

***Washington-Baltimore  
Regional Air Passenger  
Origin/Destination Forecast Update***

**July 2013**



***Metropolitan Washington Council of Governments***



## ABSTRACT FORM

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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.

### ABSTRACT:

This report presents regional air passenger origin and destination forecast for the three commercial airports in the Washington Baltimore region. The air passenger enplanements are based on data from FAA forecasts. The report documents the techniques used to forecast and distribute total air passengers origins by AAZ and jurisdiction for the Base year 2011 and forecast years through 2040 to the three commercial airports in the Washington/Baltimore region.

### SUBJECT:

**Regional Air Passenger Origin/Destination Forecast Update**

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## **1. Introduction**

The Washington-Baltimore metropolitan area is one of the few places in the country where air passengers have a choice of multiple airports. These facilities are: Washington Dulles International Airport (IAD), Ronald Reagan Washington National Airport (DCA) and Baltimore/Washington Thurgood Marshall International Airport (BWI).

Forecasts of key aviation activity measures for the Washington-Baltimore region are published periodically by the Federal Aviation Administration (FAA). While these forecasts are produced to predict air passenger enplanements at the three above airports, no origin/destination forecasts are produced. Origin/destination information is essential for use in airport-related transportation studies, and for determining airport master plan landside facility needs.

This report documents the procedures used to develop forecasts of locally originating air passenger trips from each regional aviation analysis zone (AAZ, aggregations of traffic analysis zones, or TAZs) to each of the three major commercial airports in the Washington-Baltimore region. The air passenger forecasts are developed as part of the Metropolitan Washington Council of Governments / National Capital Region Transportation Planning Board's (COG/TPB) Continuous Airport System Planning (CASP) program.

The COG/TPB Models Development program identifies the improvement of the representation of special traffic generators as an important component of the travel demand forecasting process. COG/TPB has performed several special generator surveys in recent years, relating to military facilities, universities, tourist locations, and major shopping centers. As these data become available, the review of special generator data for the purpose of refining the regional travel model is envisioned to be an ongoing work activity. The principal purpose of the air passenger trip origin/destination forecast is to provide annual air passenger control totals to be used as an input to the regional travel forecasting process.

This model does not forecast enplanements from each aviation analysis zone; rather, it uses the official enplanements forecast made by the FAA as a base to distribute originating trips within the study area. The factors and rates developed in this report are based on data from the 2011 Washington-Baltimore Regional Air Passenger Survey and Cooperative Land Use Forecasts from MWCOG and the Baltimore Metropolitan Council (BMC). This model is not an airport choice model and does not take into consideration variables such as travel time to the airports, ticket price, travel mode to the airports, flight frequency, and others. The output of the regional air passenger origin/destination report presents a set of forecasted air passenger trips originating from aviation analysis zones to each of the three major airports in the Washington-Baltimore region.

## **2. Study Area**

The Washington-Baltimore air service area market is larger than the combined metropolitan planning areas of the TPB and BMC. The market stretches from Harford County, Maryland (along the Susquehanna River) in the northeast, down to Spotsylvania County, Virginia in the south, and from the Chesapeake Bay in the east to the foothills of the Appalachian Mountains in the west. Figure 1 represents the jurisdictions that combine to make up this region, and locates the three airports. The region consists of 25 jurisdictions, 161 Aviation Analysis Zones (AAZs) and 4,374 Transportation Analysis Zones (TAZ). Figure 2 shows the AAZ boundaries. Even with such a large area, in 2011 approximately 6 percent of the air travelers using the Washington-Baltimore regional airports came from areas beyond these boundaries.

The airports are not only an entry point for local originating passengers, but also a destination for the majority of their air passengers. Based on the 2011 Air Passenger Survey, almost 46 percent of the airports' passengers do not reside within the study area. This proportion is similar for all types of trips, such as business, personal, vacation, school, etc, indicating that these airports provide an important link to governments (local and federal), firms, and individuals for areas outside the region.



**Figure 1: Washington-Baltimore Air System Planning Region**



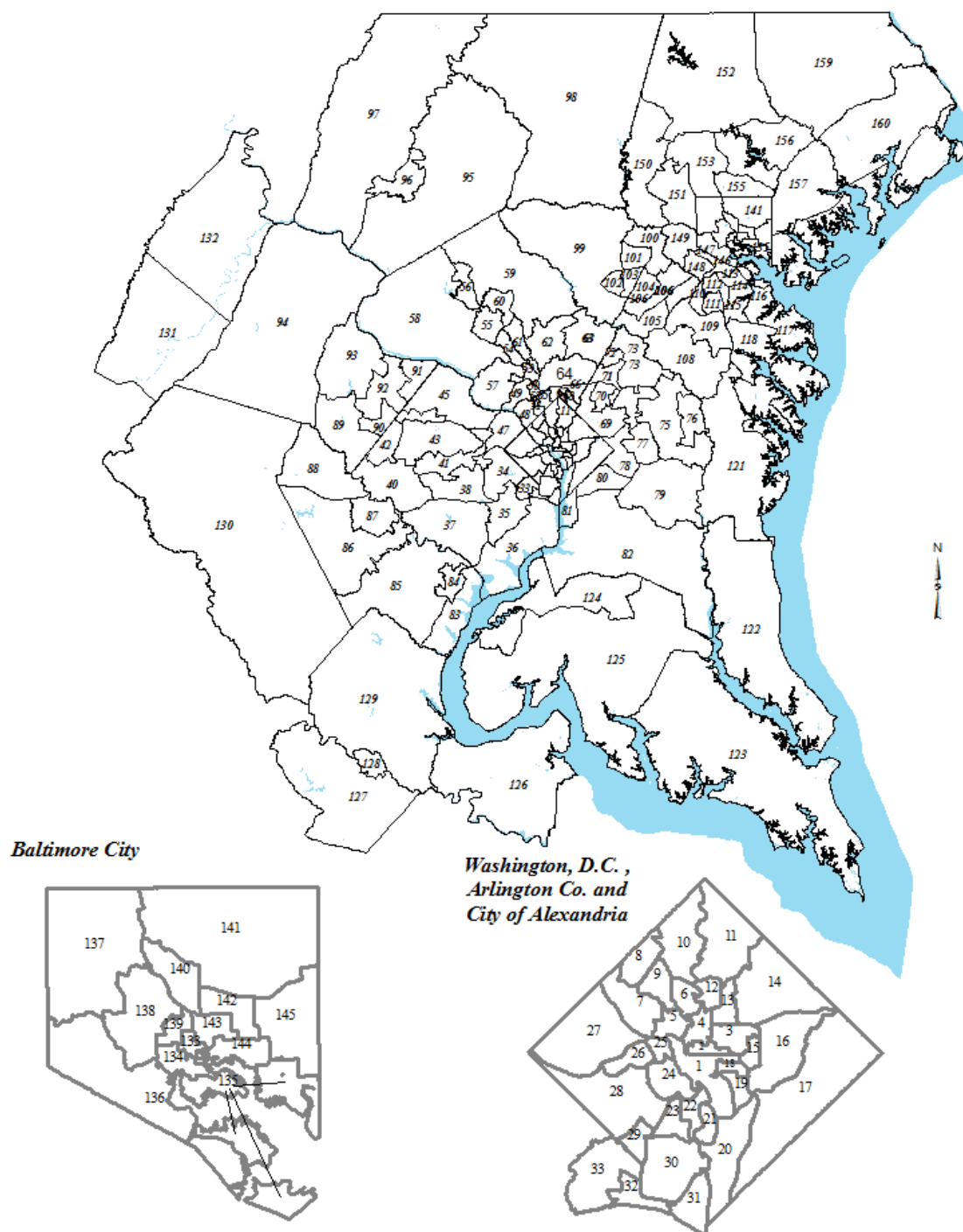
**Note:-**

**BWI = Baltimore Washington International Thurgood Marshall Airport**

**DCA = Ronald Reagan Washington National Airport**

**LAD = Washington Dulles International Airport**

**Figure 2: Washington-Baltimore Air System Planning Region Aviation Analysis Zone System**



### **3. Demographic Background**

In 2010, the Washington-Baltimore region was home to approximately 8.3 million people. Table 1 shows that 6.6 million people, or about 79 percent of the region's population (6.6. million people), resides in the MWCOG planning area. Of the 25 jurisdictions which comprise the Washington-Baltimore Air System Planning region, Fairfax County is the largest with one million people, followed by Montgomery County, Prince George's County, and Baltimore County respectively. The population within the air system region is projected to grow at an average of 1.3 percent per year through 2040. By 2040, the region will have 10.5 million residents, an increase of 25 percent over 2010.

The distribution of households reflects the pattern of population distribution. As shown in Table 2, there were over 3 million households in the Washington-Baltimore Air System Planning region in 2010. The table also shows that approximately 78 percent of the households reside in the MWCOG planning area. In terms of individual jurisdictions, Fairfax County ranked first with 400,000 households in 2010, followed by Montgomery County (361,000) and Baltimore County (325,000). Regional households are estimated to increase by almost 30 percent between 2010 and 2040, with an average of 1.5 percent per year.

Table 3 shows the employment distribution for the Washington-Baltimore region. In 2010, there are almost 5 million jobs in the region. Of the total employment, over 78 percent of them are located within the MWCOG planning area. The District of Columbia, Montgomery County and Fairfax County, combined accounted for over half of the total employment within the MWCOG region. Within the BMC planning area, Baltimore City and Baltimore County have almost an equal share of employment. The combined Washington-Baltimore Air System Planning regional employment is expected to increase by 33 percent between 2010 and 2040, with an average of 1.6 percent per year.

**Table 1: Population by Jurisdiction**

Jurisdiction	Population						
	2010	2015	2020	2025	2030	2035	2040
District of Columbia	601,723	653,874	676,326	701,569	722,763	741,181	771,165
Montgomery County	971,615	1,015,406	1,065,425	1,109,740	1,153,998	1,185,510	1,203,644
Prince George's County	863,420	881,379	899,712	926,744	950,030	972,926	995,303
Arlington County	207,627	222,670	233,355	241,906	246,476	248,699	252,435
City of Alexandria	139,958	146,913	156,981	165,607	172,232	181,801	189,349
Fairfax County	1,091,483	1,131,140	1,186,139	1,235,867	1,274,273	1,306,564	1,325,173
Loudoun County	312,311	352,695	395,923	435,869	457,258	470,881	480,525
Prince William County	454,096	505,774	551,512	588,874	621,563	649,451	672,899
Frederick County	233,385	240,406	254,589	275,071	294,944	311,705	327,011
Howard County	283,572	298,822	312,230	321,198	328,173	332,824	332,824
Anne Arundel County	532,788	546,520	556,577	565,594	574,270	581,608	581,608
Charles County	144,594	160,098	175,953	191,475	202,552	213,651	224,871
Carroll County	175,519	183,603	192,300	199,977	207,309	213,516	220,043
Calvert County	91,748	96,500	100,450	103,253	105,099	106,980	108,882
St. Mary's County	104,854	118,184	130,098	141,135	151,403	162,572	173,832
King George County	23,558	26,894	30,229	34,026	37,820	41,259	44,909
City of Fredericksburg	24,286	25,722	27,159	28,864	30,568	32,088	33,612
Stafford County	128,948	149,366	169,784	191,231	212,677	232,259	251,847
Spotsylvania County	98,527	114,017	127,806	142,555	156,583	169,645	182,645
Fauquier County	74,762	86,175	99,438	114,681	132,294	152,587	175,906
Clarke County	15,421	16,175	16,915	17,870	18,806	19,792	20,831
Jefferson County	51,189	56,669	62,144	68,854	75,565	83,109	91,394
Baltimore City	659,496	674,928	683,633	690,523	694,576	694,778	696,810
Baltimore County	816,550	834,619	846,973	856,934	862,208	865,374	868,554
Harford County	248,614	258,818	268,517	277,926	287,677	294,218	302,443
<b>Total</b>	<b>8,350,044</b>	<b>8,797,367</b>	<b>9,220,168</b>	<b>9,627,343</b>	<b>9,971,117</b>	<b>10,264,978</b>	<b>10,528,515</b>

Source:- MWCOC Round 8.1 and BMC Round 7.2 Cooperative Land Use Forecast

**Table 2: Households by Jurisdiction**

Jurisdiction	Households						
	2010	2015	2020	2025	2030	2035	2040
District of Columbia	266,707	287,617	298,115	309,979	318,252	326,410	339,889
Montgomery County	361,030	376,536	397,237	415,795	436,202	451,446	461,469
Prince George's County	304,042	323,364	336,404	348,604	359,878	370,144	379,317
Arlington County	98,050	105,611	111,190	114,797	116,788	117,795	119,761
City of Alexandria	68,131	71,520	76,426	80,624	83,831	88,491	92,155
Fairfax County	399,514	417,325	440,826	462,164	478,759	492,706	500,832
Loudoun County	104,583	117,839	132,843	146,497	154,159	159,291	162,971
Prince William County	147,819	166,083	183,321	197,890	210,450	221,111	229,944
Frederick County	84,800	87,487	92,740	100,327	107,686	113,895	119,564
Howard County	107,502	117,700	125,600	132,182	135,486	137,773	137,773
Anne Arundel County	202,314	210,888	217,782	223,822	229,371	234,332	234,332
Charles County	50,950	57,528	64,299	70,833	75,847	80,876	85,901
Carroll County	61,592	65,691	69,614	73,417	76,111	78,720	81,464
Calvert County	32,046	34,298	36,027	37,374	38,348	39,322	40,301
St. Mary's County	38,870	44,443	49,352	53,960	58,143	62,326	66,509
King George County	8,370	9,800	11,228	12,792	14,358	15,742	17,125
City of Fredericksburg	9,505	10,236	10,966	11,750	12,533	13,133	13,733
Stafford County	41,769	49,584	57,388	65,384	73,383	80,531	87,679
Spotsylvania County	33,670	39,758	45,171	50,837	56,230	60,787	65,317
Fauquier County	26,871	30,982	35,730	41,197	47,502	54,773	63,154
Clarke County	6,069	6,423	6,722	7,108	7,487	7,886	8,308
Jefferson County	20,427	23,192	25,957	29,518	33,075	37,062	41,527
Baltimore City	266,180	276,668	282,165	286,301	288,728	289,727	290,815
Baltimore County	325,160	334,879	342,550	346,884	349,054	350,805	352,565
Harford County	93,186	98,412	103,623	108,877	114,084	117,895	122,083
<b>Total</b>	<b>3,159,157</b>	<b>3,363,864</b>	<b>3,553,276</b>	<b>3,728,913</b>	<b>3,875,745</b>	<b>4,002,979</b>	<b>4,114,488</b>

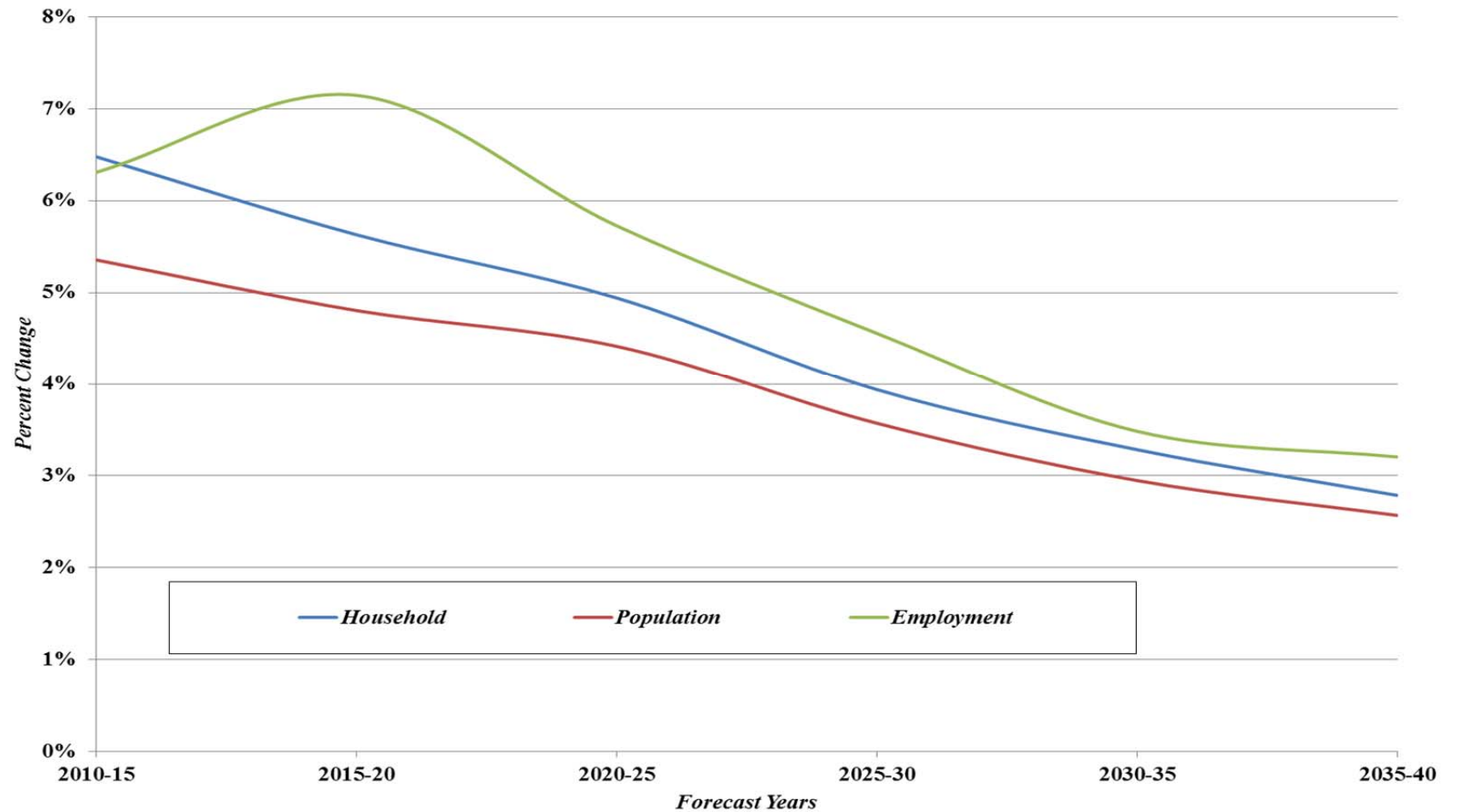
Source:- MWCOG Round 8.1 and BMC Round 7.2 Cooperative Land Use Forecast

**Table 3: Employment by Jurisdiction**

Jurisdiction	Employment						
	2010	2015	2020	2025	2030	2035	2040
District of Columbia	783,460	812,947	865,726	902,631	929,641	955,757	982,647
Montgomery County	510,136	541,995	585,363	633,226	684,284	714,438	737,364
Prince George's County	342,588	356,958	377,879	403,134	427,514	457,275	497,652
Arlington County	223,264	247,135	275,862	291,622	302,588	305,514	308,376
City of Alexandria	106,046	116,274	122,551	134,910	142,738	149,755	155,012
Fairfax County	680,040	722,244	785,619	835,997	875,216	905,688	935,411
Loudoun County	143,738	167,565	206,465	236,344	257,212	271,487	285,449
Prince William County	143,579	163,423	186,215	207,340	230,047	253,511	278,151
Frederick County	98,695	99,386	103,862	107,266	109,755	112,302	114,907
Howard County	195,402	214,527	230,914	248,369	261,926	267,837	274,635
Anne Arundel County	339,012	363,161	385,641	404,390	419,975	434,701	434,701
Charles County	62,199	68,405	71,695	74,695	77,499	80,298	83,097
Carroll County	84,255	86,767	88,267	89,280	90,301	91,318	92,338
Calvert County	35,200	41,097	44,501	46,305	47,206	48,102	49,003
St. Mary's County	62,994	68,202	71,601	74,599	76,596	78,637	80,731
King George County	16,241	17,805	19,370	20,938	22,501	24,123	25,740
City of Fredericksburg	31,491	35,575	39,659	43,717	47,777	51,298	54,818
Stafford County	46,929	52,220	57,505	63,833	70,172	77,152	84,144
Spotsylvania County	42,959	46,322	49,549	52,781	55,896	60,425	64,873
Fauquier County	22,313	24,907	29,202	32,155	35,409	38,990	42,932
Clarke County	5,055	5,387	5,718	6,032	6,363	6,713	7,082
Jefferson County	16,786	18,803	20,818	22,639	24,452	26,410	28,524
Baltimore City	451,052	461,744	471,299	479,870	485,002	485,012	485,023
Baltimore County	510,894	529,642	544,607	552,536	558,327	563,121	567,960
Harford County	129,702	142,294	151,226	158,221	163,502	165,002	166,530
<b>Total</b>	<b>5,084,030</b>	<b>5,404,785</b>	<b>5,791,114</b>	<b>6,122,830</b>	<b>6,401,899</b>	<b>6,624,866</b>	<b>6,837,100</b>

Source:- MWCOG Round 8.1 and BMC Round 7.2 Cooperative Land Use Forecast

**Figure 3: Percent Change in Forecast Population, Households, and Employment**



## **4. Development of Air Passenger Origin/ Destination Forecasts**

The process of developing the air passenger origin/destination forecasts involved many steps, including:

1. Obtaining FAA enplanement statistics and forecasts for the three regional airports through 2040 and convert FAA's U.S. Government fiscal year basis enplanement forecast to a calendar year enplanement forecast
2. Reviewing the 2011 Air Passenger Survey data files
3. Reviewing land use data files
4. Developing trip rates
5. Distributing the air passenger forecasts of local originating trips from each AAZ to each of the three regional airports

Each of the five steps is described in detail below.

### **4.1 Air Passenger Enplanements Forecasts**

The FAA Office of Aviation Policy and Plans (APO) produces the Terminal Area Forecast (TAF). The TAF is the official forecast of aviation activity at FAA facilities. The TAF is produced each year covering airports in the National Plan of Integrated Airport Systems (NPIAS). The forecast is made at the individual airport level and assumes an unconstrained demand for aviation services. TAF data cover 264 FAA towered airports, 244 Federal contract tower airports, 32 Terminal Radar Approach Control (TRACON) facilities, and 2,828 non-FAA airports. Data in the TAF are presented on a U.S. government fiscal year basis (October 1 through September 30), and generally cover 10 years of history and 15 or more years of forecast.

Aviation activity forecasts for FAA-towered (which includes BWI, DCA, and IAD) and Federal contract towered airports are developed using historical relationships between airport passenger demand and/or activity measures and local and national factors that influence aviation activity. Forecasts at individual airports reflect to varying degrees national aviation trends as well as dynamics at individual airports.

National TAF forecast data are divided into nine regions; the Washington-Baltimore regional airports fall within the Eastern Region. This region accounted for 15 percent of total enplanements



in 2010 and is forecasted to remain the same in 2040. The region includes 7 of the 29 large hub tower airports (an airport with one percent or more of total U.S. passenger enplanements) in the nation. Enplanements in this region are forecast to increase by 93 percent between 2010 and 2040, doubling at BWI Marshall and Dulles and by 42 percent at Reagan National. Washington Dulles International is projected to be one of the five airports with the fastest projected increase in enplanements growth over the next 30 years and also is projected to make the largest upward movement in ranking of enplanements, going from 21<sup>st</sup> to 14<sup>th</sup> during the same time period. Dulles International will also be gaining in ranking from 19<sup>th</sup> in 2010 with airport operations to 10<sup>th</sup> by 2040.

FAA's baseline scenario enplanement forecasts were obtained for forecast years 2010 through 2040. These forecasts are based on the U.S. Government fiscal year, which runs from October 1 through September 30. Converting FAA's 2013 – 2040 fiscal year forecast into calendar year (January 1 through December 31) forecasts were done by applying an annual percent increase to the 2010-2012 base years, January through December observed enplanement and for forecast years 2013 through 2040 to be the same as FAA's annual percent increase by airport. The average growth rate between 2013 and 2040 was 2.4 percent for BWI, 2.5 percent for IAD and for DCA 1.2 percent per year.

Tables 4, 5, 6, and Figure 4 present observed and forecasts of air passenger enplanements for the three airports in the Washington/Baltimore region. Observed air passenger enplanements for 2010 were obtained from observed monthly statistical data from MWAA for Ronald Reagan Washington National and Dulles International Airports, and from MAA for Baltimore/Washington International Thurgood Marshall Airport. Based on the findings from the 2011 Air Passenger Survey, local originating (originations within the Washington/Baltimore Air System Planning region ) passengers are 78 percent at BWI Marshall, 88 percent at Reagan National and 65 percent at Dulles International of the total passenger volume and are assumed to remain at a constant throughout the forecast period.

Air passenger enplanements for the BWI Marshall airport, are presented in Table 4. Domestic destined enplanements at BWI are forecast to reach 21.6 million by 2040, an average annual increase of 2.4 percent, and international destined enplanements, with an average annual increase of 3.9 percent to 600 thousand by 2040.

**Table 4: BWI Marshall Airport Enplanements Forecast**

Year	Air Carrier	Domestic		US Flag	International		Total Enplanement
		Commuter	Total		Foreign Flag	Total	
2010 <sup>1</sup>	10,316,365	484,943	10,801,308	88,189	107,216	195,405	10,996,713
2015 <sup>2</sup>	10,151,574	474,468	10,626,042	194,501	129,954	324,455	10,950,496
2020 <sup>2</sup>	11,779,815	520,261	12,300,076	219,202	146,458	365,660	12,665,736
2025 <sup>2</sup>	13,589,870	566,014	14,155,884	248,008	165,704	413,712	14,569,596
2030 <sup>2</sup>	15,678,055	615,790	16,293,845	280,597	187,478	468,075	16,761,920
2035 <sup>2</sup>	18,087,105	669,942	18,757,048	317,470	212,114	529,584	19,286,631
2040 <sup>2</sup>	20,866,325	728,856	21,595,181	359,189	239,986	599,176	22,194,357

<sup>1</sup> Observed Years<sup>2</sup> Forecast Years

Note:- Forecast based on FAA TAF Fiscal Year annual percent increase

Enplanements at Dulles International Airport are projected to reach more than 24 million by 2040, double when compared with 2010 volume. Table 5 shows observed, and FAA enplanements forecast for Dulles International Airport. Domestic destined enplanements are forecast to reach 15.8 million by 2040, an average annual increase of 2.5 percent, and international destined enplanements, with an average annual increase of 3.7 percent to 8.8 million by 2040.

**Table 5: Washington Dulles International Airport Enplanements Forecast**

Year	Air Carrier	Domestic		US Flag	International		Total Enplanement
		Commuter	Total		Foreign Flag	Total	
2010 <sup>1</sup>	5,541,616	3,302,576	8,844,192	1,452,182	1,516,531	2,968,713	11,812,905
2015 <sup>2</sup>	4,931,849	3,252,777	8,184,626	1,738,535	1,685,250	3,423,785	11,608,411
2020 <sup>2</sup>	5,749,958	3,818,103	9,568,060	2,117,188	2,052,297	4,169,485	13,737,545
2025 <sup>2</sup>	6,505,549	4,340,946	10,846,495	2,551,211	2,473,017	5,024,227	15,870,722
2030 <sup>2</sup>	7,360,432	4,935,385	12,295,818	3,074,207	2,979,983	6,054,190	18,350,007
2035 <sup>2</sup>	8,327,654	5,611,228	13,938,882	3,704,417	3,590,877	7,295,295	21,234,177
2040 <sup>2</sup>	9,421,976	6,379,619	15,801,595	4,463,820	4,327,006	8,790,826	24,592,421

<sup>1</sup> Observed Years<sup>2</sup> Forecast Years

Note:- Forecast based on FAA TAF Fiscal Year annual percent increase

At Ronald Reagan Washington National airport, enplanements are projected to reach 12.8 million by 2040, an increase of 42 percent over 2010. Domestic enplanements at DCA are forecast to reach 12.7 million by 2040, from 8.8 million in 2010, an increase of 43 percent. International service at DCA, unless the perimeter rule, changes, is limited to Eastern Canada, Bermuda, the Bahamas, and part of the Turks and Caicos Island. Hence there is little or no opportunity to increase international air passenger traffic. Total international enplanements at DCA are forecasted to decline by 27 percent from 158,000 in 2010 to 115,000 in 2040.

**Table 6: Ronald Reagan National Airport Enplanements Forecast**

Year	Air Carrier	Domestic Commuter	Total	US Flag	International Foreign Flag	Total	Total Enplanement
2010 <sup>1</sup>	6,043,389	2,834,369	8,877,758	46,615	111,171	157,786	9,035,544
2015 <sup>2</sup>	6,719,432	3,203,936	9,923,368	19,914	69,889	89,803	10,013,171
2020 <sup>2</sup>	7,062,190	3,367,369	10,429,558	20,927	73,454	94,381	10,523,940
2025 <sup>2</sup>	7,422,433	3,539,137	10,961,570	21,996	77,201	99,197	11,060,767
2030 <sup>2</sup>	7,801,052	3,719,670	11,520,722	23,118	81,140	104,257	11,624,979
2035 <sup>2</sup>	8,198,984	3,909,411	12,108,395	24,297	85,280	109,577	12,217,972
2040 <sup>2</sup>	8,617,214	4,108,830	12,726,044	25,537	89,630	115,167	12,841,211

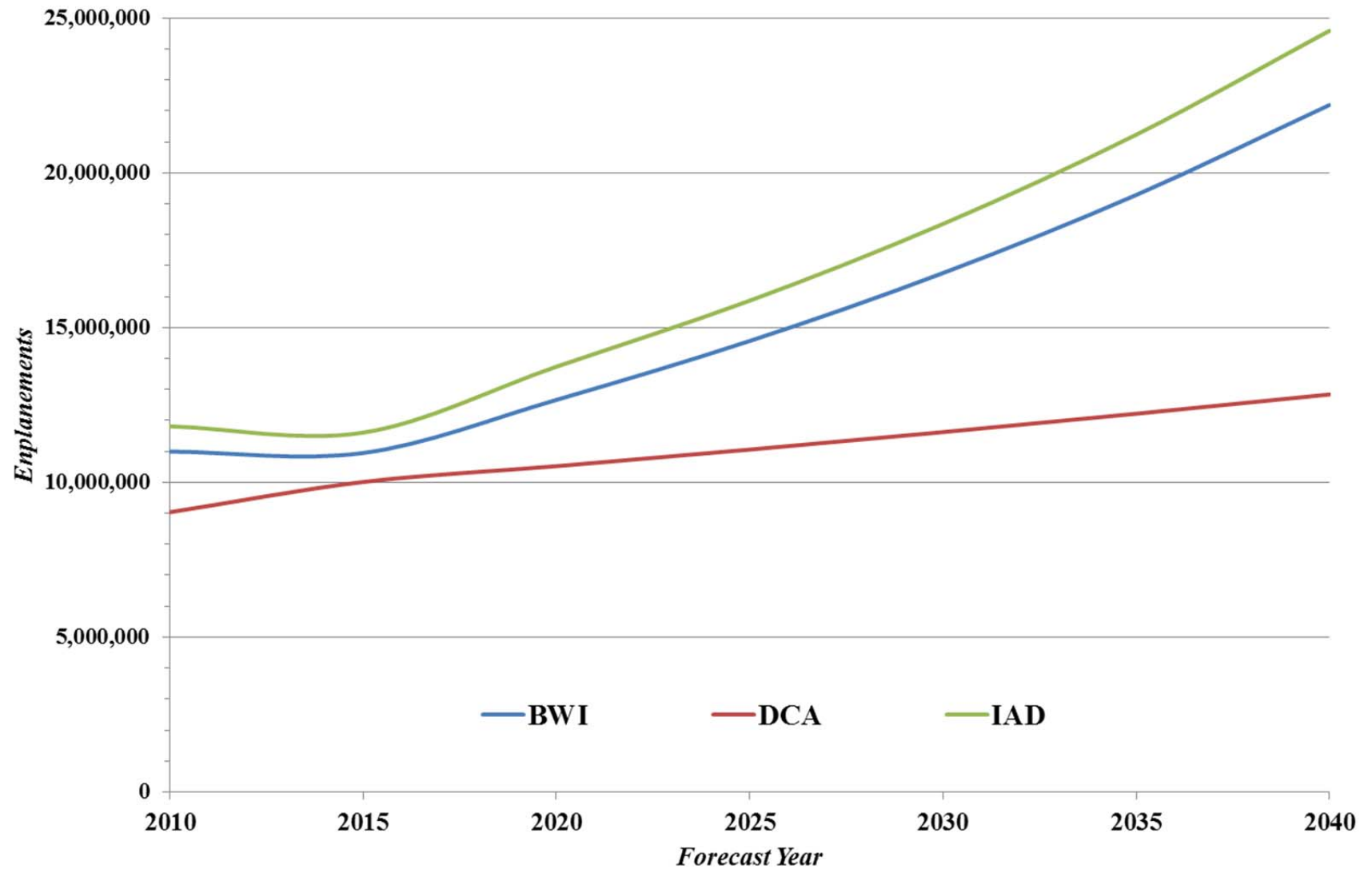
<sup>1</sup> Observed Years

<sup>2</sup> Forecast Years

Note:- Forecast based on FAA TAF Fiscal Year annual percent increase

Overall the three airports in the region are forecasted to have 59.6 million enplanements by 2040 an increase of 87 percent from 2010. Domestic destined enplanements will experience a 75 percent increase between 2010 and 2040 to reach to 50 million. However, international destined enplanements are projected to more than double between 2010 and 2040 to reach 9.5 million. Figure 4 present historical and forecasts of air passenger enplanements for the three airports in the Washington/Baltimore region.

**Figure 4: Observed and Forecast of Enplanements by Airport**



## **4.2 Review of 2011 Air Passenger Survey Data**

The 2011 Air Passenger Survey data file was reviewed to produce AAZ output calibration data files. The development of the calibration file was based on those trips that were made to the three airports by ground transportation; therefore, the analysis does not include passengers who made connecting trips. The 2011 survey data file initially had 22,519 records, and with the exclusion of the connecting passengers the number of records used for the calibration process was 17,440 records.

The Washington-Baltimore region is divided into 168 AAZs, including the outlying areas of Delaware, Maryland, New Jersey, Pennsylvania, Virginia, West Virginia, and the rest of the United States. The zone number system is listed in Table 7 and was shown earlier in Figure 2.

The 2011 air passenger survey data file was geocoded to include trip origin TAZs and AAZs. As a part of this study, the MWCOG and BMC TAZ systems were merged to create one combined Air System Planning regional TAZ system. Therefore, TAZs in the BMC jurisdictions of Baltimore City, Baltimore County, and Harford County were added to the MWCOG model TAZ system. The combined MWCOG and BMC regional TAZ system has 4,374 zones.

## **4.3 Market Segmentation**

The first step in the update of airport origin/destination trips was calculating local originating trips from the 2011 Washington-Baltimore Regional Air Passenger Survey. This was accomplished in three steps:

1. Adjust the annual passenger survey weights to exactly match the year 2011 observed enplanements at the three commercial airports
2. Select only the survey records for local originating air passengers
3. Summarize local originating trips to home and non-home based originations for areas within the Washington-Baltimore Air System Planning region<sup>1</sup>

Table 8 and Table 9 show annual enplanement type and Table 10 shows home and non-home trip originations to the three commercial airports, respectively.

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<sup>1</sup> Local and internal trip origination percentages are held constant for the forecast years. This assumption may overstate future local and internal originations, as the future regional air service network will likely include more connections from other hub airports.

Table 7: Aviation Analysis Zone System

No.	Jurisdiction	No. of AAZs	AAZs Range	No. of TAZs
1	District of Columbia	20	1 - 20	393
2	Arlington County	9	21 - 29	141
3	City of Alexandria	4	30 - 33	65
4	Fairfax County	15	34 - 47	549
5	Montgomery County	20	48 - 68	375
6	Prince George's County	14	69 - 82	636
7	Prince William County	6	83 - 88	378
8	Loudoun County	6	89 - 94	282
9	Frederick County	3	95 - 97	130
10	Carroll County	1	98	58
11	Howard County	9	99 - 107	68
12	Anne Arundel County	14	108 - 121	99
13	Calvert County	1	122	47
14	St. Mary's County	1	123	75
15	Charles County	2	124 - 125	113
16	King George County	1	126	25
17	Spotsylvania County	1	127	62
18	City of Fredericksburg	1	128	14
19	Stafford County	1	129	93
20	Fauquier County	1	130	50
21	Clarke County	1	131	9
22	Jefferson County	1	132	13
23	Baltimore City	13	133 - 145	217
24	Baltimore County	13	146 - 158	342
25	Harford County	3	159 - 161	140
<b>Total Washington/Baltimore Air System Planning Area</b>		<b>161</b>		<b>4,374</b>
26	External Maryland	1	162	NA
27	External Virginia	1	163	NA
28	External West Virginia	1	164	NA
29	Pennsylvania	1	165	NA
30	Delaware	1	166	NA
31	New Jersey	1	167	NA
32	Other	1	999	NA
<b>Total Externals</b>		<b>7</b>		
<b>Grand Total</b>		<b>168</b>		

**Table 8: 2011 Annual Enplanement Type by Airport**

Enplanement Type		Airport			Total
		BWI	DCA	IAD	
Local origination	Number	8,758,172	8,215,338	7,492,613	24,466,123
- (Came by ground transportation)	Percent	78%	88%	65%	76%
Connected from another Flight	Number	2,465,995	1,147,441	4,077,535	7,690,971
- (Local and/or International)	Percent	22%	12%	35%	24%
<b>Total Annual Enplanements</b>	Number	<b>11,224,167</b>	<b>9,362,779</b>	<b>11,570,148</b>	<b>32,157,094</b>
	Percent	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source:- 2011 Washington-Baltimore Regional Air Passenger Survey

Note:- Originating Trips are factored to 2011 observed enplanements

**Table 9: Internal and External Annual Trip Originations by Airport (in thousands)**

Enplanement Type		Airport			Total
		BWI	DCA	IAD	
Within Air System Planning Region	Number	7,704,500	8,094,074	7,109,399	22,907,973
- (Internals)	Percent	88%	99%	95%	94%
Outside Air System Planning Region	Number	1,053,672	121,264	383,214	1,558,150
- (Externals)	Percent	12%	1%	5%	6%
<b>Total Annual Enplanements</b>	Number	<b>8,758,172</b>	<b>8,215,338</b>	<b>7,492,613</b>	<b>24,466,123</b>
	Percent	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

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

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

Source:- 2011 Washington-Baltimore Regional Air Passenger Survey

Note:- Originating Trips are factored to 2011 observed enplanements

- Numbers may not add to total due to rounding

**Table 10: Home and Non-Home Annual Local Trip Originations by Airport (in thousands)**

Enplanement Type		Airport			Total
		BWI	DCA	IAD	
Home	Number	5,743,659	4,127,948	4,569,213	14,440,820
	Percent	66%	50%	61%	59%
Non-Home	Number	3,014,513	4,087,390	2,923,400	10,025,303
	Percent	34%	50%	39%	41%
<b>Total Annual Enplanements</b>	Number	<b>8,758,172</b>	<b>8,215,338</b>	<b>7,492,613</b>	<b>24,466,123</b>
	Percent	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Source:- 2011 Washington-Baltimore Regional Air Passenger Survey

Note:- Originating Trips are factored to 2011 observed enplanements

- Numbers may not add to total due to rounding

The next step in the process was to calculate trips originating at each of the three airports out of the total enplanements, and then calculate trips originating within the Washington-Baltimore Air System Planning region. These data were obtained using percent local originations (in Table 9) from total enplanements by airport (in Table 4, Table 5 and Table 6). Air passenger enplanement type within the Washington-Baltimore Air System Planning region is shown in Table 8 and Table 9 illustrates local originating air passenger trips. Total enplanements for local originating trips and internal enplanements within the Washington-Baltimore Air System Planning region for base and forecast years are shown below in Table 11.



**Table 11: Regional Airports Annual and Local and Internal Trip Originations**

Year	Local Originations				Internal Originations			
	BWI	DCA	IAD	Total	BWI	DCA	IAD	Total
2010	8,580,691	7,928,207	7,649,818	<b>24,158,715</b>	7,548,371	7,811,181	7,258,564	<b>22,618,116</b>
2011	8,758,172	8,215,338	7,492,613	<b>24,466,123</b>	7,704,500	8,094,074	7,109,399	<b>22,907,973</b>
2015	8,544,628	8,786,022	7,517,391	<b>24,848,041</b>	7,516,647	8,656,334	7,132,910	<b>23,305,891</b>
2020	9,883,023	9,234,194	8,896,179	<b>28,013,396</b>	8,694,023	9,097,891	8,441,179	<b>26,233,093</b>
2025	11,368,597	9,705,231	10,277,585	<b>31,351,413</b>	10,000,872	9,561,976	9,751,932	<b>29,314,779</b>
2030	13,079,258	10,200,298	11,883,124	<b>35,162,680</b>	11,505,728	10,049,734	11,275,355	<b>32,830,817</b>
2035	15,049,280	10,720,617	13,750,859	<b>39,520,756</b>	13,238,742	10,562,373	13,047,563	<b>36,848,679</b>
2040	17,318,167	11,267,476	15,925,595	<b>44,511,238</b>	15,234,665	11,101,161	15,111,071	<b>41,446,897</b>

Note:-

- Local originating trips are departing passengers whose trip starts from one of the region's three airports and does not include connecting passengers
- Internal originating trips are local originating trips within the Washington - Baltimore Air System Planning Area
- Local originating trips are calculated based on the 2011 Air Passenger Survey data to be 78% for BWI, 88% for DCA and 65% for IAD, of the total departing passengers.
- Internal originating trips are calculated based on the 2011 Air Passenger Survey to be 88% for BWI, 99% for DCA, and 95% for IAD, of the total local originating trips, that are within the 161 internal AAZ's.

#### 4.4 Estimation of Rates

Base year household and employment land activity data for 2010 and household and employment five-year forecasts for 2010 through 2040 by TAZ were obtained from MWCOG and BMC. The MWCOG data were the Round 8.1 Cooperative Forecast and BMC data were the Round 7.2 land activity forecast. These TAZ-level data were aggregated to the internal AAZs previously shown in Figure 2. Home and non-home local originating trips were also aggregated to internal AAZs within the Washington-Baltimore Air System Planning region by airport.

Once originating trips and land activity data had been summarized, trip generation rates were calculated for each airport/AAZ/trip origin using the following formulae:

##### Equation 1: Home Based Trip Origin Rate for Airport<sub>(A)</sub> from AAZ<sub>(X)</sub>

$$\text{for Airport}_{(A)} \text{ AAZ}_{(X)} = \frac{\text{AAZ}_X \text{ Origin Home Trips}_{(2011)}}{\text{AAZ}_X \text{ Number of Household}_{(2010)}}$$

##### Equation 2: Non-Home Based Trip Origin Rate for Airport<sub>(A)</sub> from AAZ<sub>(X)</sub>

$$\text{for Airport}_{(A)} \text{ AAZ}_{(X)} = \frac{\text{AAZ}_X \text{ Origin Non-Home Trips}_{(2011)}}{\text{AAZ}_X \text{ Number of Employments}_{(2010)}}$$

Table 12 and 13 below shows, household and employment forecast summary and Table 14 below shows the resulting average trip rate for household and employment for each of the airports.

**Table 12: Household Forecast Summary**

Year	Household	Change	Percent Growth	
<b>2010</b>	3,159,157	-		
<b>2015</b>	3,363,864	204,707	2010 - 2015	6.5%
<b>2020</b>	3,553,276	189,412	2015 - 2020	5.6%
<b>2025</b>	3,728,913	175,637	2020 - 2025	4.9%
<b>2030</b>	3,875,745	146,832	2025 - 2030	3.9%
<b>2035</b>	4,002,979	127,234	2030 - 2035	3.3%
<b>2040</b>	4,114,488	111,509	2035 - 2040	2.8%

Source:- MWCOG Round 8.1 and BMC Round 7.2 Cooperative Land Use Forecast

**Table 13: Employment Forecast Summary**

Year	Employment	Change	Percent Growth	
<b>2010</b>	5,084,030	-		
<b>2015</b>	5,404,785	320,755	2010 - 2015	6.3%
<b>2020</b>	5,791,114	386,329	2015 - 2020	7.1%
<b>2025</b>	6,122,830	331,716	2020 - 2025	5.7%
<b>2030</b>	6,401,899	279,069	2025 - 2030	4.6%
<b>2035</b>	6,624,866	222,967	2030 - 2035	3.5%
<b>2040</b>	6,837,100	212,234	2035 - 2040	3.2%

Source:- MWCOG Round 8.1 and BMC Round 7.2 Cooperative Land Use Forecast

**Table 14: Average Household and Employment Trip Rates by Airport**

Airport	Trip Rates	
	Household	Employment
BWI	1.76	0.42
DCA	1.47	0.68
IAD	1.62	0.40

## 4.5 Base and Forecast Year Enplanements Forecast

Once the trip rates were developed, the next step was to use these rates to distribute total forecasted enplanements by AAZ, for the 2010 base year and forecast years 2015, 2020, 2025, 2030, 2035 and 2040. This distribution was obtained by multiplying base year and forecast year household and employment data by the appropriate trip rate factors for each AAZ and adjusting the resultant product to be consistent with local air passenger originations estimated for each airport. For each airport-AAZ combination, home based air passenger originating trips were calculated by multiplying AAZ households by the AAZ home-based trip rate for each airport, and non-home based air passenger originating trips were calculated by multiplying AAZ employment by the AAZ non-home based trip rate for each airport. These computations were performed for both base year and each forecast year.

Home and non-home originating trips were calculated for each airport/AAZ trip origin using the following formulae:

### Equation 3: Home Based Trips

$$\text{for Airport}_{(A)} \text{AAZ}_{(X)} = \frac{\text{AAZ}_X \text{ Origin Home Trips}_{(2011)}}{\text{AAZ}_X \text{ Number of Household}_{(2010)}}$$

### Equation 4: Non-Home Based Trips

$$\text{for Airport}_{(A)} \text{AAZ}_{(X)} = \frac{\text{AAZ}_X \text{ Origin Non-Home Trips}_{(2011)}}{\text{AAZ}_X \text{ Number of Employments}_{(2010)}}$$

Table 1 shows total originating air passenger trips by AAZ for the base year of 2011. For the forecast years of 2015, 2020, 2025, 2030, 2035, and 2040, originating air passenger trips are presented in Appendix A.

**Table 15: Air Passenger Originating Trips by AAZ, Year 2011**

<b>AAZ</b>	<b>BWI</b>	<b>DCA</b>	<b>IAD</b>	<b>Total</b>	<b>AAZ</b>	<b>BWI</b>	<b>DCA</b>	<b>IAD</b>	<b>Total</b>
1	3,361	12,022	1,540	16,923	42	9,776	3,854	50,342	63,972
2	20,364	93,294	35,391	149,049	43	26,376	63,806	484,205	574,387
3	171,540	1,000,726	373,214	1,545,480	44	12,375	19,889	380,374	412,638
4	130,358	631,172	317,573	1,079,103	45	16,941	43,373	189,028	249,342
5	18,554	122,854	66,668	208,076	46	20,782	68,207	142,151	231,140
6	26,090	174,736	69,815	270,641	47	26,282	93,685	106,593	226,560
7	0	30,233	62,136	92,369	48	18,261	22,335	25,923	66,519
8	9,432	22,201	26,117	57,750	49	27,800	56,389	46,777	130,966
9	17,200	63,498	49,237	129,935	50	50,318	78,065	43,021	171,404
10	27,675	59,296	45,222	132,193	51	7,572	20,725	16,693	44,990
11	14,944	49,858	13,459	78,261	52	35,213	70,556	34,273	140,042
12	25,522	56,099	37,584	119,205	53	24,572	40,542	52,834	117,948
13	10,796	88,826	28,564	128,186	54	37,187	96,471	50,001	183,659
14	30,486	64,477	21,241	116,204	55	43,913	53,193	56,350	153,456
15	42,456	94,009	11,745	148,210	56	31,731	24,820	39,693	96,244
16	67,175	148,790	41,171	257,136	57	46,121	60,626	76,056	182,803
17	24,695	23,418	6,505	54,618	58	54,516	54,173	88,964	197,653
18	25,043	114,886	59,920	199,849	59	90,007	27,553	18,700	136,260
19	9,059	33,719	7,157	49,935	60	37,754	27,329	23,394	88,477
20	1,416	16,529	7,813	25,758	61	24,263	15,328	13,865	53,456
21	0	0	1,394	1,394	62	71,547	46,877	20,376	138,800
22	32,470	436,847	60,373	529,690	63	64,052	8,649	14,415	87,116
23	6,859	119,813	18,376	145,048	64	84,209	57,134	48,210	189,553
24	0	52,337	19,221	71,558	65	27,507	34,528	18,937	80,972
25	9,937	167,656	67,144	244,737	66	52,618	28,241	38,637	119,496
26	26,825	294,046	110,869	431,740	67	27,051	40,776	16,305	84,132
27	30,237	112,598	83,755	226,590	68	32,648	11,719	7,048	51,415
28	37,574	223,550	135,203	396,327	69	42,632	40,609	23,173	106,414
29	8,946	61,402	3,793	74,141	70	44,089	45,032	2,410	91,531
30	15,043	126,527	31,282	172,852	71	15,762	3,887	34,066	53,715
31	41,565	278,219	82,407	402,191	72	1,851	864	0	2,715
32	12,644	21,331	425	34,400	73	87,022	6,898	12,376	106,296
33	12,090	113,099	56,328	181,517	74	42,094	13,175	4,694	59,963
34	31,391	130,878	132,357	294,626	75	65,330	15,185	10,204	90,719
35	16,634	166,939	35,551	219,124	76	57,590	10,448	13,515	81,553
36	59,586	228,753	83,968	372,307	77	32,517	9,154	6,275	47,946
37	30,912	171,346	129,645	331,903	78	23,485	25,109	1,480	50,074
38	24,005	64,404	144,065	232,474	79	58,463	26,730	9,308	94,501
39	0	42,431	31,542	73,973	80	5,795	11,744	0	17,539
40	3,078	14,026	164,209	181,313	81	16,020	130,362	37,387	183,769
41	9,173	107,262	182,201	298,636	82	30,068	62,644	19,066	111,778

**Table 15: Air Passenger Originating Trips by AAZ, Year 2011 (continued)**

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
83	9,431	61,587	31,537	102,555	124	32,911	35,530	3,094	71,535
84	5,819	25,013	54,891	85,723	125	44,385	22,131	14,108	80,624
85	6,901	67,587	90,620	165,108	126	3,731	9,477	0	13,208
86	6,895	20,752	79,962	107,609	127	4,694	38,535	12,852	56,081
87	10,626	26,050	59,655	96,331	128	19,094	26,267	18,076	63,437
88	2,414	3,216	128,948	134,578	129	6,184	65,118	64,128	135,430
89	3,903	11,230	92,927	108,060	130	2,130	6,860	83,795	92,785
90	2,315	5,326	20,166	27,807	131	0	1,583	3,683	5,266
91	10,614	12,727	77,940	101,281	132	14,797	20,704	45,026	80,527
92	8,657	6,550	236,005	251,212	133	404,901	2,039	14,697	421,637
93	17,652	31,818	337,440	386,910	134	132,595	1,224	1,456	135,275
94	11,290	7,842	144,927	164,059	135	48,155	475	0	48,630
95	114,762	9,562	10,840	135,164	136	27,580	1,008	0	28,588
96	56,712	0	43,836	100,548	137	52,590	0	4,123	56,713
97	58,770	26,618	11,460	96,848	138	50,097	0	0	50,097
98	134,694	3,046	22,110	159,850	139	39,807	3,239	0	43,046
99	93,885	0	7,166	101,051	140	93,203	6,329	0	99,532
100	57,998	513	8,014	66,525	141	140,038	2,662	10,968	153,668
101	32,673	0	954	33,627	142	6,059	0	0	6,059
102	28,630	0	7,674	36,304	143	65,158	0	6,480	71,638
103	70,963	0	1,790	72,753	144	158,414	3,221	4,715	166,350
104	102,085	1,720	7,691	111,496	145	15,330	1,113	0	16,443
105	49,188	1,787	1,623	52,598	146	6,907	0	0	6,907
106	119,012	10,686	18,772	148,470	147	13,076	0	0	13,076
107	36,111	0	1,881	37,992	148	26,991	0	0	26,991
108	167,348	11,587	3,521	182,456	149	86,801	2,747	4,560	94,108
109	129,060	0	5,697	134,757	150	39,783	0	3,581	43,364
110	29,548	0	0	29,548	151	140,268	10,520	4,547	155,335
111	42,305	2,243	0	44,548	152	57,706	3,730	546	61,982
112	346,161	3,982	1,437	351,580	153	59,419	0	29,957	89,376
113	41,221	0	1,402	42,623	154	104,477	1,715	4,530	110,722
114	6,032	0	0	6,032	155	119,861	0	379	120,240
115	65,184	0	2,775	67,959	156	11,116	2,998	0	14,114
116	13,624	0	2,423	16,047	157	116,785	3,970	618	121,373
117	107,149	1,847	17,983	126,979	158	94,592	840	0	95,432
118	106,312	0	21,867	128,179	159	101,550	2,315	4,491	108,356
119	125,863	8,660	16,957	151,480	160	154,729	0	0	154,729
120	168,036	5,482	16,459	189,977	161	9,510	0	0	9,510
121	46,660	6,994	6,918	60,572					
122	54,374	3,623	15,317	73,314					
123	89,004	34,833	24,060	147,897					
<b>Total</b>					<b>7,704,550</b>	<b>8,094,022</b>	<b>7,109,354</b>	<b>22,907,926</b>	

Note:- Numbers may not add to total due to rounding

## **5 Conclusion**

This report documents the procedures used for forecasting enplanements at the three major airports in the Washington-Baltimore Air System Planning region. The purpose of the enplanements forecast are to provide control totals to be used as a base for distributing air passengers' origins/destinations for future years.

The air passenger origin/destination update develops a technique to distribute air passenger characteristics based on trip origin. Characteristics such as arrival mode to the airports, travel time to the airports by trip origin, airport choice, and others were not analyzed. However, these characteristics in combination with resident status and trip purpose can also be tested. The results documented in this report are based on the 2011 air passenger survey data, the Round 8.1 Cooperative forecast for the MWCOG region and the BMC 7.2 land use data.

Local air passenger originations within the study area increased from 22.6 million trips in 2010, increased by 83 percent to over 41.4 million by 2040 (see Table 11). It should be noted that trip rates for both households and employment were kept at a constant using the 2011 value. Total air passenger originating trips by AAZ for the forecast years 2015 through 2040 are documented in Appendix A in Tables A-1 through A-6.<sup>2</sup>

Although the increase in households and employment between 2010 and 2040 is evident in all the jurisdictions, a greater increase is observed in the outer suburban counties, such as Loudoun, Prince William, Spotsylvania, King George, Stafford, and Fauquier Counties in Virginia, Frederick County in Maryland and Jefferson County in West Virginia. These increases in household and employment result in the more than doubling of originating air passenger trips. Tables A-7 through A-9, show originating air passenger trips summary by jurisdiction to the three commercial airports.

The combined inner jurisdictions of the District of Columbia, Montgomery and Prince George's counties in Maryland, and Fairfax and Arlington counties and the City of Alexandria in Virginia accounted for almost 66 percent of the total originating trips in 2011, and almost 32 percent of them come from the District of Columbia. Though the outer suburban counties show a higher increase in originating air passenger trips

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<sup>2</sup> The forecasts reflect demand, not airport supply (runway and terminal capacity).

between 2011 and 2040, the inner jurisdictions will continue to represent the majority of the region's air passenger trips, 61 percent by 2040.

Analysis by trip origin (home or non-home) of air passengers indicates that almost 67 percent of the total air passengers are from home based originations and 62 percent of these are from the inner jurisdictions in 2011. A similar pattern is also true for non-home air passenger originations, in 2011, where the inner jurisdictions accounted for 74 percent of the total. By 2040, home based originations from the inner jurisdictions will only account a little over half of the total, while non-home based originations will almost remain the same.

This report outlined the techniques used to forecast and distribute air passenger originating trips using the 2011 Washington-Baltimore Regional Air Passenger survey data and land-use forecast. Household and employment trip rates were set constant at the 2011 level for this study.





# **Appendix A**



**Table A-1: Air Passenger Originating Trips by AAZ, Year 2015**

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
1	3,103	11,995	1,438	16,536	42	12,954	7,450	59,601	80,005
2	19,060	94,794	33,535	147,389	43	24,642	64,400	457,497	546,539
3	175,876	1,080,930	376,550	1,633,356	44	12,810	21,694	386,290	420,794
4	124,971	649,332	306,933	1,081,236	45	15,779	43,660	178,165	237,604
5	17,524	125,607	63,444	206,575	46	21,822	77,502	151,057	250,381
6	24,783	177,275	66,354	268,412	47	24,545	94,496	100,692	219,733
7	0	32,219	61,937	94,156	48	16,882	22,314	24,239	63,435
8	9,066	23,011	25,269	57,346	49	25,729	56,393	43,787	125,909
9	16,436	65,592	47,613	129,641	50	48,212	83,399	42,570	174,181
10	26,449	60,811	43,625	130,885	51	7,629	22,938	17,069	47,636
11	14,460	52,134	13,172	79,766	52	35,936	76,676	34,282	146,894
12	24,703	58,577	36,801	120,081	53	24,718	44,038	53,777	122,533
13	10,845	95,980	28,883	135,708	54	36,671	103,237	49,900	189,808
14	30,392	70,042	21,655	122,089	55	43,298	56,780	56,062	156,140
15	44,166	101,634	11,540	157,340	56	31,469	26,623	39,828	97,920
16	71,963	167,085	43,405	282,453	57	43,494	62,477	72,896	178,867
17	24,667	25,004	6,410	56,081	58	51,254	55,164	84,596	191,014
18	23,598	115,065	56,779	195,442	59	86,778	28,703	18,237	133,718
19	9,865	37,672	7,828	55,365	60	35,147	27,494	22,028	84,669
20	1,576	19,508	8,797	29,881	61	23,412	15,985	13,531	52,928
21	0	0	1,301	1,301	62	67,125	47,525	19,337	133,987
22	34,569	496,886	64,533	595,988	63	59,760	8,722	13,605	82,087
23	6,335	119,563	17,165	143,063	64	79,549	58,670	45,725	183,944
24	0	51,347	17,783	69,130	65	25,607	35,052	17,758	78,417
25	10,621	194,399	73,014	278,034	66	48,769	27,889	36,415	113,073
26	26,760	316,919	111,975	455,654	67	28,208	50,021	19,515	97,744
27	27,939	112,440	78,286	218,665	68	30,221	11,710	6,590	48,521
28	38,331	248,838	140,191	427,360	69	41,285	42,422	22,709	106,416
29	8,874	66,106	3,618	78,598	70	50,008	53,217	2,888	106,113
30	14,924	135,273	31,391	181,588	71	15,269	4,026	32,591	51,886
31	41,348	295,003	83,465	419,816	72	3,423	1,371	0	4,794
32	11,969	22,454	398	34,821	73	88,030	7,697	12,925	108,652
33	11,587	122,657	57,221	191,465	74	40,787	13,763	4,557	59,107
34	29,732	133,939	126,790	290,461	75	63,592	15,879	10,046	89,517
35	16,237	176,007	34,672	226,916	76	54,494	10,662	12,909	78,065
36	57,864	240,465	82,974	381,303	77	30,531	9,293	6,061	45,885
37	28,796	172,471	122,216	323,483	78	22,555	26,056	1,438	50,049
38	22,396	64,767	135,655	222,818	79	58,922	29,149	9,411	97,482
39	0	50,404	35,252	85,656	80	5,524	12,050	0	17,574
40	2,900	14,423	156,942	174,265	81	17,447	153,433	41,189	212,069
41	8,916	112,366	178,572	299,854	82	29,224	65,836	18,846	113,906

Table A-1: Washington-Baltimore Air System Planning Region, Air Passenger Originating Trips by AAZ, Year 2015 (continued)

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
83	10,406	72,539	34,601	117,546	124	33,963	39,758	3,246	76,967
84	6,534	29,681	63,943	100,158	125	45,901	25,171	15,020	86,092
85	6,574	69,710	87,324	163,608	126	4,034	10,926	0	14,960
86	7,875	25,128	90,576	123,579	127	5,069	45,400	14,173	64,642
87	10,847	28,608	61,200	100,655	128	19,283	28,722	18,238	66,243
88	3,120	4,011	141,287	148,418	129	6,569	76,627	70,917	154,113
89	5,371	16,241	125,799	147,411	130	2,267	7,848	89,754	99,869
90	2,308	5,737	20,335	28,380	131	0	1,672	3,640	5,312
91	9,877	12,801	73,367	96,045	132	15,465	23,454	47,321	86,240
92	9,152	7,483	252,113	268,748	133	391,935	2,067	13,938	407,940
93	18,264	35,614	349,954	403,832	134	127,663	1,302	1,449	130,414
94	11,251	8,443	146,588	166,282	135	45,955	488	0	46,443
95	109,597	9,836	10,489	129,922	136	26,131	1,036	0	27,167
96	53,201	0	41,869	95,070	137	48,729	0	3,863	52,592
97	55,564	27,372	11,029	93,965	138	48,374	0	0	48,374
98	132,438	3,130	22,023	157,591	139	39,994	3,855	0	43,849
99	101,257	0	7,756	109,013	140	87,885	6,397	0	94,282
100	56,627	519	7,936	65,082	141	130,161	2,674	10,314	143,149
101	31,248	0	924	32,172	142	5,676	0	0	5,676
102	27,137	0	7,357	34,494	143	63,590	0	6,405	69,995
103	71,116	0	1,820	72,936	144	155,082	3,407	4,670	163,159
104	95,207	1,737	7,273	104,217	145	15,380	1,209	0	16,589
105	51,845	2,098	1,727	55,670	146	6,457	0	0	6,457
106	117,606	11,359	18,675	147,640	147	12,304	0	0	12,304
107	43,169	0	2,290	45,459	148	25,249	0	0	25,249
108	167,538	12,485	3,552	183,575	149	81,733	2,797	4,346	88,876
109	131,369	0	5,708	137,077	150	38,638	0	3,510	42,148
110	31,248	0	0	31,248	151	134,200	10,863	4,403	149,466
111	40,396	2,304	0	42,700	152	54,459	3,806	519	58,784
112	336,063	4,217	1,424	341,704	153	55,907	0	28,511	84,418
113	40,550	0	1,326	41,876	154	97,928	1,741	4,291	103,960
114	5,719	0	0	5,719	155	115,098	0	369	115,467
115	61,678	0	2,654	64,332	156	10,502	3,025	0	13,527
116	13,761	0	2,544	16,305	157	112,111	4,090	636	116,837
117	101,672	1,894	17,259	120,825	158	89,549	860	0	90,409
118	100,505	0	20,898	121,403	159	97,483	2,402	4,361	104,246
119	117,719	8,713	16,097	142,529	160	152,658	0	0	152,658
120	159,634	5,637	15,799	181,070	161	9,344	0	0	9,344
121	44,088	7,140	6,611	57,839					
122	54,327	3,869	15,309	73,505					
123	93,012	39,539	25,606	158,157					
<b>Total</b>					<b>7,516,708</b>	<b>8,656,302</b>	<b>7,132,937</b>	<b>23,305,947</b>	

Note:- Numbers may not add to total due to rounding

**Table A-2: Air Passenger Originating Trips by AAZ, Year 2020**

<b>AAZ</b>	<b>BWI</b>	<b>DCA</b>	<b>IAD</b>	<b>Total</b>	<b>AAZ</b>	<b>BWI</b>	<b>DCA</b>	<b>IAD</b>	<b>Total</b>
1	3,423	11,667	1,571	16,661	42	16,743	8,746	75,167	100,656
2	21,110	92,444	36,791	150,345	43	27,712	63,791	509,596	601,099
3	214,943	1,173,801	459,741	1,848,485	44	17,992	25,331	500,094	543,417
4	138,524	634,313	337,009	1,109,846	45	17,646	43,044	197,557	258,247
5	19,320	122,070	69,333	210,723	46	27,999	87,670	192,028	307,697
6	27,500	172,941	72,751	273,192	47	27,683	93,875	112,509	234,067
7	0	31,230	67,533	98,763	48	18,858	21,977	26,830	67,665
8	10,131	22,657	27,945	60,733	49	28,460	55,002	47,990	131,452
9	18,193	64,057	52,319	134,569	50	54,179	83,943	47,892	186,014
10	29,350	59,429	47,950	136,729	51	8,413	22,791	18,737	49,941
11	16,515	52,508	14,905	83,928	52	42,948	79,956	39,666	162,570
12	27,476	57,451	40,551	125,478	53	31,748	49,712	68,627	150,087
13	12,245	95,634	32,338	140,217	54	44,235	108,293	59,533	212,061
14	35,241	71,962	25,034	132,237	55	52,570	61,207	66,864	180,641
15	51,298	104,933	13,471	169,702	56	40,620	29,828	50,605	121,053
16	87,956	175,497	51,362	314,815	57	48,503	61,496	80,587	190,586
17	29,545	25,876	7,243	62,664	58	57,766	54,799	94,462	207,027
18	27,666	113,459	64,893	206,018	59	100,985	29,454	21,027	151,466
19	11,320	40,850	8,984	61,154	60	38,812	26,770	24,104	89,686
20	1,735	18,936	9,593	30,264	61	29,370	17,691	16,949	64,010
21	0	0	1,422	1,422	62	75,574	47,177	21,569	144,320
22	49,566	634,345	92,258	776,169	63	66,724	8,584	15,049	90,357
23	6,985	116,257	18,755	141,997	64	91,085	59,489	51,598	202,172
24	0	49,931	19,430	69,361	65	28,415	34,379	19,497	82,291
25	12,741	208,415	88,519	309,675	66	53,956	27,231	39,904	121,091
26	31,061	324,456	128,562	484,079	67	33,537	53,916	23,932	111,385
27	31,561	111,982	87,603	231,146	68	33,353	11,395	7,205	51,953
28	43,651	250,775	158,485	452,911	69	45,828	41,854	24,925	112,607
29	9,923	65,042	4,108	79,073	70	70,447	63,903	4,186	138,536
30	17,280	139,007	36,006	192,293	71	16,951	3,929	35,628	56,508
31	49,116	305,273	98,792	453,181	72	6,862	2,290	0	9,152
32	13,950	22,644	466	37,060	73	99,427	7,649	14,432	121,508
33	13,562	126,980	66,566	207,108	74	45,701	13,718	5,236	64,655
34	34,562	137,325	146,003	317,890	75	73,613	16,117	11,522	101,252
35	18,880	180,450	39,865	239,195	76	60,387	10,368	14,103	84,858
36	68,231	249,933	96,825	414,989	77	34,322	9,215	6,838	50,375
37	32,416	171,199	136,327	339,942	78	25,691	26,173	1,623	53,487
38	25,246	64,063	150,893	240,202	79	70,833	31,066	10,806	112,705
39	0	54,477	42,877	97,354	80	6,157	11,867	0	18,024
40	3,356	14,949	180,825	199,130	81	26,744	212,750	64,681	304,175
41	10,346	115,100	205,588	331,034	82	33,493	66,556	21,464	121,513

Table A-2: Air Passenger Originating Trips by AAZ, Year 2020 (continued)

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
83	13,190	80,976	43,383	137,549	124	41,043	42,734	3,935	87,712
84	8,536	34,049	83,103	125,688	125	55,216	27,697	18,570	101,483
85	7,422	69,595	97,655	174,672	126	5,096	12,051	0	17,147
86	9,986	28,249	114,426	152,661	127	6,314	50,157	17,594	74,065
87	13,279	30,768	73,842	117,889	128	23,083	30,366	21,411	74,860
88	4,058	4,453	172,745	181,256	129	8,191	85,834	89,516	183,541
89	8,738	20,995	182,741	212,474	130	2,883	8,825	113,397	125,105
90	3,121	6,843	27,251	37,215	131	0	1,701	4,162	5,863
91	10,972	12,536	80,734	104,242	132	19,037	25,524	57,459	102,020
92	12,370	8,916	337,058	358,344	133	438,932	2,030	15,384	456,346
93	22,622	38,993	421,782	483,397	134	142,940	1,290	1,613	145,843
94	13,564	8,977	175,314	197,855	135	54,849	489	0	55,338
95	129,496	10,232	12,281	152,009	136	29,277	1,025	0	30,302
96	61,711	0	48,330	110,041	137	53,800	0	4,226	58,026
97	64,132	27,973	12,665	104,770	138	55,099	0	0	55,099
98	154,500	3,096	25,501	183,097	139	47,733	4,355	0	52,088
99	121,640	0	9,141	130,781	140	96,899	6,270	0	103,169
100	65,985	538	9,158	75,681	141	143,688	2,602	11,277	157,567
101	36,904	0	1,081	37,985	142	6,251	0	0	6,251
102	29,743	0	7,989	37,732	143	74,113	0	7,442	81,555
103	85,762	0	2,168	87,930	144	177,908	3,455	5,256	186,619
104	104,760	1,679	7,899	114,338	145	17,342	1,198	0	18,540
105	61,801	2,217	2,039	66,057	146	7,257	0	0	7,257
106	136,776	11,653	21,526	169,955	147	13,799	0	0	13,799
107	56,656	0	2,983	59,639	148	28,351	0	0	28,351
108	192,500	12,555	4,013	209,068	149	92,373	2,786	4,867	100,026
109	156,993	0	6,690	163,683	150	43,622	0	3,925	47,547
110	42,552	0	0	42,552	151	151,872	10,962	4,909	167,743
111	47,587	2,291	0	49,878	152	61,592	3,797	580	65,969
112	381,408	4,215	1,599	387,222	153	62,830	0	31,744	94,574
113	45,814	0	1,458	47,272	154	110,587	1,739	4,797	117,123
114	6,473	0	0	6,473	155	129,963	0	413	130,376
115	69,906	0	2,985	72,891	156	11,851	2,999	0	14,850
116	16,928	0	2,984	19,912	157	126,570	4,072	711	131,353
117	115,318	1,894	19,395	136,607	158	100,945	855	0	101,800
118	113,730	0	23,292	137,022	159	111,849	2,429	4,957	119,235
119	130,475	8,526	17,658	156,659	160	178,861	0	0	178,861
120	180,183	5,605	17,678	203,466	161	10,359	0	0	10,359
121	49,829	7,117	7,403	64,349					
122	63,189	3,952	17,571	84,712					
123	112,779	42,489	30,971	186,239					
<b>Total</b>					<b>8,694,029</b>	<b>9,097,944</b>	<b>8,441,151</b>	<b>26,233,124</b>	

Note:- Numbers may not add to total due to rounding

**Table A-3: Air Passenger Originating Trips by AAZ, Year 2025**

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
1	3,778	11,628	1,702	17,108	42	20,735	10,088	89,814	120,637
2	23,296	92,101	39,840	155,237	43	31,097	64,627	561,141	656,865
3	248,846	1,213,825	516,188	1,978,859	44	23,638	28,670	608,164	660,472
4	153,442	633,773	366,135	1,153,350	45	19,728	43,455	216,850	280,033
5	21,434	122,390	75,357	219,181	46	35,654	100,775	239,913	376,342
6	30,340	172,337	78,786	281,463	47	31,183	95,388	124,393	250,964
7	0	31,095	73,075	104,170	48	20,880	21,974	29,149	72,003
8	11,663	23,499	31,393	66,555	49	31,467	54,921	52,074	138,462
9	20,593	65,862	58,966	145,421	50	59,927	83,773	51,959	195,659
10	32,366	59,180	51,885	143,431	51	9,289	23,201	20,389	52,879
11	18,714	53,718	16,576	89,008	52	49,491	82,934	44,543	176,968
12	30,653	57,864	44,402	132,919	53	37,098	52,528	78,600	168,226
13	14,960	104,328	38,321	157,609	54	53,347	118,577	70,508	242,432
14	41,928	76,652	28,907	147,487	55	64,410	67,715	80,389	212,514
15	58,780	109,355	15,341	183,476	56	55,538	36,285	67,481	159,304
16	99,292	181,689	57,698	338,679	57	53,639	61,441	87,468	202,548
17	34,959	27,268	8,133	70,360	58	65,858	56,457	105,688	228,003
18	30,993	117,030	71,816	219,839	59	119,298	31,423	24,374	175,095
19	17,335	47,667	13,203	78,205	60	42,890	26,708	26,133	95,731
20	1,911	18,930	10,371	31,212	61	35,847	19,503	20,380	75,730
21	0	0	1,540	1,540	62	83,985	47,343	23,522	154,850
22	56,778	662,872	104,409	824,059	63	74,535	8,662	16,496	99,693
23	7,893	119,410	20,878	148,181	64	103,307	61,046	57,279	221,632
24	0	49,775	21,049	70,824	65	31,725	35,225	21,208	88,158
25	15,697	235,831	109,738	361,266	66	61,628	28,395	44,545	134,568
26	35,271	332,698	143,234	511,203	67	38,644	55,763	26,828	121,235
27	35,172	112,677	95,805	243,654	68	36,858	11,366	7,812	56,036
28	50,695	262,928	180,593	494,216	69	50,842	42,377	27,062	120,281
29	11,048	65,404	4,471	80,923	70	81,999	67,257	4,775	154,031
30	19,893	145,778	40,673	206,344	71	18,786	3,926	38,609	61,321
31	57,673	320,857	114,307	492,837	72	12,458	3,235	0	15,693
32	16,147	24,855	511	41,513	73	113,436	7,892	16,182	137,510
33	15,912	137,381	78,296	231,589	74	53,299	14,465	6,020	73,784
34	39,978	143,445	165,735	349,158	75	84,796	16,681	13,025	114,502
35	21,757	187,779	45,093	254,629	76	66,991	10,335	15,280	92,606
36	79,641	263,252	110,664	453,557	77	41,014	9,947	8,101	59,062
37	36,396	173,584	150,206	360,186	78	29,257	26,908	1,814	57,979
38	28,326	64,758	165,814	258,898	79	83,785	33,298	12,242	129,325
39	0	58,882	50,433	109,315	80	6,924	12,045	0	18,969
40	3,866	15,645	204,815	224,326	81	40,380	297,122	98,871	436,373
41	11,893	119,536	232,049	363,478	82	38,167	68,502	24,055	130,724

**Table A-3: Air Passenger Originating Trips by AAZ, Year 2025 (continued)**

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
83	16,272	90,191	52,503	158,966	124	48,798	46,206	4,638	99,642
84	10,796	38,811	103,365	152,972	125	66,460	31,071	22,638	120,169
85	8,350	70,912	107,818	187,080	126	6,409	13,555	0	19,964
86	12,212	31,117	136,975	180,304	127	7,804	56,270	21,451	85,525
87	15,871	33,068	86,096	135,035	128	27,563	32,793	24,905	85,261
88	5,138	4,953	204,980	215,071	129	10,181	97,249	110,386	217,816
89	11,939	24,834	234,925	271,698	130	3,671	10,062	140,612	154,345
90	3,867	7,655	33,127	44,649	131	0	1,793	4,768	6,561
91	12,153	12,540	87,758	112,451	132	23,657	28,935	68,766	121,358
92	16,005	10,417	427,097	453,519	133	489,383	2,041	16,817	508,241
93	26,926	41,963	487,827	556,716	134	157,852	1,294	1,759	160,905
94	17,162	10,257	217,317	244,736	135	61,382	501	0	61,883
95	155,661	11,017	14,537	181,215	136	32,556	1,030	0	33,586
96	72,783	0	56,995	129,778	137	59,779	0	4,610	64,389
97	74,865	29,676	14,603	119,144	138	62,892	0	0	62,892
98	179,576	3,122	29,136	211,834	139	56,359	4,881	0	61,240
99	140,523	0	10,462	150,985	140	107,730	6,251	0	113,981
100	75,582	573	10,273	86,428	141	158,810	2,598	12,234	173,642
101	41,401	0	1,191	42,592	142	6,934	0	0	6,934
102	32,835	0	8,655	41,490	143	83,322	0	8,186	91,508
103	102,362	0	2,519	104,881	144	202,574	3,564	5,804	211,942
104	116,562	1,674	8,558	126,794	145	19,397	1,202	0	20,599
105	75,737	2,432	2,453	80,622	146	8,095	0	0	8,095
106	157,891	12,179	24,452	194,522	147	15,373	0	0	15,373
107	70,309	0	3,633	73,942	148	31,657	0	0	31,657
108	219,004	12,842	4,461	236,307	149	103,690	2,825	5,361	111,876
109	180,794	0	7,601	188,395	150	48,810	0	4,307	53,117
110	56,088	0	0	56,088	151	169,728	11,071	5,382	186,181
111	55,788	2,367	0	58,155	152	68,978	3,840	638	73,456
112	458,592	4,676	1,928	465,196	153	70,179	0	34,795	104,974
113	51,984	0	1,599	53,583	154	123,831	1,759	5,271	130,861
114	7,351	0	0	7,351	155	145,009	0	452	145,461
115	79,145	0	3,318	82,463	156	13,242	3,032	0	16,274
116	20,847	0	3,522	24,369	157	141,636	4,113	782	146,531
117	130,418	1,934	21,524	153,876	158	112,720	862	0	113,582
118	128,104	0	25,672	153,776	159	128,295	2,516	5,580	136,391
119	144,782	8,561	19,202	172,545	160	208,980	0	0	208,980
120	203,219	5,702	19,576	228,497	161	11,396	0	0	11,396
121	56,320	7,264	8,211	71,795					
122	72,391	4,086	19,747	96,224					
123	135,025	46,121	36,590	217,736					
					<b>Total</b>	<b>10,000,911</b>	<b>9,562,029</b>	<b>9,751,892</b>	<b>29,314,832</b>

Note:- Numbers may not add to total due to rounding



**Table A-4: Air Passenger Originating Trips by AAZ, Year 2030**

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
1	4,221	11,827	1,882	17,930	42	25,213	11,398	106,834	143,445
2	26,029	93,687	44,047	163,763	43	35,170	66,529	627,944	729,643
3	280,465	1,248,413	577,088	2,105,966	44	29,555	31,831	729,203	790,589
4	171,446	644,981	404,898	1,221,325	45	22,300	44,731	242,569	309,600
5	24,002	124,745	83,572	232,319	46	43,747	112,593	291,326	447,666
6	33,875	175,396	87,136	296,407	47	35,406	98,527	139,774	273,707
7	0	31,596	80,694	112,290	48	23,357	22,381	32,268	78,006
8	13,038	23,942	34,815	71,795	49	35,190	55,930	57,633	148,753
9	23,060	67,072	65,146	155,278	50	67,070	85,395	57,561	210,026
10	36,114	60,179	57,307	153,600	51	10,377	24,232	22,673	57,282
11	21,137	55,246	18,525	94,908	52	57,127	87,066	50,752	194,945
12	34,210	58,812	49,034	142,056	53	46,541	59,874	97,750	204,165
13	16,700	106,375	42,471	165,546	54	64,295	129,555	84,047	277,897
14	51,121	82,629	33,554	167,304	55	81,567	77,737	101,301	260,605
15	72,455	119,261	17,778	209,494	56	73,578	42,827	87,683	204,088
16	119,681	204,345	70,348	394,374	57	59,976	62,595	96,819	219,390
17	40,868	28,919	9,323	79,110	58	75,609	59,043	120,071	254,723
18	34,620	119,137	79,404	233,161	59	138,331	33,174	27,969	199,474
19	19,576	49,289	14,768	83,633	60	47,963	27,199	28,923	104,085
20	2,398	21,393	12,877	36,668	61	43,682	21,638	24,565	89,885
21	0	0	1,703	1,703	62	94,069	48,286	26,071	168,426
22	66,176	709,194	121,063	896,433	63	83,608	8,847	18,313	110,768
23	8,822	121,504	23,088	153,414	64	118,989	64,155	65,130	248,274
24	0	50,634	23,271	73,905	65	35,790	36,816	23,488	96,094
25	18,251	249,328	126,007	393,586	66	70,476	29,781	50,267	150,524
26	40,432	347,099	162,811	550,342	67	45,523	59,809	31,272	136,604
27	39,349	114,774	106,043	260,166	68	41,209	11,563	8,636	61,408
28	58,427	276,164	206,065	540,656	69	58,210	44,375	30,628	133,213
29	12,344	66,543	4,942	83,829	70	95,059	71,245	5,455	171,759
30	22,724	151,778	45,981	220,483	71	21,002	3,995	42,686	67,683
31	66,239	334,949	130,008	531,196	72	22,570	3,291	0	25,861
32	18,041	25,283	565	43,889	73	129,253	8,165	18,195	155,613
33	18,952	151,476	93,843	264,271	74	62,087	15,323	6,903	84,313
34	46,255	151,111	189,753	387,119	75	96,611	17,274	14,686	128,571
35	25,096	197,219	51,467	273,782	76	75,145	10,513	16,892	102,550
36	92,633	278,727	127,219	498,579	77	46,725	10,328	9,386	66,439
37	41,212	178,961	168,312	388,485	78	34,192	28,636	2,098	64,926
38	32,082	66,651	185,534	284,267	79	106,515	38,526	15,459	160,500
39	0	63,604	59,259	122,863	80	7,996	12,718	0	20,714
40	4,461	16,516	234,213	255,190	81	46,453	312,006	112,917	471,376
41	13,720	125,601	264,986	404,307	82	43,748	71,509	27,337	142,594

Table A-4: Air Passenger Originating Trips by AAZ, Year 2030 (continued)

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
83	19,838	100,272	63,479	183,589	124	57,931	50,204	5,489	113,624
84	13,461	44,161	127,238	184,860	125	78,718	33,860	26,815	139,393
85	9,471	73,484	121,045	204,000	126	8,038	15,359	0	23,397
86	14,918	34,272	163,902	213,092	127	9,606	63,313	26,232	99,151
87	19,064	35,949	101,431	156,444	128	33,129	35,921	29,422	98,472
88	6,552	5,556	244,178	256,286	129	12,646	110,830	136,871	260,347
89	14,342	25,895	266,208	306,445	130	4,728	11,712	177,993	194,433
90	4,756	8,573	40,317	53,646	131	0	1,921	5,553	7,474
91	13,731	12,897	98,116	124,744	132	29,378	32,982	83,214	145,574
92	19,728	11,690	520,135	551,553	133	547,866	2,078	18,610	568,554
93	31,477	44,729	559,023	635,229	134	176,194	1,322	1,952	179,468
94	21,779	11,851	272,188	305,818	135	68,990	515	0	69,505
95	183,835	11,780	17,030	212,645	136	36,524	1,052	0	37,576
96	89,471	0	71,873	161,344	137	67,120	0	5,123	72,243
97	87,278	31,437	16,812	135,527	138	71,445	0	0	71,445
98	207,782	3,212	33,394	244,388	139	65,368	5,276	0	70,644
99	163,290	0	12,019	175,309	140	121,075	6,360	0	127,435
100	84,644	604	11,357	96,605	141	177,487	2,643	13,529	193,659
101	46,265	0	1,317	47,582	142	7,766	0	0	7,766
102	36,683	0	9,569	46,252	143	93,087	0	9,148	102,235
103	122,916	0	2,974	125,890	144	228,692	3,666	6,473	238,831
104	130,298	1,703	9,461	141,462	145	22,035	1,230	0	23,265
105	89,100	2,623	2,854	94,577	146	9,090	0	0	9,090
106	178,718	12,423	27,110	218,251	147	17,285	0	0	17,285
107	82,522	0	4,167	86,689	148	35,583	0	0	35,583
108	254,342	13,538	5,110	272,990	149	116,929	2,899	5,978	125,806
109	211,622	0	8,863	220,485	150	54,924	0	4,795	59,719
110	65,520	0	0	65,520	151	190,884	11,348	5,987	208,219
111	63,882	2,414	0	66,296	152	77,740	3,940	712	82,392
112	528,756	4,925	2,207	535,888	153	78,797	0	38,648	117,445
113	59,503	0	1,812	61,315	154	139,360	1,800	5,874	147,034
114	8,452	0	0	8,452	155	162,962	0	502	163,464
115	89,716	0	3,718	93,434	156	14,896	3,119	0	18,015
116	24,639	0	4,162	28,801	157	159,557	4,218	874	164,649
117	148,168	2,001	24,200	174,369	158	126,587	880	0	127,467
118	145,312	0	28,895	174,207	159	148,672	2,655	6,399	157,726
119	164,541	8,817	21,668	195,026	160	245,395	0	0	245,395
120	230,884	5,903	22,002	258,789	161	12,668	0	0	12,668
121	63,611	7,470	9,177	80,258					
122	82,920	4,266	22,401	109,587					
123	161,269	50,362	43,480	255,111					
					<b>Total</b>	<b>11,505,724</b>	<b>10,049,686</b>	<b>11,275,369</b>	<b>32,830,779</b>

Note:- Numbers may not add to total due to rounding

**Table A-5: Air Passenger Originating Trips by AAZ, Year 2035**

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
1	4,734	12,119	2,102	18,955	42	30,255	12,677	126,568	169,500
2	29,317	96,561	49,419	175,297	43	39,834	68,823	708,144	816,801
3	319,460	1,297,786	653,932	2,271,178	44	36,145	34,899	867,334	938,378
4	193,937	664,780	455,515	1,314,232	45	25,256	46,267	273,563	345,086
5	27,278	129,658	94,299	251,235	46	52,439	123,269	347,699	523,407
6	38,600	181,288	98,224	318,112	47	40,214	102,139	158,081	300,434
7	0	33,259	92,649	125,908	48	27,417	23,999	37,715	89,131
8	15,039	25,216	39,939	80,194	49	41,009	59,474	66,815	167,298
9	26,293	70,000	74,346	170,639	50	75,207	87,456	64,260	226,923
10	41,485	62,863	65,464	169,812	51	11,966	25,492	26,025	63,483
11	24,468	58,416	21,353	104,237	52	64,514	89,883	57,177	211,574
12	39,369	61,776	56,185	157,330	53	56,037	65,742	117,336	239,115
13	19,220	111,869	48,690	179,779	54	74,641	137,051	97,125	308,817
14	62,059	89,271	39,188	190,518	55	99,699	86,760	123,333	309,792
15	82,866	124,151	20,119	227,136	56	90,651	47,777	107,180	245,608
16	138,739	214,794	80,670	434,203	57	67,268	64,148	108,130	239,546
17	47,530	30,641	10,727	88,898	58	86,141	61,440	136,211	283,792
18	39,284	122,458	89,458	251,200	59	156,537	34,288	31,517	222,342
19	22,207	51,400	16,692	90,299	60	53,973	27,955	32,407	114,335
20	2,803	22,760	14,985	40,548	61	54,160	24,515	30,499	109,174
21	0	0	1,902	1,902	62	106,168	49,780	29,301	185,249
22	75,944	742,019	138,166	956,129	63	94,297	9,113	20,565	123,975
23	9,898	124,497	25,791	160,186	64	135,826	66,961	73,922	276,709
24	0	51,871	25,989	77,860	65	41,853	39,106	27,421	108,380
25	20,682	259,086	142,997	422,765	66	79,896	30,829	56,755	167,480
26	45,491	356,718	182,384	584,593	67	52,012	62,216	35,410	149,638
27	44,191	117,733	118,579	280,503	68	49,588	12,815	10,433	72,836
28	66,315	286,060	232,783	585,158	69	66,050	46,838	34,444	147,332
29	13,849	68,182	5,520	87,551	70	114,010	78,731	6,455	199,196
30	26,804	163,515	54,004	244,323	71	23,685	4,120	48,057	75,862
31	75,292	347,343	147,229	569,864	72	34,163	3,372	0	37,535
32	23,202	29,599	725	53,526	73	147,273	8,464	20,561	176,298
33	22,668	165,512	111,778	299,958	74	73,471	16,676	8,348	98,495
34	53,255	158,884	217,578	429,717	75	110,576	18,024	16,736	145,336
35	28,910	207,512	59,039	295,461	76	85,335	10,838	18,981	115,154
36	107,390	295,044	146,696	549,130	77	53,014	10,726	11,290	75,030
37	46,701	185,214	189,900	421,815	78	39,231	30,015	2,396	71,642
38	36,399	68,941	209,256	314,596	79	135,935	44,742	20,156	200,833
39	0	68,408	69,530	137,938	80	9,099	13,282	0	22,381
40	5,136	17,390	268,671	291,197	81	53,759	330,674	130,551	514,984
41	15,799	132,232	304,167	452,198	82	50,346	75,189	31,379	156,914

Table A-5: Air Passenger Originating Trips by AAZ, Year 2035 (continued)

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
83	23,816	110,301	76,212	210,329	124	68,809	54,718	6,534	130,061
84	16,524	49,732	154,774	221,030	125	93,308	37,008	31,947	162,263
85	10,771	76,588	137,048	224,407	126	9,883	17,186	0	27,069
86	18,043	37,388	194,830	250,261	127	11,646	70,119	31,670	113,435
87	22,796	38,955	119,379	181,130	128	39,268	38,935	34,495	112,698
88	8,302	6,219	290,651	305,172	129	15,579	124,618	167,758	307,955
89	16,609	26,934	301,830	345,373	130	6,116	13,733	227,660	247,509
90	5,537	9,117	46,738	61,392	131	0	2,073	6,531	8,604
91	15,534	13,329	110,521	139,384	132	36,634	37,861	101,748	176,243
92	23,712	12,836	622,115	658,663	133	614,831	2,130	20,782	637,743
93	36,340	47,204	638,478	722,022	134	197,722	1,356	2,183	201,261
94	26,313	13,079	327,105	366,497	135	77,382	527	0	77,909
95	217,818	12,689	20,129	250,636	136	41,022	1,080	0	42,102
96	105,989	0	85,734	191,723	137	75,291	0	5,723	81,014
97	101,722	33,746	19,674	155,142	138	80,588	0	0	80,588
98	240,826	3,328	38,571	282,725	139	74,602	5,570	0	80,172
99	188,187	0	13,684	201,871	140	136,216	6,516	0	142,732
100	94,949	619	12,685	108,253	141	199,026	2,708	15,106	216,840
101	51,892	0	1,470	53,362	142	8,716	0	0	8,716
102	41,145	0	10,686	51,831	143	105,030	0	10,303	115,333
103	148,002	0	3,536	151,538	144	256,570	3,756	7,233	267,559
104	146,141	1,745	10,565	158,451	145	24,753	1,261	0	26,014
105	101,684	2,692	3,247	107,623	146	10,245	0	0	10,245
106	200,465	12,729	30,277	243,471	147	19,494	0	0	19,494
107	95,308	0	4,760	100,068	148	40,125	0	0	40,125
108	292,257	14,181	5,836	312,274	149	131,913	2,985	6,710	141,608
109	246,907	0	10,331	257,238	150	61,923	0	5,382	67,305
110	79,778	0	0	79,778	151	215,249	11,700	6,719	233,668
111	74,114	2,499	0	76,613	152	87,652	4,056	801	92,509
112	622,686	5,343	2,610	630,639	153	88,845	0	43,381	132,226
113	68,432	0	2,068	70,500	154	157,293	1,853	6,603	165,749
114	9,755	0	0	9,755	155	183,808	0	564	184,372
115	102,334	0	4,220	106,554	156	16,785	3,221	0	20,006
116	29,277	0	4,902	34,179	157	179,934	4,344	985	185,263
117	169,203	2,087	27,517	198,807	158	142,736	907	0	143,643
118	165,728	0	32,851	198,579	159	170,729	2,785	7,316	180,830
119	187,209	9,138	24,597	220,944	160	284,401	0	0	284,401
120	262,906	6,144	24,937	293,987	161	14,107	0	0	14,107
121	72,114	7,736	10,359	90,209					
122	95,284	4,482	25,651	125,417					
123	192,591	55,122	51,946	299,659					
					<b>Total</b>	<b>13,238,795</b>	<b>10,562,359</b>	<b>13,047,578</b>	<b>36,848,732</b>

Note:- Numbers may not add to total due to rounding

**Table A-6: Air Passenger Originating Trips by AAZ, Year 2040**

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
1	5,514	12,733	2,428	20,675	42	35,727	13,550	147,944	197,221
2	34,015	100,904	56,850	191,769	43	45,251	70,549	797,962	913,762
3	371,755	1,362,036	754,515	2,488,306	44	42,781	37,134	1,013,600	1,093,515
4	224,280	692,479	522,114	1,438,873	45	28,704	47,435	308,487	384,626
5	31,879	136,788	109,158	277,825	46	62,586	132,706	411,568	606,860
6	45,122	190,794	113,665	349,581	47	45,792	104,912	178,543	329,247
7	0	35,435	108,547	143,982	48	31,692	25,024	43,241	99,957
8	17,790	26,883	46,757	91,430	49	47,311	61,879	76,437	185,627
9	30,714	73,819	86,296	190,829	50	87,100	90,547	73,367	251,014
10	48,697	66,463	76,186	191,346	51	13,524	26,158	29,216	68,898
11	29,074	62,624	25,166	116,864	52	73,924	92,776	64,762	231,462
12	46,349	65,585	65,613	177,547	53	67,555	71,371	140,503	279,429
13	22,640	118,718	56,805	198,163	54	88,333	145,479	113,929	347,741
14	72,689	94,658	45,732	213,079	55	118,119	92,749	144,912	355,780
15	96,954	130,813	23,272	251,039	56	106,560	50,130	124,427	281,117
16	161,673	226,599	93,527	481,799	57	76,571	65,845	122,065	264,481
17	56,013	32,658	12,614	101,285	58	97,429	62,748	152,808	312,985
18	45,768	128,701	103,375	277,844	59	177,348	35,050	35,414	247,812
19	25,904	54,195	19,317	99,416	60	61,006	28,506	36,330	125,842
20	3,373	24,644	17,889	45,906	61	64,596	26,384	36,110	127,090
21	0	0	2,132	2,132	62	120,275	50,869	32,921	204,065
22	88,644	768,912	158,276	1,015,832	63	106,583	9,293	23,054	138,930
23	11,189	126,965	28,916	167,070	64	156,613	69,721	84,445	310,779
24	0	52,896	29,135	82,031	65	48,996	41,126	31,903	122,025
25	24,098	274,758	167,405	466,261	66	91,165	31,731	64,231	187,127
26	51,880	366,934	206,347	625,161	67	59,605	64,351	40,276	164,232
27	50,057	120,309	133,224	303,590	68	56,077	13,068	11,697	80,842
28	75,695	293,961	263,259	632,915	69	76,702	49,581	39,564	165,847
29	15,653	69,536	6,188	91,377	70	133,499	84,332	7,380	225,211
30	32,301	177,276	64,553	274,130	71	26,901	4,227	54,290	85,418
31	86,297	359,736	167,257	613,290	72	47,170	3,438	0	50,608
32	28,265	32,200	883	61,348	73	168,830	8,654	23,110	200,594
33	26,609	175,741	130,495	332,845	74	86,553	17,692	9,696	113,941
34	61,145	164,580	247,794	473,519	75	129,269	18,952	19,405	167,626
35	33,242	215,265	67,264	315,771	76	97,718	11,118	21,409	130,245
36	123,716	306,677	167,661	598,054	77	61,287	11,231	14,455	86,973
37	53,076	189,902	214,094	457,072	78	44,346	30,605	2,687	77,638
38	41,530	70,826	236,433	348,789	79	173,046	51,291	25,773	250,110
39	0	72,002	80,477	152,479	80	10,290	14,008	0	24,298
40	5,897	18,163	306,717	330,777	81	67,276	376,222	163,667	607,165
41	18,155	137,478	347,790	503,423	82	58,280	78,507	35,971	172,758

**Table A-6: Air Passenger Originating Trips by AAZ, Year 2040 (continued)**

AAZ	BWI	DCA	IAD	Total	AAZ	BWI	DCA	IAD	Total
83	28,320	118,889	90,484	237,693	124	82,106	59,142	7,778	149,026
84	20,100	54,951	185,353	260,404	125	111,136	40,102	38,057	189,295
85	12,321	79,317	155,505	247,143	126	12,153	19,002	0	31,155
86	21,803	40,138	229,841	291,782	127	14,144	76,833	38,150	129,127
87	27,316	41,728	139,990	209,034	128	46,768	41,876	40,507	129,151
88	10,532	6,875	343,853	361,260	129	19,185	138,376	204,775	362,336
89	19,370	27,779	342,257	389,406	130	7,970	16,031	292,368	316,369
90	6,431	9,553	53,846	69,830	131	0	2,227	7,713	9,940
91	17,556	13,591	123,913	155,060	132	46,041	43,259	124,925	214,225
92	28,371	13,855	739,098	781,324	133	695,369	2,172	23,298	720,839
93	42,095	49,359	729,984	821,438	134	223,607	1,384	2,450	227,441
94	31,339	14,052	386,207	431,598	135	87,504	538	0	88,042
95	259,671	13,580	23,851	297,102	136	46,430	1,103	0	47,533
96	125,890	0	102,059	227,949	137	85,138	0	6,418	91,556
97	118,672	35,575	22,804	177,051	138	91,624	0	0	91,624
98	281,453	3,431	44,749	329,633	139	85,853	5,857	0	91,710
99	212,767	0	15,368	228,135	140	154,490	6,644	0	161,134
100	107,318	631	14,220	122,169	141	224,972	2,761	16,935	244,668
101	58,654	0	1,649	60,303	142	9,860	0	0	9,860
102	46,502	0	11,981	58,483	143	119,454	0	11,654	131,108
103	171,173	0	3,964	175,137	144	290,078	3,831	8,113	302,022
104	165,187	1,779	11,845	178,811	145	28,034	1,289	0	29,323
105	114,939	2,750	3,640	121,329	146	11,636	0	0	11,636
106	226,582	12,979	33,942	273,503	147	22,156	0	0	22,156
107	109,071	0	5,336	114,407	148	45,597	0	0	45,597
108	330,324	14,462	6,543	351,329	149	149,969	3,058	7,560	160,587
109	279,083	0	11,582	290,665	150	70,353	0	6,063	76,416
110	90,176	0	0	90,176	151	244,608	12,005	7,570	264,183
111	83,773	2,549	0	86,322	152	99,585	4,157	905	104,647
112	703,817	5,448	2,926	712,191	153	100,940	0	48,878	149,818
113	77,344	0	2,318	79,662	154	178,913	1,899	7,452	188,264
114	11,025	0	0	11,025	155	208,923	0	635	209,558
115	115,666	0	4,731	120,397	156	19,064	3,310	0	22,374
116	33,091	0	5,496	38,587	157	204,496	4,452	1,113	210,061
117	191,250	2,128	30,847	224,225	158	162,184	929	0	163,113
118	187,322	0	36,828	224,150	159	197,686	2,909	8,402	208,997
119	211,606	9,316	27,574	248,496	160	332,737	0	0	332,737
120	297,156	6,265	27,954	331,375	161	16,080	0	0	16,080
121	81,510	7,887	11,613	101,010					
122	110,288	4,683	29,474	144,445					
123	230,943	59,812	62,028	352,783					
					<b>Total</b>	<b>15,234,692</b>	<b>11,101,103</b>	<b>15,111,057</b>	<b>41,446,852</b>

Note:- Numbers may not add to total due to rounding

**Table A-4: Total Originating Passengers by Jurisdiction**

Jurisdiction	Total Originating Passengers						
	2010	2015	2020	2025	2030	2035	2040
District of Columbia	4,858,881	4,999,738	5,366,523	5,713,569	6,136,927	6,659,710	7,347,558
Montgomery County	2,515,361	2,503,425	2,767,828	3,071,726	3,475,422	3,915,197	4,387,235
Prince George's County	1,098,513	1,141,515	1,349,355	1,602,160	1,796,112	2,036,992	2,358,432
Arlington County	2,121,225	2,267,793	2,545,833	2,735,866	2,954,034	3,156,647	3,386,369
City of Alexandria	790,960	827,690	889,642	972,283	1,059,839	1,167,671	1,281,613
Fairfax County	3,762,395	3,759,812	4,224,919	4,718,860	5,309,242	5,985,658	6,705,115
Loudoun County	1,039,329	1,110,698	1,393,527	1,683,769	1,977,435	2,293,331	2,648,656
Prince William County	691,904	753,964	889,715	1,029,428	1,198,271	1,392,329	1,607,316
Frederick County	332,560	318,957	366,820	430,137	509,516	597,501	702,102
Howard County	660,816	666,683	780,098	902,256	1,032,617	1,176,468	1,332,277
Anne Arundel County	1,532,737	1,488,202	1,697,054	1,952,396	2,235,830	2,580,056	2,909,610
Charles County	152,159	163,059	189,195	219,811	253,017	292,324	338,321
Carroll County	159,850	157,591	183,097	211,834	244,388	282,725	329,633
Calvert County	73,314	73,505	84,712	96,224	109,587	125,417	144,445
St. Mary's County	147,897	158,157	186,239	217,736	255,111	299,659	352,783
King George County	13,208	14,960	17,147	19,964	23,397	27,069	31,155
City of Fredericksburg	63,437	66,243	74,860	85,261	98,472	112,698	129,151
Stafford County	135,430	154,113	183,541	217,816	260,347	307,955	362,336
Spotsylvania County	56,081	64,642	74,065	85,525	99,151	113,435	129,127
Fauquier County	92,785	99,869	125,105	154,345	194,433	247,509	316,369
Clarke County	5,266	5,312	5,863	6,561	7,474	8,604	9,940
Jefferson County	80,527	86,240	102,020	121,358	145,574	176,243	214,225
Baltimore City	1,297,676	1,249,629	1,406,743	1,571,742	1,762,626	1,977,983	2,236,860
Baltimore County	953,020	907,902	1,020,768	1,137,438	1,276,168	1,436,213	1,628,410
Harford County	272,595	266,248	308,455	356,767	415,789	479,338	557,814
<b>Total</b>	<b>22,907,926</b>	<b>23,305,947</b>	<b>26,233,124</b>	<b>29,314,832</b>	<b>32,830,779</b>	<b>36,848,732</b>	<b>41,446,852</b>

Note:- Numbers may not add to total due to rounding

**Table A-5: Home Based Originating Passengers by Jurisdiction**

Jurisdiction	Home Based Originating Passengers						
	2010	2015	2020	2025	2030	2035	2040
District of Columbia	2,096,961	2,216,313	2,348,866	2,535,630	2,748,190	3,012,576	3,356,835
Montgomery County	2,000,697	1,970,479	2,180,375	2,414,134	2,726,771	3,080,308	3,461,703
Prince George's County	783,049	800,940	900,301	997,450	1,121,447	1,274,006	1,447,675
Arlington County	1,154,867	1,207,939	1,295,974	1,376,167	1,472,803	1,579,600	1,712,117
City of Alexandria	501,756	524,866	574,623	629,879	686,080	761,768	841,304
Fairfax County	2,966,217	2,957,491	3,285,530	3,643,019	4,075,920	4,576,975	5,093,348
Loudoun County	794,109	846,583	1,042,144	1,249,004	1,454,189	1,675,524	1,918,305
Prince William County	617,415	669,764	788,508	909,756	1,054,356	1,218,877	1,398,460
Frederick County	272,073	262,516	302,213	356,950	426,261	502,239	592,306
Howard County	574,490	579,995	678,340	782,641	892,276	1,015,318	1,145,210
Anne Arundel County	1,011,606	975,451	1,105,025	1,247,233	1,422,384	1,624,749	1,831,136
Charles County	119,806	129,994	151,341	176,371	202,721	233,916	270,083
Carroll County	150,787	148,741	173,583	201,545	233,078	270,213	315,704
Calvert County	66,685	66,358	76,178	86,421	98,422	112,656	129,751
St. Mary's County	126,327	136,315	161,452	189,666	223,319	263,456	311,263
King George County	11,257	12,826	14,890	17,532	20,738	24,149	27,978
City of Fredericksburg	46,739	48,017	54,015	61,292	70,612	80,631	92,275
Stafford County	123,103	140,861	168,549	200,466	240,058	284,016	334,226
Spotsylvania County	55,564	64,127	73,458	84,811	98,306	112,411	127,884
Fauquier County	77,785	84,144	105,154	130,694	165,808	212,504	273,400
Clarke County	5,266	5,312	5,863	6,561	7,474	8,604	9,940
Jefferson County	47,398	51,626	60,108	71,881	86,426	104,865	127,722
Baltimore City	650,770	637,676	721,630	806,714	907,468	1,020,017	1,155,522
Baltimore County	808,595	770,140	865,750	964,790	1,082,101	1,217,485	1,380,040
Harford County	237,775	231,294	267,506	309,161	360,804	417,110	486,831
<b>Total</b>	<b>15,301,097</b>	<b>15,539,768</b>	<b>17,401,376</b>	<b>19,449,768</b>	<b>21,878,012</b>	<b>24,683,973</b>	<b>27,841,018</b>

Note:- Numbers may not add to total due to rounding



**Table A-6: Non-Home Based Originating Passengers by Jurisdiction**

Jurisdiction	Non-Home Based Originating Passengers						
	2010	2015	2020	2025	2030	2035	2040
District of Columbia	2,761,920	2,783,425	3,017,657	3,177,939	3,388,737	3,647,134	3,990,723
Montgomery County	514,664	532,946	587,453	657,592	748,651	834,889	925,532
Prince George's County	315,464	340,575	449,054	604,710	674,665	762,986	910,757
Arlington County	966,358	1,059,854	1,249,859	1,359,699	1,481,231	1,577,047	1,674,252
City of Alexandria	289,204	302,824	315,019	342,404	373,759	405,903	440,309
Fairfax County	796,178	802,321	939,389	1,075,841	1,233,322	1,408,683	1,611,767
Loudoun County	245,220	264,115	351,383	434,765	523,246	617,807	730,351
Prince William County	74,489	84,200	101,207	119,672	143,915	173,452	208,856
Frederick County	60,487	56,441	64,607	73,187	83,255	95,262	109,796
Howard County	86,326	86,688	101,758	119,615	140,341	161,150	187,067
Anne Arundel County	521,131	512,751	592,029	705,163	813,446	955,307	1,078,474
Charles County	32,353	33,065	37,854	43,440	50,296	58,408	68,238
Carroll County	9,063	8,850	9,514	10,289	11,310	12,512	13,929
Calvert County	6,629	7,147	8,534	9,803	11,165	12,761	14,694
St. Mary's County	21,570	21,842	24,787	28,070	31,792	36,203	41,520
King George County	1,951	2,134	2,257	2,432	2,659	2,920	3,177
City of Fredericksburg	16,698	18,226	20,845	23,969	27,860	32,067	36,876
Stafford County	12,327	13,252	14,992	17,350	20,289	23,939	28,110
Spotsylvania County	517	515	607	714	845	1,024	1,243
Fauquier County	15,000	15,725	19,951	23,651	28,625	35,005	42,969
Clarke County	0	0	0	0	0	0	0
Jefferson County	33,129	34,614	41,912	49,477	59,148	71,378	86,503
Baltimore City	646,906	611,953	685,113	765,028	855,158	957,966	1,081,338
Baltimore County	144,425	137,762	155,018	172,648	194,067	218,728	248,370
Harford County	34,820	34,954	40,949	47,606	54,985	62,228	70,983
<b>Total</b>	<b>7,606,829</b>	<b>7,766,179</b>	<b>8,831,748</b>	<b>9,865,064</b>	<b>10,952,767</b>	<b>12,164,759</b>	<b>13,605,834</b>

Note:- Numbers may not add to total due to rounding

**Table A-10: Aviation Analysis Zone System Place Names**

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

<b>AAZ</b>	<b>Jurisdiction</b>	<b>Place Name</b>
37	Fairfax County, VA	Lorton
38	Fairfax County, VA	Ravensworth, Burke, Fairfax Station, Burke Center, George Mason University
39	Fairfax County, VA	Merrifield
40	Fairfax County, VA	Centerville, Sully Station, Clifton
41	Fairfax County, VA	Fair Oaks, Fairfax City
42	Fairfax County, VA	Chantilly
43	Fairfax County, VA	Reston, Franklin Farm, Vienna
44	Fairfax County, VA	Woodland Park, Dulles Technology Center
45	Fairfax County, VA	Herndon, Great Falls
46	Fairfax County, VA	Tysons Corner
47	Fairfax County, VA	McLean
48	Montgomery County, MD	Glen Echo
49	Montgomery County, MD	Cabin John, Oakmont
50	Montgomery County, MD	Medical Center
51	Montgomery County, MD	Chevy Chase
52	Montgomery County, MD	Bethesda
53	Montgomery County, MD	Rock Spring, White Flint
54	Montgomery County, MD	West I-270 Rockville
55	Montgomery County, MD	Gaithersburg, Washington Grove
56	Montgomery County, MD	Germantown
57	Montgomery County, MD	Potomac
58	Montgomery County, MD	Dickerson, Barsville, Poolesville, Dovsonville, 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, Colesville, Spencerville, Burtonsville, Fairland
64	Montgomery County, MD	Glenmont, White Oak, Wheaton, Four Corners, Hillandale, Forest Glen
65	Montgomery County, MD	North Chevy Chase
66	Montgomery County, MD	Forest Glen Park, North Silver Spring
67	Montgomery County, MD	Downtown Silver Spring
68	Montgomery County, MD	Takoma Park
69	Prince George's County, MD	Langley Park, Adelphi, Chillum, Hyattsville, Mount Rainer, Brentwood, Cottage City, Bladensburg, Edmonton, Berwyn Heights, Cheverly
70	Prince George's County, MD	College Park, University Park, University of Maryland
71	Prince George's County, MD	Beltsville
72	Prince George's County, MD	Calverton
73	Prince George's County, MD	Laurel, Montpelier
74	Prince George's County, MD	Greenbelt, Goddard 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-10: AAZ System Place Names (continued)**

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



**Table A-10: AAZ System Place Names (continued)**

<b>AAZ</b>	<b>Jurisdiction</b>	<b>Place Name</b>
115	Anne Arundel County, MD	Glen Burnie, Harundale
116	Anne Arundel County, MD	Harundale
117	Anne Arundel County, MD	Lake Shore, Gibson Island, Arnold, Cape Saint Claire, US Naval Station
118	Anne Arundel County, MD	Severna Park
119	Anne Arundel County, MD	Annapolis
120	Anne Arundel County, MD	Heritage Harbor, Edgewater, Woodland Beach, Mayo, Highland Beach
121	Anne Arundel County, MD	Crofton, Davidsonville, Harwood, Lothian, Bayard, Owensville, Gallesville, Shady Side, Tracys Landing, Deale Churchton, Friendship
122	Calvert County, MD	Calvert County
123	St. Mary's County, MD	St. Mary's County
124	Charles County, MD	Pinefield, Waldorf, Cedarville, Indian Head, Glaymont, Marbury, Bryans Road, St. Charles
125	Charles County, MD	White Plains, Pomfret, La Plata, Doncaster, Pisgah, Ironsides, Port Tobacco, Bryantown, Hughesville, Benedict, Nanjemoy, Welcome, Bel Alton, Faulkner, Charlotte Hall, Mechanicsville, Newburg
126	King George County, VA	King George County
127	Spotsylvania County, VA	Northern Spotsylvania County
128	Fredericksburg, VA	City of Fredericksburg
129	Stafford County, VA	Stafford County
130	Fauquier County, VA	Fauquier County
131	Clarke County, VA	Clarke County
132	Jefferson County, WV	Jefferson County
133	Baltimore City, MD	Downtown Inner Harbor
134	Baltimore City, MD	Locust Point, Oriols Park
135	Baltimore City, MD	Canton Waterfront
136	Baltimore City, MD	Brooklyn, Cherry Hill, Loudon Park
137	Baltimore City, MD	Arlington, Pimlico, Gwynns Falls Park, Park Heights, North West Baltimore
138	Baltimore City, MD	Walbrook, Rosemont, Druid Hill Park
139	Baltimore City, MD	University of MD Baltimore-area
140	Baltimore City, MD	Hampden
141	Baltimore City, MD	Roland 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	Halethorpe
147	Baltimore County, MD	North Arbutus
148	Baltimore County, MD	Arbutus
149	Baltimore County, MD	Catonsville, Westview Park, Woodlawn
150	Baltimore County, MD	Upperco, Boring, Reisterstown, Glyndon, Snowy
151	Baltimore County, MD	Garrison, Owings Mills, Pikesville, Randallstown, Woodlawn

**Table A-10: AAZ System Place Names (continued)**

<b>AAZ</b>	<b>Jurisdiction</b>	<b>Place Name</b>
152	Baltimore County, MD	Freeland, Maryland Line, Middletown, Gunpowder Falls, Butler, Belfast, Cooperstown, Dover
153	Baltimore County, MD	Stevenson, Brooklandville
154	Baltimore County, MD	Lutherville, Cockeysville, Timonium, Carney
155	Baltimore County, MD	Towson, Parkville
156	Baltimore County, MD	Long Green, Glen Park, Baldwin, Fork
157	Baltimore County, MD	Fullerton, Perry Hall, Bradshaw, Rosedale, Middle River, White Marsh
158	Baltimore County, MD	Essex, Dundalk, Sparrows Point, Edgemere, East Baltimore County
159	Harford County, MD	Norrisville, Whiteford, Cardiff, Pylesville, Broad Creek, Dublin, Jarrettsville, Forest Hill, Darlington
160	Harford County, MD	Bel Air, Churchville, Fountain Green, Creswell, Level, Aberdeen, Harve De Grace, Joppatowne
161	Harford County, MD	Aberdeen Proving Ground

## **Appendix B**





**Table B-7: BWI Marshall Airport****Annual Domestic and International Enplanements Forecast**

Year	Air Carrier	Domestic Commuter	Total	US Flag	International Foreign Flag	Total	Total Enplanement
2010 <sup>1</sup>	10,316,365	484,943	10,801,308	88,189	107,216	195,405	10,996,713
2011 <sup>1</sup>	10,465,918	537,403	11,003,321	130,839	87,419	218,257	11,221,578
2012 <sup>1</sup>	10,562,036	533,617	11,095,653	164,686	110,033	274,719	11,370,372
2013 <sup>2</sup>	9,787,857	423,488	10,211,345	185,491	123,933	309,424	10,520,769
2014 <sup>2</sup>	9,836,796	451,015	10,287,811	190,128	127,032	317,160	10,604,971
2015 <sup>2</sup>	10,151,574	474,468	10,626,042	194,501	129,954	324,455	10,950,496
2016 <sup>2</sup>	10,486,576	484,906	10,971,482	198,974	132,943	331,917	11,303,399
2017 <sup>2</sup>	10,811,659	494,604	11,306,264	203,551	136,001	339,552	11,645,815
2018 <sup>2</sup>	11,125,198	503,013	11,628,210	208,640	139,400	348,040	11,976,250
2019 <sup>2</sup>	11,447,828	511,564	11,959,393	213,856	142,886	356,742	12,316,135
2020 <sup>2</sup>	11,779,815	520,261	12,300,076	219,202	146,458	365,660	12,665,736
2021 <sup>2</sup>	12,121,429	529,106	12,650,535	224,683	150,119	374,802	13,025,337
2022 <sup>2</sup>	12,472,951	538,101	13,011,052	230,300	153,873	384,173	13,395,224
2023 <sup>2</sup>	12,834,666	547,249	13,381,915	236,058	157,720	393,777	13,775,692
2024 <sup>2</sup>	13,206,871	556,552	13,763,424	241,959	161,663	403,622	14,167,045
2025 <sup>2</sup>	13,589,870	566,014	14,155,884	248,008	165,704	413,712	14,569,596
2026 <sup>2</sup>	13,983,976	575,637	14,559,613	254,208	169,846	424,054	14,983,667
2027 <sup>2</sup>	14,389,511	585,423	14,974,934	260,563	174,092	434,655	15,409,589
2028 <sup>2</sup>	14,806,808	595,375	15,402,182	267,077	178,444	445,521	15,847,704
2029 <sup>2</sup>	15,236,205	605,496	15,841,702	273,754	182,905	456,659	16,298,360
2030 <sup>2</sup>	15,678,055	615,790	16,293,845	280,597	187,478	468,075	16,761,920
2031 <sup>2</sup>	16,132,719	626,258	16,758,977	287,612	192,165	479,777	17,238,754
2032 <sup>2</sup>	16,600,568	636,905	17,237,472	294,803	196,969	491,772	17,729,244
2033 <sup>2</sup>	17,081,984	647,732	17,729,717	302,172	201,894	504,066	18,233,783
2034 <sup>2</sup>	17,577,362	658,744	18,236,105	309,726	206,941	516,667	18,752,772
2035 <sup>2</sup>	18,087,105	669,942	18,757,048	317,470	212,114	529,584	19,286,631
2036 <sup>2</sup>	18,611,632	681,331	19,292,963	325,407	217,417	542,824	19,835,787
2037 <sup>2</sup>	19,151,369	692,914	19,844,283	333,542	222,852	556,394	20,400,677
2038 <sup>2</sup>	19,706,759	704,694	20,411,453	341,881	228,423	570,304	20,981,757
2039 <sup>2</sup>	20,278,255	716,673	20,994,929	350,428	234,133	584,561	21,579,490
2040 <sup>2</sup>	20,866,325	728,856	21,595,181	359,189	239,986	599,176	22,194,357

<sup>1</sup> Observed Years<sup>2</sup> Forecast Years

Note:- Forecast based on FAA TAF Fiscal Year annual percent increase

**Table B-2: Ronald Reagan Washington National Airport****Annual Domestic and International Enplanements Forecast**

Year	Air Carrier	Domestic Commuter	Total	US Flag	International Foreign Flag	Total	Total Enplanement
2010 <sup>1</sup>	6,043,389	2,834,369	8,877,758	46,615	111,171	157,786	9,035,544
2011 <sup>1</sup>	6,274,492	2,947,239	9,221,731	31,095	109,137	140,232	9,361,963
2012 <sup>1</sup>	6,548,166	3,139,930	9,688,097	23,396	82,115	105,510	9,793,607
2013 <sup>2</sup>	6,587,032	3,140,806	9,727,839	19,520	68,512	88,033	9,815,871
2014 <sup>2</sup>	6,652,903	3,172,215	9,825,117	19,716	69,197	88,913	9,914,030
2015 <sup>2</sup>	6,719,432	3,203,936	9,923,368	19,914	69,889	89,803	10,013,171
2016 <sup>2</sup>	6,786,626	3,235,976	10,022,602	20,112	70,588	90,700	10,113,302
2017 <sup>2</sup>	6,854,492	3,268,335	10,122,827	20,313	71,294	91,607	10,214,434
2018 <sup>2</sup>	6,923,037	3,301,018	10,224,055	20,516	72,007	92,523	10,316,578
2019 <sup>2</sup>	6,992,267	3,334,028	10,326,295	20,720	72,727	93,447	10,419,743
2020 <sup>2</sup>	7,062,190	3,367,369	10,429,558	20,927	73,454	94,381	10,523,940
2021 <sup>2</sup>	7,132,812	3,401,042	10,533,854	21,137	74,188	95,325	10,629,179
2022 <sup>2</sup>	7,204,140	3,435,052	10,639,192	21,349	74,931	96,279	10,735,471
2023 <sup>2</sup>	7,276,181	3,469,402	10,745,584	21,562	75,680	97,242	10,842,826
2024 <sup>2</sup>	7,348,944	3,504,096	10,853,040	21,778	76,436	98,214	10,951,254
2025 <sup>2</sup>	7,422,433	3,539,137	10,961,570	21,996	77,201	99,197	11,060,767
2026 <sup>2</sup>	7,496,657	3,574,529	11,071,186	22,216	77,973	100,189	11,171,375
2027 <sup>2</sup>	7,571,624	3,610,275	11,181,899	22,438	78,753	101,190	11,283,089
2028 <sup>2</sup>	7,647,340	3,646,377	11,293,718	22,662	79,540	102,202	11,395,920
2029 <sup>2</sup>	7,723,814	3,682,841	11,406,655	22,889	80,336	103,225	11,509,880
2030 <sup>2</sup>	7,801,052	3,719,670	11,520,722	23,118	81,140	104,257	11,624,979
2031 <sup>2</sup>	7,879,062	3,756,867	11,635,929	23,348	81,952	105,300	11,741,229
2032 <sup>2</sup>	7,957,853	3,794,436	11,752,289	23,582	82,771	106,354	11,858,643
2033 <sup>2</sup>	8,037,432	3,832,380	11,869,812	23,818	83,599	107,418	11,977,230
2034 <sup>2</sup>	8,117,806	3,870,704	11,988,510	24,056	84,435	108,492	12,097,002
2035 <sup>2</sup>	8,198,984	3,909,411	12,108,395	24,297	85,280	109,577	12,217,972
2036 <sup>2</sup>	8,280,974	3,948,505	12,229,479	24,540	86,133	110,673	12,340,152
2037 <sup>2</sup>	8,363,784	3,987,990	12,351,774	24,786	86,994	111,780	12,463,553
2038 <sup>2</sup>	8,447,422	4,027,869	12,475,291	25,034	87,864	112,898	12,588,189
2039 <sup>2</sup>	8,531,895	4,068,148	12,600,044	25,284	88,743	114,026	12,714,070
2040 <sup>2</sup>	8,617,214	4,108,830	12,726,044	25,537	89,630	115,167	12,841,211

<sup>1</sup> Observed Years<sup>2</sup> Forecast Years

Note:- Forecast based on FAA TAF Fiscal Year annual percent increase

**Table B-3: Washington Dulles International Airport****Annual Domestic and International Enplanements Forecast**

Year	Air Carrier	Domestic		International			Total Enplanement
		Commuter	Total	US Flag	Foreign Flag	Total	
2010 <sup>1</sup>	5,541,616	3,302,576	8,844,192	1,452,182	1,516,531	2,968,713	11,812,905
2011 <sup>1</sup>	5,416,227	3,123,755	8,539,982	1,480,169	1,549,797	3,029,966	11,569,948
2012 <sup>1</sup>	4,825,730	3,242,464	8,068,193	1,555,280	1,549,449	3,104,729	11,172,922
2013 <sup>2</sup>	4,460,604	2,930,810	7,391,414	1,570,912	1,522,765	3,093,677	10,485,091
2014 <sup>2</sup>	4,701,477	3,094,935	7,796,412	1,652,600	1,601,949	3,254,548	11,050,960
2015 <sup>2</sup>	4,931,849	3,252,777	8,184,626	1,738,535	1,685,250	3,423,785	11,608,411
2016 <sup>2</sup>	5,138,986	3,395,899	8,534,885	1,816,769	1,761,086	3,577,855	12,112,740
2017 <sup>2</sup>	5,339,407	3,535,131	8,874,538	1,893,073	1,835,052	3,728,125	12,602,662
2018 <sup>2</sup>	5,472,892	3,627,045	9,099,937	1,965,009	1,904,783	3,869,793	12,969,730
2019 <sup>2</sup>	5,609,715	3,721,348	9,331,063	2,039,679	1,977,165	4,016,845	13,347,908
2020 <sup>2</sup>	5,749,958	3,818,103	9,568,060	2,117,188	2,052,297	4,169,485	13,737,545
2021 <sup>2</sup>	5,893,707	3,917,374	9,811,080	2,197,641	2,130,285	4,327,926	14,139,006
2022 <sup>2</sup>	6,041,049	4,019,225	10,060,274	2,281,151	2,211,235	4,492,387	14,552,661
2023 <sup>2</sup>	6,192,075	4,123,725	10,315,800	2,367,835	2,295,262	4,663,097	14,978,897
2024 <sup>2</sup>	6,346,877	4,230,941	10,577,818	2,457,814	2,382,482	4,840,296	15,418,114
2025 <sup>2</sup>	6,505,549	4,340,946	10,846,495	2,551,211	2,473,017	5,024,227	15,870,722
2026 <sup>2</sup>	6,668,188	4,453,810	11,121,998	2,648,157	2,566,992	5,215,149	16,337,147
2027 <sup>2</sup>	6,834,893	4,569,609	11,404,502	2,748,787	2,664,537	5,413,324	16,817,826
2028 <sup>2</sup>	7,005,765	4,688,418	11,694,184	2,853,241	2,765,790	5,619,031	17,313,214
2029 <sup>2</sup>	7,180,909	4,810,317	11,991,227	2,961,664	2,870,889	5,832,553	17,823,779
2030 <sup>2</sup>	7,360,432	4,935,385	12,295,818	3,074,207	2,979,983	6,054,190	18,350,007
2031 <sup>2</sup>	7,544,443	5,063,705	12,608,148	3,191,027	3,093,222	6,284,249	18,892,397
2032 <sup>2</sup>	7,733,054	5,195,362	12,928,416	3,312,286	3,210,765	6,523,051	19,451,467
2033 <sup>2</sup>	7,926,381	5,330,441	13,256,822	3,438,153	3,332,774	6,770,927	20,027,749
2034 <sup>2</sup>	8,124,541	5,469,033	13,593,574	3,568,803	3,459,419	7,028,222	20,621,795
2035 <sup>2</sup>	8,327,654	5,611,228	13,938,882	3,704,417	3,590,877	7,295,295	21,234,177
2036 <sup>2</sup>	8,535,845	5,757,120	14,292,965	3,845,185	3,727,330	7,572,515	21,865,481
2037 <sup>2</sup>	8,749,241	5,906,806	14,656,047	3,991,302	3,868,969	7,860,272	22,516,318
2038 <sup>2</sup>	8,967,973	6,060,383	15,028,355	4,142,972	4,015,991	8,158,962	23,187,317
2039 <sup>2</sup>	9,192,172	6,217,952	15,410,124	4,300,405	4,168,599	8,469,003	23,879,128
2040 <sup>2</sup>	9,421,976	6,379,619	15,801,595	4,463,820	4,327,006	8,790,826	24,592,421

<sup>1</sup> Observed Years<sup>2</sup> Forecast Years

Note:- Forecast based on FAA TAF Fiscal Year annual percent increase

**Table B-3: Washington-Baltimore Regional Airports****Annual Domestic and International Enplanements Forecast**

Year	Air Carrier	Domestic Commuter	Total	US Flag	International Foreign Flag	Total	Total Enplanement
2010 <sup>1</sup>	21,901,370	6,621,888	28,523,258	1,586,985	1,734,919	3,321,904	31,845,162
2011 <sup>1</sup>	22,156,637	6,608,396	28,765,033	1,642,103	1,746,353	3,388,456	32,153,489
2012 <sup>1</sup>	21,935,932	6,916,011	28,851,943	1,743,361	1,741,597	3,484,958	32,336,901
2013 <sup>2</sup>	20,835,494	6,495,104	27,330,598	1,775,923	1,715,211	3,491,134	30,821,732
2014 <sup>2</sup>	21,191,176	6,718,165	27,909,340	1,862,443	1,798,178	3,660,621	31,569,961
2015 <sup>2</sup>	21,802,854	6,931,182	28,734,036	1,952,949	1,885,093	3,838,042	32,572,078
2016 <sup>2</sup>	22,412,188	7,116,781	29,528,969	2,035,856	1,964,617	4,000,472	33,529,442
2017 <sup>2</sup>	23,005,558	7,298,071	30,303,629	2,116,937	2,042,346	4,159,283	34,462,912
2018 <sup>2</sup>	23,521,127	7,431,076	30,952,203	2,194,164	2,116,191	4,310,355	35,262,558
2019 <sup>2</sup>	24,049,811	7,566,940	31,616,751	2,274,256	2,192,778	4,467,034	36,083,785
2020 <sup>2</sup>	24,591,962	7,705,733	32,297,695	2,357,317	2,272,209	4,629,526	36,927,221
2021 <sup>2</sup>	25,147,948	7,847,522	32,995,470	2,443,461	2,354,592	4,798,053	37,793,522
2022 <sup>2</sup>	25,718,140	7,992,378	33,710,518	2,532,800	2,440,039	4,972,839	38,683,356
2023 <sup>2</sup>	26,302,922	8,140,376	34,443,298	2,625,455	2,528,662	5,154,117	39,597,415
2024 <sup>2</sup>	26,902,692	8,291,590	35,194,282	2,721,551	2,620,581	5,342,132	40,536,414
2025 <sup>2</sup>	27,517,852	8,446,097	35,963,949	2,821,215	2,715,921	5,537,136	41,501,085
2026 <sup>2</sup>	28,148,822	8,603,976	36,752,797	2,924,581	2,814,811	5,739,392	42,492,189
2027 <sup>2</sup>	28,796,029	8,765,306	37,561,335	3,031,788	2,917,382	5,949,170	43,510,505
2028 <sup>2</sup>	29,459,913	8,930,171	38,390,084	3,142,980	3,023,774	6,166,754	44,556,838
2029 <sup>2</sup>	30,140,929	9,098,655	39,239,583	3,258,306	3,134,130	6,392,436	45,632,019
2030 <sup>2</sup>	30,839,539	9,270,845	40,110,385	3,377,922	3,248,600	6,626,522	46,736,907
2031 <sup>2</sup>	31,556,224	9,446,830	41,003,054	3,501,988	3,367,338	6,869,326	47,872,381
2032 <sup>2</sup>	32,291,475	9,626,702	41,918,178	3,630,671	3,490,505	7,121,177	49,039,354
2033 <sup>2</sup>	33,045,797	9,810,554	42,856,351	3,764,143	3,618,267	7,382,410	50,238,762
2034 <sup>2</sup>	33,819,709	9,998,481	43,818,189	3,902,585	3,750,795	7,653,381	51,471,570
2035 <sup>2</sup>	34,613,744	10,190,581	44,804,325	4,046,185	3,888,271	7,934,455	52,738,780
2036 <sup>2</sup>	35,428,451	10,386,956	45,815,407	4,195,132	4,030,880	8,226,012	54,041,420
2037 <sup>2</sup>	36,264,394	10,587,709	46,852,104	4,349,630	4,178,815	8,528,445	55,380,549
2038 <sup>2</sup>	37,122,153	10,792,946	47,915,099	4,509,886	4,332,278	8,842,164	56,757,263
2039 <sup>2</sup>	38,002,323	11,002,774	49,005,097	4,676,116	4,491,474	9,167,591	58,172,687
2040 <sup>2</sup>	38,905,515	11,217,305	50,122,820	4,848,546	4,656,622	9,505,168	59,627,988

<sup>1</sup> Observed Years<sup>2</sup> Forecast Years

Note:- Forecast based on FAA TAF Fiscal Year annual percent increase

### **Bibliography**

- Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board [COG/TPB]. (2011). *Washington-Baltimore Regional Air Passenger Origin/Destination Forecast Update*. May 2011, Washington, D.C.
- Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board [COG/TPB]. (2008). *Washington-Baltimore Regional Air Passenger Origin/Destination Forecast Update*. March 2008, Washington, D.C.
- Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board [COG/TPB]. (2004). *Washington-Baltimore Regional Air Passenger Origin/Destination Forecast Update*. May 2004, Washington, D.C.
- Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board [COG/TPB]. (2011). *2011 Washington-Baltimore Regional Air Passenger Survey*. May 2012, Washington, D.C.
- Federal Aviation Administration, *Terminal Area Forecast Summary*, U.S. Department of Transportation, Federal Aviation Administration Aviation Policy and Plans, February 2013, Washington, D.C.