Transportation and Air Traveler Characteristics Findings from the 2011 Washington-Baltimore Regional Air Passenger Survey

TPB Technical Committee
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Presentation Overview

▸ Survey Overview and Methodology

▸ Transportation Findings

▸ Air Traveler Characteristics Findings

▸ Conclusions…so far

▸ Next steps

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Survey Overview and Methodology (1)

▸ Survey purpose: provide observed data foundation for CASP program activities and the work of our airport partners (MAA, MWAA)

– Air passenger demand forecasting

– Planning for airport access facilities

– Planning airport landside facilities

– Trend and market analyses

▸ Conducted every two years at the three regional commercial service airports: BWI, DCA, IAD

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Survey Overview and Methodology (2)

▸ Sample randomly selected from all scheduled departures during two-week survey period, taken from Official Airline Guide

▸ Stratification for 2011 survey: by airport, airline, first stop destination

▸ Final sample and strata approved by MWAA and MAA

▸ Passengers surveyed at airport departure gates while waiting to board flights

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Survey Overview and Methodology (3)

▸ 2011 survey conducted for two-week period Wednesday November 2nd through November 15th

▸ Resurvey period (flights with insufficient response) November 16th to November 22nd

▸ Survey is voluntary; opt-in, self-administered questionnaire

▸ Surveyors collect completed questionnaires from respondents; mail-back option for passengers arriving late to gate area

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Survey Questionnaire

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2011 APS Data Collection Summary

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

*Survey results annualized

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Transportation Findings

▸ Airport Use
▸ Airport Choice / Preference
▸ Trip Purpose
▸ Trip Origin
▸ Mode of Access

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Airport Use - General

Total Annual Enplanements by Year

• Regional enplanements up slightly over 2009

• Regionally, both local originations and connections increased

• Different local origination / connecting characteristics at each airport

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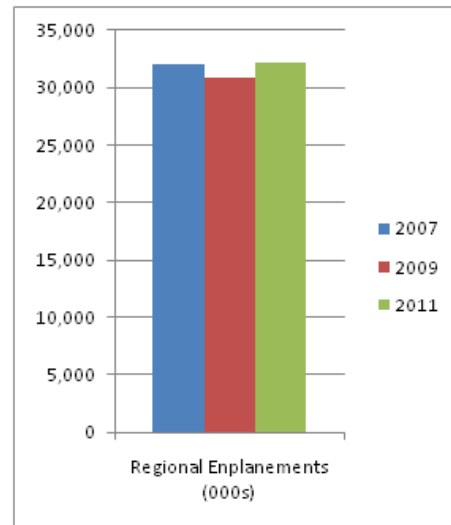
Airport Use: Annual Enplanements by Airport by Year (000s)

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Annual Local Originations and Connecting Flights by Airport by Year (000s)

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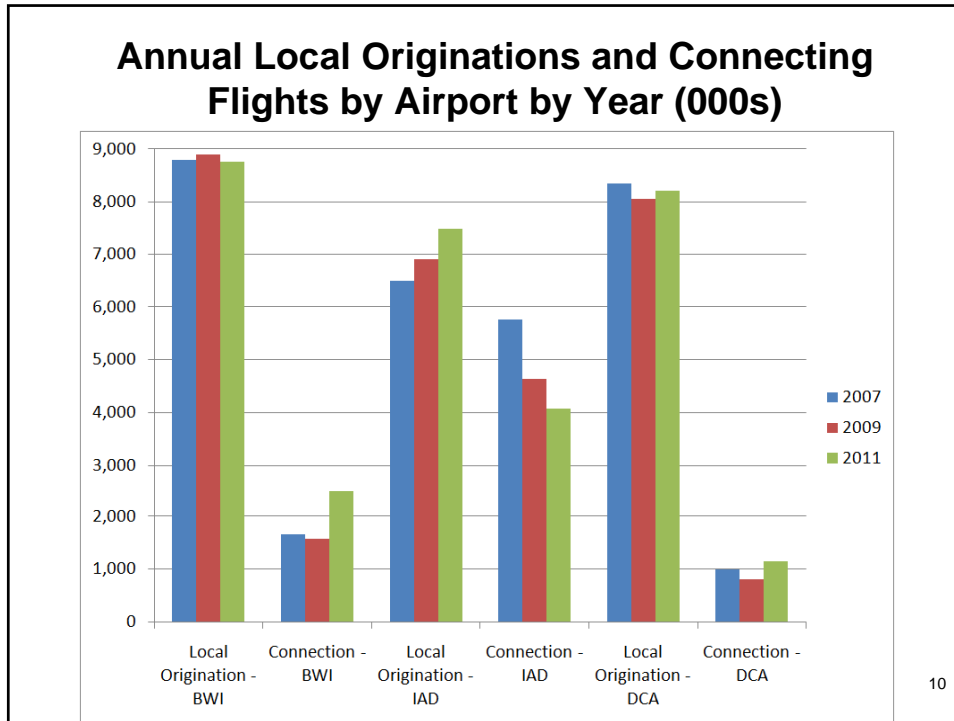
Airport Use – Local Originations vs. Connections

• Regionally, 76% of enplanements were local originations and 24% connecting flights, compared with 77% and 23% for 2009.

• Increase in proportion of connecting passengers at BWI attributed to merger of Southwest and AirTran (May 2011)

• Decrease in connecting passengers at IAD despite merger of United and Continental (October 2010)

• Survey analysis focused on local originations, since they utilize the surface transportation network

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Airport Choice – Primary Factor

• Cost of airfare less of a factor, down from 2009 levels of 27% and 16% at BWI and IAD to 18% and 8% in 2011, respectively

• Accessibility (closest airport) still the biggest factor, but decreased from 61% in 2009 to 57% in 2011 for all airports

• By airport, accessibility factor unchanged at BWI, decreased from 53% to 42% at IAD, and from 72% to 71% at DCA

• Travelers more sensitive to value of travel time to airport than airfare

Lower Airfares as the Primary Factor in Airport Choice (% of Passengers)
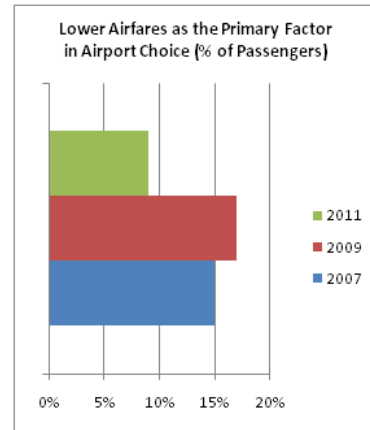
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Airport Preference

• Regionally, two-thirds of respondents indicated they were travelling from their preferred airport (unchanged from 2009)

• Residents more likely than non-residents to express an airport preference

• DCA is the most-preferred airport by both residents (36%) and non-residents (39%), followed by BWI (31% and 27%), and IAD (23% and 14%)

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Trip Purpose – All Airports
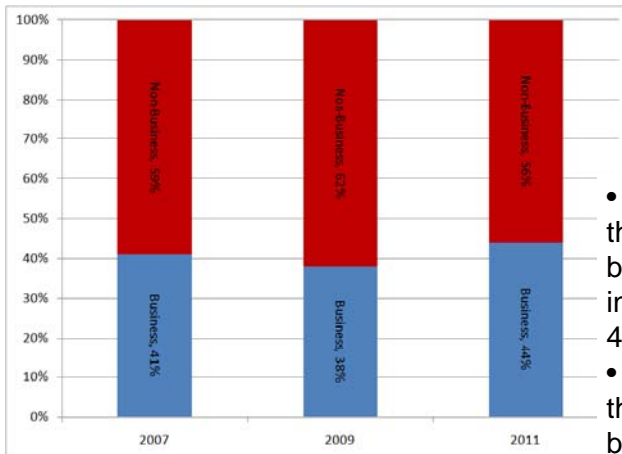
• Compared with 2009, the percentage of business travel has increased from 38% to 44%
• Compared with 2009, the percentage of non-business travel has decreased from 62% to 56% (effects of recession)

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Trip Purpose By Airport by Year

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Trip Origin

Local Air Passenger Trip Origins - Regional

- Private Residence
- Hotel / Motel
- Regular Place of Employment
- Another Place of Business
- Other

• By airport, about two-thirds of airport passengers' ground trips began at a private residence for both BWI and IAD, but only about half for DCA
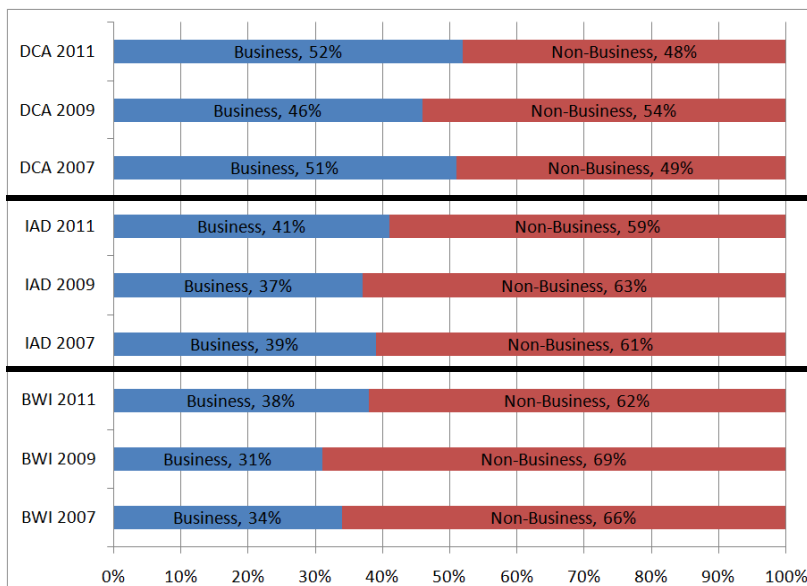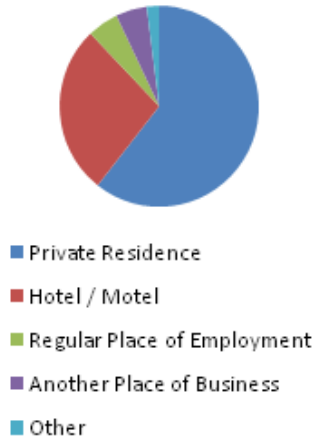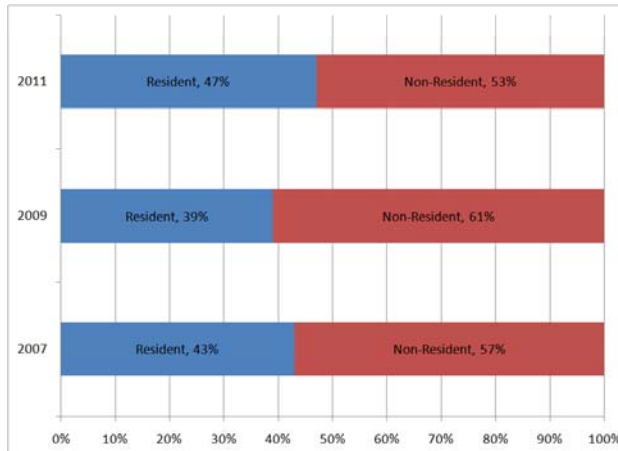
• About one-third of airport passengers' ground trips began at a hotel for DCA, but only 21% at BWI and 26% at IAD

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Air Traveler Resident Status

• For 2011, DCA highest proportion of non-residents (58%); in 2009 BWI highest proportion of non-residents (62%)

• For 2011, IAD highest proportion of residents (52%) and only airport with majority of resident travelers

• In 2009, IAD still highest proportion of residents (44%) but none of the three airports had a majority of resident travelers
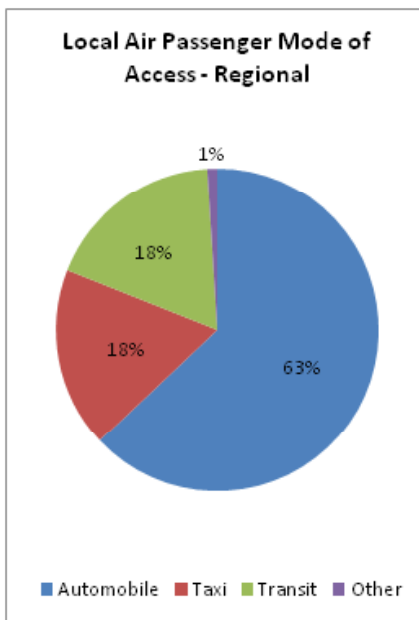
All Airports

2011	Resident, 47%	Non-Resident, 53%
2009	Resident, 39%	Non-Resident, 61%
2007	Resident, 43%	Non-Resident, 57%

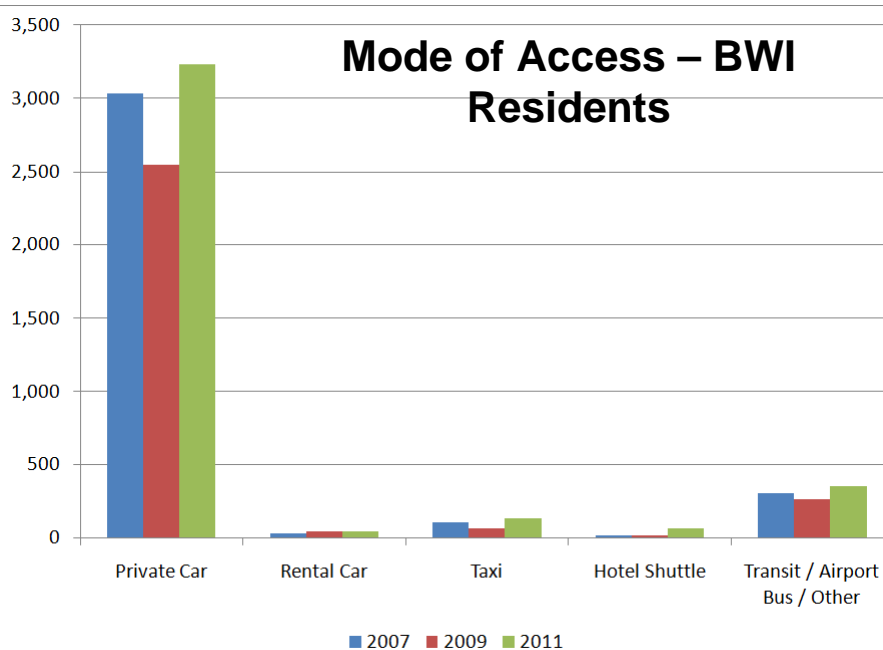0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

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Mode of Access

• The most common mode of access to the airports in 2011 continued to be the automobile (private and rental), accounting for 63% of all local originations

• Metrorail usage by passengers traveling to DCA continues to be among the highest proportions of any airport in the United States at 16%

Local Air Passenger Mode of Access - Regional

Automobile 63%, Taxi 18%, Transit 18%, Other 1%

Legend: Automobile, Taxi, Transit, Other

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Mode of Access – BWI Residents

Categories: Private Car, Rental Car, Taxi, Hotel Shuttle, Transit / Airport Bus / Other

Legend: 2007, 2009, 2011

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Mode of Access – BWI, Non-Residents

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**Mode of Access
DCA, Residents**

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**Mode of Access
DCA, Non-Residents**

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**Mode of Access
IAD, Residents**

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**Mode of Access
IAD, Non-Residents**
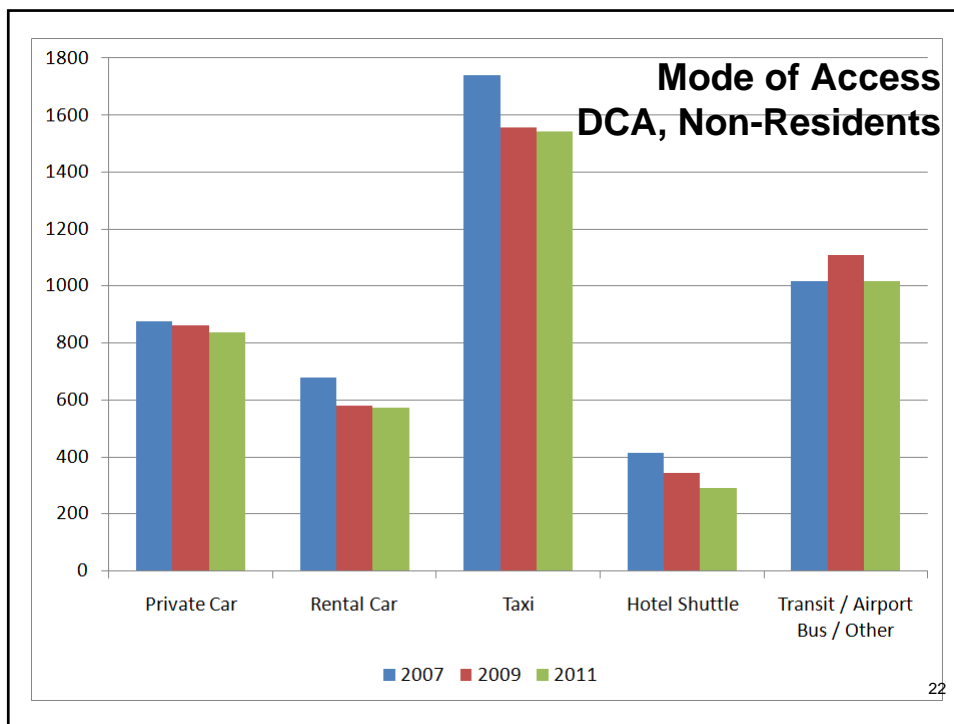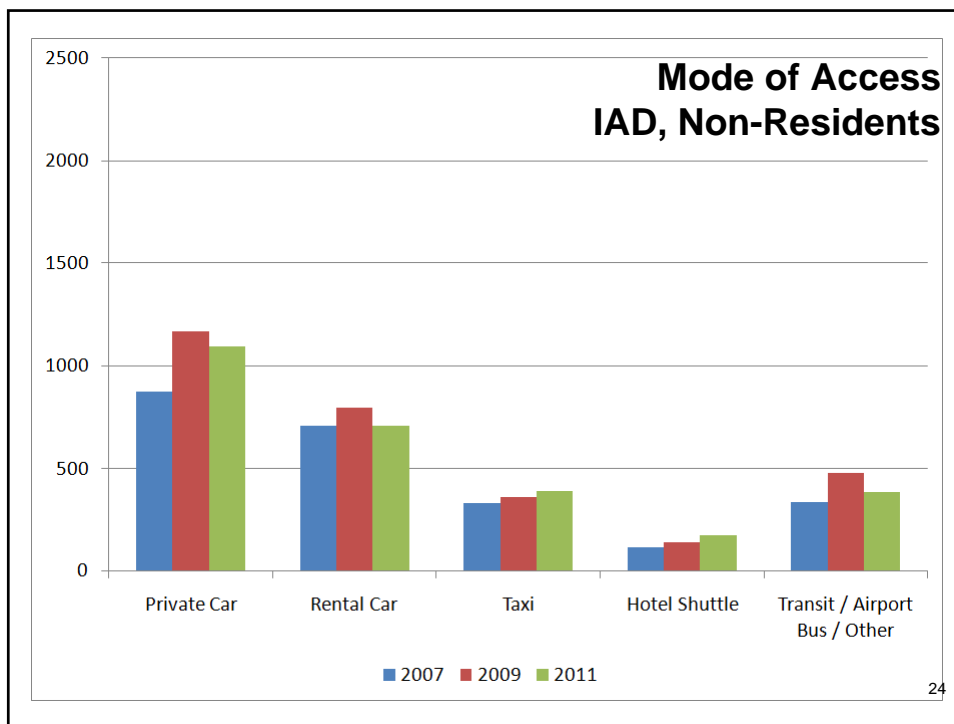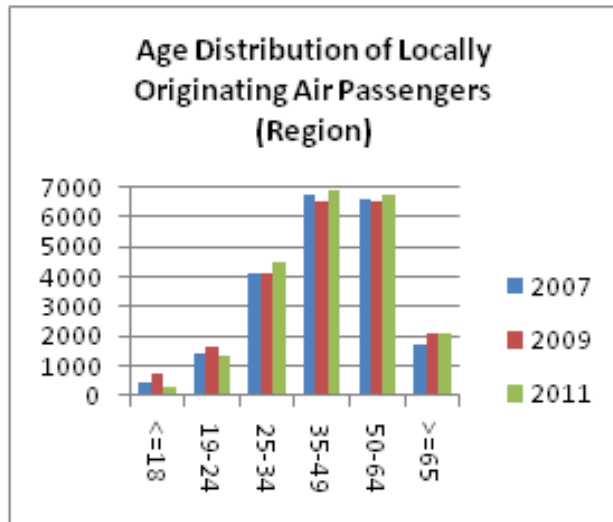

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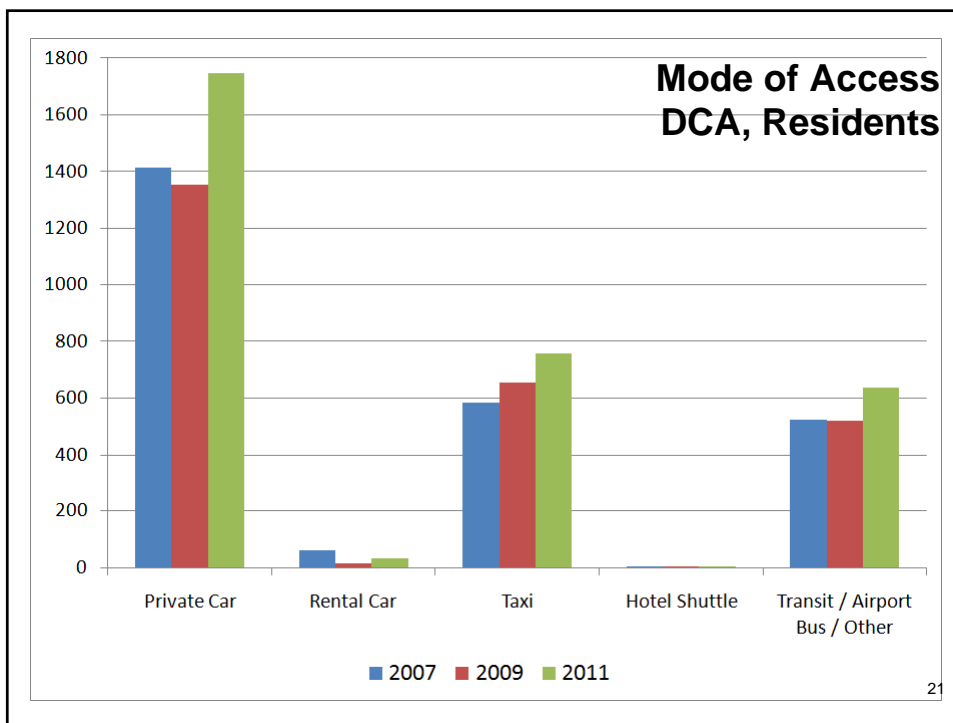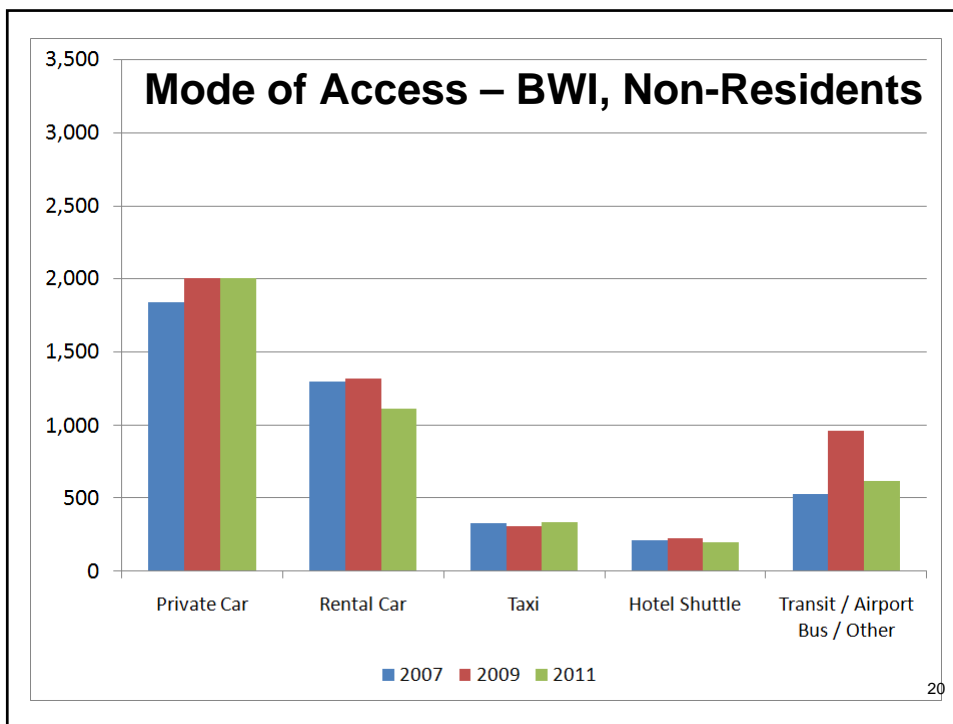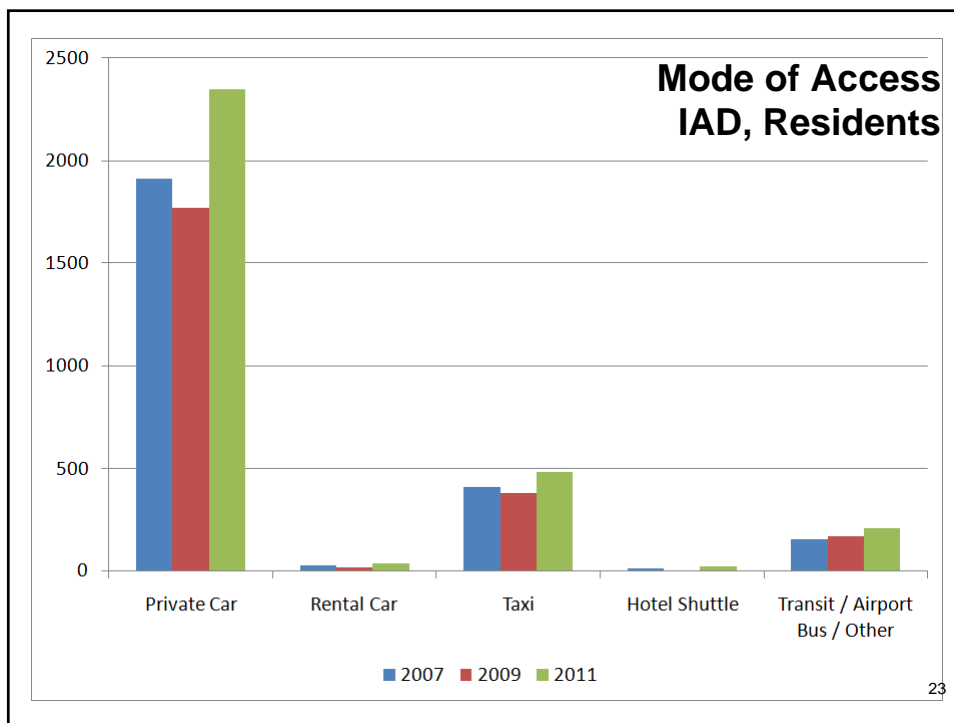
Air Travel Characteristics Findings

▶ Age
▶ Income

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Air Traveler Age

• Slight increase in 25-34, 35-49, and 50-64 age groups over 2009

• Regional age distribution virtually identical to all three individual airports

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Air Traveler Income
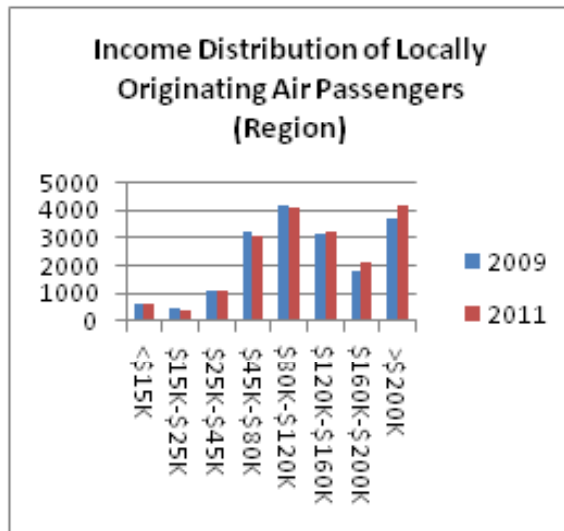
• A little over half of regional locally originating air passengers had annual household incomes of at least $120,000, an increase over 2009 and 2007

• More than half of resident local originations have annual household incomes of more than $120,000

• Affluence explains lack of price (airfare) sensitivity in airport choice

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2006-2010 ACS Median HH Income for Region (CSA) is $78,040; $51,914 for Nation

Conclusions…so far (1)

- ▸ Airport passenger traffic has grown over 2009
- ▸ Proportion of business travel has grown over 2009 at all airports
- ▸ Proportion of travel by area residents has grown over 2009 at all airports
- ▸ Each airport's regional share of passengers generally constant since 2007

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Conclusions…so far (2)

- ▸ Proportion of local originations (using airport ground access network) generally constant but travel base growing
- ▸ Private auto dominant mode of access except at DCA
- ▸ Most locally originating travelers affluent and value time highly

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Next Steps (1)

▶ Comments on report
▶ Additional cross-classifications and analysis
  ▶ Airport choice by resident / non-resident
  ▶ Airport choice by business / non-business travel
  ▶ Trip origin by resident / non-resident
  ▶ Trip purpose by resident / non-resident
  ▶ Others

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Next Steps (2)

▶ Geocode survey file and conduct further analysis
▶ 2011 Air Passenger Survey Geographic Findings Report (to Aviation Technical Subcommittee and TPB Technical Committee, Spring 2013)
▶ Spring 2013: begin preparations for Fall 2013 Air Passenger Survey

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