

Washington / Baltimore Region



2009 Air Passenger Survey



MWCOG
Travel Forecasting Subcommittee
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Survey Background

- A random sample of approximately 679 flights (617 Domestic and 62 International)
 - 227 at BWI
 - 208 at DCA and
 - 244 and IAD.

- Survey started on Sunday October 11, and ended on Saturday October 24th 2009.
 - 33 Airlines
 - 15 International
 - 18 Domestic
 - 116 Destinations
 - 30 International
 - 86 Domestic



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No. of Survey Flights by Airport and Destination Region

Region	BWI	DCA	IAD	Total
Great Lakes	20	20	20	60
Mid-Atlantic	30	22	42	94
New England	30	26	20	76
New York	20	26	20	66
South East	64	62	44	170
West	51	46	54	151
International	12	6	44	62
Total	227	208	244	679



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Data Collection Summary

Airport	No. of Flights Surveyed	No. Survey Completed (With Pass. Factor)	Rev. Pass Count	Response Rate		Actual No. of Completed Surveys
				(With Pass. Factor)	(Without Pass. Factor)	
BWI	227	12,767	22,933	56%	37%	8,570
DCA	208	7,937	15,251	52%	37%	5,664
IAD	244	9,007	21,137	43%	31%	6,489
Total	679	29,711	59,321	50%	35%	20,723
Mailback						234
Grand Total						20,957



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No. of Survey Questionnaires by Originations

Enplanement Type		BWI	DCA	IAD	TOTAL
Local originations	<i>Number</i>	6,902	4,897	3,615	15,414
(came by ground transportation)	<i>Percent</i>	84%	89%	58%	77%
Connected from another flight	<i>Number</i>	1,324	618	2,615	4,557
	<i>Percent</i>	16%	11%	42%	23%
Total Questionnaires	<i>Number</i>	8,226	5,515	6,230	19,971

Notes:

** Totals do not include departing passengers who identified themselves as being on the same flight to make a connection when it arrived at the airport*



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2009 Washington-Baltimore Air Passenger Survey Originating Passengers Survey Questionnaires Geo-coding

Geo-Coding		BWI	DCA	IAD	TOTAL
Hand - Coded	<i>Number</i>	5,106	3,748	2,500	11,354
	<i>Percent</i>	74%	77%	69%	74%
Partial Address	<i>Number</i>	1,768	1,125	1,098	3,991
	<i>Percent</i>	26%	23%	30%	26%
Allocated	<i>Number</i>	28	24	17	69
	<i>Percent</i>	0%	0%	0%	0%
TOTAL	<i>Number</i>	6,902	4,897	3,615	15,414
	<i>Percent</i>	100%	100%	100%	100%



Geo-Coding Process

- Adopt revised TAZ System for the MWCOG/TPB Model area
- Merge BMC/BRTB TAZ system with MWCOG/TPB to create Washington/Baltimore Air System Region TAZ boundaries
- Revise Washington/Baltimore Air System Region AAZ system boundary
- Convert Washington/Baltimore Air System Region TAZ boundaries into "kml" file for Geo-coding
- Used Google Earth as a base to identify TAZ's for each originating air passenger trip record address.



Washington/Baltimore Air System Planning Region Aviation Analysis Zone System

Model Region	No. of TAZ's (Old)	No. of TAZ's (Revised)	No. of AAZ's
MWCOG/TPB	1,972	3,669	132
BMC/BRTB	699	699	29
Total	2,671	4,368	161



Findings

- Annual air passenger enplanements declined by 4 percent to 30.1 million between 2007 and 2009.
- While the percentage of local originating passengers remained almost the same, connecting passengers declined by 17% between 2007 and 2009
- 216,000 local originating passengers in 2009 accounting for all of enplanements increase between 2007 and 2009



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

Enplanement Type		BWI MARSHALL 2009	DULLES 2009	REAGAN NATIONAL 2009	REGION 2009
Local originations	<i>Number</i>	8,898	6,898	8,051	23,847
(came by ground transportation)	<i>Percent</i>	85%	60%	91%	77%
Connected from another flight	<i>Number</i>	1,579	4,644	797	7,020
	<i>Percent</i>	15%	40%	9%	23%
Total Enplanement	<i>Number</i>	10,477	11,542	8,848	30,867
Percent of Region		34%	37%	29%	100%

Notes:

** Totals may not add due to rounding*

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



- Airport shares of locally originating air passengers
 - 37% to BWI Marshall airport – same as in 2007
 - 34% to Reagan National airport – down from 35% in 2007
 - 29% to Dulles airport – up from 27% in 2007

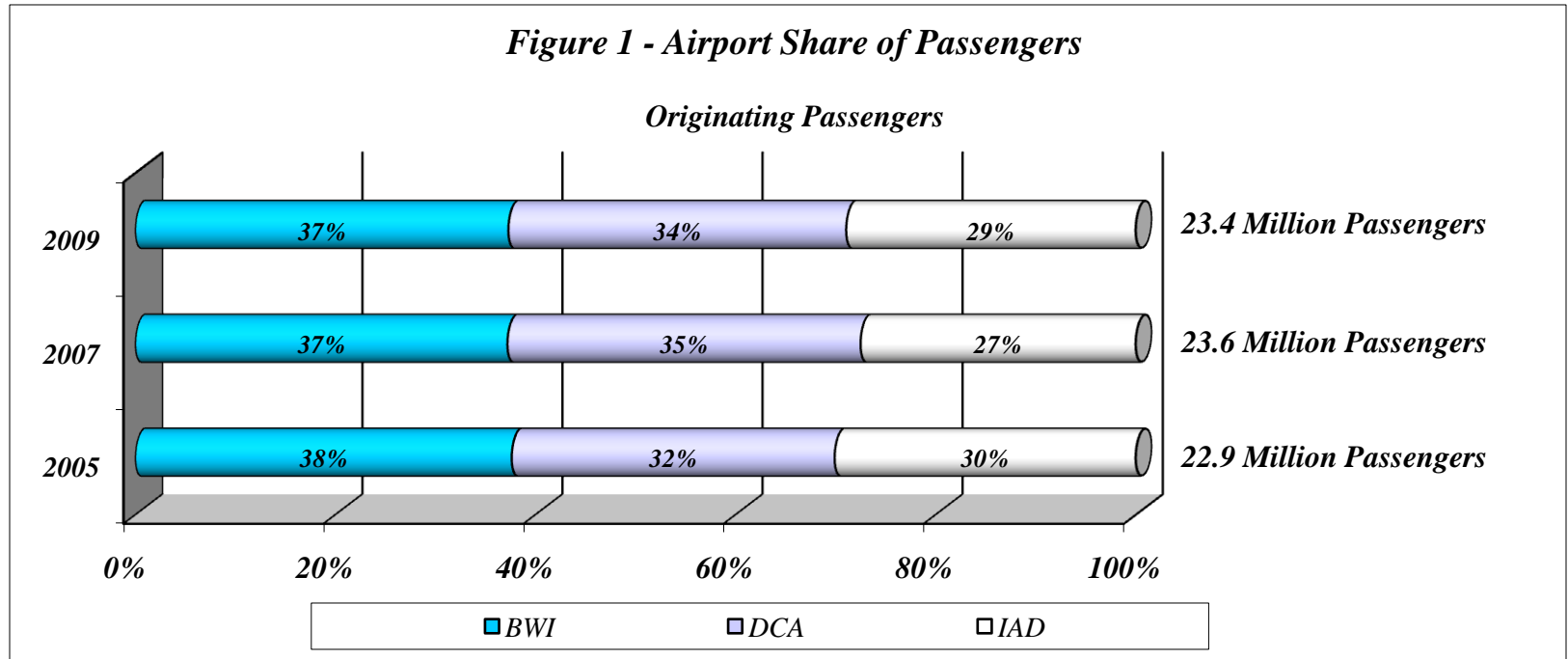
- Airport shares of connecting air passengers
 - 22% to BWI Marshall airport – up from 20% in 2007
 - 11% to Reagan National airport – down from 12% in 2007
 - 66% to Dulles airport – down from 69% in 2007



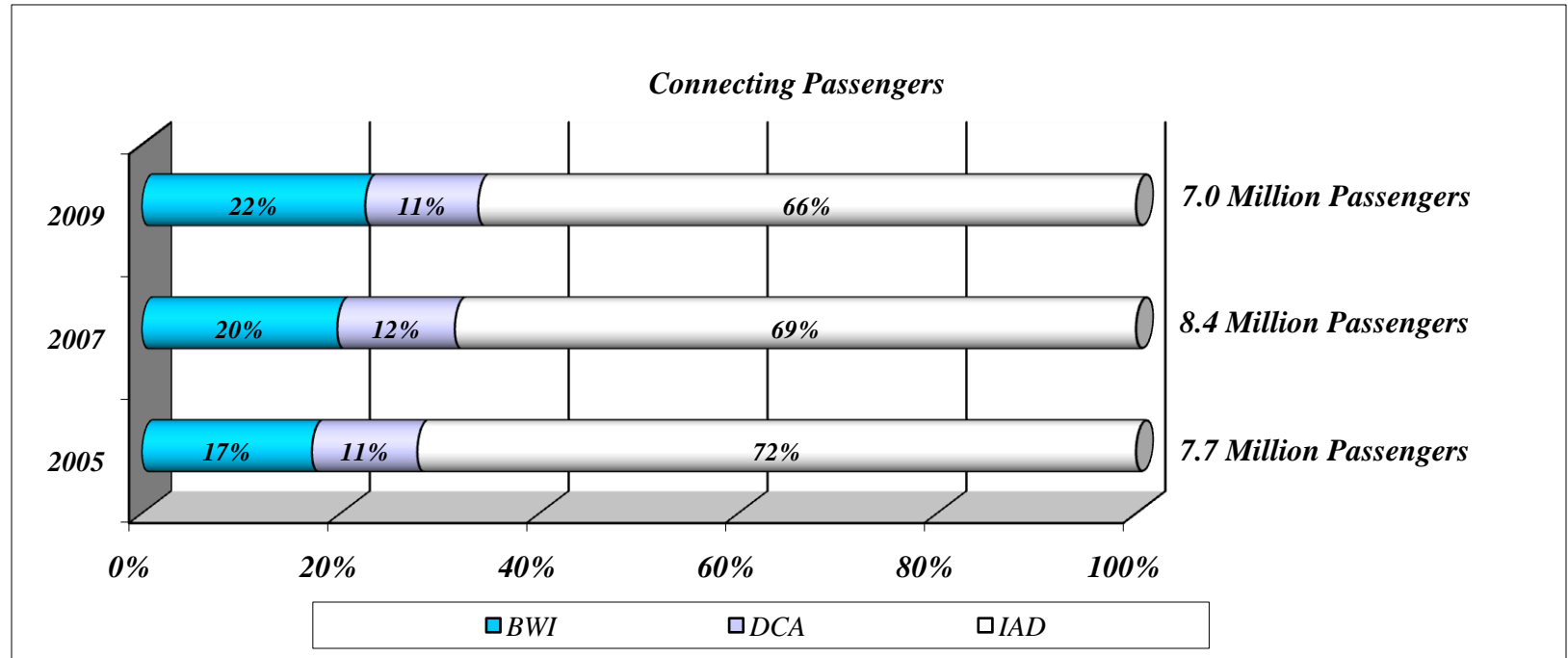
2009 Washington-Baltimore Regional Air Passenger Survey

Figure 1 - Airport Share of Passengers

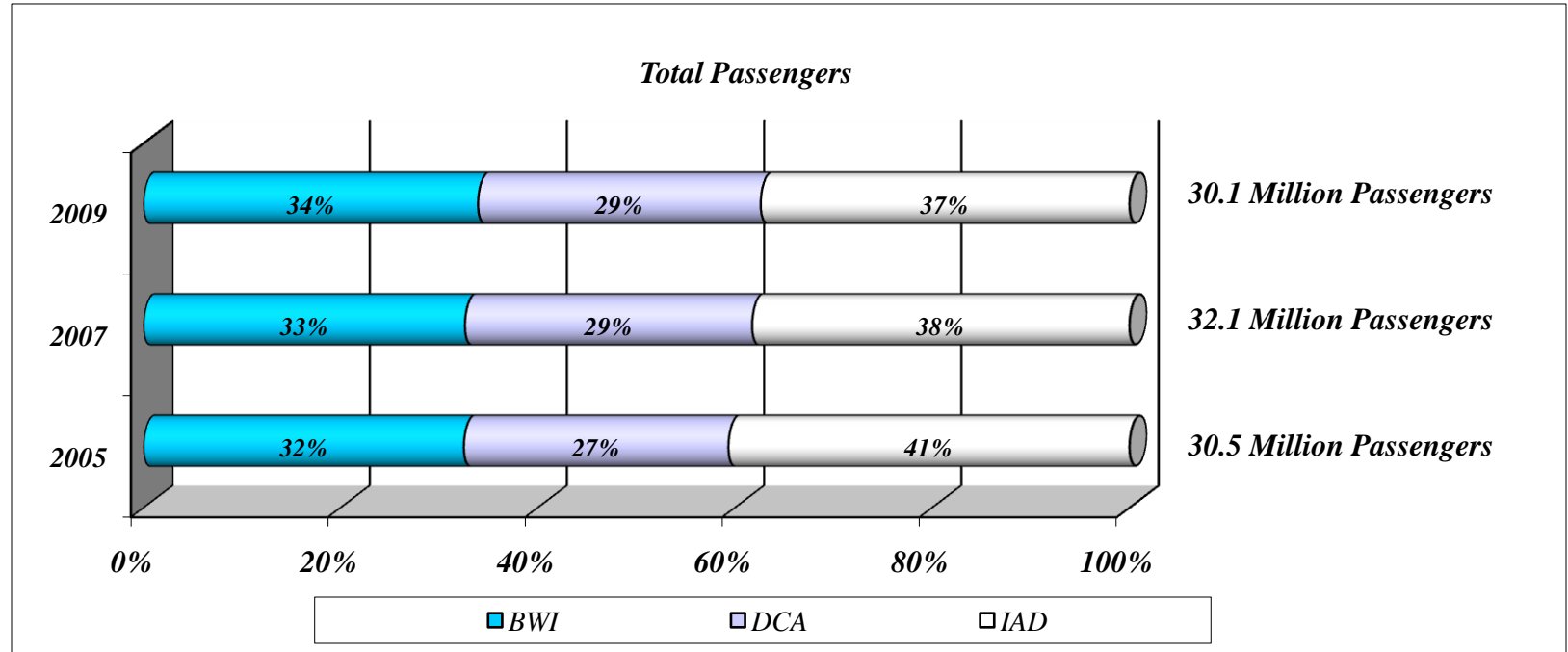
Originating Passengers



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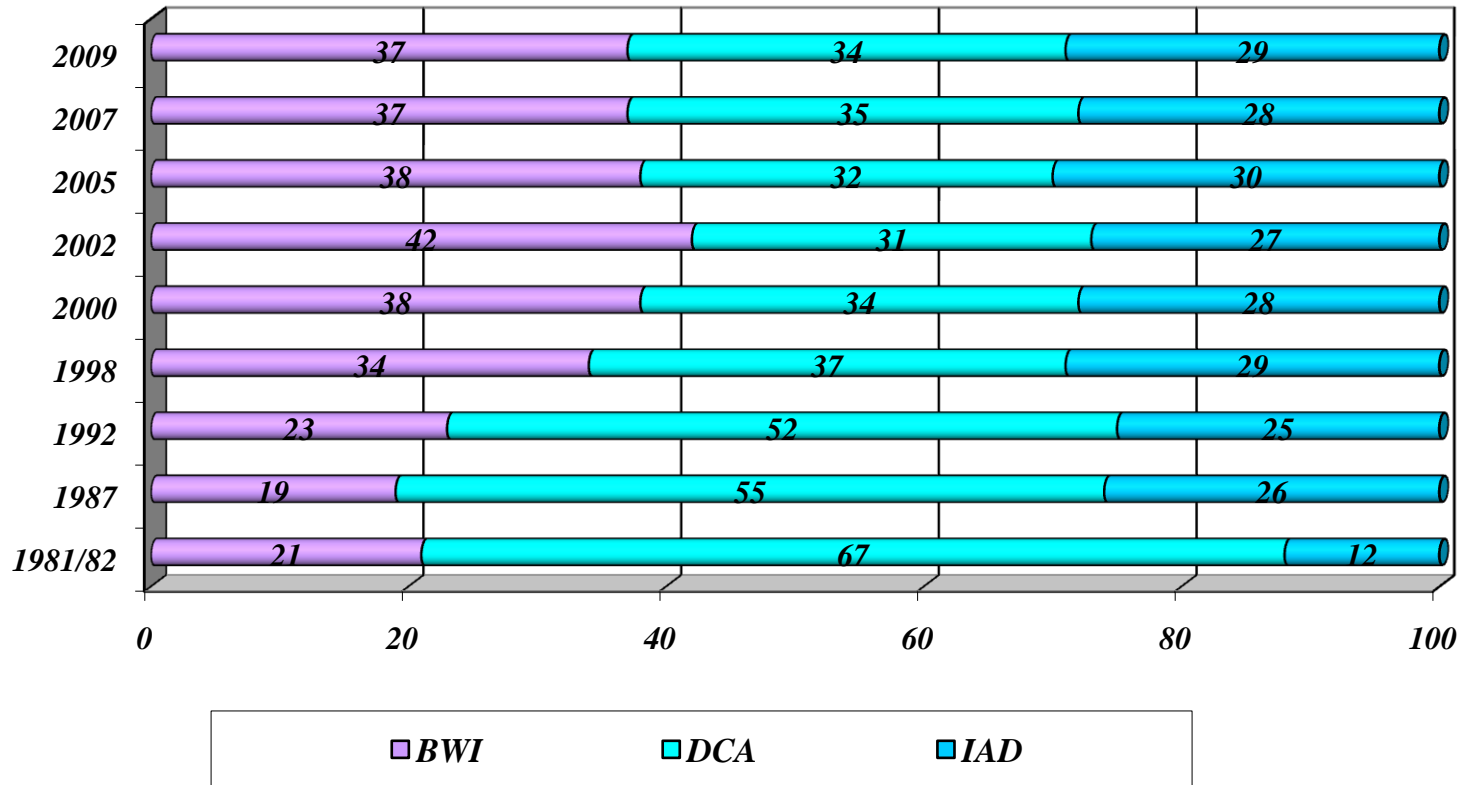
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- Connecting passengers at BWI Marshall declined by 78,000 or 5% between 2007 and 2009.
- Connecting passengers at Reagan National declined by 198,000 or 20% between 2007 and 2009.
- Connecting passengers at Dulles declined by 1.1 million or 19% between 2007 and 2009.
- Local originating passengers increased by 1% at BWI Marshall, less than 1% at Dulles and declined by 3% at National when compared with 2007.



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Local Originating Passengers



2009 Washington-Baltimore Regional Air Passenger Survey

Washington-Baltimore Regional Airports
Local Originating Air Passengers Trips by Flight Destinations
(Thousands of Originations)

<i>Enplanement Type</i>		B.W.I. MARSHALL 2009	REAGAN NATIONAL 2009	DULLES 2009	REGION 2009
Domestic	<i>Number</i>	8,683	7,914	5,157	21,754
Destinations	<i>Percent</i>	98%	98%	75%	91%
International	<i>Number</i>	215	137	1,741	2,093
Destinations	<i>Percent</i>	2%	2%	25%	9%
Total Enplanements	<i>Number</i>	8,898	8,051	6,898	23,847
Percent of Region		100%	100%	100%	100%



Primary Reason for Selecting Airport

➤ Reasons for choosing an airport

Accessibility

- Closest airport
- Better ground transportation
- Better access and parking

Quality of Air Service

- More convenient flight times
- Only airport with direct non-stop flight
- Only airport serving market

Cost of Air Service

- Less expensive airfare
- Frequent flyer with specific airline



- Accessibility reasons for choosing an airport overall remained the same between 2007 and 2009, 66%
- Closest Airport
 - 56% of BWI Marshall airport users – down from 58% in 2007
 - 72% of Reagan National airport users – up from 69% in 2007
 - 53% of Dulles airport users – down from 54% in 2007
- Lowest Airfare
 - 27% of BWI Marshall airport users – up from 24% in 2007
 - 7% of Reagan National airport users – same as in 2007
 - 16% of Dulles airport users – up from 14% in 2007



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Primary reason for Choosing airport used	BWI Marshall	Dulles	Reagan National	Region
Accessibility	60%	57%	79%	66%
Quality of Air Service	10%	22%	11%	33%
Cost of Service	29%	19%	8%	18%
Other	1%	2%	1%	1%
Total	100%	100%	100%	100%



Airport Preference

- Overall airport preference changed little between 2007 and 2009
 - BWI Marshall 27% – (down from 29% in 2007)
 - Reagan National 39% – (up from 38% in 2007)
 - Dulles 17% – (same as in 2007)
 - No preference 16% – (up from 15% in 2007)

- Washington-Baltimore area residents expressed preference
 - 41% to Reagan National – 37% in 2007
 - 31% to BWI Marshall– 34 in 2007
 - 22% to Dulles – Same as in 2007
 - 7% no preference – same as in 2007



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

Preferred Airport		Resident 2009	Non-Resident 2009	REGION 2009
BWI MARSHALL	<i>Number</i>	3,138	2,415	5,553
	<i>Percent</i>	26%	31%	27%
DULLES	<i>Number</i>	1,789	1,716	3,505
	<i>Percent</i>	15%	22%	17%
REAGAN NATIONAL	<i>Number</i>	4,634	3,227	7,861
	<i>Percent</i>	38%	41%	39%
No Preference	<i>Number</i>	2,722	559	3,281
	<i>Percent</i>	22%	7%	16%
TOTAL	<i>Number</i>	12,283	7,917	20,200
	<i>Percent</i>	100%	100%	100%

Notes:

* Totals do not include non-respondents and resident unknown



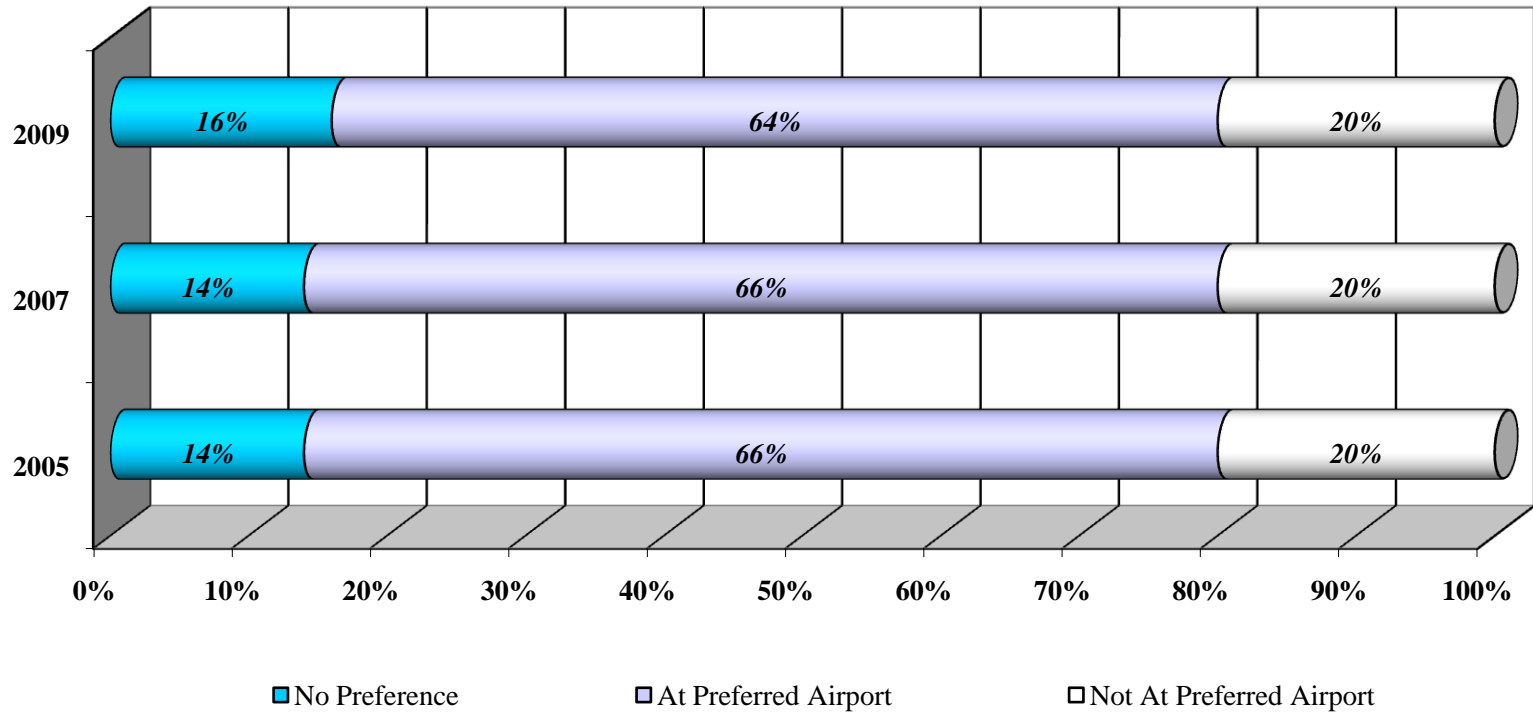
- Non-residents expressed preference
 - 38% to National – 39% in 2005
 - 26% to BWI Marshall – same as in 2007
 - 15% to Dulles – 13% in 2007
 - 22% no preference same as in 2007

- Overall there was a slight decrease in share of passengers flying out of their preferred airport, from 66% in 2007 to 64% in 2009.



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Satisfaction with Airport Used
(originating Passengers Only)



Trip Purpose

Business

- Related to federal government
- Related to other government (state, local)
- Other non-government related

Non-Business

- Vacation
- Personal or family affairs
- Student or school related
- Other



Originating Passengers Trip Purpose

Trip Purpose	2005	2007	2009
Business	42%	41%	38%
Non-Business	58%	59%	62%
Total	100%	100%	100%



- Business related trip purpose overall declined by 7% while non-business related trips increased by the same amount between 2007 and 2009.

Business related trips

- BWI Marshall – declined by 6%
- Reagan National – declined by 13%
- Dulles – increased by 1%

Non-Business related trips

- BWI Marshall – increased by 5%
- Reagan National – increased by 6%
- Dulles – increased by 10%



Trip Origin

Home

- Private residence

Non-Home

- Hotel / Motel
- Place of employment (work)
- Another place of business
- Other



Passengers Ground Trip Origin to Airport

Trip Origin	2005	2007	2009
Private Residence	61%	57%	56%
Hotel / Motel	26%	30%	29%
Place of Employment	11%	11%	10%
Other	3%	2%	4%
Total	100%	100%	100%

** Totals may not add due to rounding*



Mode of Travel to Airport

- The most common mode of access to airports continued to be the automobile (private and rental car) accounting for 62% of total trips to all airports
- Metrorail usage to National increased slightly to 16%, while the share of rental car trips dropped to 8% from 10% in 2007, and the share of auto trips remained the same.
- Travel to BWI Marshall by private car mode share declined from 64% in 2007 to 59% in 2009.
- Travel to Dulles showed no significant modal change between 2007 and 2009



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Passengers Ground Trip Mode to Airport - 2009

Travel Mode	BWI	DCA	IAD
Private Car	60%	33%	55%
Rental Car	17%	8%	15%
Taxi	5%	31%	14%
Rail Transit	4%	16%	1%
Airport bus/ Van/Limo	9%	6%	9%
Hotel/motel Bus	3%	5%	3%
Other	3%	1%	3%
Total	100%	100%	100%



Air Traveler Characteristics

- In 2009, the majority of departing air travelers at the region's three major airports were middle-aged, affluent and non-resident
 - Non-residents departing passengers accounted for 61%, up from 57% in 2007.
 - The share of Residents departing passengers declined to 39% in 2009 from 43% in 2007.
 - The share of departing passengers under the age of 25 years and over the age of 65 years increased slightly between 2007 to 2009.



Local Originating Passengers Resident Status

Resident Status	2005	2007	2009
Resident	50%	43%	39%
Non-Resident	50%	57%	61%
Total	100%	100%	100%



Local Originating Passengers by Age Group

Age Group	2005	2007	2009
18 and Younger	6%	2%	3%
19 to 24 Years	10%	7%	8%
25 to 34 Years	18%	19%	19%
35 to 49 Years	33%	32%	30%
50 to 64 Years	28%	31%	30%
65 and Older	6%	8%	10%
Total	100%	100%	100%

** Totals may not add due to rounding*



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- In 2009, 53% of departing passengers household income was less than \$120,000, which is comparable to 2007
- In 2009, over half of departing area residents, 56% had annual household income of over \$120,000, while the same amount of non-resident passengers had household income less than \$120,000.



Local Originating Passengers Household Income

Household Income	2007	2009
Less than \$15,000	2%	4%
\$15,000-\$24,999	2%	2%
\$25,000-\$44,999	7%	6%
\$45,000-\$79,999	17%	18%
\$80,000-\$119,999	25%	23%
\$120,000-\$199,999	10%	10%
\$200,000 and Above	20%	21%
Total	100%	100%

** Totals may not add due to rounding*



- The content of air passenger survey changed in 2009 to include a question where and if passengers had made a stop for boarding pass and/or bag check at the following:
 - A. Curbside agent for boarding pass
 - B. Curbside agent for bag check
 - C. E-ticket kiosk for boarding pass
 - D. E-ticket kiosk for bag check
 - E. Ticket agent in terminal for boarding pass
 - F. Ticket agent in terminal for bag check
 - G. None of the above



- Overall 77% of departing passengers reported to have made a stop for boarding pass and/or bag check
 - 75% at BWI Marshall
 - 76% at Dulles
 - 81% at Reagan National

- Overall 20% of departing passengers reported to have made no stop for either boarding pass and/or bag check
 - 24% at BWI Marshall
 - 20% at Dulles
 - 18% at Reagan National



- Among passengers who reported to have made a stop for boarding pass and/or bag check, 55% used the E-ticket Kiosk
 - 50% at BWI Marshall
 - 52% at Dulles
 - 62% at Reagan National

- Among passengers who reported to have made a stop for boarding pass and/or bag check, 30% made a stop at the Terminal Ticket Agent
 - 31% at BWI Marshall
 - 36% at Dulles
 - 23% at Reagan National



- Curbside use for boarding pass and/or bag checking accounted for 15% of passengers
 - 18% at BWI Marshall
 - 12% at Dulles
 - 14% at Reagan National

- Among domestic destined departing flight passengers overall 77% stopped for boarding pass and/or bag check
 - 75% at BWI Marshall
 - 74% at Dulles
 - 80% at Reagan National



- Among international destined flight departing passengers, overall 82% stopped for boarding pass and/or bag check
 - 84% at BWI Marshall
 - 81% at Dulles
 - 90% at Reagan National

- Among passengers who used the curbside only, overall 82% stopped for bag check and boarding pass while 18% did so for boarding pass only
 - bag check (includes boarding pass)
 - 83% at BWI Marshall
 - 77% at Dulles
 - 84% at Reagan National



- Among passengers who used the e-ticket kiosk only, overall 47% stopped for bag check and boarding pass while 53% did so for boarding pass only

bag check (includes boarding pass)

- 47% at BWI Marshall
- 49% at Dulles
- 61% at Reagan National

- Among passengers who used ticket agent service only, overall 66% stopped for bag check and boarding pass while 34% did so for boarding pass only

bag check (includes boarding pass)

- 70% at BWI Marshall
- 68% at Dulles
- 56% at Reagan National



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Passengers at Airport Boarding Pass and Bag Check	Percent Share
Only stopped at curbside for boarding pass	2%
Only stopped at curbside for bag check	4%
Only stopped at E-ticket kiosk for boarding pass	18%
Only stopped at E-ticket kiosk for bag check	8%
Only stopped at ticket agent in terminal for boarding pass	8%
Only stopped at ticket agent in terminal for bag check	7%
Stopped at multiple place for boarding pass and bag check	31%
Did not stop for boarding pass or bag check	20%
None of the above	2%
Total	100%



Thank You