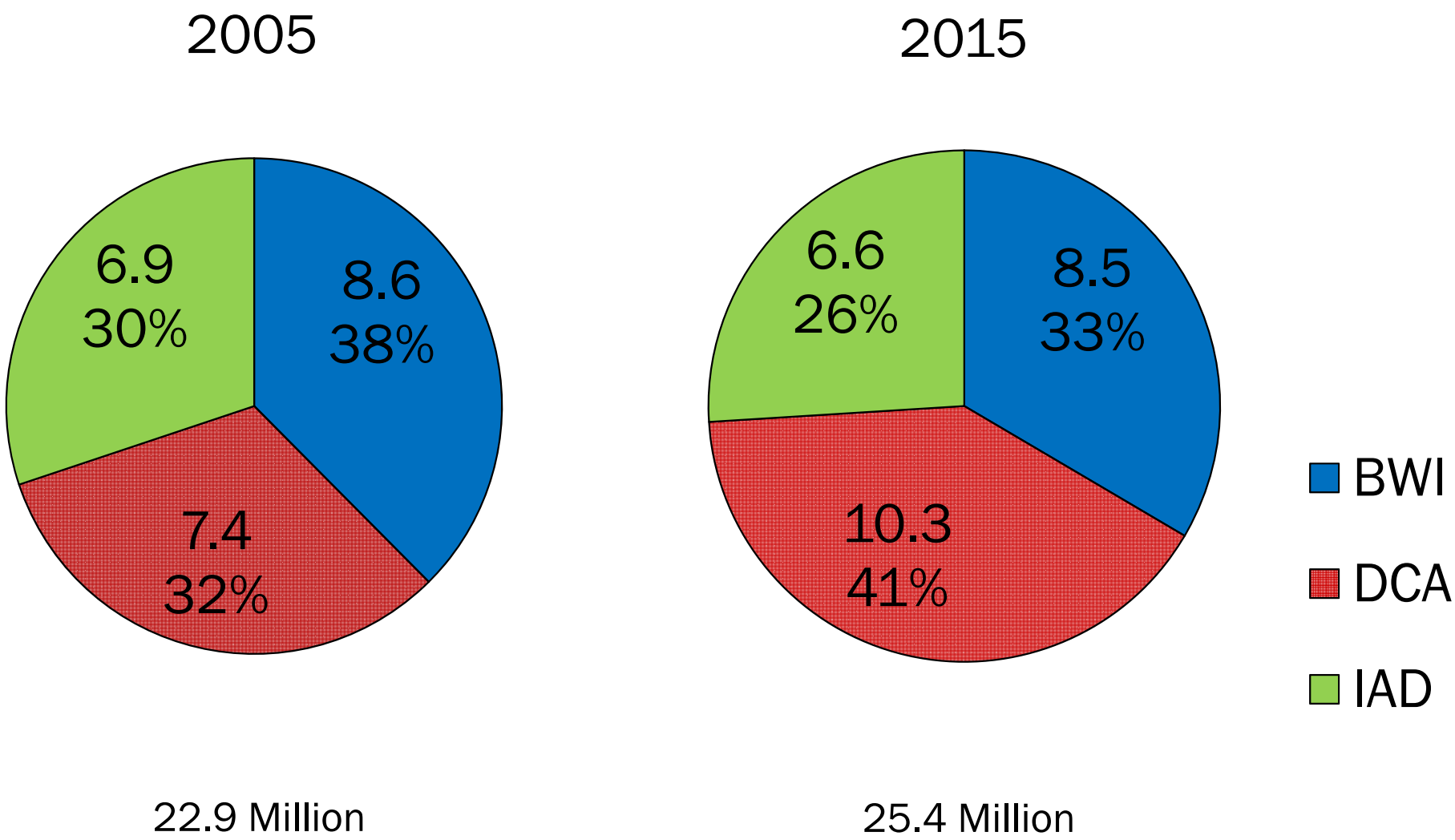
34.1 Million

Comparing Locally Originating and Connecting Passengers (2015)

- Locally originating passengers use the regional surface transportation network to access the airport
- Connecting passengers are often flying an airline for which the airport is a hub or focus city

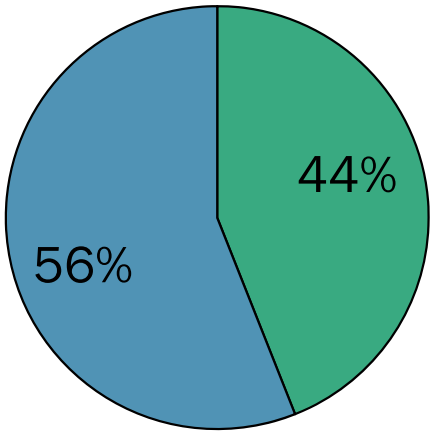


Change in Local Originations by Airport



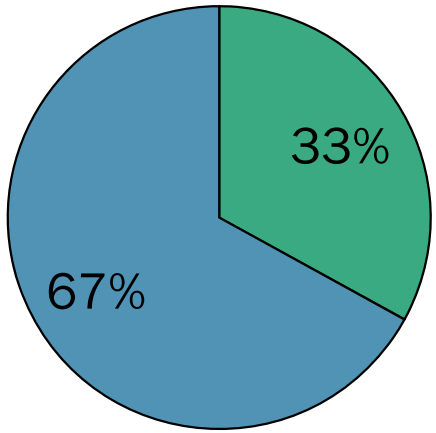
Change in Trip Purpose – All Airports

2011



24.4 Million Passengers

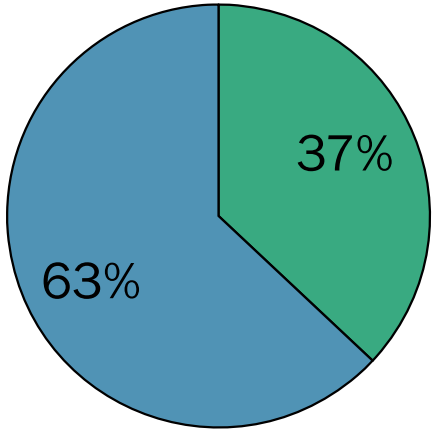
2013



Federal Sequester
Federal Shutdown

23.4 Million Passengers

2015



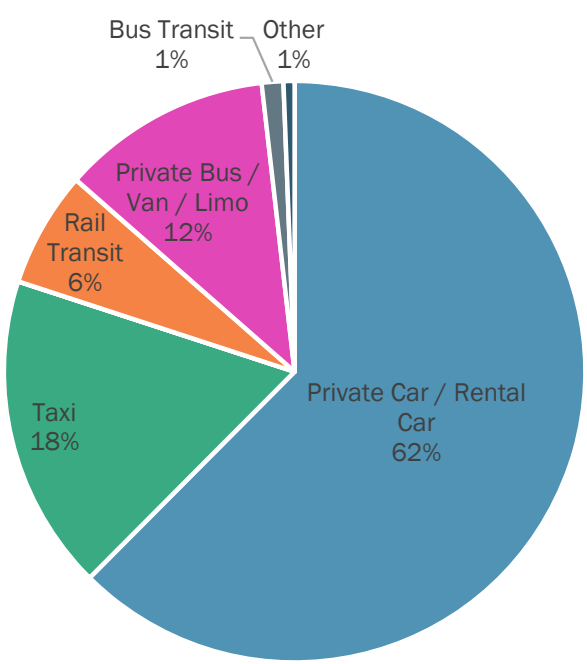
25.1 Million Passengers

Factors Influencing Airport Choice for Travelers (All Purposes) by Airport (2015)

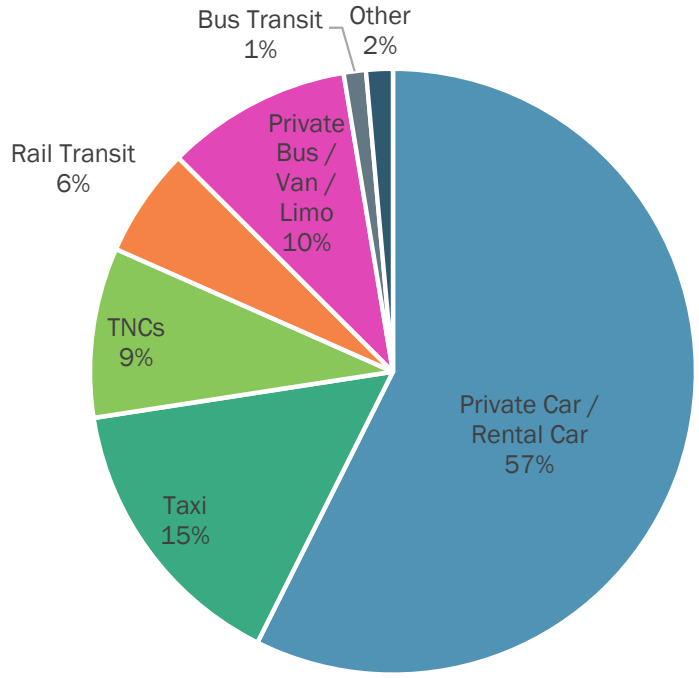
	BWI	DCA	IAD	All
Closest airport	28%	33%	25%	29%
Better public ground transportation	3%	10%	2%	6%
Better access roads and parking	18%	12%	14%	15%
More convenient flight times	17%	18%	19%	18%
Only airport with direct flight	7%	7%	12%	8%
Less expensive airfare	17%	12%	14%	14%
Frequent flyer with specific airline	5%	5%	7%	6%
Only airport serving market	7%	2%	5%	3%
Other	3%	2%	1%	2%

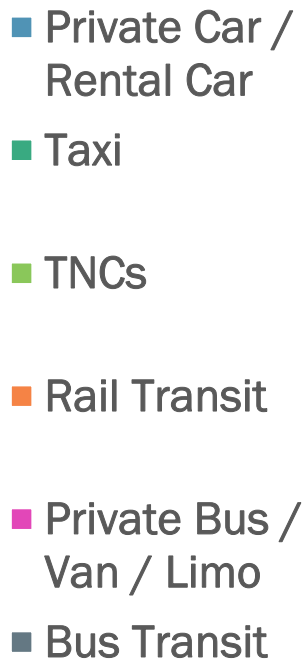
Airport Mode of Access – All Airports

2013



2015



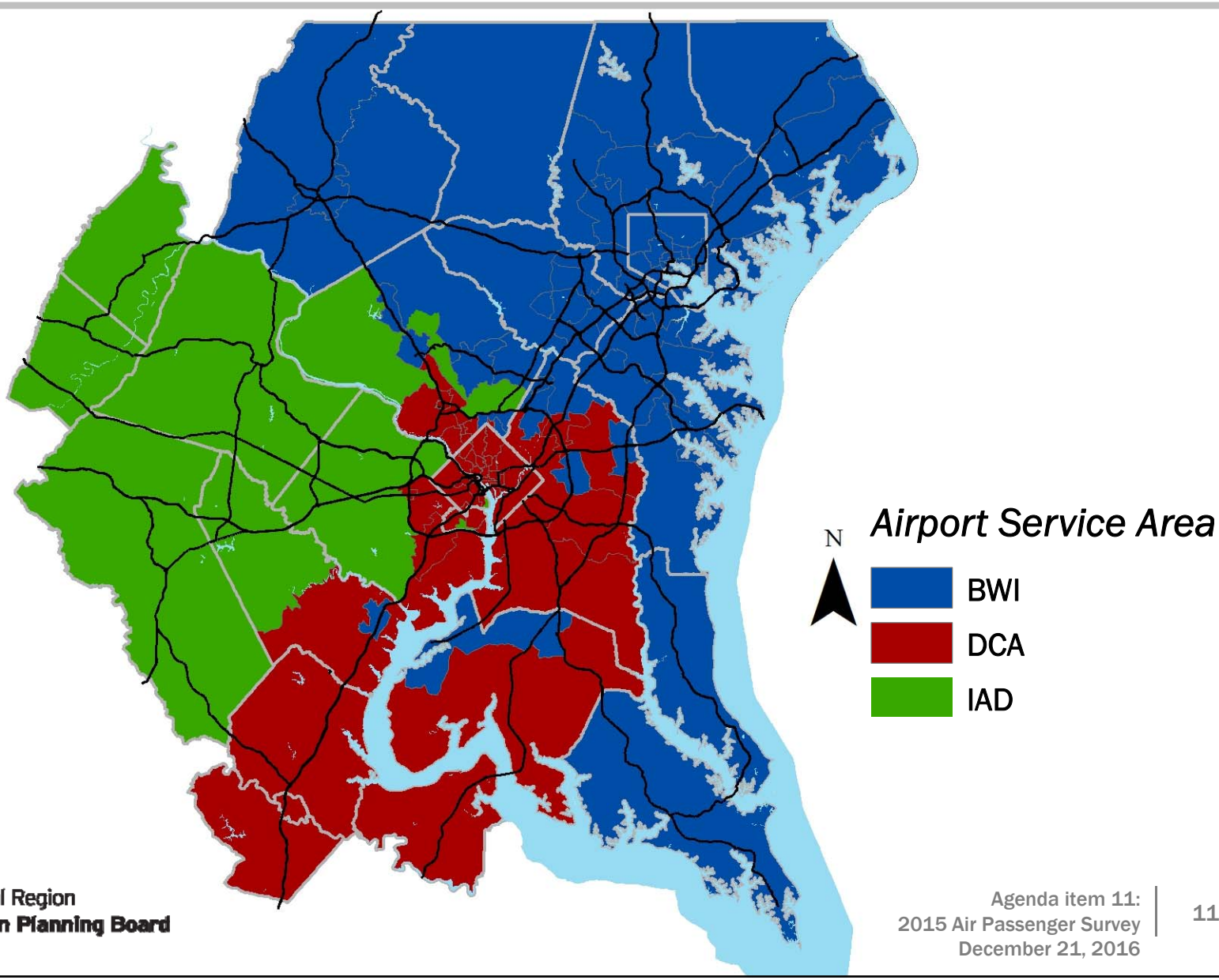


Metrorail Share at DCA
15%

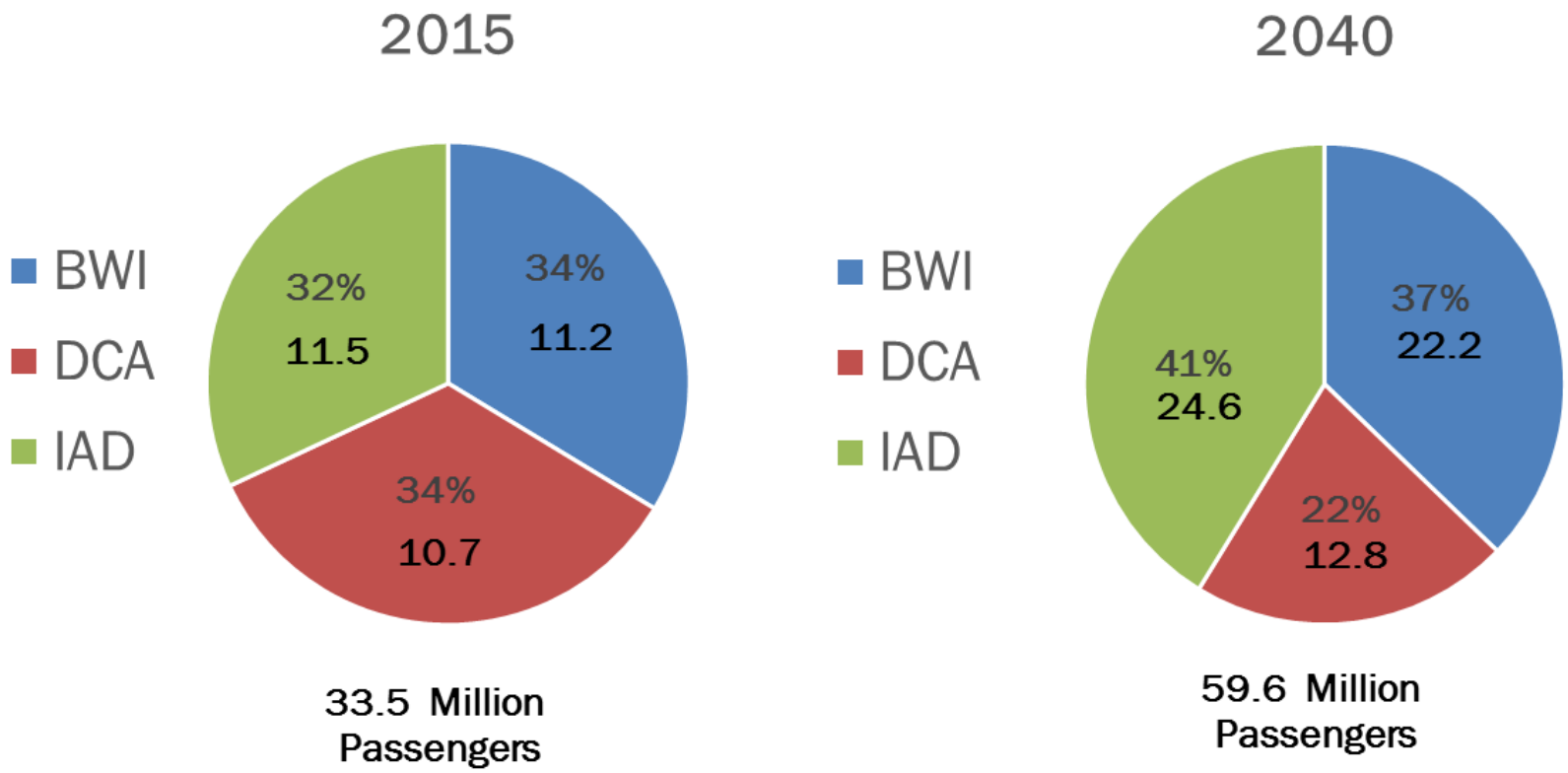
Metrorail Share at DCA
12%

DCA's transit usage is among the highest in the country for airports, but has decreased between 2013 and 2015

2015 Airport Service Areas by Aviation Analysis Zone



FAA Forecast in Regional Air Passengers



Source: FAA Terminal Area Forecasts (2014)

Next Steps

- Receive comments on draft report from Aviation Technical Subcommittee
- Finalize report and survey data file
- Transmit data file to airports
- Begin preparations for 2017 Washington-Baltimore Regional Air Passenger Survey

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National Capital Region
Transportation Planning Board

2015 WASHINGTON-BALTIMORE
REGIONAL AIR PASSENGER SURVEY

Geographic Findings

November 2015
DRAFT

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

ABSTRACT

TITLE:	
2015 Washington-Baltimore Regional Air Passenger Survey Geographic Findings	**DATE:** November 2016
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AUTHORS:

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Rich Roisman, AICP, CASP Program Manager

AGENCY:

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

REPORT ABSTRACT:

This report presents the geographic findings of the 2015 Washington-Baltimore Regional Air Passenger Survey of approximately 24,700 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, trip purpose, 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:

2015 Washington-Baltimore Regional Air Passenger Survey Geographic Findings.

PRECEDING REPORTS:

2002 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.
2009 Washington-Baltimore Regional Air Passenger Survey Geographic Findings.
2011 Washington-Baltimore Regional Air Passenger Survey Geographic Findings.
2013 Washington-Baltimore Regional Air Passenger Survey Geographic Findings.

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Policy Guidance

National Capital Region Transportation Planning Board

Technical Oversight

Aviation Technical Subcommittee

of the Transportation Planning Board Technical Committee

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EXECUTIVE SUMMARY

In October 2015, the Metropolitan Washington Council of Governments (MWCOG) 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 Airport (DCA), Washington Dulles International Airport (IAD), and Baltimore/Washington International Thurgood Marshall Airport (BWI). Approximately 24,700 passengers out of a total of approximately 69,100 enplaning passengers on 673 randomly selected flights were interviewed as they waited to board their planes, an overall response rate of 36 percent. The survey questionnaires asked about the trip that was being made, about the passenger's trip to the airport, about the passenger's choice of airport, and several questions about the passenger's demographic characteristics. The 2013 regional air passenger survey was the eleventh in a series of regional air passenger surveys conducted since 1981. Prior surveys were conducted in 1981/82, 1987, 1992, 1998, 2000, 2002, and every two years since 2005. 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 geographic patterns of airport use in the Washington-Baltimore region are as follows:

Airport Use

- Approximately 25.5 million air passengers originated in the Washington-Baltimore region in 2015, an increase of 9.6 percent over the 24.5 million passenger originations in 2011.
- The total number of air passengers (including connecting passengers) increased by 6 percent between 2013 and 2015.
- The total number of local originating passengers increased by 9 percent between 2013 and 2015, primarily due to increase in many of the Virginia suburbs. The District of Columbia experienced and the Baltimore region and Maryland suburbs of DC experienced a slight increase in originating air passengers, of 8 percent and 6 percent respectively, when compared with 2013. Originations from the Outlying areas on the air system region had a 4 percent decline and external trips increased by 1 percent when compared with 2013.

Airport Preference

- Across the region, (within the air system region) 81 percent of passengers are satisfied with their airport choice.
- The jurisdictions with highest percent of satisfied passengers are mainly in the Baltimore region, and outlying areas.

Trip Purpose and Origin Activity

- In 2015, the percentage of locally originating passengers traveling for business increased 36 percent, when compared with 32 percent in 2013. 27 percent of locally originating passengers indicated vacation as their trip purpose and 27 percent indicated personal or family affairs as their purpose.
- While 36 percent of air passengers originating in the Washington-Baltimore region are traveling on business, only 9 percent of the total number of passengers leave a place of business and travel directly to the airport, same as in 2013.
- While over half of all air passengers leave for the airport from a private residence, a significant amount (32 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 2015 was the automobile (private autos or rental cars, and transportation networks), accounting for 65 percent of originating air passengers, same as in 2013.
- Taxicabs were used by the second highest percentage of local air passengers (15 percent).
- The percentage of originating air passengers regionally using public transportation, such as the Metrorail to Reagan National, or light rail or Amtrak/MARC services to BWI Marshall, was 7 percent. However, usage of public transportation for originating air passengers within the Washington Core Area (the District of Columbia, Arlington County and City of Alexandria) was double than the regional average and about twice that of Baltimore City.

Air Passenger Destinations

- Domestically, the Atlantic region of the United States received the greatest number of passengers, followed by Midwest, together accounting for 46 percent of all passengers.
- The distribution of travel to each of the destination regions, within the United States, remains almost the same when compared with 2013 findings.
- Dulles International Airport remained dominant for international travel.

Washington Core Area and Baltimore City:

- Although the number of air passengers from Baltimore City account for only five percent of the regional total, it is nearly 27 percent of all passengers from the Baltimore metropolitan area.
- The Washington Core Area generated 8.4 million air passengers in 2015 and 74 percent of them used Reagan National Airport.
- Business travel is the trip purpose for 47 percent of the passengers from Baltimore City and 40 percent of the passengers from the Washington Core Area.
- Both the Washington Core Area and Baltimore City had a significant percent of passengers traveling to the airport from a hotel or motel, 48 percent from the Washington Core Area and 42 percent in Baltimore City.
- Places of employment or other business locations generated 12 percent of the passengers from the Washington Core Area and 8 percent from Baltimore City.
- In Baltimore City, 19 percent of the passengers used taxicabs, and this figure grew to 28 percent in the Washington Core Area.
- Passengers from both Baltimore City and the Washington Core Area also used the airport limousine service at a little higher rate (12 percent) than the regional average (10 percent).
- The use of public transportation from the Washington Core Area is 16 percent and is almost the same as the 14 percent of overall Metrorail usage at Reagan National airport.

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I. INTRODUCTION

This report presents the geographic and temporal findings from the 2015 Washington-Baltimore Regional Air Passenger Survey, conducted concurrently at Ronald Reagan Washington National Airport (DCA), Washington Dulles International Airport (IAD), and Baltimore/Washington International Thurgood Marshall Airport (BWI). The survey was conducted as part of the Metropolitan Washington Council of Governments' (COG's) Continuous Airport System Planning (CASP) program. One of the goals of this program is to continue the rational development of aviation facilities and services at the three major commercial airports serving the Washington-Baltimore region. Figure 1 represents the jurisdictions that combine to make up the Washington/Baltimore Air System Planning Region, and locates the three commercial airports.[1]

The 2015 Air Passenger Survey was conducted during the two week period from Wednesday, October 7th to Tuesday, October 20th, in the fall of 2015. A small number of flights that were either missed or required resurveying were surveyed again during the week of October 21st to November 1st. Approximately 24,600 passengers out of a total of 79,100 enplaning passengers on 683 flights (628 domestic and 55 International) were interviewed as they waited to board their planes, an overall response rate of 31 percent. The survey questionnaires representing the responses of these 24,600 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 2015 data is compared with the results from the similar survey conducted in 2013.

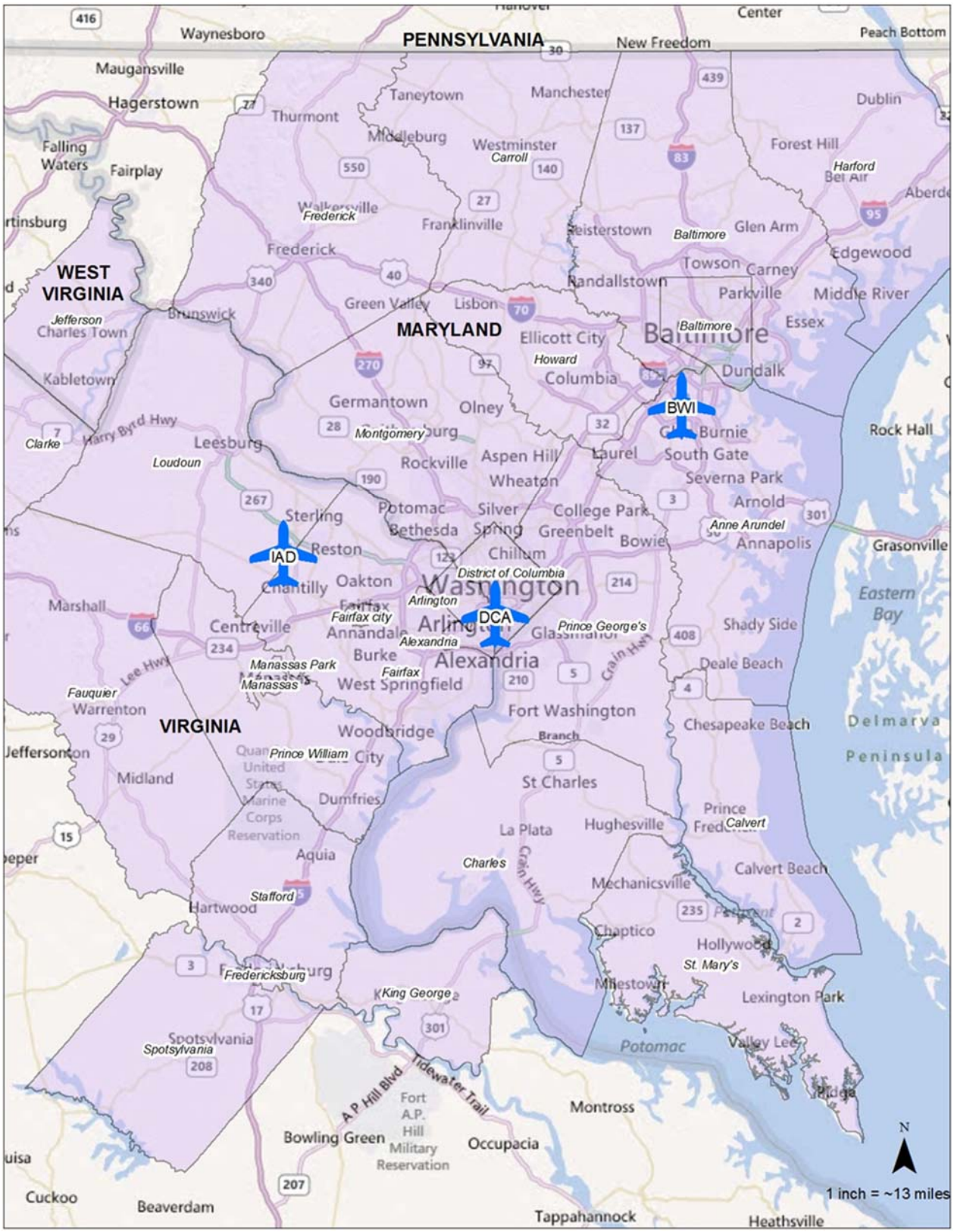
The survey instrument contained questions regarding the passengers' trip (i.e., destination, trip purpose), trip to the airport (i.e., origination, mode of access), passengers' choice of airport (i.e., airport preference, airport usage), and several demographic questions regarding the passenger (i.e., 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 using the three major airports in the region. It should be noted that 65 percent of the passengers originating from the three commercial airports, responding to the survey were not residents of the Washington-Baltimore region (Washington-Baltimore Air System Planning Region). The geographic findings, therefore, do not necessarily reflect characteristics of persons living in a particular jurisdiction. These findings reflect characteristics of many persons coming from outside the region, but originating their ground trip to the airport within one of the jurisdictions in the Washington/Baltimore Air System Planning Region.

The 2015 Regional Air Passenger Survey was conducted by the National Capital Transportation Planning Board (TPB) of the Metropolitan Washington COG, 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.

[1] Although Figure 1 shows all of Spotsylvania County, VA, the Air System Planning Region only includes the northern portion of the county, and only that portion is shown on all other maps in this document.

Figure 1: Washington / Baltimore Air System Planning Region



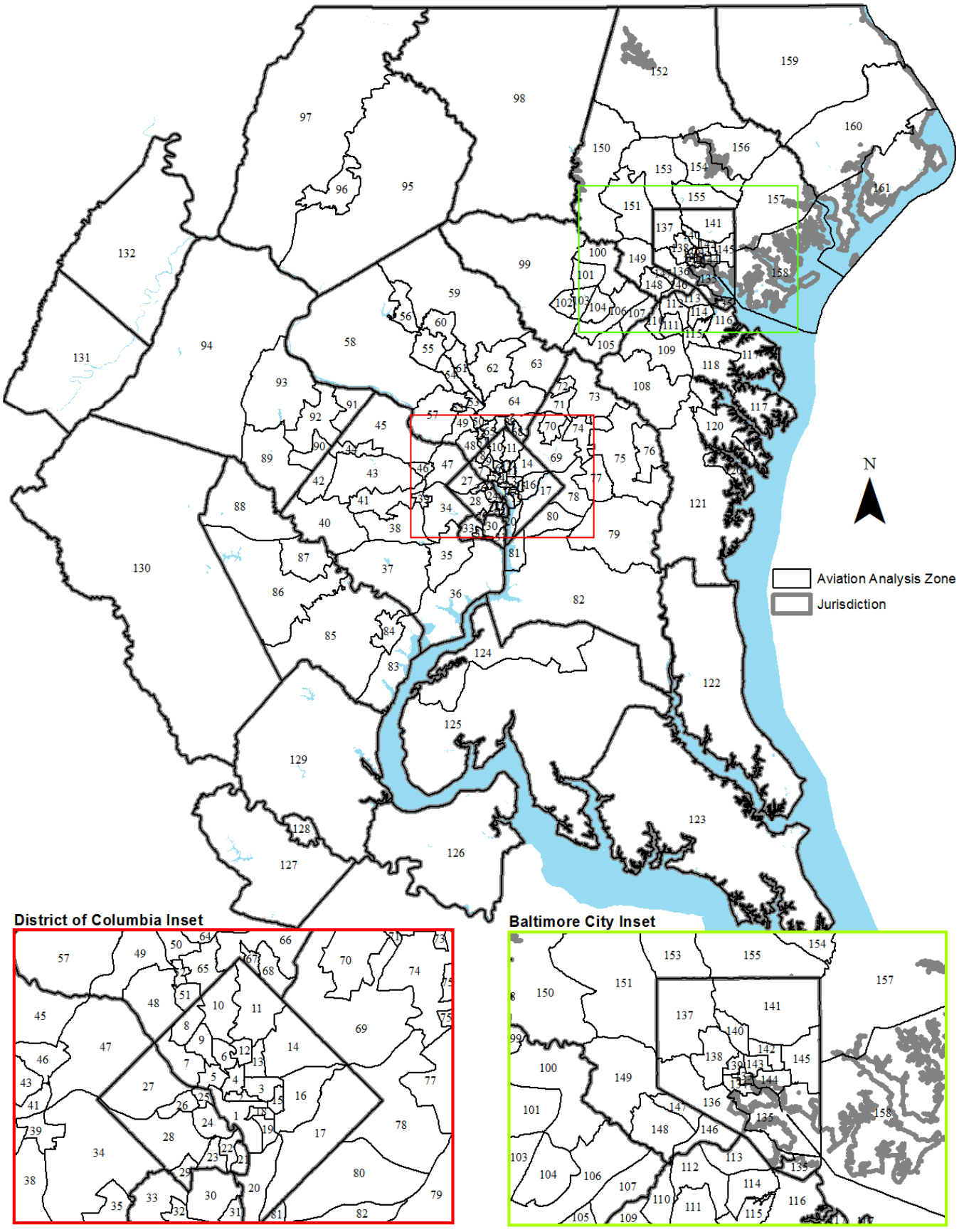
II. FINDINGS

This chapter summarizes the results of the 2015 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 2015.

The total enplanements in this report for the region and at each airport are annualized numbers, based on the survey sample. This sample has been factored up to represent an estimate of annual enplanements, and does not necessarily equate to the actual observed counts reported by the airports. Expansion of the survey data to calendar year 2015 (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 judgment and not 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 transportation analysis zones identified by the Baltimore Metropolitan Council (BMC) 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, not intended to be adjusted due to demographic changes, and, thus provide a consistent geographic bases 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). A full description of the AAZ system may be found in Appendix A. In addition, there are 5 zones that represent external areas, areas that are outside the immediate Washington-Baltimore region.

Figure 2: Aviation Analysis Zone System



Geographic Patterns of Airport Use

Approximately 25.4 million air passengers originated from the three commercial airports in the Washington-Baltimore Region in 2015, an eight percent increase to the 23.4 million passenger originations in 2013 (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: Annual Trip Originations by Airport (000s)

Enplanement Type		BWI		Dulles		National		Region	
		2013	2015	2013	2015	2013	2015	2013	2015
Local origination	*Number*	8,505	8,500	6,214	6,592	8,686	10,371	23,405	25,464
- (Came by ground transportation	*Percent*	75%	71%	57%	62%	85%	90%	72%	75%
Connected from another Flight	*Number*	2,775	3,449	4,646	4,120	1,510	1,127	8,932	8,697
- (Local and/or International)	*Percent*	25%	29%	43%	38%	15%	10%	28%	25%
Total Enplanements	*Number*	**11,280**	**11,950**	**10,861**	**10,712**	**10,196**	**11,499**	**32,337**	**34,161**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**
Percent of Region		35%	35%	34%	31%	32%	34%	100%	100%

Source:- 2013 and 2015 Washington-Baltimore Regional Air Passenger Survey

Table 2: Annual Internal / External Trip Originations by Airport (000s)

Enplanement Type		BWI		Dulles		National		Region	
		2013	2015	2013	2015	2013	2015	2013	2015
Within Air System Planning Region	*Number*	7,245	7,267	5,655	6,095	8,462	10,152	21,362	23,514
- (Internal)	*Percent*	85%	85%	91%	92%	97%	98%	91%	92%
Outside Air System Planning Region	*Number*	1,259	1,233	560	497	225	219	2,044	1,949
- (External)	*Percent*	15%	15%	9%	8%	3%	2%	9%	8%
Total Enplanements	***Number***	**8,504**	**8,500**	**6,215**	**6,592**	**8,687**	**10,371**	**23,406**	**25,464**
	Percent	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**	**100%**

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 (except for Jefferson County), NJ or external VA and MD

Source:- 2013 and 2015 Washington-Baltimore Regional Air Passenger Survey

The geographic distribution of the air passenger originations in both 2013 and 2015 is illustrated in Figure 3. Most air passengers originated in the core and inner suburbs of the metropolitan Washington area, including the District of Columbia, Arlington and Fairfax counties and the City of Alexandria in Northern Virginia, and Prince George's, and Montgomery counties in Maryland. A significant number of passengers also originated from Baltimore City and neighboring Anne Arundel and Baltimore counties. This geographic distribution is similar to the distribution of air passengers in 2013. Figure 4 illustrates the distribution of 2013 passenger originations by residents and non-residents. The outer counties tend to generate residents for travel while the more central jurisdictions of the region are more evenly divided between resident and non-resident air passengers starting their trip at one of the area airports.

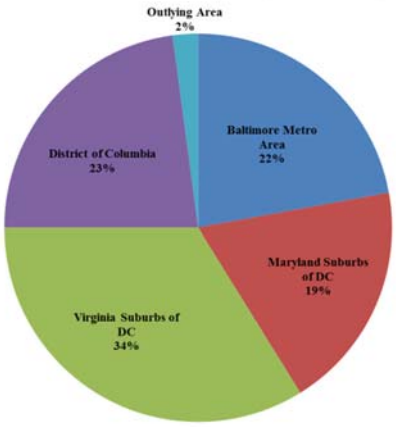
Table 4 shows air passenger trip originations by jurisdiction. The total number of passengers experienced an increase of 9 percent between 2013 and 2015. In contrast to the increase of originating air passengers regionally, the outlying areas experienced a drop of 4 percent between 2013 and 2015. The Maryland suburbs of DC show an increase of 2 percent, when compared with 2013. Originations from the Virginia suburbs of DC had a 18 percent drop and the Baltimore metro area also experienced an increase of 6 percent when compared with 2013.

The service areas for each airport, defined as all zones in which a majority of all originating passengers use a specific airport, are illustrated in Figure 6 for 2015[2]. While the preferences in the inner jurisdictions are stable, the outer jurisdictions are somewhat less predictable. Recent years have seen improvements in geo-coding of origination addresses allowing passengers to be linked to the geography more reliably, but small samples of travelers from those outer jurisdictions make continuity of preference data less reliable. Despite these challenges, residential location is the biggest predictor of airport choice.

The pattern is most apparent for BWI and IAD. BWI draws a large proportion of its locally originating passengers from the eastern half of the Washington-Baltimore air system region, as shown in Figure 11 and Figure 12, and IAD draws a large proportion of its passengers from the western half of the region, as show in Figure 9 and Figure 10. DCA, in the middle, attracts passengers from the central part of the region, but also from the more southern part of the region. DCA is located further south than the other two airports, as shown in Figure 7 and Figure 8. These findings correlate with Table 3 in the Air Passenger Survey General Findings report[3]. In 2013, more than half of departing air passengers cited the closest airport as the reason for selecting the airport they used, almost same when compared with 2011. The next most chosen reason is less expensive airfare with 15 percent.

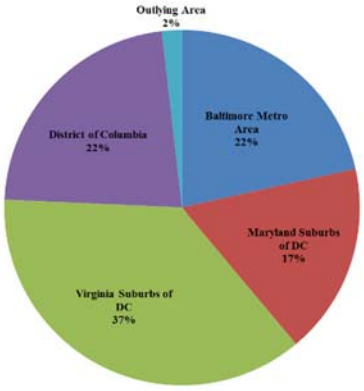
Table 3: Annual Internal Originations by Regional District, 2013 and 2015

2013



Total: 21.3 Million

2015



Total: 23.4 Million

[2] Majority does not mean 50% of the originations but the highest proportion of originations in that AAZ: for example, if an AAZ had 33% of its originations headed to BWI, 33% to DCA, and 34% to IAD, it would be placed in the IAD service area.
[3] See Table X in that report.

Figure 3: Washington / Baltimore Air System Planning Region
Jurisdictional Subdivisions

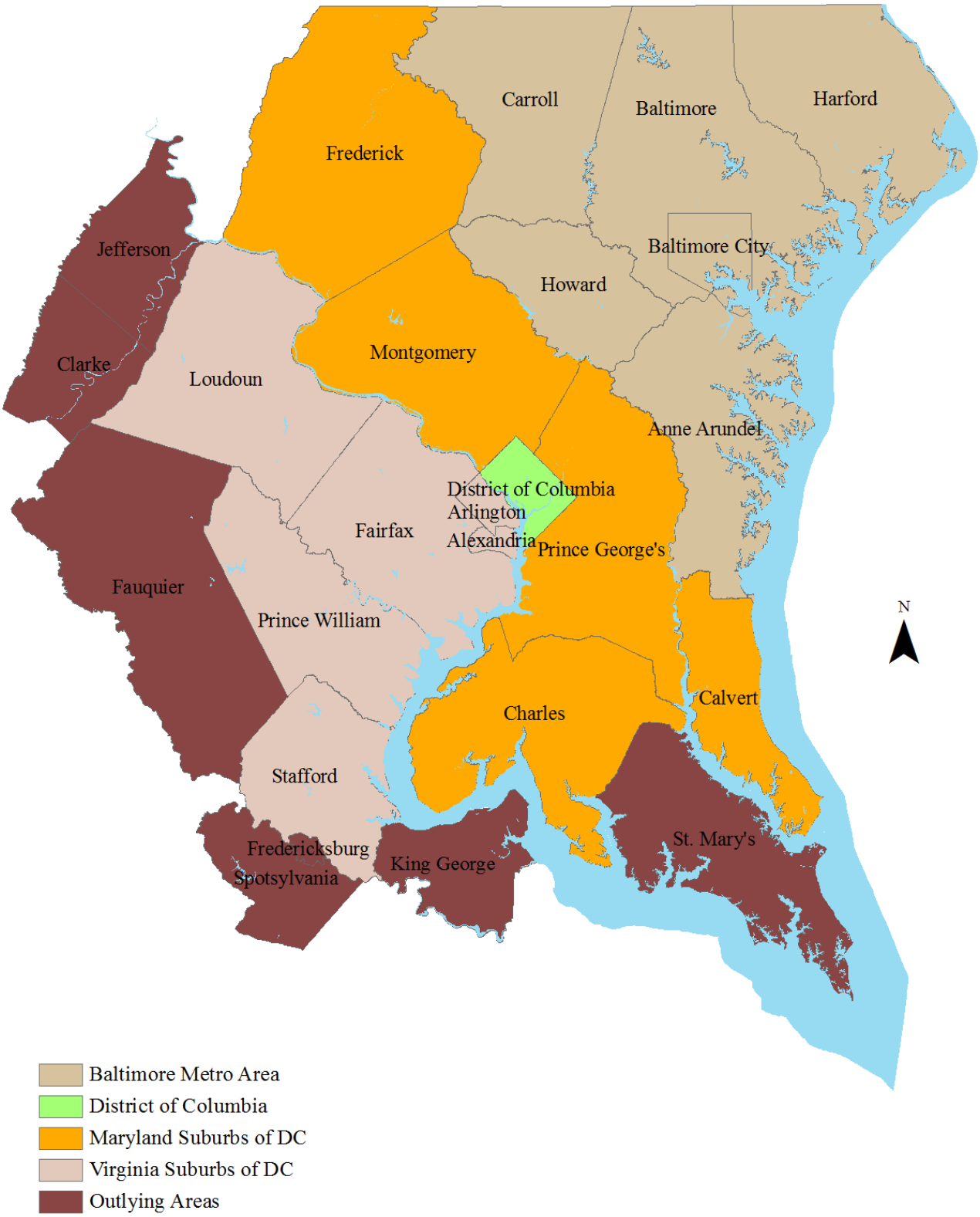


Figure 4: Percent Resident and Non-Resident Departing Passengers by Jurisdiction

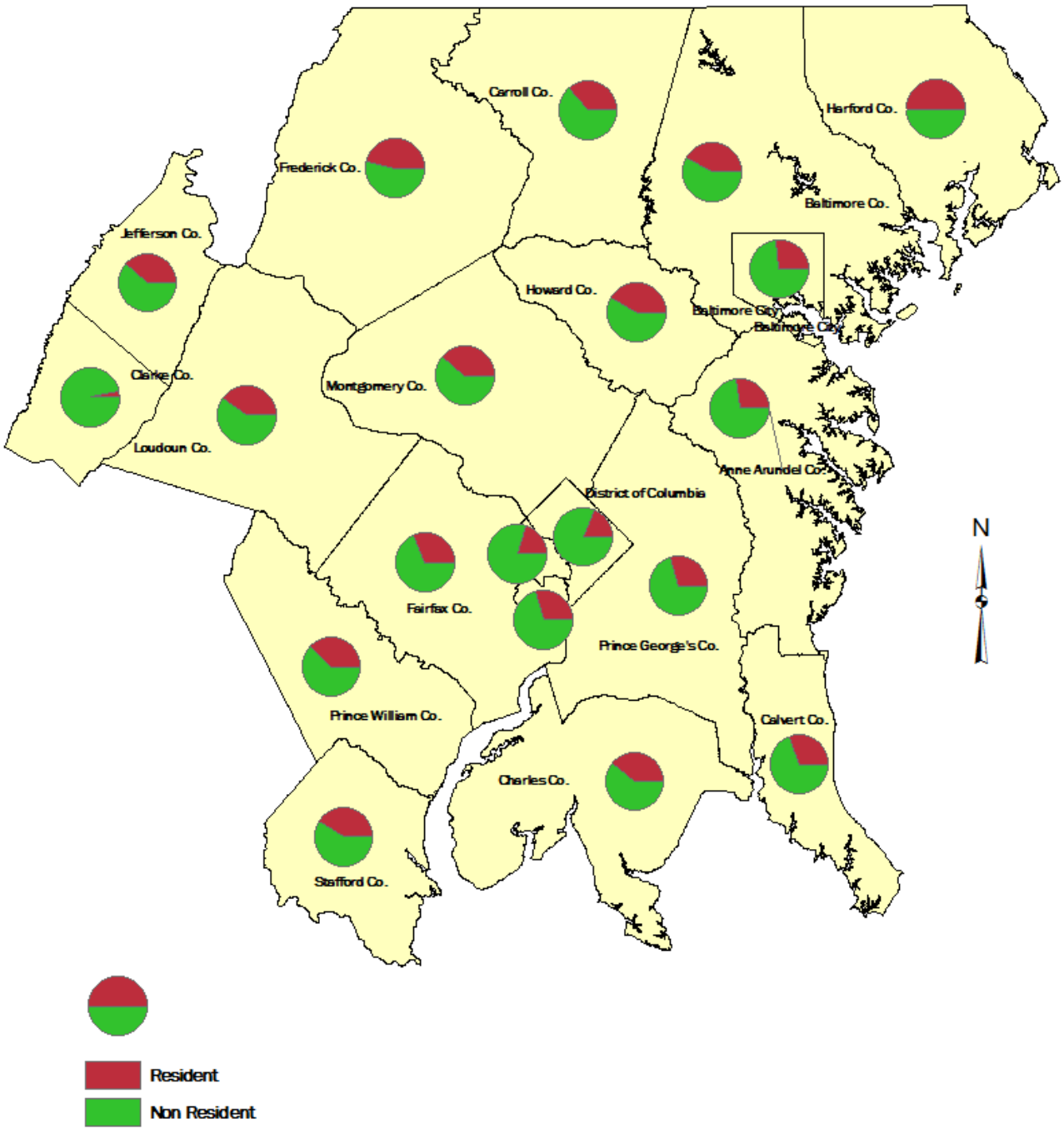


Table 4: Air System Planning Region Change in Originating Air Passengers by Jurisdiction 2013-2015

ORIGIN COUNTY	BWI AIRPORT				NATIONAL AIRPORT				DULLES AIRPORT				REGION			
	2013	2015	13-15	% Change	2013	2015	13-15	% Change	2013	2015	13-15	% Change	2013	2015	13-15	% Change
Anne Arundel Co.	1,436	1,564	129	9%	49	63	14	29%	51	72	21	41%	1,536	1,700	164	11%
Baltimore City	1,229	1,262	33	3%	60	50	-9	-15%	52	44	-8	-15%	1,341	1,357	17	1%
Baltimore Co.	806	751	-54	-7%	4	6	2	38%	52	21	-31	-59%	862	778	-83	-10%
Carroll Co.	192	217	26	13%	12	5	-8	-64%	16	4	-12	-77%	220	226	5	2%
Harford Co.	170	231	60	35%	4	1	-4	-84%	17	16	0	-3%	192	248	56	29%
Howard Co.	528	643	115	22%	28	33	5	19%	57	49	-8	-14%	614	726	112	18%
SUBTOTAL BALTIMORE METRO AREA	**4,361**	**4,669**	**309**	**7%**	**158**	**159**	**1**	**0%**	**245**	**206**	**-38**	**-16%**	**4,764**	**5,035**	**271**	**6%**
Calvert Co.	42	60	18	44%	29	49	20	68%	1	6	5	549%	72	115	43	60%
Charles Co.	70	71	1	1%	65	64	0	-1%	16	13	-3	-17%	151	149	-3	-2%
Frederick Co.	207	190	-18	-8%	28	24	-4	-15%	48	69	20	42%	284	283	-1	-1%
Montgomery Co.	837	790	-47	-6%	800	966	166	21%	658	624	-35	-5%	2,295	2,380	84	4%
Prince Georges Co.	577	431	-146	-25%	472	618	146	31%	158	99	-59	-37%	1,207	1,148	-59	-5%
SUBTOTAL MARYLAND SUBURBS OF DC	**1,733**	**1,542**	**-191**	**-11%**	**1,394**	**1,721**	**327**	**23%**	**882**	**811**	**-71**	**-8%**	**4,009**	**4,074**	**64**	**2%**
Alexandria	57	34	-23	-41%	564	658	94	17%	199	150	-49	-25%	820	842	21	3%
Arlington Co.	79	81	2	3%	1,313	1,808	495	38%	347	481	133	38%	1,739	2,369	630	36%
Fairfax Co.	196	198	2	1%	1,154	1,345	191	17%	1,707	2,314	607	36%	3,056	3,856	800	26%
Loudoun Co.	52	27	-25	-48%	149	119	-30	-20%	796	603	-194	-24%	998	749	-249	-25%
Prince William Co.	57	52	-5	-9%	235	326	91	38%	276	299	23	8%	569	677	108	19%
Stafford Co.	9	17	8	83%	60	72	12	21%	38	29	-9	-24%	107	117	11	10%
SUBTOTAL VIRGINIA SUBURBS OF DC	**450**	**408**	**-42**	**-9%**	**3,475**	**4,327**	**852**	**25%**	**3,363**	**3,874**	**511**	**15%**	**7,288**	**8,610**	**1,321**	**18%**
District of Columbia	**556**	**474**	**-82**	**-15%**	**3,284**	**3,801**	**518**	**16%**	**1,017**	**987**	**-31**	**-3%**	**4,857**	**5,262**	**405**	**8%**
Outlying Areas	145	121	-25	-17%	151	145	-6	-4%	147	161	13	9%	444	426	-17	-4%
Externals	1,259	1286	26	2%	225	219	-6	-3%	560	554	-6	-1%	2,043	2,058	14	1%
Total	**8,505**	**8,500**	**-5**	**0%**	**8,686**	**10,371**	**1,685**	**19%**	**6,214**	**6,592**	**378**	**6%**	**23,406**	**25,464**	**2,058**	**9%**

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,
Externals include jurisdictions outside the air system planning region.

Source:- 2013 and 2015 Washington-Baltimore Regional Air Passenger Surveys

Figure 5: Originating Air Passengers by Super District by Airport, 2015 and 2013

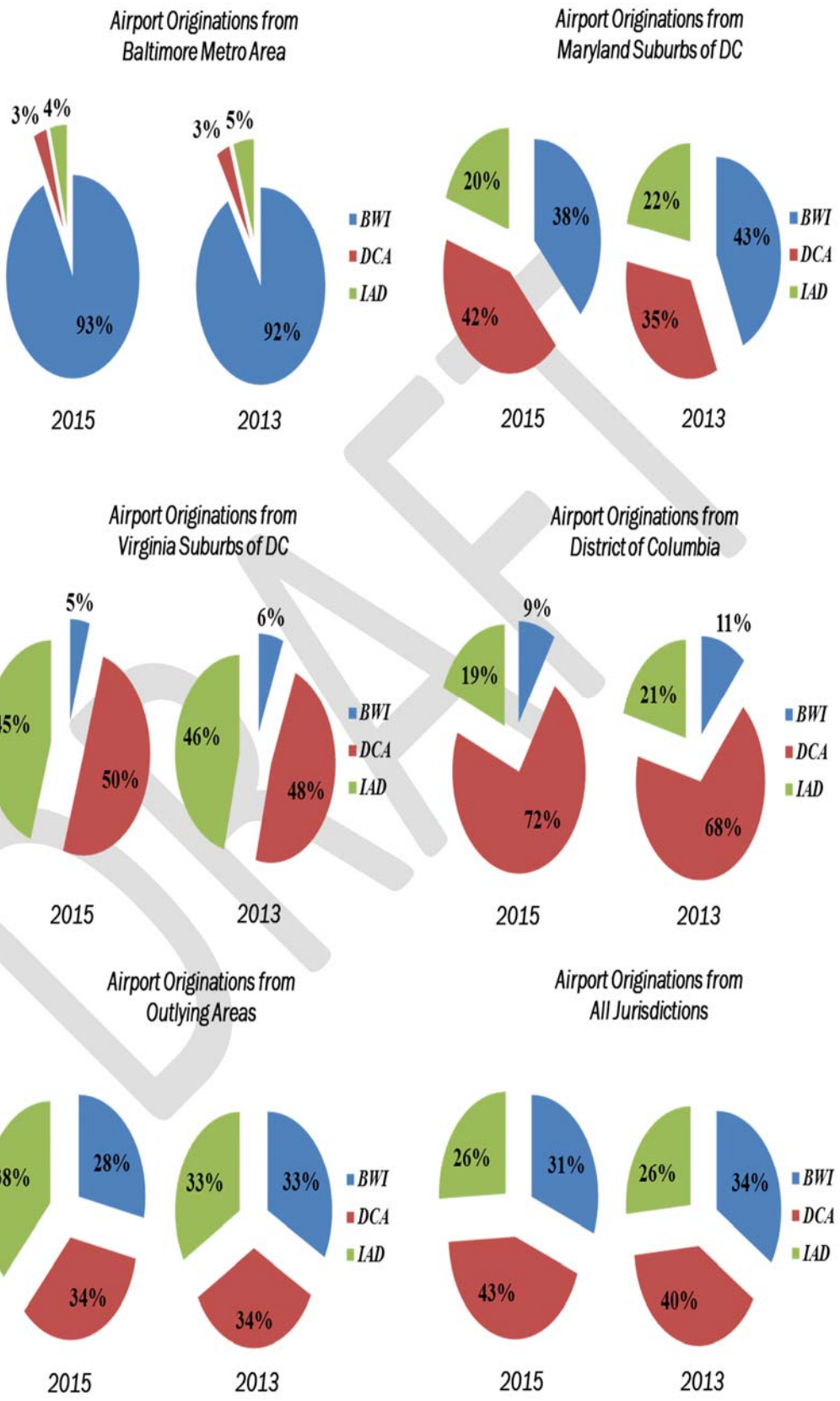
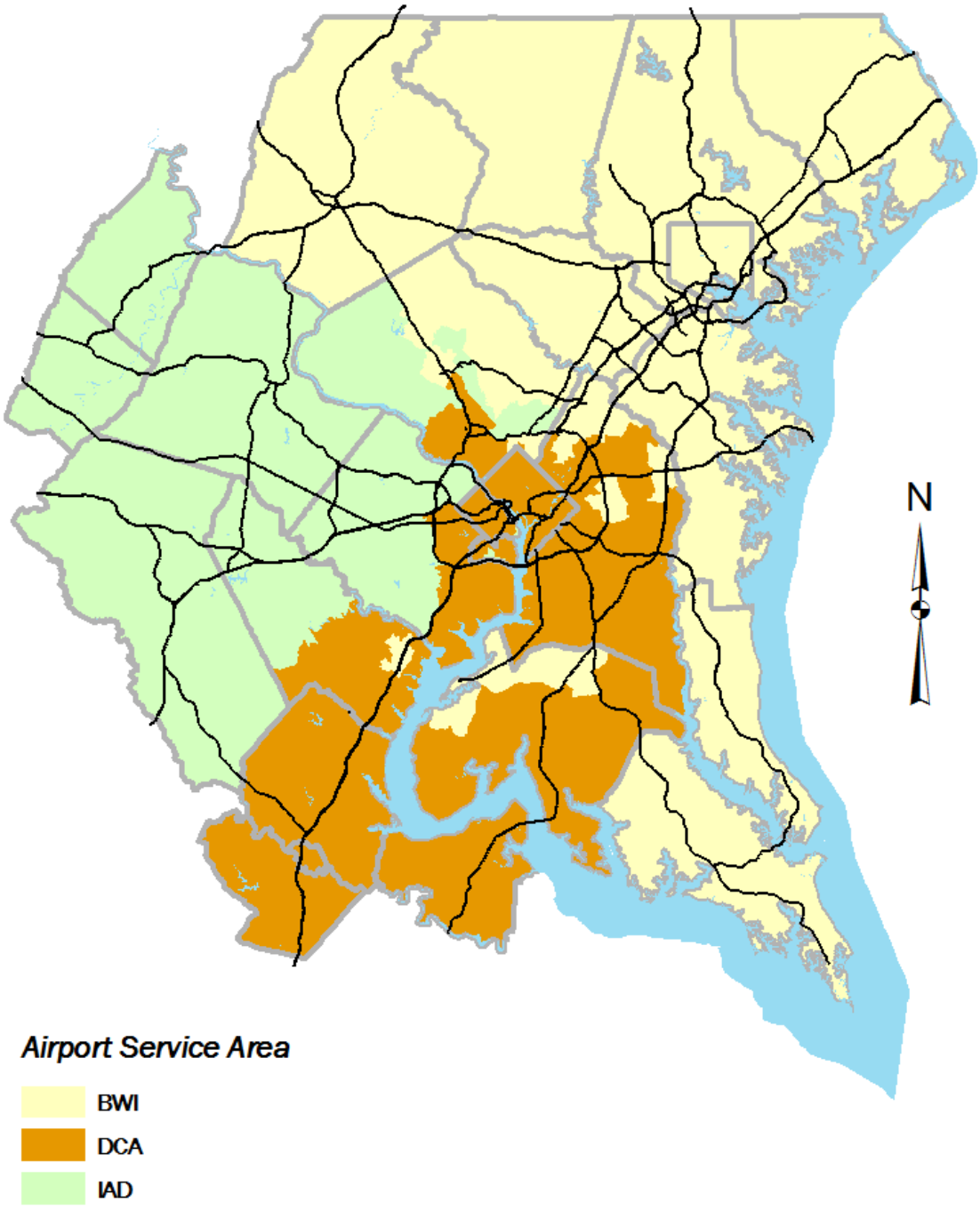


Figure 6: Airport Service Area by AAZ – 2015



Ronald Reagan Washington National Airport (DCA)

Annual local air passenger originations at DCA increased by 19 percent between 2013 and 2015. In 2015, just over 36 percent of passengers using DCA started their trip within the District of Columbia. 76 percent of Arlington County's departing air passengers along with 78 percent of Alexandria's and 72 percent from the District of Columbia flew out of DCA. Figure 7 illustrates the distribution of air passenger originations from DCA in 2015. Along with the District and the inner Virginia suburbs, sections of southern Montgomery, Prince George's Counties in Maryland, and along the I-95 corridor of Prince William and Stafford Counties account for significant numbers of passengers using DCA. Though the percentage of passengers departing from DCA grew in Baltimore County, Carroll, Harford, Calvert, and Loudoun Counties, the majority of originating trips from these jurisdictions are destined either to BWI (see Figure 8).

The size of DCA's service area is much smaller than that of the other airports. Though some of the AAZs in Montgomery County and the District of Columbia have a greater share of airport trip originations to BWI, overall DCA served 41 percent and 72 percent of total trips from these jurisdictions respectively. However, in eastern Fairfax County, AAZs along the I-95 and US 1 corridor show more trips attracted to DCA. Figure 7 shows annual air passenger origination volumes and Figure 8 shows the percent distribution of originations by AAZ from DCA.

Figure 7: Annual Air Passenger Originations – DCA 2015

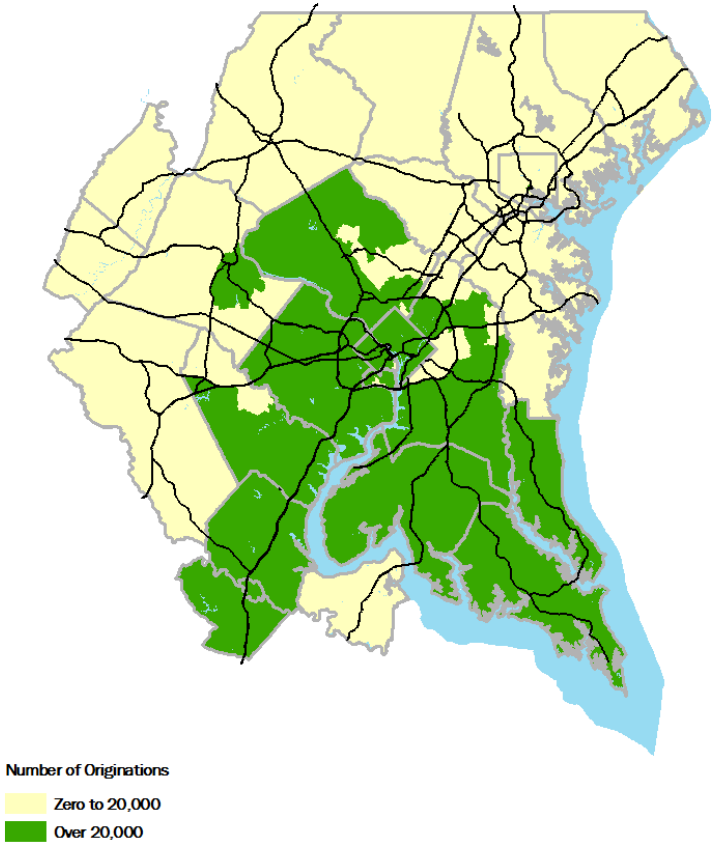
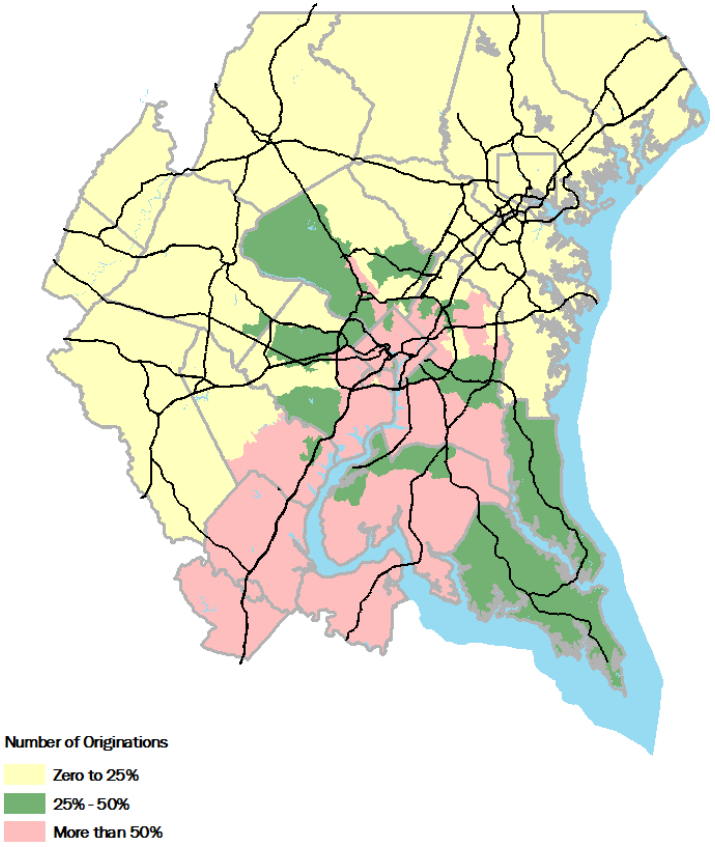


Figure 8: Percentage of Passengers Using DCA 2015



Washington Dulles International Airport (IAD)

Overall local air passenger originations at IAD experienced an increase of 6 percent when compared with 2013. Despite the total increase, some decline was observed of trip originations for some jurisdictions within the air system region between 2013 and 2015. With the exception of the City of Alexandria, Loudoun and Stafford counties originations from Virginia Suburbs of DC to IAD have increased (see Table 4). Originations to IAD from Maryland jurisdictions also have declined when compared with 2013, while a marginal increase of 9 percent was observed from the outlying areas of the air system region. According to Table 4, 74 percent of IAD passengers are from the Virginia suburbs and the District of Columbia. Originations from IAD increased from the Virginia suburbs by 15 percent when compared with 2013, while it dropped by 8 percent from the Maryland suburbs. IAD air passenger originations from the Baltimore metropolitan area were down by 16 percent.

The scope of the IAD service area is mostly as expected and is similar to that from 2011 and 2013, except for the shift of a large swath of western Montgomery County to the BWI service area. This shift is largely due to the improved access to BWI provided by the Inter-county Connector (MD 200). Figure 9 shows annual air passenger volume and Figure 10 shows the percentage distribution of originations by AAZ to Dulles for 2013.

Figure 9: Annual Originations IAD 2015

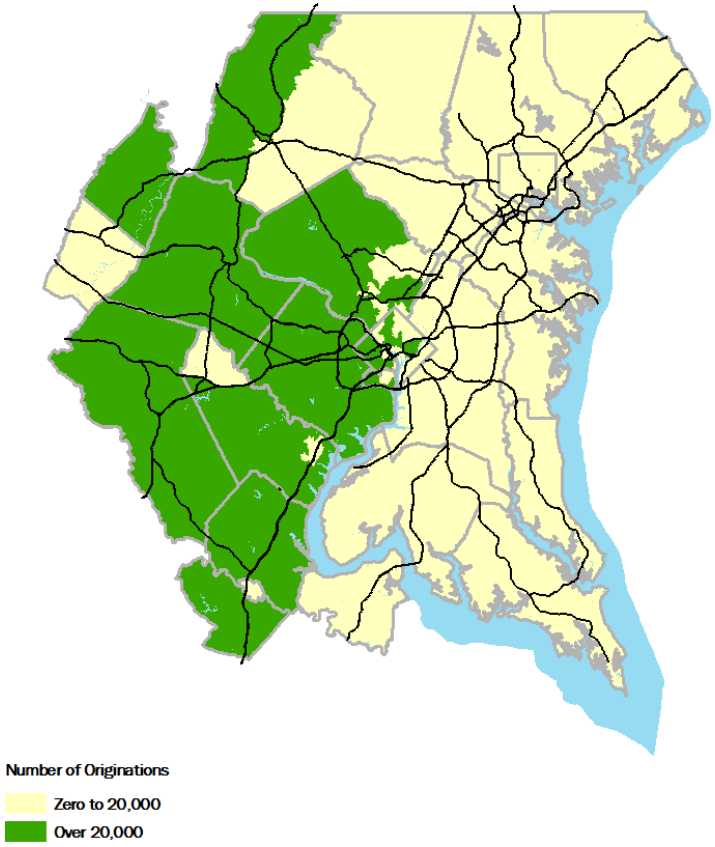
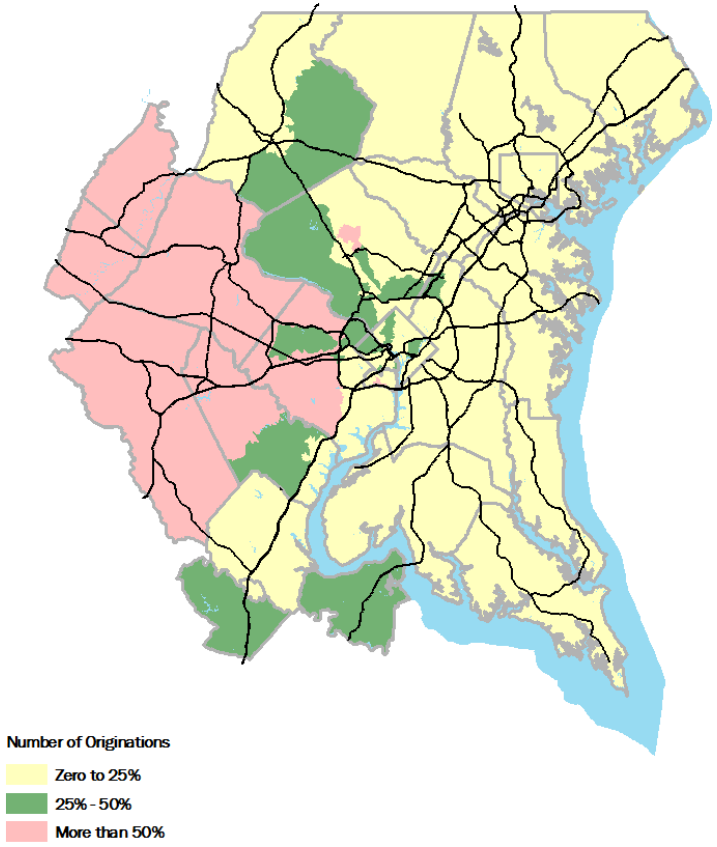


Figure 10: Percentage of Passengers Using IAD 2015



Baltimore/Washington International Thurgood Marshall Airport (BWI)

Between 2013 and 2015, local air passenger originations at BWI dropped by just less than 1 percent. Originating passengers at BWI from the Virginia suburbs dropped by 9 percent when compared with 2013 while passengers from the Maryland suburbs of DC also dropped by 11 percent. The percentage of passengers originating in the District of Columbia decreased by 15 percent and originations to BWI from the outlying jurisdictions show a drop of 17 percent between 2013 and 2015. Figure 11 illustrates the distribution of air passenger originations for BWI in 2015. Over half of the passengers using BWI were from the Baltimore region. Originations from Anne Arundel County accounted for 18 percent of the total, while Baltimore City made up 27 percent of the Baltimore region passenger originations at BWI.

The BWI Marshall service area is concentrated in the eastern half of the region. It does extend to areas along the border of the District of Columbia and in Prince George's County. Figure 11 shows annual air passenger volume and Figure 12 show the percentage distribution of originations by AAZ to BWI for 2015.

Figure 11: Originations BWI 2015

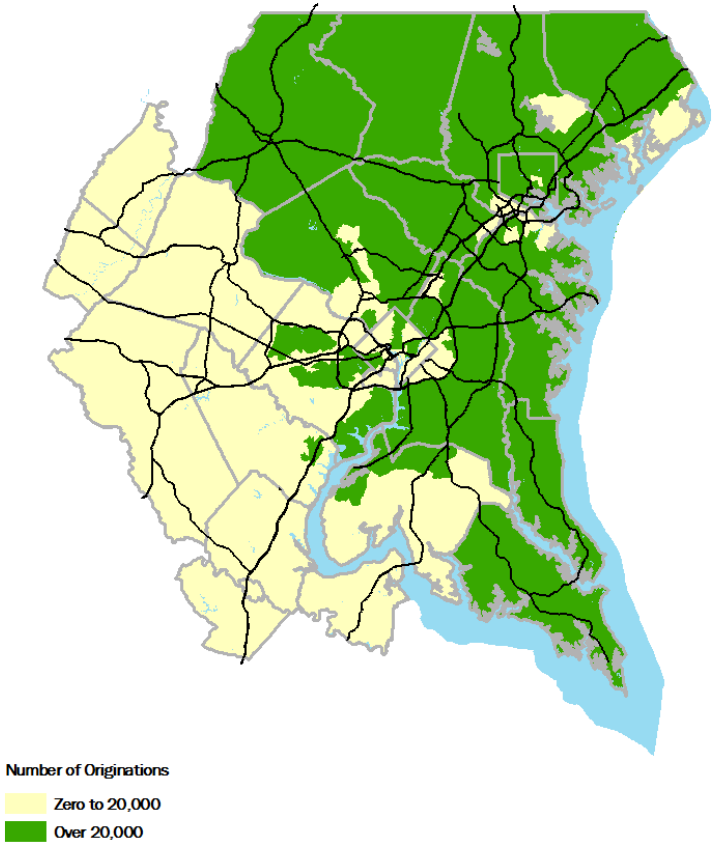
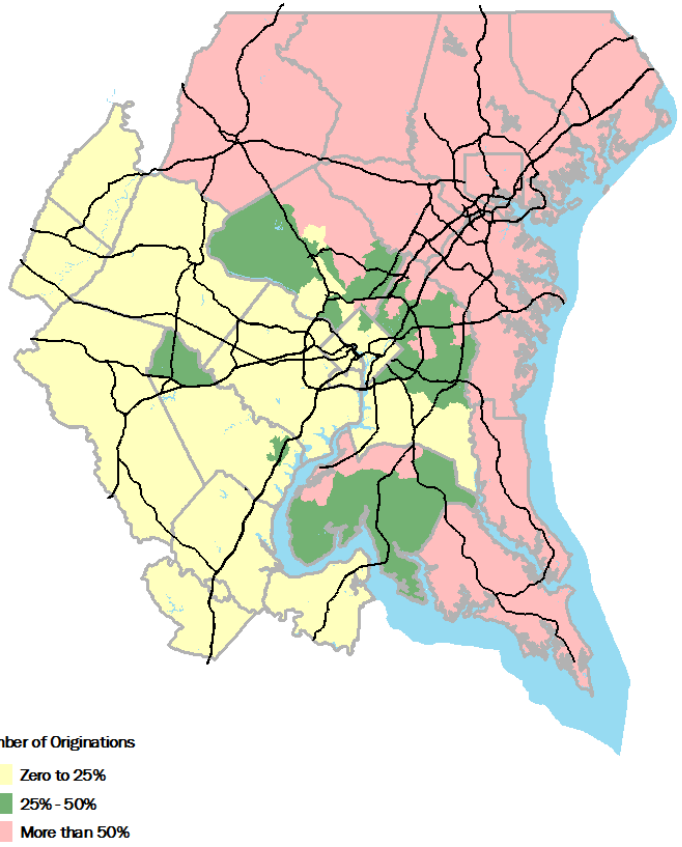


Figure 12: Percentage of Passengers Using BWI 2015



Use of Preferred Airport (Survey Question C-2)

Overall, the survey indicates that passengers are typically flying from their preferred airport. Across the region, 62 percent of flew from their preferred airport. Figure 13 displays the percentage distribution of departing air passengers' airport preference by AAZ. Those respondents expressing no airport preference (a very small number) are included in the analysis.

Table 5 shows airport preference by jurisdiction. For the region, the overall percentage of originating air passengers departing from their preferred airport in 2013 was about the same as 2011 (the percent has been rising from the 2005 figure of 76%). The jurisdictions with 90 percent or more passengers departing from their preferred airport are mainly in the Baltimore region.

Table 5: Annual Departing Air Passengers Satisfaction with Airport by Jurisdiction

JURISDICTION	Total Originating Trips	Percent from Prefered Airport	Percent Not from Prefered Airport	Percent No Preference Airport	Total
Anne Arundel Co.	1,699,540	70%	10%	20%	100%
Baltimore City	1,357,058	68%	8%	24%	100%
Baltimore Co.	778,348	83%	4%	13%	100%
Carroll Co.	225,635	80%	8%	12%	100%
Hartford Co.	247,862	81%	2%	17%	100%
Howard Co.	726,171	74%	11%	15%	100%
SUBTOTAL BALTIMORE METRO AREA	5,034,614	73%	9%	19%	100%
Calvert Co.	115,425	78%	15%	7%	100%
Charles Co.	148,543	58%	29%	13%	100%
Frederick Co.	282,510	59%	19%	22%	100%
Montgomery Co.	2,379,691	53%	23%	25%	100%
Prince Georges Co.	1,147,643	62%	17%	21%	100%
SUBTOTAL MARYLAND SUBURBDS OF DC	4,073,812	57%	21%	23%	100%
Alexandria	841,723	67%	14%	19%	100%
Arlington Co.	2,369,032	60%	16%	24%	100%
Fairfax Co.	3,856,008	56%	19%	25%	100%
Loudoun Co.	748,666	68%	18%	14%	100%
Prince William Co.	676,705	58%	18%	24%	100%
Stafford Co.	117,471	59%	7%	34%	100%
SUBTOTAL VIRGINIA SUBURBDS OF DC	8,609,605	59%	18%	23%	100%
District of Columbia	5,261,794	61%	15%	24%	100%
Outlying Areas	426,044	61%	16%	23%	100%
Externals	2,057,825	58%	9%	33%	100%
Total	25,463,694	62%	15%	23%	100%

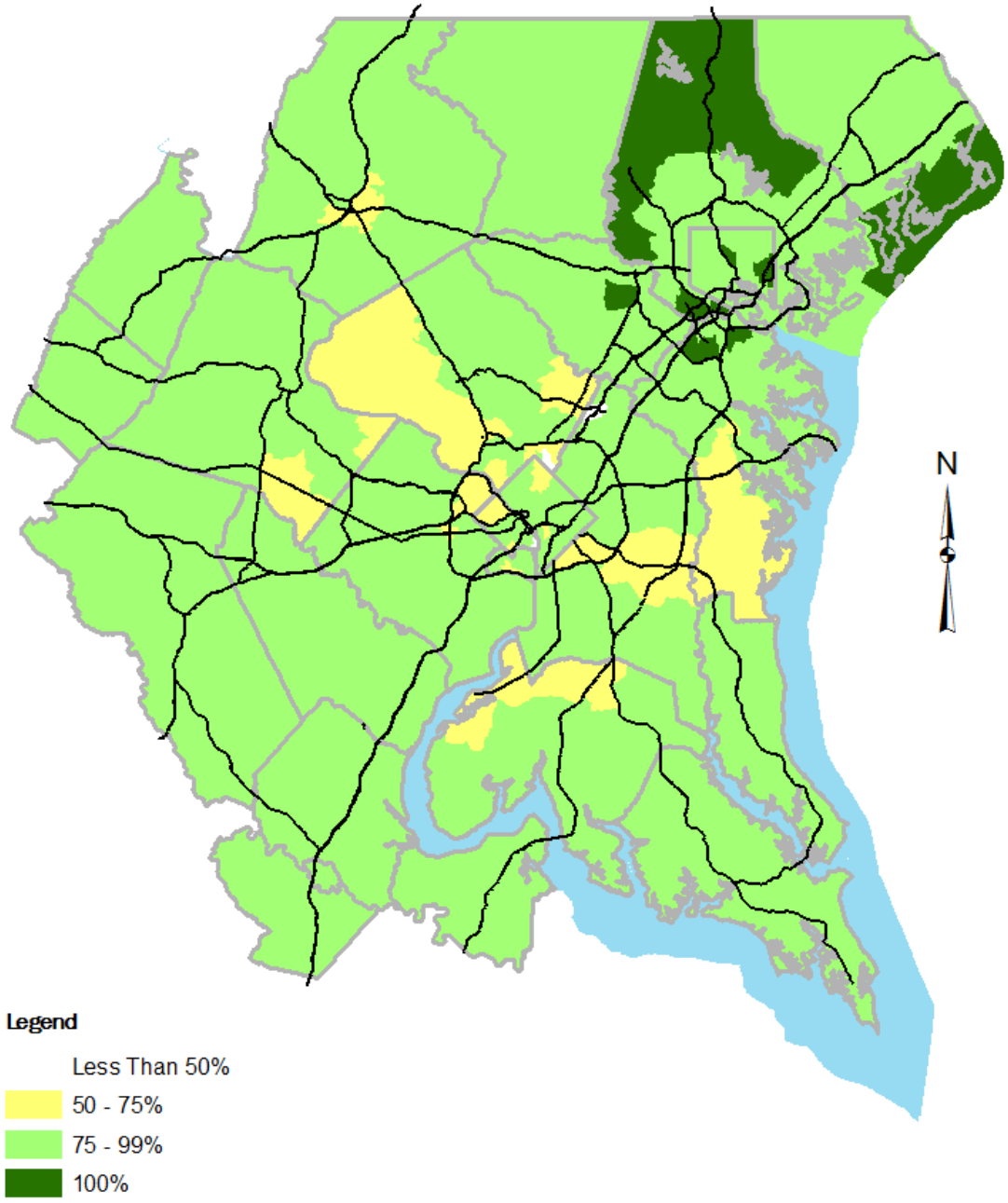
Note:- Fairfax City, City of Falls Church, Manassas Park and Manassas City are included in their respective county totals

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,

Externals include jurisdictions outside the air system planning region.

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Figure 13 Percentage of Passengers Flying from Preferred Airport by AAZ



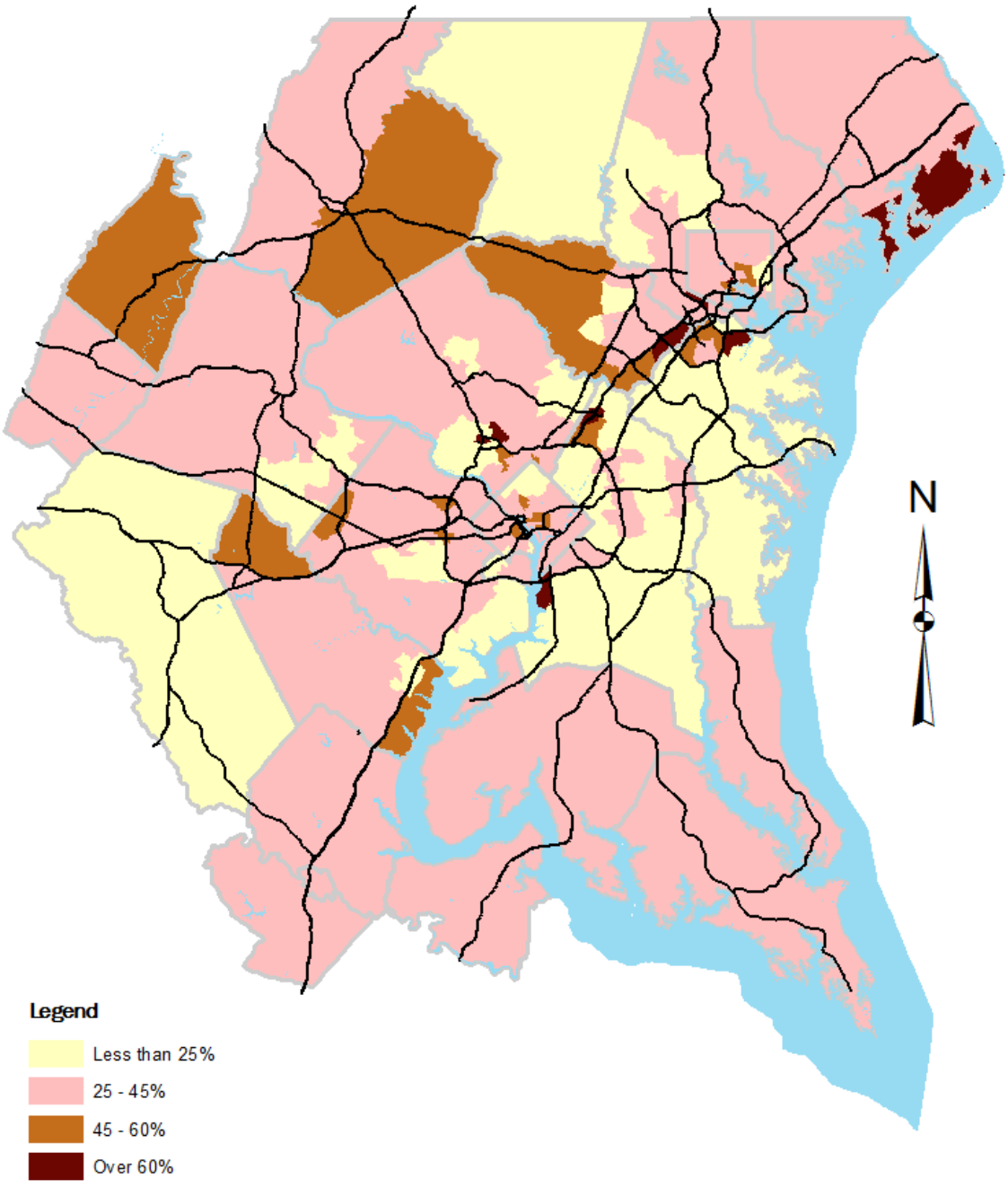
Trip Purpose (Survey Question A-3)

In past surveys, business travel accounted for almost half of the trips made by air passengers originating in the Washington-Baltimore region. In 2015, the percentage of locally originating passengers traveling for business show a slight increase to 36 percent compared with 32 percent in 2013. 27 percent of locally originating passengers indicated vacation as their trip purpose and 30 percent indicated personal or family affairs as their purpose.

Figure 14 illustrates the percentage of passengers traveling on business from each of the aviation analysis zones in 2015. Business travelers may be residents or nonresidents of the region and they may leave from any location including home, a hotel or motel, or a place of business. The downtown core areas of the District of Columbia accounted for 40% of the total business travel. Downtown Baltimore extending over to the BWI airport area also produced business travelers, 47 percent of the total trips from Baltimore City . Other areas producing business travelers are employment centers throughout the air system region.

The concentrations of business travel displayed in Figure 14 correspond to the percentage of passengers traveling on business at the three airports: higher concentrations are found in the service areas for DCA (at which 40 percent of all air passengers are business travelers). BWI and IAD only carry 31 and 24 percent of business travelers, respectively of their departing passengers, even though concentrations of business travelers can be found throughout the region. While DCA accounted for 45 percent of all business departing passengers, BWI had a 31 percent share and IAD with 24 percent regionally.

Figure 14 Percentage of Passengers Traveling on Business 2015



Trip Origin Activity (Survey Question B-1)

While 36 percent of air passengers originating in the Washington-Baltimore region are traveling on business, only 9 percent of the total number of passengers leave from a place of business and travel directly to the airport. As seen in Figure 15, the zonal locations of passengers leaving a place of business for the airport are somewhat scattered throughout the region but with notably high proportions in downtown Washington and Baltimore, and some regional activity centers. Some AAZs with relatively high originations from employment centers are near the BWI and from northeast of Baltimore at the Aberdeen Proving Ground.

While over half of all air passengers leave for the airport from their home, a significant amount (32 percent of the total) leave from a hotel or motel. Figure 16 displays the pattern for locally originating passengers in the Washington-Baltimore region who left a hotel or motel to go to the airport. This pattern is somewhat different from those leaving a place of business. While there are still high proportions in the downtown areas, the other major area is near the airports themselves. BWI and IAD both show this trend. It is a little more complicated near DCA, because of the airport's proximity to downtown Washington as well as Arlington and Alexandria, as well as the National Harbor resort in Prince George's County.

In Washington, the AAZ with concentrations of air passengers leaving hotels was around the downtown area of the District, but around the periphery of the National Mall, which also includes areas in Crystal City (Arlington) and Alexandria. This differs from passengers who left a place of business where there was also a presence in the AAZ that encompasses the Mall due to the boundaries of that AAZ also including some business locations. These zones are generally those around the airports, and those with good access to public transportation (either airport limousines or public transportation). A much more significant percentage of passengers departing from hotel/motel locations are observed at National Harbor, the I-95 corridor in Greenbelt, along the Dulles Access Road in Reston and Herndon, the BWI area, and I-66 corridor in Fairfax County.

Figure 15 Percentage of Passengers Leaving From Work

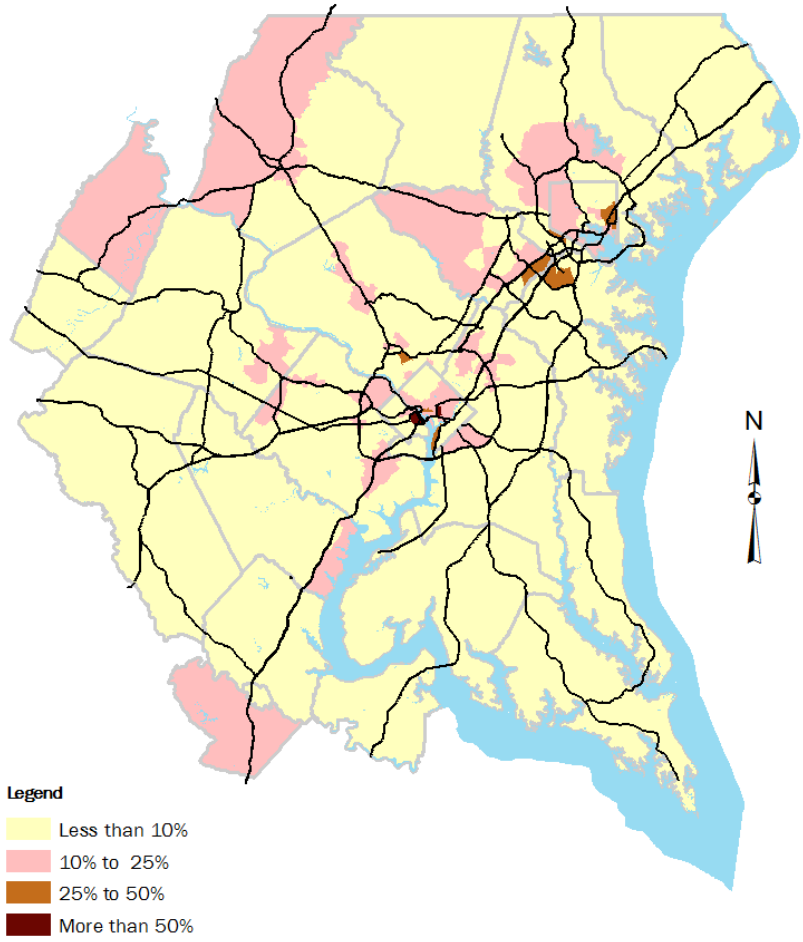
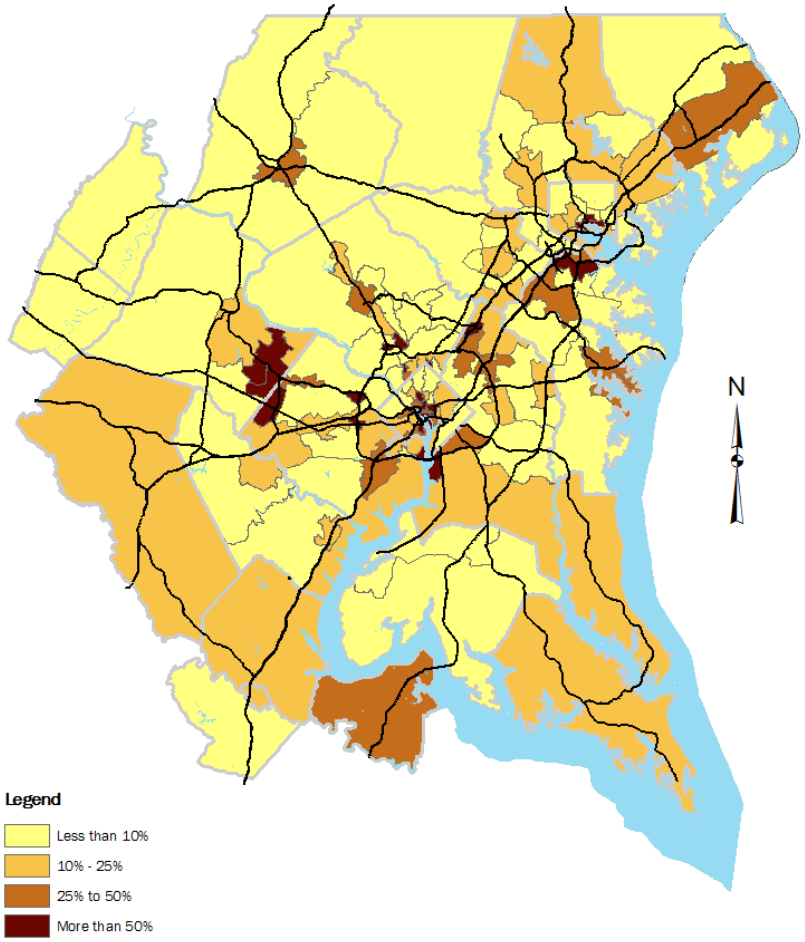


Figure 16 Percentage of Passengers Leaving from Hotel / Motel



Mode of Access (Survey Question B-7)

For the Washington-Baltimore region as a whole, the most common mode of access to the airports, in 2013, was the automobile (private autos, rental cars, or transportation networks such as Uber and Lift), accounting for 64 percent of originating air passengers, almost the same as in 2011, and 2013. Taxicabs were used by the second highest percentage of local air passengers (15 percent). Figure 18 displays the zones from which passengers used taxicabs to access the airports. The areas with the highest concentrations of taxi usage are located within the District and in downtown Baltimore.

The areas with the percentage of originating air passengers using the airport limousine services are shown in Figure 19. The usage of this mode is low throughout the region with the exception of AAZs in downtown Washington, central Baltimore City, the area immediately around BWI, Crystal City and the Pentagon in Arlington, and the areas of Reston, Hendon, Sterling, and Chantilly in Fairfax and Loudoun Counties, all of which are very close to IAD.

The percentage of originating air passengers regionally using public transportation, such as the Metrorail to Reagan National, or light rail or Amtrak/MARC services to BWI Marshall, was seven percent. However, usage of public transportation within the Washington Downtown Center was double than the regional average and about twice that of the Baltimore Downtown center originations. The percentage of originating air passengers, region-wide using Metrorail to Reagan National is 14 percent.

Usage of Metrorail is concentrated in the District of Columbia as well as the surrounding core of Arlington, Fairfax, Montgomery, and Prince George's Counties and City of Alexandria, representing the Metrorail service area. Some areas such as portions of the Annapolis area in Anne Arundel County, southern Fairfax, Loudoun, and Prince William Counties show some passengers using rail to access the airports, which could be attributed to passengers using VRE.. Currently six percent of downtown Baltimore passengers are using public transportation to access the airport, presumably Baltimore's light rail station at BWI. Future changes in service to BWI and IAD (the Metrorail Silver Line to Wiehle Ave in Reston is scheduled to open on July 26th, 2014) will need to be examined for changes in public transportation access to the area airports.

Figure 17 Percentage of Passengers Using Taxicabs

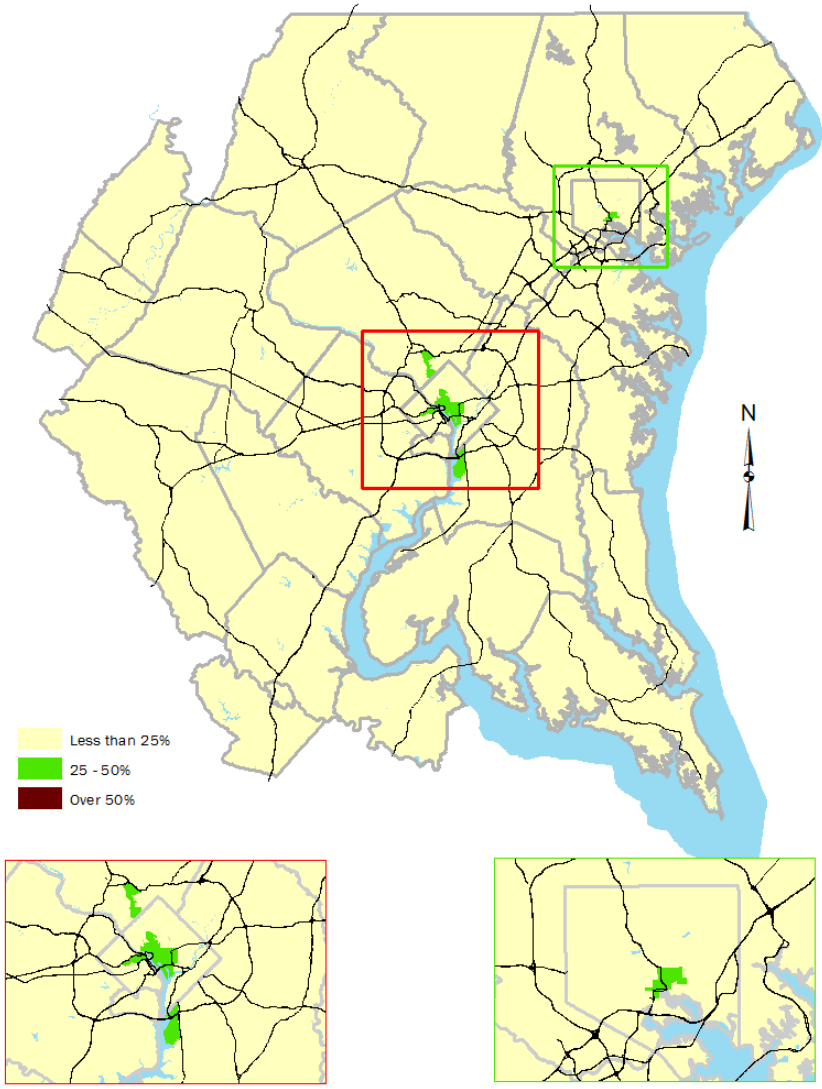


Figure 18: Percentage of Passengers Using Bus / Van / Limo

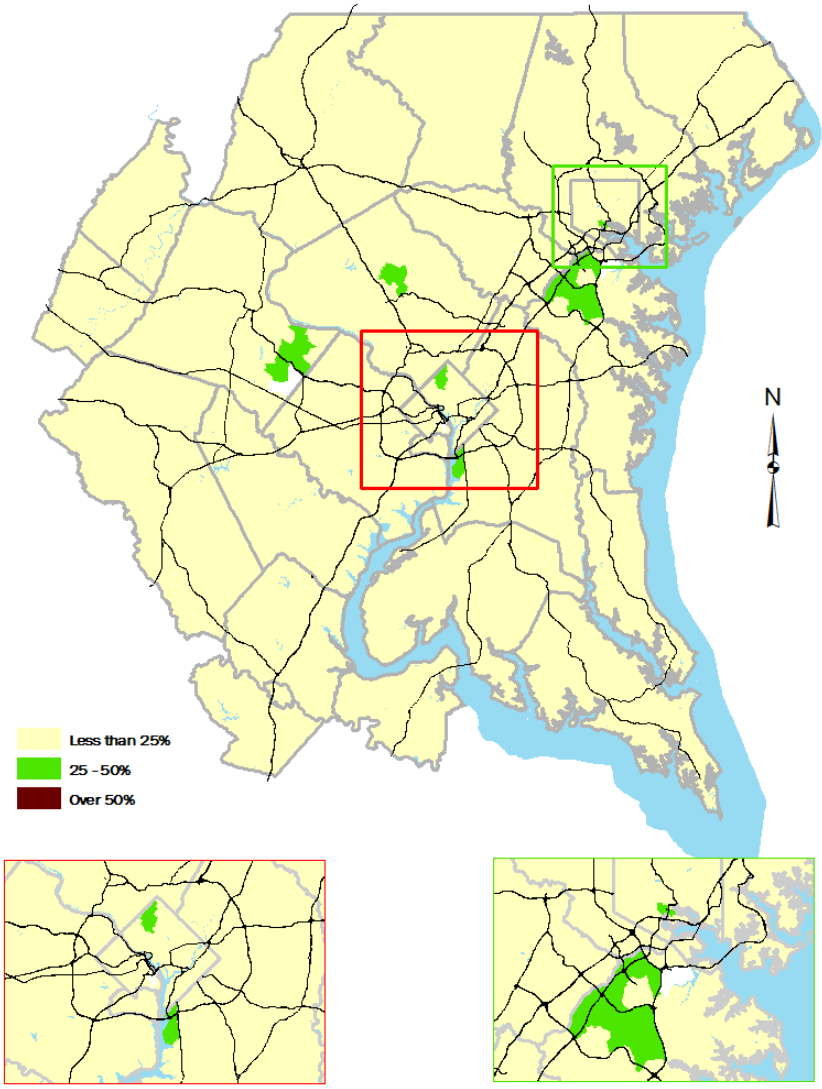
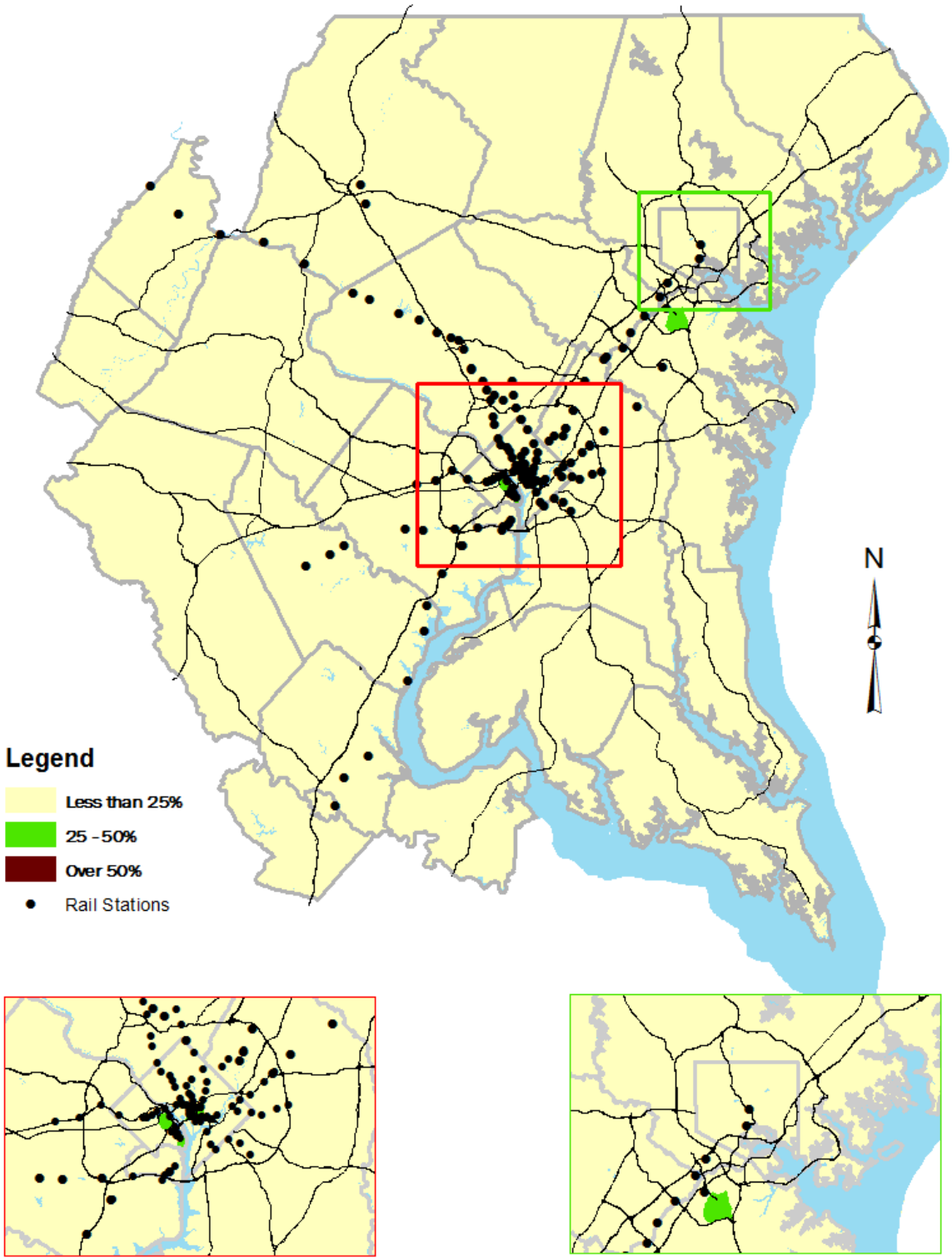


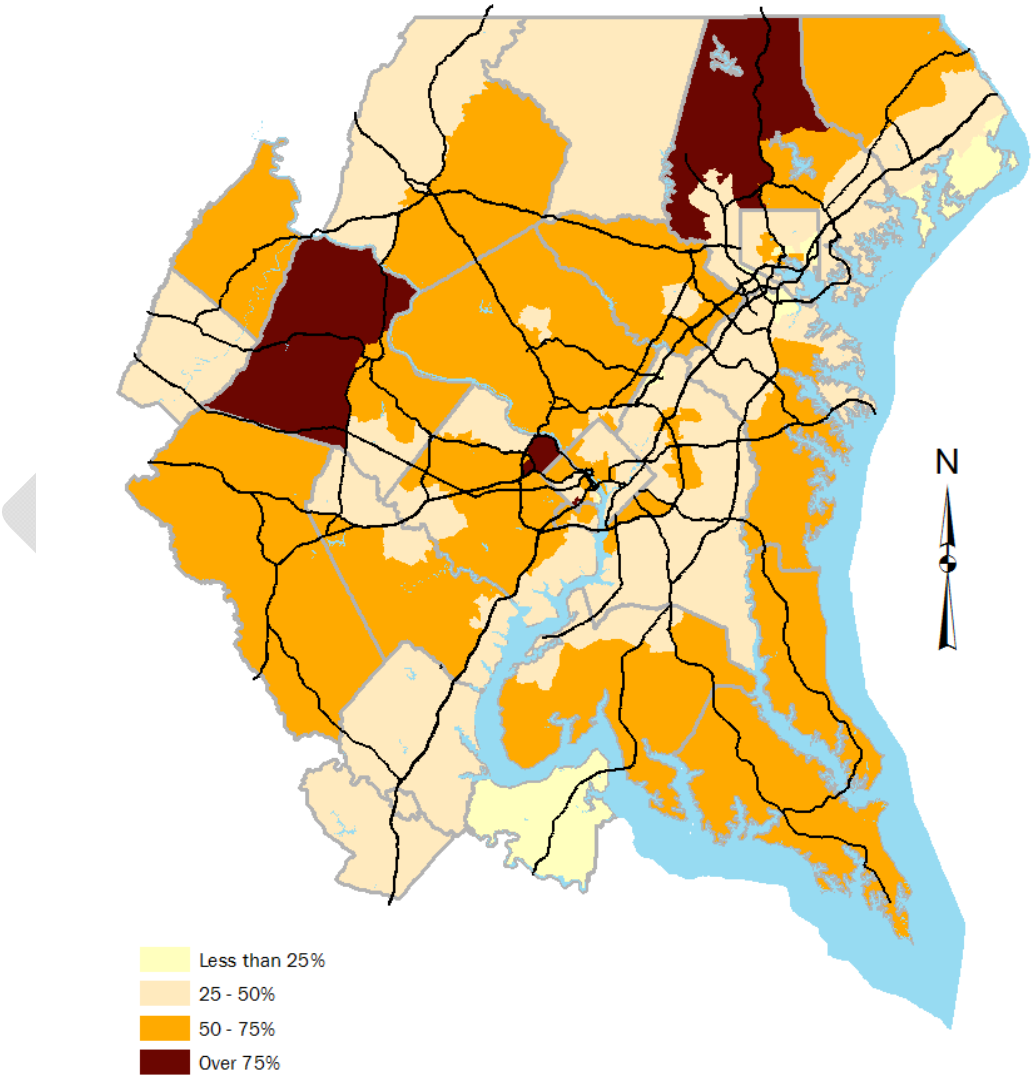
Figure 19: Percentage of Passengers Using Metrorail / Commuter / Bus



Household Income (Survey Question D-4)

Air passenger trips often correlate directly to household income levels. Figure 21 shows the proportion of originating air passengers with incomes of $120,000 or more for each AAZ. 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 that show less than 50 percent of the air passengers in 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 $81,685 according to Census data.

Figure 20 Household Income > $120K



First Flight Destination of Air Passengers

The Washington-Baltimore Regional Air Passenger Survey sample included flights from 36 airlines, of which 23 had international destinations and 13 had domestic destinations. The sample flights selected were grouped into 335 regional destination clusters containing a total of 673 destinations, 81 international and 592 domestic. Although the survey questionnaire asked passengers where their trip would ultimately end (final destination), the information summarized in in Table 5. In 2015, trips destined to the Atlantic region accounted for 28 percent of the total trips, followed by the Midwest with 18 percent (see Figure 22 for domestic destinations regional groupings).

The vast majority of all departing air passengers were destined for a domestic location accounting for 88 percent of all trips from the Washington/Baltimore air system region. BWI and DCA had a 36 and 45 percent share respectively of regional domestic flights. Over 50 percent of the passengers to the North East / New York, Plains, Mid West South Central and Southeast destinations regions departed from DCA, while 55 percent of trips to the Pacific West did so from IAD. 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 65 percent of total trips originating from the Washington-Baltimore Air System Region, they accounted for almost 74 percent of trips destined to the Pacific Northwest /Alaska/Hawaii destinations .

Figure 23 displays the number of passengers destined to each of the regions within the continental US, as well as those with international destinations, from each of the three airports in the region. IAD is the origin airport with a disproportionate number of passengers heading to international destinations, accounting for 86 percent of total international departures.

Figure 21: Destination Strata

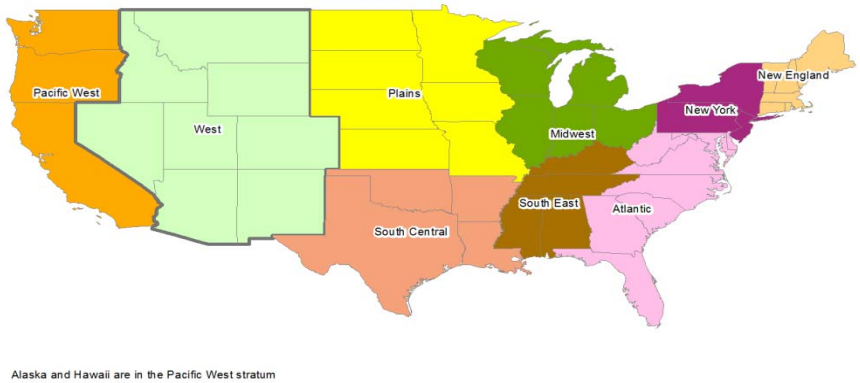


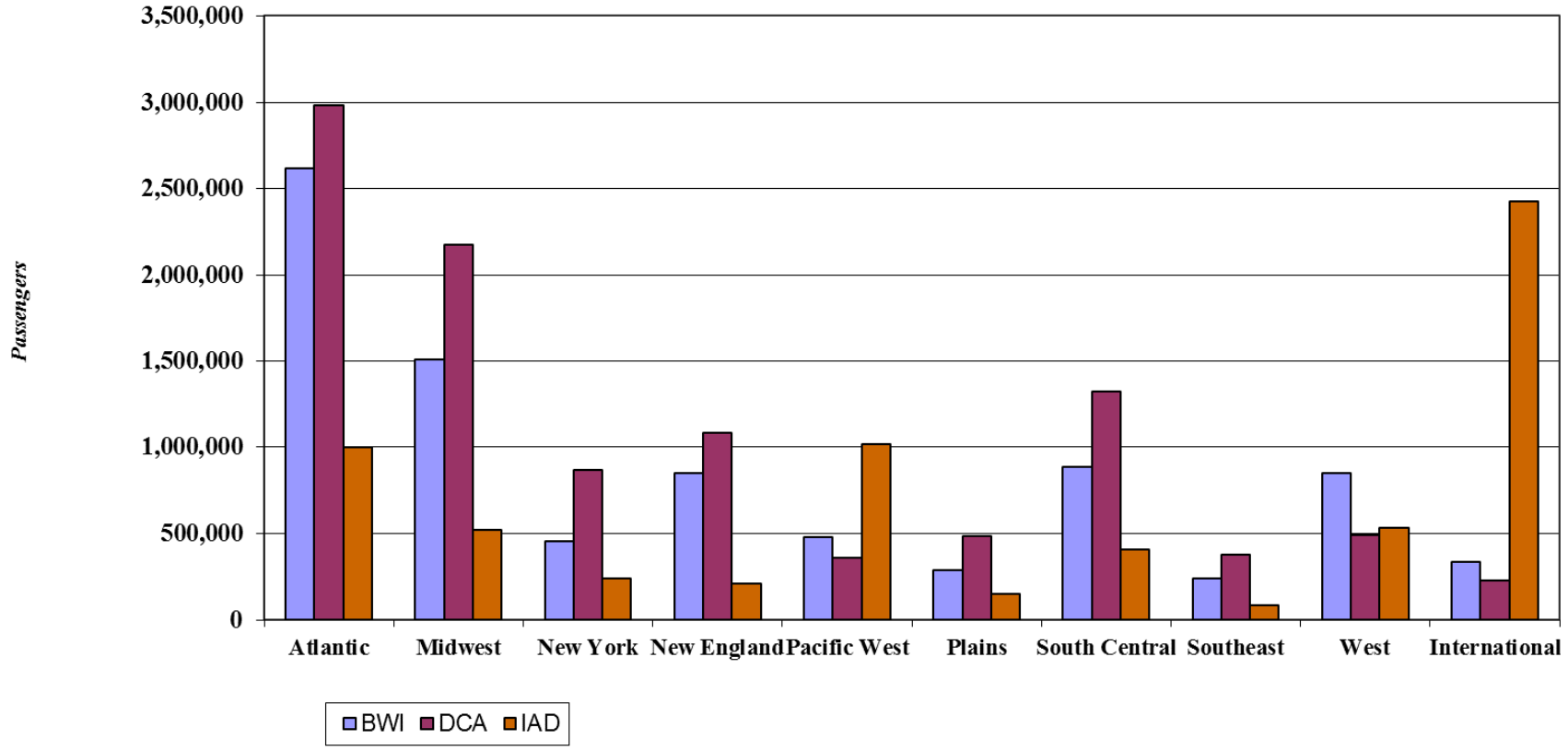
Table 6: First Flight Destination by Region and by Airport

Destination Region	BWI		DCA		IAD		TOTAL		Airport Share of Trips to Destination Region		
	No.	% of BWI Originations	No.	% of DCA Originations	No.	% of IAD Originations	No.	% of Total Originations	BWI	DCA	IAD
Atlantic	2,617	31%	2,982	34%	1,001	16%	6,600	28%	40%	45%	15%
Midwest	1,505	18%	2,178	25%	522	8%	4,205	18%	36%	52%	12%
New England	458	5%	865	10%	241	4%	1,564	7%	29%	55%	15%
New York	851	10%	1,085	12%	209	3%	2,145	9%	40%	51%	10%
Pacific West	479	6%	360	4%	1,014	16%	1,854	8%	26%	19%	55%
Plains	287	3%	485	6%	149	2%	922	4%	31%	53%	16%
South Central	886	10%	1,321	15%	409	7%	2,616	11%	34%	50%	16%
Southeast	238	3%	376	4%	85	1%	699	3%	34%	54%	12%
West	847	10%	491	6%	532	9%	1,870	8%	45%	26%	28%
Domestic Subtotal	**8,168**	**96%**	**10,142**	**98%**	**4,164**	**63%**	**22,474**	**88%**	**36%**	**45%**	**19%**
International	**333**	4%	**229**	**2%**	**2,429**	**37%**	**2,990**	**12%**	**11%**	**8%**	**81%**
Total	**8,500**	**100%**	**10,371**	**100%**	**6,592**	**100%**	**25,464**	**100%**	**33%**	**41%**	**26%**

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Note:- Destinations refer to scheduled flight destinations and do not refer to final destination of passengers

Figure 22: Departing Destinations



Source: 2015 Washington-Baltimore Regional Air Passenger Survey

Note:- Destinations refer to scheduled flight destinations and do not refer to final destination of passengers

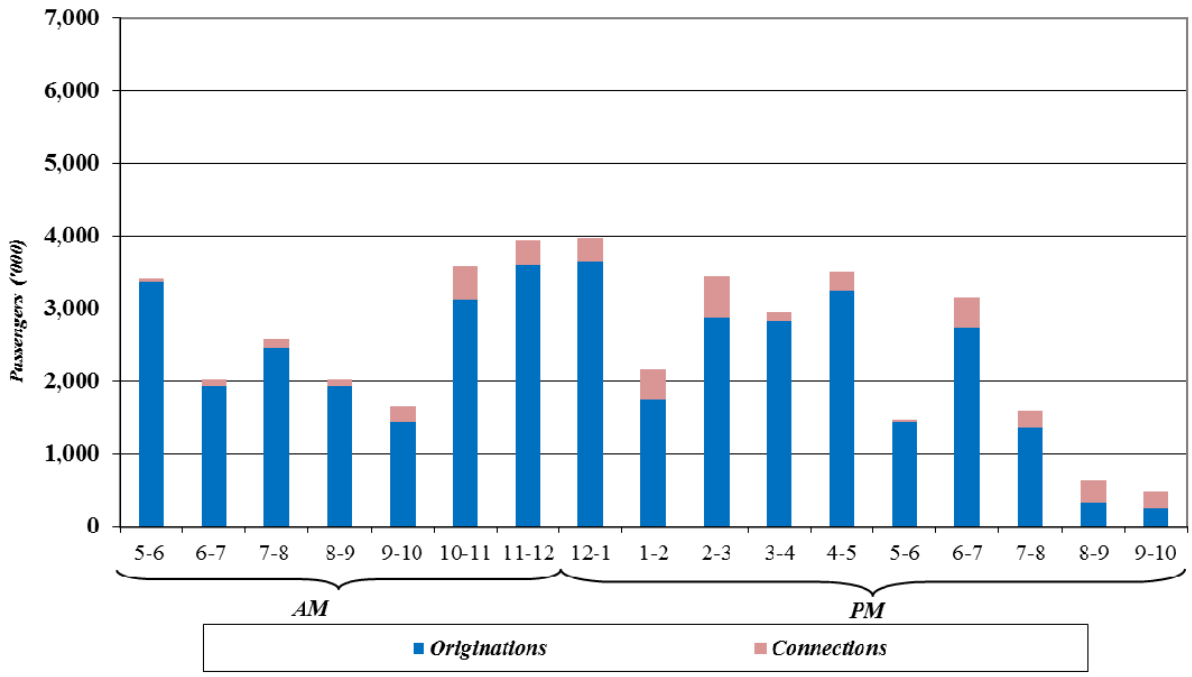
Departures by Time of Day (Survey Question B-3)

The distributions of passenger departures by time of day at the three airports in the Washington-Baltimore region are displayed in Figure 23, Figure 24, and Figure 25. These diurnal time distributions are indicative of the different roles played by these airports in the aviation system in the region.

DCA's daily activity is characteristic of a typical "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 6:00 AM and 11:00 AM., and 2:00 P.M. and 5:00 P.M, and 6:00 to 7:00 PM.

The generally high number of departing passengers every hour between 8:00 AM and 7:00 PM reflects the "slot" and "high density" rules that are in effect at DCA. By limiting the number of operations that may be scheduled per hour, these restrictions tend to flatten out the peak hour of activity throughout the day. There were 10 hours during which DCA handled between 2,000 and 4,000 passengers, although the overall peak hours were 5-6 AM and 10-12PM when almost over 3,000 passengers departed.

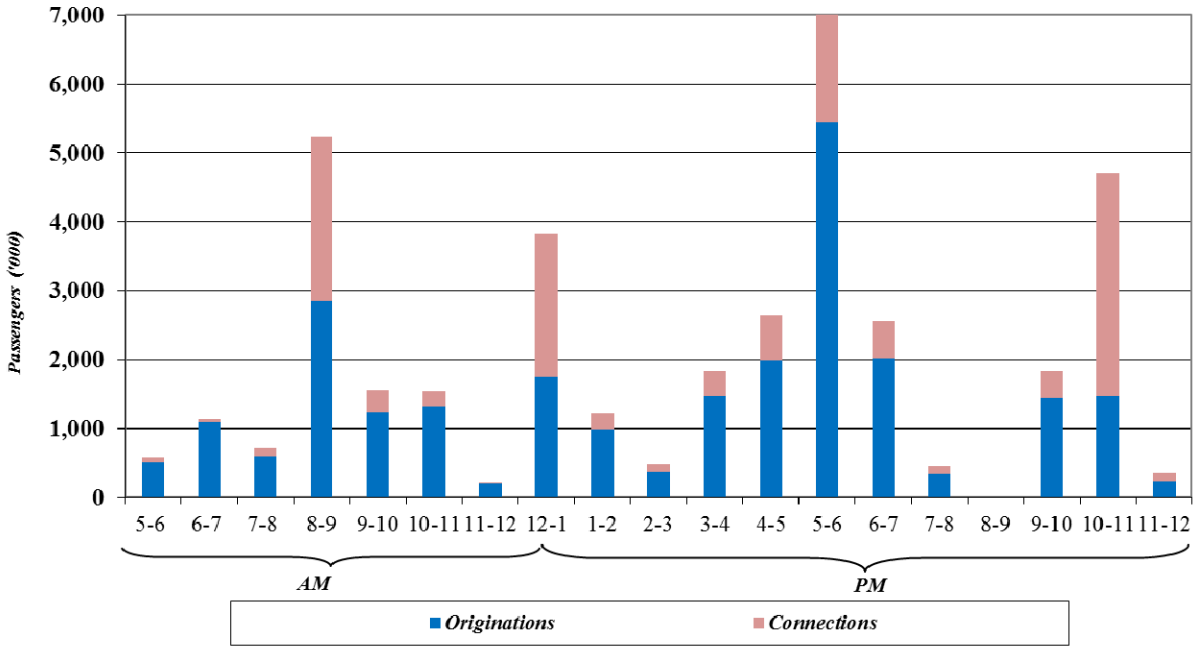
Figure 23: 2013 Diurnal Passenger Distribution at DCA



Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

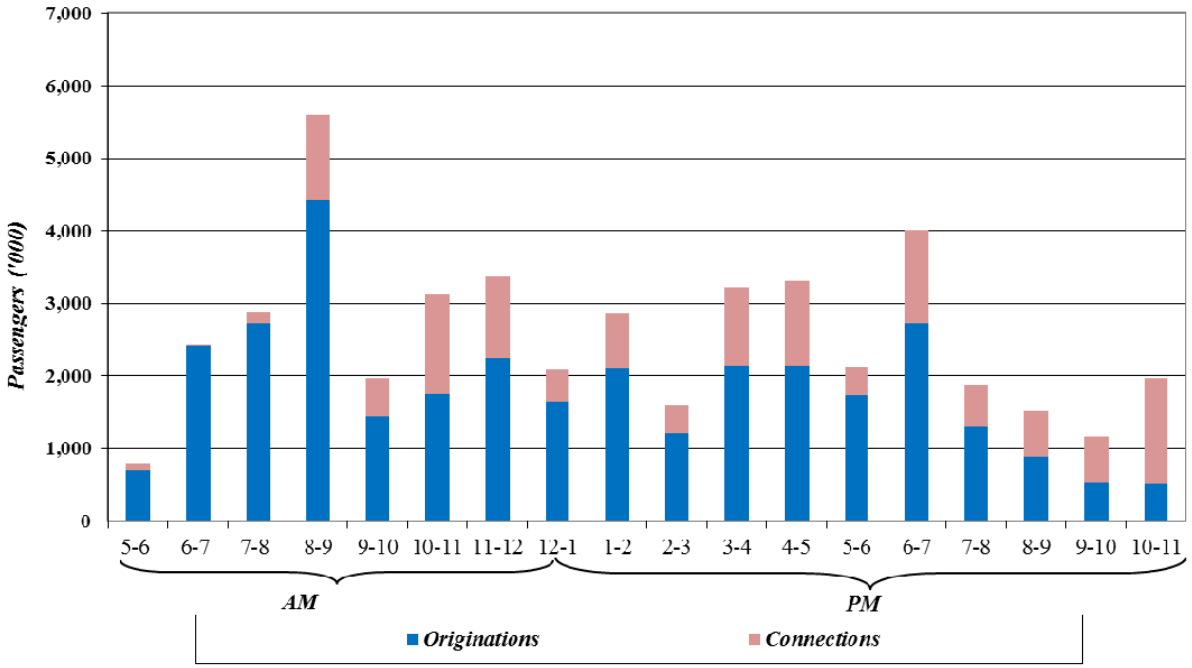
The distributions for both IAD and BWI, however, characterize airports that are dominated by hub-style activity. The peaks and valleys indicate the phenomenon of inbound flights from the airlines' "spoke" cities are arriving and then departures occurring en masse. The morning peak occurs once connections 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 24: 2013 Diurnal Passenger Distribution at IAD



Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Figure 25: 2013 Diurnal Passenger Distribution at BWI



Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

The overall peak for IAD was between 5-6 PM, when approximately 7,000 passengers departed. Note that during the hours before this afternoon peak (between noon and 4pm), there was very little departing passenger activity at IAD. This is indicative of the high number of long haul flights that serve IAD. 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 IAD (between 5:00 PM and 6:00 PM) is characteristic of airports that handle significant amounts of long-haul activity.

BWI 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. The AM peak hour at BWI was 8-9 AM, during which more than 5,500 passengers departed, and the PM peak hours between 3:00-4:00 PM with nearly 3,000 departures per hour.

Washington Core Area and Baltimore City

This section focuses on air passengers originating from the Washington Core Area (District of Columbia, Arlington County, and the City of Alexandria) and Baltimore City. Table 7 displays airport use by originating passengers from the Washington Core Area and Baltimore City, as well as the remaining zones in the region. Although the number of air passengers from Baltimore City account for only five percent of the regional total, it is nearly 27 percent of all passengers from the Baltimore metropolitan area. 93% of air passenger originations from Baltimore City used BWI for their departing trips. The Washington Core Area generated 8.4 million air passengers in 2015, 74 percent of whom used DCA. In contrast to Baltimore City, more Washington Core Area passengers went to airports further away.

Table 7: 2015 Airport Usage for Baltimore City and Washington Core Area

Airport Used	Baltimore City		Washington Core		All Other		Region	
	No.	%	No.	%	No.	%	No.	%
BWI	1,262	93%	589	7%	6,649	43%	8,500	**33%**
DCA	50	4%	6,267	74%	4,054	26%	10,371	**41%**
IAD	44	3%	1,617	19%	4,931	32%	6,592	**26%**
Total	**1,357**	**100%**	**8,472**	**100%**	**15,634**	**100%**	**25,464**	**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:- 2015 Washington-Baltimore Regional Air Passenger Survey

Business travel is the trip purpose for 47 percent of the passengers from Baltimore City and 40 percent of the passengers from the Washington Core Area. Table 8 displays a breakdown of trip purpose for passengers from these centers. Business related trips from the these two downtown centers are higher than the regional average of 36 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: 2015 Air Passenger Trip Purpose – Baltimore City and Washington Core Area

Trip Purpose	Baltimore City		Washington Core		All Other		Region	
	No.	%	No.	%	No.	%	No.	%
Business (Gov't)	128	9%	1,506	18%	1,971	13%	3,605	14%
Business (Non-Gov't)	514	38%	1,842	22%	3,228	21%	5,584	22%
Vacation	292	22%	2,236	26%	4,429	28%	6,957	27%
Personal	298	22%	1,940	23%	4,749	30%	6,987	27%
Student	76	6%	622	7%	759	5%	1,457	6%
Other	49	4%	327	4%	497	3%	873	3%
Total	1,357	100%	8,473	100%	15,634	100%	25,464	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:- 2015 Washington-Baltimore Regional Air Passenger Survey

As seen in Table 9 below, Baltimore City and the Washington Core Area display higher percentages of air passengers that began their trip at hotels and motels than the region as a whole and much lower percentages leaving from a private residence. Both areas had a majority of passengers traveling to the airport from a hotel or motel, 42 percent in Baltimore City and 48 percent in the Washington Core Area, compared with only 22 percent of passengers originating from the rest of the region. Air passengers leaving from private residences followed the opposite pattern with 65 percent of passengers from the rest of the region leaving from a home and 42 and 34 percent of passengers leaving from Baltimore City and the Washington Core Area respectively. Places of employment or other business locations generated 12 percent of the passengers from the Washington activity center and 8 percent from the Baltimore activity center. The regional average was 9 percent.

Table 9: 2015 Air Passenger Trip Origin – Baltimore City and Washington Core Area

Origin Activity	Baltimore City		Washington Core		All Other		Region	
	No.	%	No.	%	No.	%	No.	%
Private Residence	564	42%	2,860	34%	10,208	65%	13,633	54%
Hotel/Motel	573	42%	4,030	48%	3,447	22%	8,050	32%
Regular Employment	46	3%	423	5%	449	3%	918	4%
Other Business	74	5%	567	7%	694	4%	1,335	5%
Other	99	7%	593	7%	836	5%	1,527	6%
Total	1,357	100%	8,473	100%	15,634	100%	25,464	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:- 2015 Washington-Baltimore Regional Air Passenger Survey

The most heavily used mode of access to the airports from the Washington Core Area is taxicab and it is the second most heavily used mode from Baltimore City. The Washington Core Area, 53 percent of total passengers used automobiles (private and rental, as well as transportation networks such as Uber and Lift) to access the airports, differs significantly from the region as a whole,. Table 10 illustrates the mode of access breakdown. In the Baltimore center, 19 percent of the passengers used taxicabs, and this figure is exceeded by the 28 percent in the Washington Core Area.

Table 10: 2015 Air Passenger Mode of Access – Baltimore City and Washington Core Area

Mode of Access	Baltimore City		Washington Core		All Other		Region	
	No.	%	No.	%	No.	%	No.	%
Private Auto	504	37%	1,603	19%	8,642	55%	10,749	42%
Rental Auto	195	14%	679	8%	2,548	16%	3,422	13%
Taxicab	257	19%	2,332	28%	1,156	7%	3,746	15%
Transportation Networks	166	12%	1,328	16%	744	5%	2,238	9%
Public Transportation	51	4%	1,152	14%	532	3%	1,734	7%
Airport Bus or Limousine	169	12%	985	12%	1,294	8%	2,447	10%
Other	15	1%	394	5%	719	5%	1,128	4%
Total	1,357	100%	8,473	100%	15,634	100%	25,464	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:- 2015 Washington-Baltimore Regional Air Passenger Survey

Passengers from both areas also used the airport limousine service at a higher rate (12 percent respectively) than in other parts of the region (8 percent). The use of mass transit from the Washington Core Area reflects the same figure (14 percent) of overall Metrorail usage at DCA. This is likely due to the extensive coverage provided by the Metrorail system in the area.

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 Hgts, Senate Hgts, Clover Park, Foxhall Village, Canal View
8	District of Columbia	Tenleytown, American University
9	District of Columbia	Westover Place, Embassy Park, Wesley Hgts, 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, Cretwood, 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, Fderal Center SW, Waterfront
19	District of Columbia	Buzzard Point
20	District of Columbia	Bolling Airforce Base
21	Arlington County, VA	Ronald Reagan National Airport
22	Arlington County, VA	Pentagon City, Crystel City
23	Arlington County, VA	The Ridge, Forest HillsCommons, Avalon Bay
24	Arlington County, VA	Arlington National Cemetary, 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	Bverley Hills, Potomac Yards, Braddock Hgts, Timber Branch Park, Rosemont, Quaker Hill, Ivy Hill,
31	City of Alexandria, VA	Oldtown 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,
36	Fairfax County, VA	Huntington, Rose Hill, Hybla Valley, Fort Hunt, Mount Vernon, Woodlawn, Fort Belvoir, Lorton, Mason Neck,

Table A-1

Washington / Baltimore Air System Planning Region

Aviation Analysis Zone System Cont.

AAZ	Jurisdiction	Place Name
37	Fairfax County, VA	Lorton,
38	Fairfax County, VA	Ravensworth, Burke, Fairfax Station, Burke Center, George Mason Un iversity,
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 Solver 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	Beltsville
72	Prince George's County, MD	Calverton
73	Prince George's County, MD	Laurel, Montpleier
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

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

AAZ	Jurisdiction	Place Name
78	Prince George's County, MD	Seat Pleasant, Fairmount Heights, Capitol Heights, District Heights, Forestville
79	Prince George's County, MD	Anrew 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, Potyomac Mills
85	Prince William County, VA	Dale City, Occoquan, Lake Ridge, Occoquan Marine Corps Base
86	Prince William County, VA	Nokesville, Lake Jackson, Gaimsville, 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 Internationa 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 Elicott City
101	Howard County, MD	South Elicott 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 Doresys Search
104	Howard County, MD	Village of Oakland Mills, Village of Owen Brown, Village of Kings Cobtrivance, Village of Long Reach
105	Howard County, MD	Scaggsville, Dickinson, Laurel, Savage
106	Howard County, MD	Village of Kings Contrivanve, Columbia Gateway,
107	Howard County, MD	Elkridge, Dorsey
108	Anne Arundel County, MD	Laurel, Odenton, Piney Orcahrd, 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

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

AAZ	Jurisdiction	Place Name
115	Anne Arundel County, MD	Glen Burnie, Harundel
116	Anne Arundel County, MD	Harundel
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 Tobaco, 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, Oriols Park
135	Baltimore City, MD	Canton Waterfront
136	Baltimore City, MD	Brooklyn, Cherry Hill, Loudon Park
137	Baltimore City, MD	Arlington, Pimlico, Gwynns Gfalls 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
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	Halethrope
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

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

AAZ	Jurisdiction	Place Name
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, Joppatown
161	Harford County, MD	Aberdeen Proving Ground

APPENDIX B AIR PASSENGER ORIGINATIONS BY AAZ

Table B-1

2015 Washington-Baltimore Air Passenger Survey

Air Passenger Originations by AAZ

AAZ	BWI		DCA		IAD		Total
	No.	%	No.	%	No.	%	
1	2,878	8	27,736	81	3,442	10	34,056
2	21,922	20	75,062	69	11,101	10	108,085
3	154,554	8	1,476,594	79	232,946	12	1,864,093
4	71,562	7	816,073	74	208,079	19	1,095,714
5	8,655	3	162,282	55	126,796	43	297,733
6	14,054	6	137,235	61	75,311	33	226,600
7	2,447	6	31,874	77	7,041	17	41,362
8	5,558	7	53,408	69	18,507	24	77,474
9	1,901	2	69,345	67	33,012	32	104,259
10	8,323	8	48,811	49	41,806	42	98,940
11	49,603	36	69,575	50	19,193	14	138,371
12	21,694	15	101,410	72	18,697	13	141,802
13	33,803	19	116,642	66	27,097	15	177,543
14	7,210	6	99,295	81	15,745	13	122,250
15	11,786	10	78,110	69	23,140	20	113,036
16	38,228	10	234,956	64	94,205	26	367,389
17	2,469	8	27,258	85	2,482	8	32,209
18	6,818	4	130,883	84	17,984	12	155,685
19	8,459	24	20,772	59	6,074	17	35,305
20	1,985	7	23,966	80	3,912	13	29,863
21	2,332	13	7,654	43	7,819	44	17,805
22	10,189	1	607,750	81	135,059	18	752,998
23	6,828	3	171,164	72	59,252	25	237,244
24	645	1	45,076	98	174	0	45,895
25	0	0	321,204	95	18,472	5	339,676
26	3,329	1	205,958	69	87,980	30	297,266
27	18,549	17	58,102	52	35,710	32	112,361
28	37,169	7	352,199	70	114,921	23	504,290
29	1,649	3	38,453	63	21,377	35	61,480
30	13,930	8	142,722	84	13,407	8	170,059
31	8,351	2	318,692	89	32,414	9	359,457
32	2,536	3	16,319	16	81,572	81	100,427
33	9,173	4	180,270	85	22,332	11	211,775
34	40,093	12	218,196	64	80,632	24	338,921
35	10,441	5	140,759	73	40,483	21	191,683
36	24,538	9	208,927	73	53,260	19	286,726
37	5,032	2	73,935	34	137,836	64	216,802
38	22,982	8	59,655	22	192,428	70	275,065
39	3,971	5	39,496	53	31,550	42	75,017
40	14,106	6	39,275	18	165,309	76	218,690
41	6,269	3	53,121	28	131,406	69	190,796
42	925	0	39,694	19	170,860	81	211,478
43	42,783	11	158,993	42	176,913	47	378,689
44	11,807	2	114,133	20	432,611	77	558,551
45	6,170	1	50,716	12	365,636	87	422,522
46	6,261	2	97,584	25	283,923	73	387,768
47	2,227	2	50,214	49	50,896	49	103,337
48	27,482	32	36,440	43	21,639	25	85,560
49	16,568	25	26,369	40	22,804	35	65,741
50	13,244	16	52,378	63	17,207	21	82,829
51	8,781	16	37,292	67	9,764	17	55,836
52	17,540	17	62,568	62	20,683	21	100,791
53	18,939	17	85,479	76	7,947	7	112,365
54	46,175	18	169,260	65	44,556	17	259,990
55	68,709	47	48,938	33	29,321	20	146,968
56	47,284	44	30,625	29	28,995	27	106,904
57	19,652	22	41,323	46	28,957	32	89,933
58	59,010	34	49,284	29	62,944	37	171,238
59	81,477	61	30,141	22	22,800	17	134,419
60	9,716	25	7,801	20	21,389	55	38,906
61	19,075	32	14,342	24	26,058	44	59,476
62	30,345	55	14,757	27	10,572	19	55,674
63	28,032	49	17,553	31	11,902	21	57,487
64	132,477	31	99,095	24	189,688	45	421,261
65	13,035	19	48,565	70	7,612	11	69,212
66	89,063	61	37,707	26	20,123	14	146,893
67	21,831	26	49,683	60	11,250	14	82,764
68	21,795	62	6,065	17	7,579	21	35,439
69	29,612	43	34,985	51	3,911	6	68,509
70	43,079	54	32,668	41	4,770	6	80,518
71	13,720	49	4,975	18	9,105	33	27,801
72	1,512	69	0	0	683	31	2,195
73	62,752	89	8,113	11	0	0	70,865
74	27,019	41	30,975	47	8,155	12	66,149
75	55,096	34	91,618	56	16,426	10	163,140
76	49,193	77	10,269	16	4,652	7	64,114
77	47,458	72	12,585	19	5,497	8	65,540
78	11,269	37	16,302	53	3,034	10	30,605
79	27,015	41	33,093	50	6,586	10	66,694
80	7,783	45	8,046	47	1,469	8	17,298
81	29,998	10	242,113	84	16,116	6	288,227
82	25,548	19	91,942	68	18,503	14	135,993

Table B-1

Cont.

2015 Washington-Baltimore Air Passenger Survey

Air Passenger Originations by AAZ

AAZ	BWI		DCA		IAD		Total
	No.	%	No.	%	No.	%	
83	7,237	4	136,698	80	26,766	16	170,701
84	25,556	50	21,330	42	4,238	8	51,124
85	4,139	2	123,052	64	65,593	34	192,785
86	441	0	30,468	19	127,641	81	158,551
87	3,109	4	11,878	17	56,338	79	71,325
88	11,523	36	2,594	8	18,105	56	32,222
89	5,851	8	17,741	24	51,877	69	75,470
90	0	0	16,164	38	26,452	62	42,616
91	4,789	5	14,300	16	68,535	78	87,624
92	0	0	12,015	7	150,561	93	162,576
93	10,042	4	47,077	17	215,648	79	272,767
94	6,596	6	11,421	11	89,616	83	107,632
95	43,985	61	8,522	12	19,527	27	72,034
96	38,327	64	6,701	11	14,734	25	59,762
97	107,471	71	8,797	6	34,452	23	150,719
98	217,413	96	4,532	2	3,686	2	225,630
99	64,597	80	3,461	4	12,733	16	80,791
100	96,026	88	1,087	1	12,579	11	109,692
101	23,729	100	0	0	0	0	23,729
102	62,475	90	3,843	6	3,020	4	69,337
103	118,541	93	8,998	7	273	0	127,812
104	119,822	91	5,653	4	6,407	5	131,882
105	52,582	91	3,525	6	1,951	3	58,058
106	88,026	82	6,880	6	11,893	11	106,799
107	17,494	97	0	0	584	3	18,077
108	190,097	90	6,490	3	14,546	7	211,133
109	96,260	97	381	0	2,956	3	99,597
110	29,416	100	0	0	0	0	29,416
111	5,558	92	508	8	0	0	6,066
112	652,644	98	5,346	1	10,671	2	668,661
113	12,110	71	3,896	23	995	6	17,001
114	13,414	100	0	0	0	0	13,414
115	28,137	100	0	0	0	0	28,137
116	17,017	93	1,292	7	0	0	18,309
117	87,754	90	9,358	10	0	0	97,112
118	72,286	85	2,784	3	9,868	12	84,939
119	174,369	91	15,170	8	2,707	1	192,246
120	140,822	84	11,263	7	15,739	9	167,824
121	44,536	68	6,956	11	14,208	22	65,701
122	60,233	52	49,341	43	5,850	5	115,424
123	80,528	59	50,430	37	6,354	5	137,312
124	51,525	56	32,766	36	7,834	9	92,125
125	19,183	34	31,608	56	5,629	10	56,421
126	1,796	7	15,372	57	9,830	36	26,998
127	3,036	6	30,772	57	20,626	38	54,433
128	13,005	22	34,658	59	11,492	19	59,155
129	16,901	14	71,940	61	28,625	24	117,466
130	16,937	18	9,719	10	67,989	72	94,645
131	0	0	720	4	16,114	96	16,834
132	5,484	15	2,940	8	28,238	77	36,662
133	312,409	90	29,068	8	6,668	2	348,144
134	123,521	98	942	1	1,834	1	126,296
135	56,225	93	0	0	4,049	7	60,274
136	25,615	92	0	0	2,116	8	27,732
137	99,718	95	3,430	3	1,328	1	104,477
138	31,615	90	3,102	9	534	2	35,250
139	42,786	93	2,307	5	1,101	2	46,194
140	75,262	97	2,414	3	0	0	77,675
141	156,180	88	4,648	3	17,272	10	178,100
142	11,585	77	3,418	23	0	0	15,003
143	63,902	100	0	0	0	0	63,902
144	240,723	96	1,164	0	9,337	4	251,224
145	22,815	100	0	0	0	0	22,815
146	6,743	100	0	0	0	0	6,743
147	4,580	100	0	0	0	0	4,580
148	16,407	100	0	0	0	0	16,407
149	61,070	96	0	0	2,607	4	63,676
150	54,842	100	0	0	0	0	54,842
151	120,760	92	4,297	3	5,973	5	131,031
152	32,838	100	0	0	0	0	32,838
153	42,508	98	688	2	0	0	43,196
154	116,599	96	0	0	4,427	4	121,026
155	125,763	99	0	0	663	1	126,426
156	9,915	100	0	0	0	0	9,915
157	110,776	95	1,164	1	4,780	4	116,721
158	48,340	95	0	0	2,609	5	50,949
159	97,510	100	0	0	0	0	97,510
160	125,056	88	688	0	16,349	12	142,093
161	8,257	100	0	0	0	0	8,257
Total	**7,214,617**	**31**	**10,152,674**	**43**	**6,038,626**	**26**	**23,405,923**

APPENDIX C AIR PASSENGER ORIGINATIONS HOME AND NON-HOME BY AAZ

Table C-1

2015 Washington-Baltimore Air Passenger Survey

Air Passenger Originations Home and Non-Home by AAZ

AAZ	Home		Non-Home		Total
	No.	%	No.	%	No.
1	0	0	34,054	100	34,054
2	10,502	10	97,588	90	108,090
3	224,962	12	1,639,145	88	1,864,107
4	185,359	17	910,363	83	1,095,722
5	114,997	39	182,735	61	297,732
6	52,432	23	174,166	77	226,598
7	33,667	81	7,696	19	41,363
8	64,904	84	12,570	16	77,474
9	48,366	46	55,898	54	104,264
10	72,814	74	26,124	26	98,938
11	118,551	86	19,820	14	138,371
12	109,123	77	32,677	23	141,800
13	125,947	71	51,595	29	177,542
14	78,315	64	43,938	36	122,253
15	18,900	17	94,133	83	113,033
16	212,456	58	154,934	42	367,390
17	26,334	82	5,875	18	32,209
18	8,028	5	147,660	95	155,688
19	20,039	57	15,265	43	35,304
20	11,549	39	18,313	61	29,862
21	1,376	8	16,429	92	17,805
22	52,216	7	700,786	93	753,002
23	115,827	49	121,421	51	237,248
24	645	1	45,251	99	45,896
25	104,864	31	234,812	69	339,676
26	96,265	32	201,007	68	297,272
27	99,054	88	13,305	12	112,359
28	332,664	66	171,628	34	504,292
29	37,452	61	24,030	39	61,482
30	114,096	67	55,965	33	170,061
31	123,902	34	235,555	66	359,457
32	83,226	83	17,198	17	100,424
33	161,130	76	50,651	24	211,781
34	269,508	80	69,420	20	338,928
35	97,064	51	94,612	49	191,676
36	191,597	67	95,121	33	286,718
37	180,526	83	36,274	17	216,800
38	222,368	81	52,697	19	275,065
39	18,365	24	56,651	76	75,016
40	165,839	76	52,853	24	218,692
41	130,388	68	60,403	32	190,791

AAZ	Home		Non-Home		Total
	No.	%	No.	%	No.
42	12,757	6	198,724	94	211,481
43	323,817	86	54,868	14	378,685
44	193,891	35	364,651	65	558,542
45	332,203	79	90,310	21	422,513
46	20,992	5	366,775	95	387,767
47	82,724	80	20,610	20	103,334
48	84,822	99	740	1	85,562
49	62,013	94	3,729	6	65,742
50	33,315	40	49,520	60	82,835
51	27,582	49	28,256	51	55,838
52	19,028	19	81,763	81	100,791
53	31,610	28	80,757	72	112,367
54	152,520	59	107,467	41	259,987
55	77,300	53	69,669	47	146,969
56	71,253	67	35,649	33	106,902
57	77,766	86	12,167	14	89,933
58	166,254	97	4,992	3	171,246
59	127,490	95	6,928	5	134,418
60	38,413	99	493	1	38,906
61	54,716	92	4,757	8	59,473
62	55,676	100	0	0	55,676
63	52,940	92	4,551	8	57,491
64	355,806	84	65,445	16	421,251
65	52,996	77	16,216	23	69,212
66	96,062	65	50,825	35	146,887
67	15,755	19	67,009	81	82,764
68	35,441	100	0	0	35,441
69	53,992	79	14,518	21	68,510
70	42,212	52	38,305	48	80,517
71	13,137	47	14,665	53	27,802
72	683	31	1,512	69	2,195
73	58,367	82	12,496	18	70,863
74	34,546	52	31,602	48	66,148
75	136,838	84	26,302	16	163,140
76	56,119	88	7,993	12	64,112
77	50,204	77	15,337	23	65,541
78	28,628	94	1,975	6	30,603
79	61,771	93	4,925	7	66,696
80	9,190	53	8,109	47	17,299
81	18,003	6	270,228	94	288,231
82	88,891	65	47,095	35	135,986

Table C-2

2015 Washington-Baltimore Air Passenger Survey

Air Passenger Originations Home and Non-Home by AAZ

Cont.

AAZ	Home		Non-Home		Total
	No.	%	No.	%	No.
83	79,475	47	91,233	53	170,708
84	35,507	69	15,619	31	51,126
85	166,043	86	26,738	14	192,781
86	133,075	84	25,474	16	158,549
87	57,058	80	14,263	20	71,321
88	26,014	81	6,206	19	32,220
89	65,748	87	9,720	13	75,468
90	0	0	42,614	100	42,614
91	78,491	90	9,131	10	87,622
92	60,637	37	101,935	63	162,572
93	201,636	74	71,121	26	272,757
94	97,198	90	10,435	10	107,633
95	67,286	93	4,746	7	72,032
96	29,857	50	29,905	50	59,762
97	122,851	82	27,865	18	150,716
98	195,909	87	29,726	13	225,635
99	61,552	76	19,236	24	80,788
100	97,989	89	11,703	11	109,692
101	23,730	100	0	0	23,730
102	66,215	96	3,119	4	69,334
103	71,996	56	55,816	44	127,812
104	88,061	67	43,820	33	131,881
105	33,647	58	24,410	42	58,057
106	83,660	78	23,140	22	106,800
107	12,480	69	5,597	31	18,077
108	185,803	88	25,324	12	211,127
109	48,019	48	51,577	52	99,596
110	3,097	11	26,318	89	29,415
111	508	8	5,558	92	6,066
112	21,606	3	647,054	97	668,660
113	9,196	54	7,804	46	17,000
114	2,195	16	11,218	84	13,413
115	26,623	95	1,512	5	28,135
116	17,016	93	1,292	7	18,308
117	94,175	97	2,941	3	97,116
118	80,643	95	4,296	5	84,939
119	109,253	57	82,993	43	192,246
120	110,953	66	56,865	34	167,818
121	64,756	99	945	1	65,701
122	96,885	84	18,540	16	115,425
123	109,889	80	27,421	20	137,310
124	76,766	83	15,356	17	92,122
125	52,227	93	4,194	7	56,421
126	16,368	61	10,629	39	26,997
127	42,095	77	12,340	23	54,435
128	43,440	73	15,718	27	59,158
129	83,847	71	33,624	29	117,471
130	76,531	81	18,116	19	94,647
131	16,646	99	188	1	16,834
132	26,031	71	10,632	29	36,663
133	18,291	5	329,838	95	348,129
134	31,670	25	94,623	75	126,293
135	27,597	46	32,680	54	60,277
136	14,804	53	12,928	47	27,732
137	79,792	76	24,688	24	104,480
138	16,542	47	18,708	53	35,250
139	37,902	82	8,289	18	46,191
140	60,655	78	17,017	22	77,672
141	144,789	81	33,306	19	178,095
142	12,431	83	2,573	17	15,004
143	15,599	24	48,303	76	63,902
144	92,737	37	158,482	63	251,219
145	11,596	51	11,218	49	22,814
146	6,743	100	0	0	6,743
147	3,193	70	1,386	30	4,579
148	16,406	100	0	0	16,406
149	54,863	86	8,814	14	63,677
150	45,990	84	8,856	16	54,846
151	86,899	66	44,131	34	131,030
152	28,718	87	4,118	13	32,836
153	36,329	84	6,869	16	43,198
154	71,690	59	49,335	41	121,025
155	91,142	72	35,284	28	126,426
156	7,993	81	1,922	19	9,915
157	94,776	81	21,943	19	116,719
158	46,359	91	4,589	9	50,948
159	92,667	95	4,842	5	97,509
160	98,123	69	43,973	31	142,096
161	6,880	83	1,377	17	8,257
Total	**12,167,199**	**52**	**11,238,670**	**48**	**23,405,869**

APPENDIX D AIR PASSENGER ORIGINATIONS WORK AND NON-WORK PURPOSE BY AAZ

Table D-1

2015 Washington-Baltimore Air Passenger Survey

Air Passenger Originations Work and Non-Work Purpose by AAZ

AAZ	Work		Non-Work		Total
	No.	%	No.	%	No.
1	14,606	43	19,448	57	34,054
2	56,055	52	52,035	48	108,090
3	951,830	51	912,277	49	1,864,107
4	453,997	41	641,725	59	1,095,722
5	106,046	36	191,686	64	297,732
6	105,021	46	121,577	54	226,598
7	11,466	28	29,897	72	41,363
8	14,702	19	62,772	81	77,474
9	29,387	28	74,877	72	104,264
10	17,905	18	81,033	82	98,938
11	20,628	15	117,743	85	138,371
12	44,111	31	97,689	69	141,800
13	63,196	36	114,346	64	177,542
14	32,696	27	89,557	73	122,253
15	59,724	53	53,309	47	113,033
16	120,915	33	246,475	67	367,390
17	12,763	40	19,446	60	32,209
18	81,032	52	74,656	48	155,688
19	11,203	32	24,101	68	35,304
20	10,549	35	19,313	65	29,862
21	2,000	11	15,805	89	17,805
22	312,950	42	440,052	58	753,002
23	89,082	38	148,166	62	237,248
24	24,256	53	21,640	47	45,896
25	109,094	32	230,582	68	339,676
26	117,592	40	179,680	60	297,272
27	39,053	35	73,306	65	112,359
28	162,292	32	342,000	68	504,292
29	12,048	20	49,434	80	61,482
30	68,981	41	101,080	59	170,061
31	121,166	34	238,291	66	359,457
32	27,542	27	72,882	73	100,424
33	43,915	21	167,866	79	211,781
34	96,542	28	242,386	72	338,928
35	60,800	32	130,876	68	191,676
36	69,594	24	217,124	76	286,718
37	66,289	31	150,511	69	216,800
38	59,346	22	215,719	78	275,065
39	42,548	57	32,468	43	75,016
40	57,672	26	161,020	74	218,692
41	60,534	32	130,257	68	190,791

AAZ	Work		Non-Work		Total
	No.	%	No.	%	No.
42	103,297	49	108,184	51	211,481
43	100,531	27	278,154	73	378,685
44	217,394	39	341,148	61	558,542
45	124,530	29	297,983	71	422,513
46	216,720	56	171,047	44	387,767
47	45,813	44	57,521	56	103,334
48	23,357	27	62,205	73	85,562
49	15,368	23	50,374	77	65,742
50	47,554	57	35,281	43	82,835
51	23,049	41	32,789	59	55,838
52	48,038	48	52,753	52	100,791
53	81,743	73	30,624	27	112,367
54	98,523	38	161,464	62	259,987
55	59,460	40	87,509	60	146,969
56	36,673	34	70,229	66	106,902
57	21,464	24	68,469	76	89,933
58	43,664	25	127,582	75	171,246
59	39,344	29	95,074	71	134,418
60	7,514	19	31,392	81	38,906
61	17,951	30	41,522	70	59,473
62	18,610	33	37,066	67	55,676
63	13,571	24	43,920	76	57,491
64	107,101	25	314,150	75	421,251
65	21,644	31	47,568	69	69,212
66	57,441	39	89,446	61	146,887
67	49,012	59	33,752	41	82,764
68	12,111	34	23,330	66	35,441
69	11,934	17	56,576	83	68,510
70	19,880	25	60,637	75	80,517
71	14,729	53	13,073	47	27,802
72	1,512	69	683	31	2,195
73	14,598	21	56,265	79	70,863
74	24,905	38	41,243	62	66,148
75	36,589	22	126,551	78	163,140
76	18,789	29	45,323	71	64,112
77	16,518	25	49,023	75	65,541
78	6,493	21	24,110	79	30,603
79	15,283	23	51,413	77	66,696
80	6,294	36	11,005	64	17,299
81	233,680	81	54,551	19	288,231
82	29,003	21	106,983	79	135,986

Table D-1
2015 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Work and Non-Work Purpose by AAZ

(Cont.)

AAZ	Work		Non-Work		Total
	No.	%	No.	%	No.
83	84,442	49	86,266	51	170,708
84	4,706	9	46,420	91	51,126
85	58,593	30	134,188	70	192,781
86	48,667	31	109,882	69	158,549
87	22,576	32	48,745	68	71,321
88	16,666	52	15,554	48	32,220
89	16,021	21	59,447	79	75,468
90	14,468	34	28,146	66	42,614
91	28,542	33	59,080	67	87,622
92	39,411	24	123,161	76	162,572
93	109,859	40	162,898	60	272,757
94	40,841	38	66,792	62	107,633
95	37,226	52	34,806	48	72,032
96	27,791	47	31,971	53	59,762
97	60,122	40	90,594	60	150,716
98	51,756	23	173,879	77	225,635
99	36,692	45	44,096	55	80,788
100	29,681	27	80,011	73	109,692
101	3,835	16	19,895	84	23,730
102	13,480	19	55,854	81	69,334
103	42,579	33	85,233	67	127,812
104	44,832	34	87,049	66	131,881
105	27,328	47	30,729	53	58,057
106	33,861	32	72,939	68	106,800
107	12,059	67	6,018	33	18,077
108	46,823	22	164,304	78	211,127
109	21,812	22	77,784	78	99,596
110	14,783	50	14,632	50	29,415
111	1,628	27	4,438	73	6,066
112	318,222	48	350,438	52	668,660
113	1,663	10	15,337	90	17,000
114	11,218	84	2,195	16	13,413
115	5,796	21	22,339	79	28,135
116	1,681	9	16,627	91	18,308
117	18,322	19	78,794	81	97,116
118	10,454	12	74,485	88	84,939
119	65,146	34	127,100	66	192,246
120	38,454	23	129,364	77	167,818
121	3,849	6	61,852	94	65,701
122	37,140	32	78,285	68	115,425
123	61,194	45	76,116	55	137,310
124	26,240	28	65,882	72	92,122
125	17,294	31	39,127	69	56,421
126	8,709	32	18,288	68	26,997
127	21,773	40	32,662	60	54,435
128	15,307	26	43,851	74	59,158
129	31,930	27	85,541	73	117,471
130	20,871	22	73,776	78	94,647
131	6,671	40	10,163	60	16,834
132	20,609	56	16,054	44	36,663
133	226,790	65	121,339	35	348,129
134	66,541	53	59,752	47	126,293
135	17,220	29	43,057	71	60,277
136	11,100	40	16,632	60	27,732
137	34,539	33	69,941	67	104,480
138	12,739	36	22,511	64	35,250
139	12,050	26	34,141	74	46,191
140	26,512	34	51,160	66	77,672
141	54,904	31	123,191	69	178,095
142	7,500	50	7,504	50	15,004
143	25,233	39	38,669	61	63,902
144	141,137	56	110,082	44	251,219
145	5,651	25	17,163	75	22,814
146	2,657	39	4,086	61	6,743
147	3,161	69	1,418	31	4,579
148	6,311	38	10,095	62	16,406
149	16,133	25	47,544	75	63,677
150	8,823	16	46,023	84	54,846
151	41,266	31	89,764	69	131,030
152	9,560	29	23,276	71	32,836
153	8,844	20	34,354	80	43,198
154	46,522	38	74,503	62	121,025
155	43,160	34	83,266	66	126,426
156	2,773	28	7,142	72	9,915
157	31,562	27	85,157	73	116,719
158	17,612	35	33,336	65	50,948
159	26,624	27	70,885	73	97,509
160	59,532	42	82,564	58	142,096
161	7,616	92	641	8	8,257
Total	8,670,507	5623	14,735,362	10477	23,405,869

APPENDIX E AIR PASSENGER ORIGINATIONS AIRPORT ACCESS MODE BY AAZ

Table E-1
2015 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Airport Access Mode by AAZ

	Private Car		Rental Car		Taxi		Transp. Networks		Public Transportation		irport/Hotel Bus/Lim		Other		Total
AAZ	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
1	2,096	6	5,484	16	13,073	38	0	0	7,892	23	534	2	4,975	15	34,054
2	19,046	18	4,211	4	48,280	45	13,210	12	19,550	18	3,053	3	740	1	108,090
3	209,446	11	134,810	7	775,093	42	291,884	16	282,484	15	111,204	6	59,186	3	1,864,107
4	130,498	12	101,683	9	391,378	36	180,094	16	170,864	16	74,624	7	46,581	4	1,095,722
5	68,696	23	11,340	4	107,077	36	47,556	16	18,527	6	11,271	4	33,265	11	297,732
6	19,807	9	18,220	8	90,455	40	22,279	10	24,455	11	42,444	19	8,938	4	226,598
7	15,497	37	0	0	9,032	22	14,836	36	0	0	1,998	5	0	0	41,363
8	38,366	50	4,101	5	9,490	12	19,705	25	5,812	8	0	0	0	0	77,474
9	21,078	20	7,897	8	16,240	16	27,799	27	4,947	5	24,253	23	2,050	2	104,264
10	17,143	17	657	1	12,149	12	30,676	31	11,814	12	26,499	27	0	0	98,938
11	45,536	33	9,760	7	8,010	6	24,917	18	25,679	19	24,469	18	0	0	138,371
12	23,186	16	4,043	3	32,941	23	43,789	31	28,583	20	2,136	2	7,122	5	141,800
13	48,490	27	11,786	7	34,220	19	30,631	17	38,024	21	2,174	1	12,217	7	177,542
14	34,983	29	3,008	2	15,937	13	39,186	32	26,921	22	2,218	2	0	0	122,253
15	15,961	14	10,485	9	33,428	30	15,288	14	31,272	28	2,893	3	3,706	3	113,033
16	99,782	27	24,823	7	47,004	13	90,486	25	57,164	16	19,903	5	28,228	8	367,390
17	17,201	53	847	3	5,663	18	7,389	23	174	1	0	0	935	3	32,209
18	11,218	7	17,793	11	59,338	38	17,932	12	39,280	25	7,050	5	3,077	2	155,688
19	7,507	21	3,738	11	9,544	27	7,640	22	645	2	6,230	18	0	0	35,304
20	16,079	54	11,547	39	0	0	2,236	7	0	0	0	0	0	0	29,862
21	3,696	21	0	0	0	0	1,376	8	5,079	29	0	0	7,654	43	17,805
22	52,808	7	51,470	7	100,869	13	64,997	9	81,604	11	396,608	53	4,646	1	753,002
23	63,759	27	12,895	5	46,222	19	29,352	12	19,078	8	49,066	21	16,876	7	237,248
24	5,938	13	2,488	5	7,643	17	529	1	18,014	39	6,309	14	4,975	11	45,896
25	35,412	10	21,879	6	103,030	30	61,771	18	65,311	19	9,489	3	42,784	13	339,676
26	56,056	19	37,241	13	98,417	33	45,592	15	26,491	9	20,794	7	12,681	4	297,272
27	61,292	55	8,765	8	16,042	14	14,991	13	10,189	9	1,080	1	0	0	112,359
28	156,587	31	71,968	14	99,656	20	74,901	15	32,319	6	30,410	6	38,451	8	504,292
29	28,892	47	8,427	14	6,300	10	11,539	19	0	0	6,324	10	0	0	61,482
30	64,322	38	2,112	1	36,670	22	23,903	14	7,999	5	29,225	17	5,830	3	170,061
31	63,480	18	44,469	12	55,937	16	51,342	14	71,108	20	57,052	16	16,069	4	359,457
32	57,004	57	4,684	5	9,193	9	3,093	3	1,005	1	3,625	4	21,820	22	100,424
33	92,080	43	25,996	12	33,944	16	16,863	8	19,539	9	11,883	6	11,476	5	211,781
34	180,124	53	27,366	8	40,864	12	28,280	8	22,587	7	20,473	6	19,234	6	338,928
35	70,351	37	60,225	31	16,408	9	12,576	7	21,159	11	8,913	5	2,044	1	191,676
36	157,936	55	47,471	17	36,162	13	7,741	3	20,085	7	4,107	1	13,216	5	286,718
37	143,348	66	17,060	8	13,772	6	10,213	5	6,283	3	3,218	1	22,906	11	216,800
38	173,473	63	21,079	8	21,915	8	18,753	7	7,602	3	1,400	1	30,843	11	275,065
39	8,435	11	25,855	34	16,334	22	13,419	18	3,561	5	3,537	5	3,875	5	75,016
40	120,932	55	10,911	5	36,353	17	11,095	5	7,397	3	8,875	4	23,129	11	218,692
41	105,072	55	29,187	15	22,741	12	21,815	11	2,520	1	7,711	4	1,745	1	190,791

Table E-1
2015 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Airport Access Mode by AAZ

Cont.

	Private Car		Rental Car		Taxi		Transp. Networks		Public Transportation		irport/Hotel Bus/Lim		Other		Total
AAZ	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
42	46,038	22	69,567	33	31,941	15	9,540	5	11,488	5	38,089	18	4,818	2	211,481
43	247,963	65	14,089	4	51,374	14	28,599	8	12,825	3	5,916	2	17,919	5	378,685
44	177,187	32	108,378	19	56,995	10	36,514	7	21,358	4	89,993	16	68,117	12	558,542
45	219,291	52	26,327	6	63,240	15	39,009	9	13,363	3	21,675	5	39,608	9	422,513
46	62,542	16	123,877	32	68,520	18	32,372	8	11,015	3	73,933	19	15,508	4	387,767
47	66,640	64	6,433	6	14,709	14	7,267	7	4,521	4	1,922	2	1,842	2	103,334
48	41,994	49	5,257	6	16,023	19	17,134	20	1,642	2	3,512	4	0	0	85,562
49	45,882	70	0	0	7,272	11	10,224	16	0	0	0	0	2,364	4	65,742
50	25,255	30	13,510	16	22,400	27	11,837	14	7,007	8	2,826	3	0	0	82,835
51	4,555	8	0	0	15,787	28	21,648	39	13,848	25	0	0	0	0	55,838
52	16,879	17	5,081	5	31,679	31	18,011	18	20,374	20	6,470	6	2,297	2	100,791
53	25,188	22	23,546	21	19,308	17	20,856	19	12,437	11	11,032	10	0	0	112,367
54	84,043	32	70,444	27	29,438	11	14,047	5	30,012	12	11,319	4	20,684	8	259,987
55	73,385	50	34,941	24	15,644	11	4,768	3	6,625	5	6,795	5	4,811	3	146,969
56	49,707	46	39,607	37	3,508	3	6,126	6	4,086	4	2,973	3	895	1	106,902
57	65,749	73	15,620	17	3,449	4	4,584	5	0	0	531	1	0	0	89,933
58	123,782	72	13,551	8	19,359	11	9,134	5	0	0	5,420	3	0	0	171,246
59	112,848	84	7,770	6	2,290	2	2,088	2	951	1	5,366	4	3,105	2	134,418
60	15,032	39	910	2	5,257	14	1,659	4	2,308	6	12,649	33	1,091	3	38,906
61	44,777	75	677	1	783	1	2,493	4	5,831	10	4,912	8	0	0	59,473
62	42,459	76	0	0	2,297	4	1,447	3	7,813	14	1,051	2	609	1	55,676
63	44,775	78	1,705	3	961	2	5,101	9	790	1	4,159	7	0	0	57,491
64	267,477	63	35,068	8	14,933	4	18,460	4	24,296	6	20,156	5	40,861	10	421,251
65	28,540	41	5,750	8	4,121	6	20,097	29	4,998	7	5,706	8	0	0	69,212
66	75,695	52	12,949	9	7,158	5	11,589	8	8,695	6	27,461	19	3,340	2	146,887
67	25,534	31	18,107	22	8,045	10	8,691	11	12,464	15	1,961	2	7,962	10	82,764
68	22,597	64	0	0	534	2	3,931	11	7,871	22	508	1	0	0	35,441
69	43,989	64	8,599	13	2,644	4	3,382	5	6,385	9	3,511	5	0	0	68,510
70	28,636	36	16,015	20	7,804	10	4,102	5	18,433	23	3,100	4	2,427	3	80,517
71	13,208	48	4,180	15	0	0	788	3	0	0	6,769	24	2,857	10	27,802
72	683	31	1,512	69	0	0	0	0	0	0	0	0	0	0	2,195
73	59,166	83	6,690	9	956	1	2,234	3	588	1	1,229	2	0	0	70,863
74	41,803	63	13,060	20	4,537	7	1,481	2	4,279	6	988	1	0	0	66,148
75	118,486	73	6,014	4	6,817	4	3,483	2	6,807	4	7,665	5	13,868	9	163,140
76	48,789	76	8,099	13	0	0	2,774	4	4,072	6	378	1	0	0	64,112
77	43,317	66	10,011	15	1,091	2	5,797	9	2,004	3	2,313	4	1,008	2	65,541
78	23,650	77	1,956	6	0	0	1,842	6	2,223	7	932	3	0	0	30,603
79	54,133	81	3,792	6	0	0	7,435	11	752	1	584	1	0	0	66,696
80	8,745	51	3,292	19	3,208	19	699	4	1,355	8	0	0	0	0	17,299
81	29,314	10	33,084	11	109,062	38	23,170	8	4,995	2	88,606	31	0	0	288,231
82	79,436	58	17,219	13	10,528	8	11,549	8	1,206	1	12,449	9	3,599	3	135,986

Table E-1
2015 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Airport Access Mode by AAZ

Cont.

	Private Car		Rental Car		Taxi		Transp. Networks		Public Transportation		irport/Hotel Bus/Lim		Other		Total
AAZ	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
83	81,377	48	31,570	18	1,068	1	1,846	1	19,341	11	4,828	3	30,678	18	170,708
84	31,561	62	11,583	23	1,027	2	571	1	1,132	2	0	0	5,252	10	51,126
85	118,418	61	16,002	8	16,792	9	6,236	3	9,739	5	3,808	2	21,786	11	192,781
86	117,865	74	4,773	3	7,245	5	1,292	1	2,972	2	1,303	1	23,099	15	158,549
87	52,512	74	14,398	20	1,783	2	1,337	2	518	1	773	1	0	0	71,321
88	25,833	80	6,111	19	0	0	0	0	0	0	276	1	0	0	32,220
89	41,323	55	8,275	11	15,903	21	2,474	3	4,531	6	0	0	2,962	4	75,468
90	2,120	5	11,743	28	0	0	0	0	0	0	27,534	65	1,217	3	42,614
91	63,575	73	10,591	12	9,457	11	1,171	1	0	0	2,828	3	0	0	87,622
92	63,910	39	27,962	17	15,546	10	3,237	2	0	0	50,675	31	1,242	1	162,572
93	160,872	59	39,380	14	31,228	11	9,496	3	890	0	30,891	11	0	0	272,757
94	84,288	78	5,977	6	2,330	2	1,558	1	0	0	13,480	13	0	0	107,633
95	62,090	86	4,113	6	0	0	1,168	2	646	1	4,015	6	0	0	72,032
96	35,092	59	19,433	33	0	0	1,723	3	0	0	3,514	6	0	0	59,762
97	106,876	71	13,092	9	3,690	2	4,453	3	1,828	1	9,989	7	10,788	7	150,716
98	166,973	74	39,042	17	0	0	787	0	6,491	3	0	0	12,342	5	225,635
99	64,548	80	11,283	14	2,205	3	1,460	2	0	0	1,292	2	0	0	80,788
100	92,386	84	14,085	13	1,029	1	0	0	868	1	1,324	1	0	0	109,692
101	18,804	79	4,926	21	0	0	0	0	0	0	0	0	0	0	23,730
102	45,418	66	19,442	28	0	0	0	0	0	0	0	0	4,474	6	69,334
103	67,710	53	25,739	20	13,139	10	6,030	5	2,733	2	4,297	3	8,164	6	127,812
104	67,404	51	33,471	25	2,117	2	5,452	4	2,269	2	14,069	11	7,099	5	131,881
105	35,706	62	8,623	15	0	0	0	0	1,680	3	1,439	2	10,609	18	58,057
106	74,887	70	9,821	9	15,577	15	935	1	1,799	2	493	0	3,288	3	106,800
107	11,660	65	3,885	21	0	0	1,240	7	1,292	7	0	0	0	0	18,077
108	164,072	78	18,856	9	8,204	4	2,595	1	1,229	1	6,520	3	9,651	5	211,127
109	47,965	48	17,177	17	2,548	3	0	0	0	0	31,334	31	572	1	99,596
110	10,620	36	8,596	29	0	0	0	0	0	0	10,199	35	0	0	29,415
111	2,554	42	0	0	1,376	23	0	0	1,628	27	0	0	508	8	6,066
112	61,244	9	220,445	33	50,247	8	35,758	5	14,352	2	279,787	42	6,827	1	668,660
113	7,085	42	4,096	24	2,111	12	1,166	7	0	0	2,542	15	0	0	17,000
114	0	0	3,046	23	2,195	16	0	0	0	0	8,172	61	0	0	13,413
115	24,701	88	1,134	4	1,922	7	0	0	0	0	0	0	378	1	28,135
116	17,016	93	1,292	7	0	0	0	0	0	0	0	0	0	0	18,308
117	59,883	62	19,368	20	0	0	4,369	4	1,130	1	12,366	13	0	0	97,116
118	72,193	85	7,002	8	2,132	3	1,323	2	0	0	2,289	3	0	0	84,939
119	105,033	55	44,833	23	16,704	9	10,732	6	7,686	4	5,630	3	1,628	1	192,246
120	106,246	63	36,806	22	8,921	5	1,512	1	861	1	12,012	7	1,460	1	167,818
121	62,771	96	2,930	4	0	0	0	0	0	0	0	0	0	0	65,701
122	90,965	79	19,382	17	2,033	2	621	1	0	0	2,424	2	0	0	115,425
123	81,316	59	44,838	33	925	1	7,143	5	0	0	2,227	2	861	1	137,310

Table E-1
2015 Washington-Baltimore Air Passenger Survey
Air Passenger Originations Airport Access Mode by AAZ

Cont.

	Private Car		Rental Car		Taxi		Transp. Networks		Public Transportation		Airport/Hotel Bus/Limo		Other		Total
AAZ	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
124	71,619	78	10,904	12	1,460	2	0	0	2,498	3	1,408	2	4,233	5	92,122
125	43,978	78	4,891	9	1,545	3	0	0	0	0	0	0	6,007	11	56,421
126	15,648	58	9,052	34	0	0	0	0	0	0	1,450	5	847	3	26,997
127	30,938	57	15,953	29	2,329	4	0	0	1,989	4	2,323	4	903	2	54,435
128	39,797	67	13,957	24	0	0	0	0	4,658	8	0	0	746	1	59,158
129	80,676	69	22,638	19	1,756	1	0	0	1,249	1	1,814	2	9,338	8	117,471
130	66,780	71	15,179	16	3,680	4	0	0	0	0	8,073	9	935	1	94,647
131	15,578	93	0	0	0	0	188	1	0	0	1,068	6	0	0	16,834
132	26,031	71	3,880	11	1,216	3	2,972	8	2,055	6	0	0	509	1	36,663
133	46,328	13	59,078	17	105,094	30	57,100	16	17,138	5	60,429	17	2,962	1	348,129
134	21,426	17	19,136	15	29,019	23	22,444	18	1,292	1	32,325	26	651	1	126,293
135	27,599	46	1,187	2	12,742	21	8,173	14	0	0	7,709	13	2,867	5	60,277
136	14,553	52	3,801	14	0	0	6,206	22	0	0	1,250	5	1,922	7	27,732
137	74,183	71	17,290	17	6,199	6	2,059	2	0	0	2,280	2	2,469	2	104,480
138	17,782	50	11,389	32	473	1	4,020	11	1,586	4	0	0	0	0	35,250
139	25,184	55	0	0	10,893	24	5,807	13	3,236	7	0	0	1,071	2	46,191
140	35,950	46	5,010	6	16,989	22	15,114	19	1,387	2	3,222	4	0	0	77,672
141	126,472	71	12,658	7	6,471	4	12,769	7	17,016	10	2,709	2	0	0	178,095
142	5,992	40	6,239	42	988	7	0	0	1,785	12	0	0	0	0	15,004
143	19,170	30	2,710	4	19,684	31	8,666	14	3,376	5	9,561	15	735	1	63,902
144	74,738	30	50,898	20	48,705	19	23,975	10	2,553	1	49,342	20	1,008	0	251,219
145	14,453	63	5,882	26	0	0	0	0	1,418	6	0	0	1,061	5	22,814
146	4,086	61	1,512	22	0	0	1,145	17	0	0	0	0	0	0	6,743
147	2,384	52	1,386	30	809	18	0	0	0	0	0	0	0	0	4,579
148	13,592	83	2,321	14	493	3	0	0	0	0	0	0	0	0	16,406
149	44,904	71	5,359	8	0	0	7,047	11	0	0	4,686	7	1,681	3	63,677
150	47,524	87	3,604	7	0	0	3,718	7	0	0	0	0	0	0	54,846
151	90,756	69	9,934	8	1,852	1	6,022	5	0	0	13,760	11	8,706	7	131,030
152	28,718	87	3,487	11	0	0	0	0	0	0	631	2	0	0	32,836
153	40,394	94	672	2	1,460	3	672	2	0	0	0	0	0	0	43,198
154	73,941	61	38,779	32	2,778	2	2,846	2	434	0	1,218	1	1,029	1	121,025
155	90,044	71	16,986	13	294	0	1,302	1	0	0	14,029	11	3,771	3	126,426
156	7,993	81	0	0	0	0	0	0	0	0	0	0	1,922	19	9,915
157	84,311	72	20,472	18	0	0	1,941	2	1,617	1	7,071	6	1,307	1	116,719
158	42,535	83	4,454	9	1,774	3	0	0	0	0	294	1	1,891	4	50,948
159	74,809	77	7,311	7	1,439	1	0	0	1,345	1	12,605	13	0	0	97,509
160	87,242	61	29,796	21	0	0	0	0	0	0	20,625	15	4,433	3	142,096
161	7,626	92	631	8	0	0	0	0	0	0	0	0	0	0	8,257
Total	**9,454,388**	**40**	**2,988,025**	**13**	**3,720,092**	**16**	**2,199,507**	**9**	**1,694,981**	**7**	**2,350,123**	**10**	**998,753**	**4**	**23,405,869**

APPENDIX F AIR PASSENGER ORIGINATIONS AIR PASSENGER RESIDENT AND NON-RESIDENT STATUS BY AAZ

Table F-1

2015 Washington-Baltimore Air Passenger Survey

Air Passengers Resident Non-Resident Status by AAZ

AAZ	Resident		Non-Resident		Total
	No.	%	No.	%	No.
1	5,387	16	28,667	84	34,054
2	18,972	18	89,118	82	108,090
3	190,069	10	1,674,038	90	1,864,107
4	118,394	11	977,328	89	1,095,722
5	40,913	14	256,819	86	297,732
6	33,614	15	192,984	85	226,598
7	20,144	49	21,219	51	41,363
8	47,832	62	29,642	38	77,474
9	14,798	14	89,466	86	104,264
10	39,904	40	59,034	60	98,938
11	62,272	45	76,099	55	138,371
12	65,216	46	76,584	54	141,800
13	72,232	41	105,310	59	177,542
14	54,229	44	68,024	56	122,253
15	28,926	26	84,107	74	113,033
16	116,975	32	250,415	68	367,390
17	11,299	35	20,910	65	32,209
18	15,764	10	139,924	90	155,688
19	9,177	26	26,127	74	35,304
20	11,418	38	18,444	62	29,862
21	3,072	17	14,733	83	17,805
22	47,106	6	705,896	94	753,002
23	43,126	18	194,122	82	237,248
24	6,532	14	39,364	86	45,896
25	57,980	17	281,696	83	339,676
26	64,653	22	232,619	78	297,272
27	54,437	48	57,922	52	112,359
28	179,796	36	324,496	64	504,292
29	23,921	39	37,561	61	61,482
30	79,201	47	90,860	53	170,061
31	69,452	19	290,005	81	359,457
32	31,310	31	69,114	69	100,424
33	64,390	30	147,391	70	211,781
34	146,002	43	192,926	57	338,928
35	64,972	34	126,704	66	191,676
36	113,755	40	172,963	60	286,718
37	96,073	44	120,727	56	216,800
38	92,341	34	182,724	66	275,065
39	16,315	22	58,701	78	75,016
40	61,938	28	156,754	72	218,692
41	91,926	48	98,865	52	190,791
42	25,704	12	185,777	88	211,481
43	160,057	42	218,628	58	378,685
44	114,234	20	444,308	80	558,542
45	134,454	32	288,059	68	422,513
46	22,088	6	365,679	94	387,767
47	64,431	62	38,903	38	103,334
48	46,791	55	38,771	45	85,562
49	44,625	68	21,117	32	65,742
50	29,113	35	53,722	65	82,835
51	17,313	31	38,525	69	55,838
52	12,861	13	87,930	87	100,791
53	23,100	21	89,267	79	112,367
54	84,781	33	175,206	67	259,987
55	37,091	25	109,878	75	146,969
56	34,705	32	72,197	68	106,902
57	44,384	49	45,549	51	89,933
58	118,154	69	53,092	31	171,246
59	60,918	45	73,500	55	134,418
60	29,849	77	9,057	23	38,906
61	35,981	60	23,492	40	59,473
62	27,343	49	28,333	51	55,676
63	29,913	52	27,578	48	57,491
64	139,929	33	281,322	67	421,251
65	25,060	36	44,152	64	69,212
66	39,055	27	107,832	73	146,887
67	16,545	20	66,219	80	82,764
68	21,793	61	13,648	39	35,441
69	25,959	38	42,551	62	68,510
70	18,370	23	62,147	77	80,517
71	9,644	35	18,158	65	27,802
72	683	31	1,512	69	2,195
73	34,263	48	36,600	52	70,863
74	18,216	28	47,932	72	66,148
75	52,332	32	110,808	68	163,140
76	33,363	52	30,749	48	64,112
77	24,412	37	41,129	63	65,541
78	17,805	58	12,798	42	30,603
79	32,025	48	34,671	52	66,696
80	7,316	42	9,983	58	17,299
81	6,982	2	281,249	98	288,231
82	58,080	43	77,906	57	135,986

Table F-1

2015 Washington-Baltimore Air Passenger Survey

Air Passengers Resident Non-Resident Status by AAZ

Cont.

AAZ	Resident		Non-Resident		Total
	No.	%	No.	%	No.
83	49,139	29	121,569	71	341,416
84	9,672	19	41,454	81	102,252
85	89,489	46	103,292	54	385,562
86	67,502	43	91,047	57	317,098
87	29,154	41	42,167	59	142,642
88	11,469	36	20,751	64	64,440
89	32,867	44	42,601	56	150,936
90	5,634	13	36,980	87	85,228
91	48,960	56	38,662	44	175,244
92	38,319	24	124,253	76	325,144
93	126,831	46	145,926	54	545,514
94	49,516	46	58,117	54	215,266
95	48,524	67	23,508	33	144,064
96	23,325	39	36,437	61	119,524
97	58,587	39	92,129	61	301,432
98	81,035	36	144,600	64	451,270
99	31,861	39	48,927	61	161,576
100	66,772	61	42,920	39	219,384
101	12,313	52	11,417	48	47,460
102	23,528	34	45,806	66	138,668
103	45,766	36	82,046	64	255,624
104	39,791	30	92,090	70	263,762
105	17,936	31	40,121	69	116,114
106	53,386	50	53,414	50	213,600
107	9,087	50	8,990	50	36,154
108	94,398	45	116,729	55	422,254
109	31,268	31	68,328	69	199,192
110	8,310	28	21,105	72	58,830
111	1,777	29	4,289	71	12,132
112	38,343	6	630,317	94	1,337,320
113	5,625	33	11,375	67	34,000
114	2,195	16	11,218	84	26,826
115	16,028	57	12,107	43	56,270
116	12,899	70	5,409	30	36,616
117	44,311	46	52,805	54	194,232
118	43,395	51	41,544	49	169,878
119	64,590	34	127,656	66	384,492
120	56,138	33	111,680	67	335,636
121	38,886	59	26,815	41	131,402
122	34,800	30	80,625	70	230,850
123	48,502	35	88,808	65	274,620
124	32,624	35	59,498	65	92,122
125	25,555	45	30,866	55	56,421
126	9,773	36	17,224	64	26,997
127	14,635	27	39,800	73	54,435
128	12,714	21	46,444	79	59,158
129	48,603	41	68,868	59	117,471
130	24,169	26	70,478	74	94,647
131	572	3	16,262	97	16,834
132	14,253	39	22,410	61	36,663
133	21,305	6	326,824	94	348,129
134	17,018	13	109,275	87	126,293
135	20,987	35	39,290	65	60,277
136	10,958	40	16,774	60	27,732
137	35,154	34	69,326	66	104,480
138	11,900	34	23,350	66	35,250
139	23,125	50	23,066	50	46,191
140	43,078	55	34,594	45	77,672
141	90,555	51	87,540	49	178,095
142	5,945	40	9,059	60	15,004
143	18,507	29	45,395	71	63,902
144	47,214	19	204,005	81	251,219
145	12,520	55	10,294	45	22,814
146	0	0	6,743	100	6,743
147	1,418	31	3,161	69	4,579
148	5,733	35	10,673	65	16,406
149	29,611	47	34,066	53	63,677
150	26,973	49	27,873	51	54,846
151	63,762	49	67,268	51	131,030
152	13,909	42	18,927	58	32,836
153	19,515	45	23,683	55	43,198
154	41,109	34	79,916	66	121,025
155	51,378	41	75,048	59	126,426
156	4,695	47	5,220	53	9,915
157	44,823	38	71,896	62	116,719
158	21,350	42	29,598	58	50,948
159	60,357	62	37,152	38	97,509
160	63,581	45	78,515	55	142,096
161	1,333	16	6,924	84	8,257
Total	**6,768,194**	**29**	**16,637,675**	**71**	**23,405,869**

APPENDIX G AIR PASSENGER ORIGINATIONS BY JURISDICTION

Table G-1
Washington / Baltimore Air System Planning Region
Originating Passengers by Jurisdiction

Jurisdiction	Airport			Total
	BWI	DCA	IAD	
District of Columbia	473,900	3,801,313	986,581	5,261,794
Montgomery County	790,230	965,672	623,789	2,379,691
Prince George's County	431,051	617,681	98,911	1,147,643
Arlington County	80,693	1,807,568	480,771	2,369,032
City of Alexandria	33,989	658,011	149,723	841,723
Fairfax County	197,604	1,344,674	2,313,730	3,856,008
Loudoun County	27,276	118,714	602,676	748,666
Prince William County	52,006	326,025	298,674	676,705
Frederick County	189,779	24,020	68,711	282,510
Howard County	643,286	33,444	49,441	726,171
Anne Arundel County	1,564,407	63,442	71,691	1,699,540
Charles County	70,706	64,374	13,463	148,543
Carroll County	217,417	4,532	3,686	225,635
Calvert County	60,233	49,342	5,850	115,425
St. Mary's County	80,526	50,429	6,355	137,310
King George County	1,796	15,371	9,830	26,997
City of Fredericksburg	13,004	34,661	11,493	59,158
Stafford County	16,901	71,942	28,628	117,471
Spotsylvania County	3,036	30,772	20,627	54,435
Fauquier County	16,939	9,718	67,990	94,647
Clarke County	0	720	16,114	16,834
Jefferson County	5,484	2,941	28,238	36,663
Baltimore City	1,262,324	50,493	44,241	1,357,058
Baltimore County	751,141	6,150	21,057	778,348
Harford County	230,825	688	16,349	247,862
Total	7,214,553	10,152,697	6,038,619	23,405,869

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Table G-2
Washington / Baltimore Air System Planning Region
Air Passenger Originations Home and Non-Home by Jurisdiction

Jurisdiction	BWI		DCA		IAD		Total		
	Home	Non-Home	Home	Non-Home	Home	Non-Home	Home	Non-Home	Total
District of Columbia	214,731	259,169	1,009,709	2,791,604	312,805	673,776	1,537,245	3,724,549	5,261,794
Montgomery County	622,755	167,475	582,449	383,223	483,554	140,235	1,688,758	690,933	2,379,691
Prince George's County	329,282	101,769	257,334	360,347	65,965	32,946	652,581	495,062	1,147,643
Arlington County	64,329	16,364	630,893	1,176,675	145,141	335,630	840,363	1,528,669	2,369,032
City of Alexandria	15,670	18,319	358,073	299,938	108,611	41,112	482,354	359,369	841,723
Fairfax County	154,537	43,067	832,163	512,511	1,255,339	1,058,391	2,242,039	1,613,969	3,856,008
Loudoun County	21,510	5,766	72,805	45,909	409,395	193,281	503,710	244,956	748,666
Prince William County	42,280	9,726	205,704	120,321	249,188	49,486	497,172	179,533	676,705
Frederick County	145,279	44,500	19,256	4,764	55,459	13,252	219,994	62,516	282,510
Howard County	475,897	167,389	20,467	12,977	42,966	6,475	539,330	186,841	726,171
Anne Arundel County	676,343	888,064	40,957	22,485	56,543	15,148	773,843	925,697	1,699,540
Charles County	65,056	5,650	50,474	13,900	13,463	0	128,993	19,550	148,543
Carroll County	188,321	29,096	4,532	0	3,056	630	195,909	29,726	225,635
Calvert County	57,102	3,131	35,622	13,720	4,161	1,689	96,885	18,540	115,425
St. Mary's County	69,938	10,588	37,727	12,702	2,224	4,131	109,889	27,421	137,310
King George County	1,796	0	10,586	4,785	3,986	5,844	16,368	10,629	26,997
City of Fredericksburg	11,397	1,607	28,149	6,512	3,894	7,599	43,440	15,718	59,158
Stafford County	7,889	9,012	53,892	18,050	22,066	6,562	83,847	33,624	117,471
Spotsylvania County	3,036	0	25,319	5,453	13,740	6,887	42,095	12,340	54,435
Fauquier County	16,004	935	7,167	2,551	53,360	14,630	76,531	18,116	94,647
Clarke County	0	0	720	0	15,926	188	16,646	188	16,834
Jefferson County	4,045	1,439	2,231	710	19,755	8,483	26,031	10,632	36,663
Baltimore City	526,150	736,174	16,588	33,905	21,667	22,574	564,405	792,653	1,357,058
Baltimore County	570,486	180,655	4,562	1,588	16,053	5,004	591,101	187,247	778,348
Harford County	195,938	34,887	0	688	1,732	14,617	197,670	50,192	247,862
Total	4,479,771	2,734,782	4,307,379	5,845,318	3,380,049	2,658,570	12,167,199	11,238,670	23,405,869

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Table G-3
Washington / Baltimore Air System Planning Region
Air Passenger Originations Work and Non-Work by Jurisdiction

Jurisdiction	BWI		DCA		IAD		Total		
	Work	Non-Work	Work	Non-Work	Work	Non-Work	Work	Non-Work	Total
District of Columbia	126,436	347,464	1,759,463	2,041,850	331,933	654,648	2,217,832	3,043,962	5,261,794
Montgomery County	248,403	541,827	403,443	562,229	191,346	432,443	843,192	1,536,499	2,379,691
Prince George's County	126,975	304,076	291,398	326,283	31,834	67,077	450,207	697,436	1,147,643
Arlington County	11,019	69,674	682,070	1,125,498	175,278	305,493	868,367	1,500,665	2,369,032
City of Alexandria	6,492	27,497	209,815	448,196	45,297	104,426	261,604	580,119	841,723
Fairfax County	30,573	167,031	464,417	880,257	826,620	1,487,110	1,321,610	2,534,398	3,856,008
Loudoun County	4,903	22,373	32,063	86,651	212,176	390,500	249,142	499,524	748,666
Prince William County	7,426	44,580	122,764	203,261	105,460	193,214	235,650	441,055	676,705
Frederick County	97,975	91,804	5,416	18,604	21,748	46,963	125,139	157,371	282,510
Howard County	220,838	422,448	9,325	24,119	14,184	35,257	244,347	481,824	726,171
Anne Arundel County	535,099	1,029,308	19,286	44,156	5,466	66,225	559,851	1,139,689	1,699,540
Charles County	22,447	48,259	20,441	43,933	646	12,817	43,534	105,009	148,543
Carroll County	48,851	168,566	1,737	2,795	1,168	2,518	51,756	173,879	225,635
Calvert County	17,238	42,995	18,747	30,595	1,155	4,695	37,140	78,285	115,425
St. Mary's County	30,545	49,981	27,279	23,150	3,370	2,985	61,194	76,116	137,310
King George County	1,796	0	6,913	8,458	0	9,830	8,709	18,288	26,997
City of Fredericksburg	4,202	8,802	7,441	27,220	3,664	7,829	15,307	43,851	59,158
Stafford County	5,945	10,956	21,817	50,125	4,168	24,460	31,930	85,541	117,471
Spotsylvania County	1,313	1,723	16,482	14,290	3,978	16,649	21,773	32,662	54,435
Fauquier County	4,486	12,453	0	9,718	16,385	51,605	20,871	73,776	94,647
Clarke County	0	0	0	720	6,671	9,443	6,671	10,163	16,834
Jefferson County	4,181	1,303	2,055	886	14,373	13,865	20,609	16,054	36,663
Baltimore City	596,295	666,029	28,262	22,231	17,359	26,882	641,916	715,142	1,357,058
Baltimore County	231,356	519,785	0	6,150	7,028	14,029	238,384	539,964	778,348
Harford County	77,423	153,402	0	688	16,349	0	93,772	154,090	247,862
Total	**2,462,217**	**4,752,336**	**4,150,634**	**6,002,063**	**2,057,656**	**3,980,963**	**8,670,507**	**14,735,362**	**23,405,869**

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Table G-4
Washington / Baltimore Air System Planning Region
Air Passengers Resident Non-Resident Status by Jurisdiction

Jurisdiction	BWI		DCA		IAD		Total		
	Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	Resident	Non-Resident	Total
District of Columbia	130,360	343,540	708,295	3,093,018	138,880	847,701	977,535	4,284,259	5,261,794
Montgomery County	325,285	464,945	324,344	641,328	269,675	354,114	919,304	1,460,387	2,379,691
Prince George's County	193,920	237,131	119,854	497,827	25,676	73,235	339,450	808,193	1,147,643
Arlington County	34,171	46,522	336,430	1,471,138	110,022	370,749	480,623	1,888,409	2,369,032
City of Alexandria	11,710	22,279	184,085	473,926	48,558	101,165	244,353	597,370	841,723
Fairfax County	73,737	123,867	449,544	895,130	681,009	1,632,721	1,204,290	2,651,718	3,856,008
Loudoun County	6,595	20,681	42,892	75,822	252,640	350,036	302,127	446,539	748,666
Prince William County	15,073	36,933	110,569	215,456	130,783	167,891	256,425	420,280	676,705
Frederick County	90,466	99,313	8,358	15,662	31,612	37,099	130,436	152,074	282,510
Howard County	281,116	362,170	3,048	30,396	16,276	33,165	300,440	425,731	726,171
Ann Arundel County	405,926	1,158,481	23,310	40,132	28,927	42,764	458,163	1,241,377	1,699,540
Charles County	20,663	50,043	25,903	38,471	11,613	1,850	58,179	90,364	148,543
Carroll County	77,062	140,355	1,737	2,795	2,236	1,450	81,035	144,600	225,635
Calvert County	24,687	35,546	9,579	39,763	534	5,316	34,800	80,625	115,425
St. Mary's County	28,887	51,639	19,615	30,814	0	6,355	48,502	88,808	137,310
King George County	1,796	0	3,991	11,380	3,986	5,844	9,773	17,224	26,997
City of Fredericksburg	1,103	11,901	10,617	24,044	994	10,499	12,714	46,444	59,158
Stafford County	2,333	14,568	30,954	40,988	15,316	13,312	48,603	68,868	117,471
Spotsylvania County	410	2,626	5,578	25,194	8,647	11,980	14,635	39,800	54,435
Fauquier County	2,007	14,932	2,710	7,008	19,452	48,538	24,169	70,478	94,647
Clarke County	0	0	0	720	572	15,542	572	16,262	16,834
Jefferson County	2,637	2,847	1,564	1,377	10,052	18,186	14,253	22,410	36,663
Baltimore City	330,436	931,888	8,406	42,087	19,424	24,817	358,266	998,792	1,357,058
Baltimore County	316,368	434,773	582	5,568	7,326	13,731	324,276	454,072	778,348
Harford County	122,851	107,974	688	0	1,732	14,617	125,271	122,591	247,862
Total	2,499,599	4,714,954	2,432,653	7,720,044	1,835,942	4,202,677	6,768,194	16,637,675	23,405,869

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Table G-5

Washington / Baltimore Air System Planning Region

Air Passenger Originations Airport Access Mode by Jurisdiction

Jurisdiction	Private Car	Rental Car	Taxi	Transportation Networks	Public Transportation	Airport Bus/Limo	Other	Total
District of Columbia	861,616	386,233	1,718,352	927,533	794,087	362,953	211,020	5,261,794
Montgomery County	1,236,153	304,493	230,246	213,925	172,048	134,807	88,019	2,379,691
Prince George's County	593,355	133,523	146,647	68,736	53,099	128,524	23,759	1,147,643
Arlington County	464,440	215,133	478,179	305,048	258,085	520,080	128,067	2,369,032
City of Alexandria	276,886	77,261	135,744	95,201	99,651	101,785	55,195	841,723
Fairfax County	1,779,332	587,825	491,328	277,193	165,764	289,762	264,804	3,856,008
Loudoun County	416,088	103,928	74,464	17,936	5,421	125,408	5,421	748,666
Prince William County	427,566	84,437	27,915	11,282	33,702	10,988	80,815	676,705
Frederick County	204,058	36,638	3,690	7,344	2,474	17,518	10,788	282,510
Howard County	478,523	131,275	34,067	15,117	10,641	22,914	33,634	726,171
Anne Arundel County	741,383	385,581	96,360	57,455	26,886	370,851	21,024	1,699,540
Charles County	115,597	15,795	3,005	0	2,498	1,408	10,240	148,543
Carroll County	166,973	39,042	0	787	6,491	0	12,342	225,635
Calvert County	90,965	19,382	2,033	621	0	2,424	0	115,425
St. Mary's County	81,316	44,838	925	7,143	0	2,227	861	137,310
King George County	15,648	9,052	0	0	0	1,450	847	26,997
City of Fredericksburg	39,797	13,957	0	0	4,658	0	746	59,158
Stafford County	80,676	22,638	1,756	0	1,249	1,814	9,338	117,471
Spotsylvania County	30,938	15,953	2,329	0	1,989	2,323	903	54,435
Fauquier County	66,780	15,179	3,680	0	0	8,073	935	94,647
Clarke County	15,578	0	0	188	0	1,068	0	16,834
Jefferson County	26,031	3,880	1,216	2,972	2,055	0	509	36,663
Baltimore City	503,830	195,278	257,257	166,333	50,787	168,827	14,746	1,357,058
Baltimore County	571,182	108,966	9,460	24,693	2,051	41,689	20,307	778,348
Harford County	169,677	37,738	1,439	0	1,345	33,230	4,433	247,862
Total	**9,454,388**	**2,988,025**	**3,720,092**	**2,199,507**	**1,694,981**	**2,350,123**	**998,753**	**23,405,869**

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Table G-6

Washington / Baltimore Air System Planning Region

Air Passenger Originations Airport Access Mode by Jurisdiction - BWI Airport

Jurisdiction	Private Car	Rental Car	Taxi	Transportation Networks	Public Transportation	Airport Bus/Limo	Other	Total
District of Columbia	101,107	75,147	55,163	57,733	122,947	38,379	23,424	473,900
Montgomery County	530,994	96,761	22,604	27,279	28,379	53,130	31,083	790,230
Prince George's County	312,333	49,194	10,199	21,846	16,712	13,572	7,195	431,051
Arlington County	39,562	27,318	0	2,594	6,366	1,932	2,921	80,693
City of Alexandria	13,789	4,192	0	7,583	2,595	0	5,830	33,989
Fairfax County	149,127	27,771	2,101	820	4,202	5,452	8,131	197,604
Loudoun County	20,534	5,766	976	0	0	0	0	27,276
Prince William County	45,798	0	956	0	0	0	5,252	52,006
Frederick County	145,726	13,086	2,080	5,326	1,828	10,945	10,788	189,779
Howard County	420,922	114,310	30,353	15,117	7,974	20,976	33,634	643,286
Anne Arundel County	662,127	362,327	82,936	54,449	18,448	364,176	19,944	1,564,407
Charles County	50,770	8,236	1,460	0	0	0	10,240	70,706
Carroll County	159,385	39,042	0	787	6,491	0	11,712	217,417
Calvert County	55,788	4,445	0	0	0	0	0	60,233
St. Mary's County	44,496	24,874	925	7,143	0	2,227	861	80,526
King George County	1,796	0	0	0	0	0	0	1,796
City of Fredericksburg	12,258	0	0	0	0	0	746	13,004
Stafford County	5,715	966	0	0	0	882	9,338	16,901
Spotsylvania County	2,133	0	0	0	0	0	903	3,036
Fauquier County	16,004	0	0	0	0	0	935	16,939
Clarke County	0	0	0	0	0	0	0	0
Jefferson County	3,635	1,849	0	0	0	0	0	5,484
Baltimore City	466,376	178,653	243,229	161,244	47,177	150,899	14,746	1,262,324
Baltimore County	557,267	104,194	8,244	22,296	2,051	38,979	18,110	751,141
Harford County	167,945	37,050	1,439	0	1,345	18,613	4,433	230,825
Total	**4,421,441**	**905,162**	**411,482**	**597,358**	**294,269**	**966,026**	**247,676**	**7,843,414**

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Table G-7

Washington / Baltimore Air System Planning Region

Air Passenger Originations Airport Access Mode by Jurisdiction - DCA Airport

Jurisdiction	Private Car	Rental Car	Transportation Taxi	Transportation Networks	Public Transportation	Airport Bus/Limo	Other	Total
District of Columbia	550,400	209,155	1,454,939	736,982	580,990	158,564	110,283	3,801,313
Montgomery County	378,655	121,857	134,121	135,202	127,001	38,656	30,180	965,672
Prince George's County	217,825	77,386	127,819	41,827	31,071	105,189	16,564	617,681
Arlington County	297,935	111,634	419,277	250,871	224,068	396,650	107,133	1,807,568
City of Alexandria	192,318	62,308	109,315	80,382	92,559	94,652	26,477	658,011
Fairfax County	597,621	195,630	187,786	128,457	120,291	53,728	61,161	1,344,674
Loudoun County	53,910	23,223	9,208	4,118	5,421	19,362	3,472	118,714
Prince William County	166,943	49,562	12,481	8,119	33,069	3,387	52,464	326,025
Frederick County	13,941	1,250	1,610	0	646	6,573	0	24,020
Howard County	17,581	13,196	0	0	2,667	0	0	33,444
Anne Arundel County	28,699	16,471	3,631	3,006	8,438	2,689	508	63,442
Charles County	51,364	7,559	1,545	0	2,498	1,408	0	64,374
Carroll County	4,532	0	0	0	0	0	0	4,532
Calvert County	31,016	13,869	2,033	0	0	2,424	0	49,342
St. Mary's County	34,000	16,429	0	0	0	0	0	50,429
King George County	9,866	3,208	0	0	0	1,450	847	15,371
City of Fredericksburg	22,825	7,178	0	0	4,658	0	0	34,661
Stafford County	53,056	16,303	402	0	1,249	932	0	71,942
Spotsylvania County	15,941	9,073	2,329	0	1,989	1,440	0	30,772
Fauquier County	7,167	2,551	0	0	0	0	0	9,718
Clarke County	720	0	0	0	0	0	0	720
Jefferson County	886	0	0	0	2,055	0	0	2,941
Baltimore City	15,868	6,331	7,082	2,869	3,610	14,733	0	50,493
Baltimore County	1,270	0	0	1,588	0	2,710	582	6,150
Harford County	0	688	0	0	0	0	0	688
Total	2,764,339	964,861	2,473,578	1,393,421	1,296,101	829,531	243,482	9,965,313

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey

Table G-8

Washington / Baltimore Air System Planning Region

Air Passenger Originations Airport Access Mode by Jurisdiction - IAD Airport

Jurisdiction	Private Car	Rental Car	Taxi	Transportation Networks	Public Transportation	Airport Bus/Limo	Other	Total
District of Columbia	210,109	101,931	208,250	132,818	14,923	166,010	77,313	911,354
Montgomery County	326,504	85,875	73,521	51,444	9,290	43,021	26,756	616,411
Prince George's County	63,197	6,943	8,629	5,063	1,613	9,763	0	95,208
Arlington County	126,943	76,181	58,902	51,583	8,234	121,498	18,013	461,354
City of Alexandria	70,779	10,761	26,429	7,236	3,680	7,133	22,888	148,906
Fairfax County	1,032,584	364,424	301,441	147,916	8,856	230,582	195,512	2,281,315
Loudoun County	341,644	74,939	64,280	13,818	0	106,046	1,949	602,676
Prince William County	214,825	34,875	14,478	3,163	0	7,601	23,099	298,041
Frederick County	44,391	22,302	0	2,018	0	0	0	68,711
Howard County	40,020	3,769	3,714	0	0	1,938	0	49,441
Anne Arundel County	50,557	6,783	9,793	0	0	3,986	572	71,691
Charles County	13,463	0	0	0	0	0	0	13,463
Carroll County	3,056	0	0	0	0	0	630	3,686
Calvert County	4,161	1,068	0	621	0	0	0	5,850
St. Mary's County	2,820	3,535	0	0	0	0	0	6,355
King George County	3,986	5,844	0	0	0	0	0	9,830
City of Fredericksburg	4,714	6,779	0	0	0	0	0	11,493
Stafford County	21,905	5,369	1,354	0	0	0	0	28,628
Spotsylvania County	12,864	6,880	0	0	0	883	0	20,627
Fauquier County	43,609	12,628	3,680	0	0	8,073	0	67,990
Clarke County	14,858	0	0	188	0	1,068	0	16,114
Jefferson County	21,510	2,031	1,216	2,972	0	0	509	28,238
Baltimore City	21,586	10,294	6,946	2,220	0	3,195	0	44,241
Baltimore County	12,645	4,772	1,216	809	0	0	1,615	21,057
Harford County	1,732	0	0	0	0	14,617	0	16,349
Total	**2,734,823**	**913,875**	**961,873**		**136,596**	**729,371**	**178,189**	**5,654,727**

Source:- 2015 Washington-Baltimore Regional Air Passenger Survey