

WASHINGTON-BALTIMORE REGIONAL AIR PASSENGER SURVEY 2019

Draft General Findings Report

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OVERVIEW

- Key Takeaways
- Ground Access
- Air Passenger Characteristics
- Preferences & Behavior
- Next Steps



New Additions to Survey Instrument

Question B1 – New Origin Option: Short-term Rental (Airbnb, VRBO)

If air passengers began their trip to the airport from a short-term rental

Question B6 – New Mode Options: Biking and Walking

If air passengers traveled to the airport by biking or walking

Question B8 – Ground Transportation Spending

How much air passengers spend on ground access to airport

Question B9 – Carpooling

If air passengers carpoled to the airport

Question C2 – Airport Ranking

Participants rank their preference for each airport (1-3)

Question D7 Airport Concessions

How much air passengers spend on concessions (non-parking spending) at the airport; Replaced APS 2017 question about total spending in region



KEY TAKEAWAYS



Key Takeaways

- **Response Rate:** 28.4%
- **Enplanement:** Local originating enplanements increased at all airports
- **Dominant Travel Purpose by Airport**
 - BWI: Personal and Vacation
 - DCA: Business – Government and Other
 - IAD: School-related
- **Ground Access Spending**
 - TNCs are the dominant mode for \$10-\$99 travel price ranges
- **Airport Spending**
 - Most air passengers spend between \$1-\$24 at the airport



Enplanement by Type and Airport

- Annual air passenger enplanements in 2019 were 1.3 million higher (37.8 million) than in 2017 (36.5 million)
- Local originations increased from 73% to 80% of total enplanements in 2019
 - BWI: 67% → 77%
 - DCA: 88% → 91%
 - IAD: 64% → 71%

Enplanement Type		BWI			DCA			IAD			REGION		
		2015	2017	2019	2015	2017	2019	2015	2017	2019	2015	2017	2019
Local originations	<i>Number</i>	8,485	8,910	10,426	10,367	10,499	10,918	6,592	7,245	8,726	25,444	26,654	30,070
	<i>Percent</i>	71%	67%	77%	90%	88%	91%	62%	64%	71%	75%	73%	80%
Connecting	<i>Number</i>	3,449	4,305	3,116	1,127	1,458	1,031	4,120	4,062	3,603	8,696	9,825	7,750
	<i>Percent</i>	29%	33%	23%	10%	12%	9%	38%	36%	29%	25%	27%	20%
Total Enplanement	<i>Number</i>	11,934	13,215	13,542	11,494	11,957	11,949	10,712	11,307	12,329	34,140	36,479	37,820
	<i>Percent of Region</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



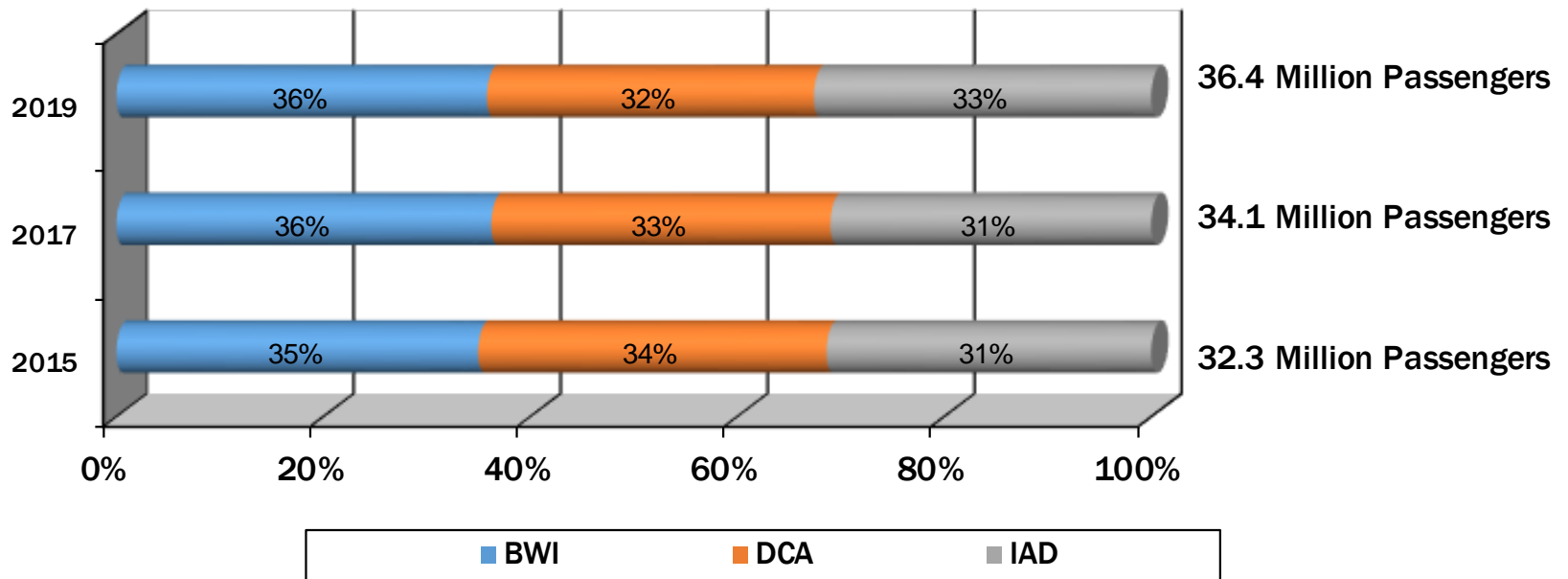
Enplanement by Type and Airport Cont'd

- Local origin enplanements increased in absolute value as well as percent share at each airport when compared with 2017
 - BWI: +17% absolute; +10% share
 - DCA: +4% absolute; +3% share
 - IAD: +20% absolute; +7% share
- Connections decreased at all airports by absolute value and percent share
 - BWI: -28% absolute; -10% share
 - DCA: -29% absolute; -3% share
 - IAD: -11% absolute; -7% share



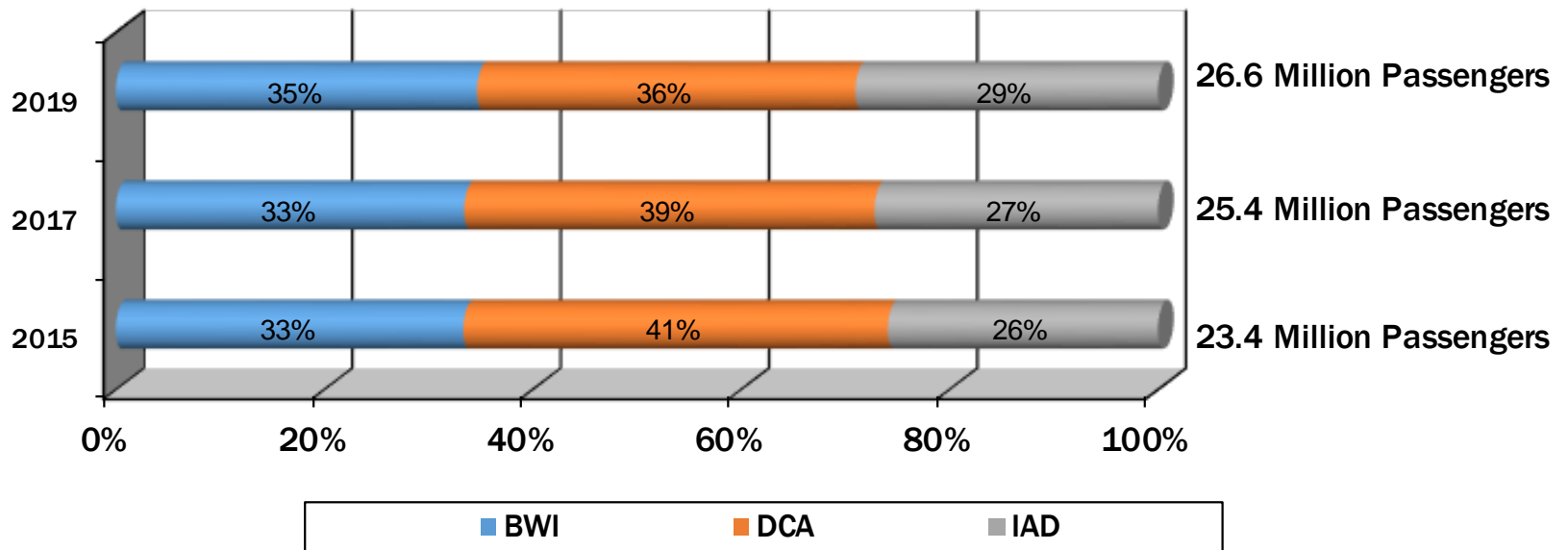
Enplanement Share by Airport: Total

- BWI total enplanement share remained the same as 2017
- DCA total enplanement share decreased by 1%
- IAD total enplanement share increased by 2%



Enplanement Share: Local Originations

- BWI local originating enplanement share increased by 2%
- DCA local originating enplanement share decreased by 3%
- IAD local originating enplanement share increased by 2%

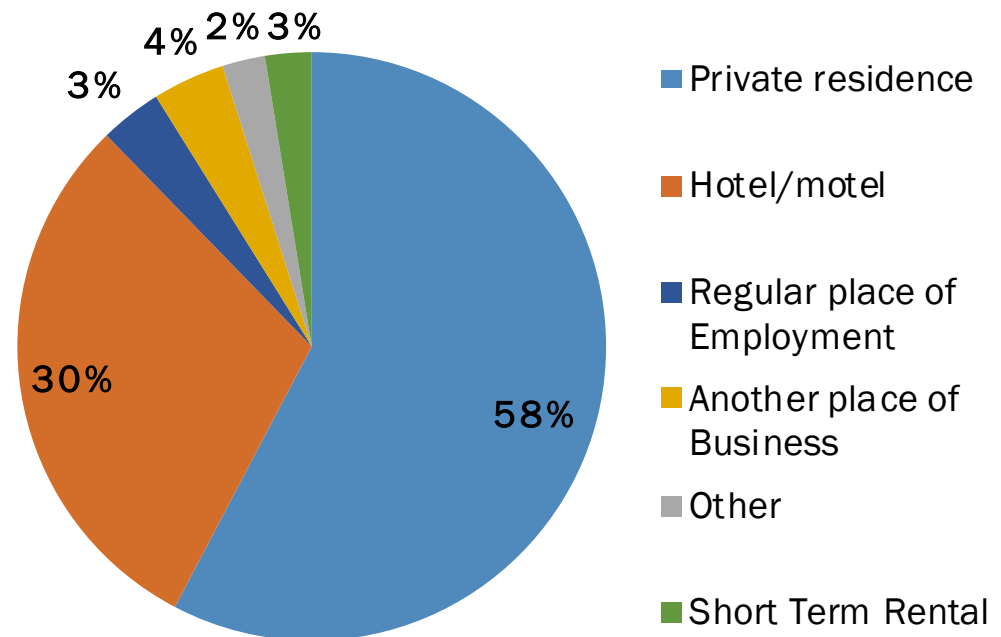


GROUND ACCESS



Local Air Passenger Trip Origin

- Short-term rental made up 3% of origins: 2% at BWI and IAD; 3% at DCA
- Private residence decreased by 2% overall: 5% at BWI, 4% at DCA, and it stayed the same at IAD
- Hotel/motel increased by 2% overall as well as at DCA and IAD Airports. BWI increased by 4%



Airport Trip Drop-Off: Question B10

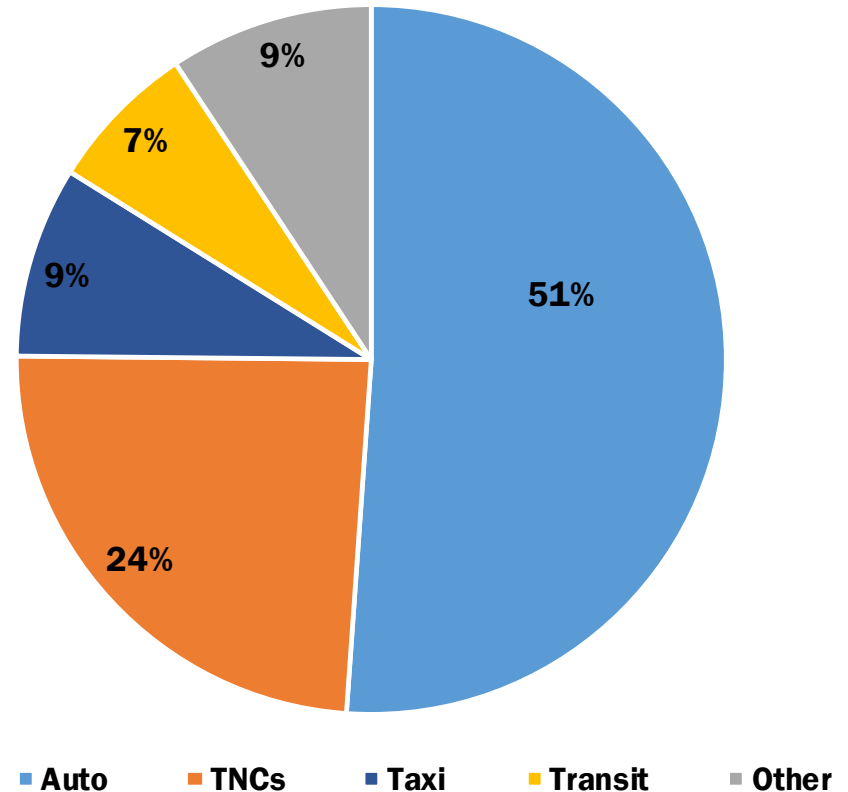
- Were you dropped off at the terminal curbside?

Dropoff		BWI	DCA	IAD	Total
Yes	<i>Number</i>	3,447	3,766	3,829	11,042
	<i>Percent</i>	48%	51%	60%	52%
No	<i>Number</i>	1,970	609	874	3,453
	<i>Percent</i>	27%	8%	14%	16%
Non-Respondents	<i>Number</i>	1,814	3,062	1,665	6,541
	<i>Percent</i>	25%	41%	26%	31%
Total		7,231 100%	7,437 100%	6,368 100%	21,036 100%



Local Air Passenger Mode of Access

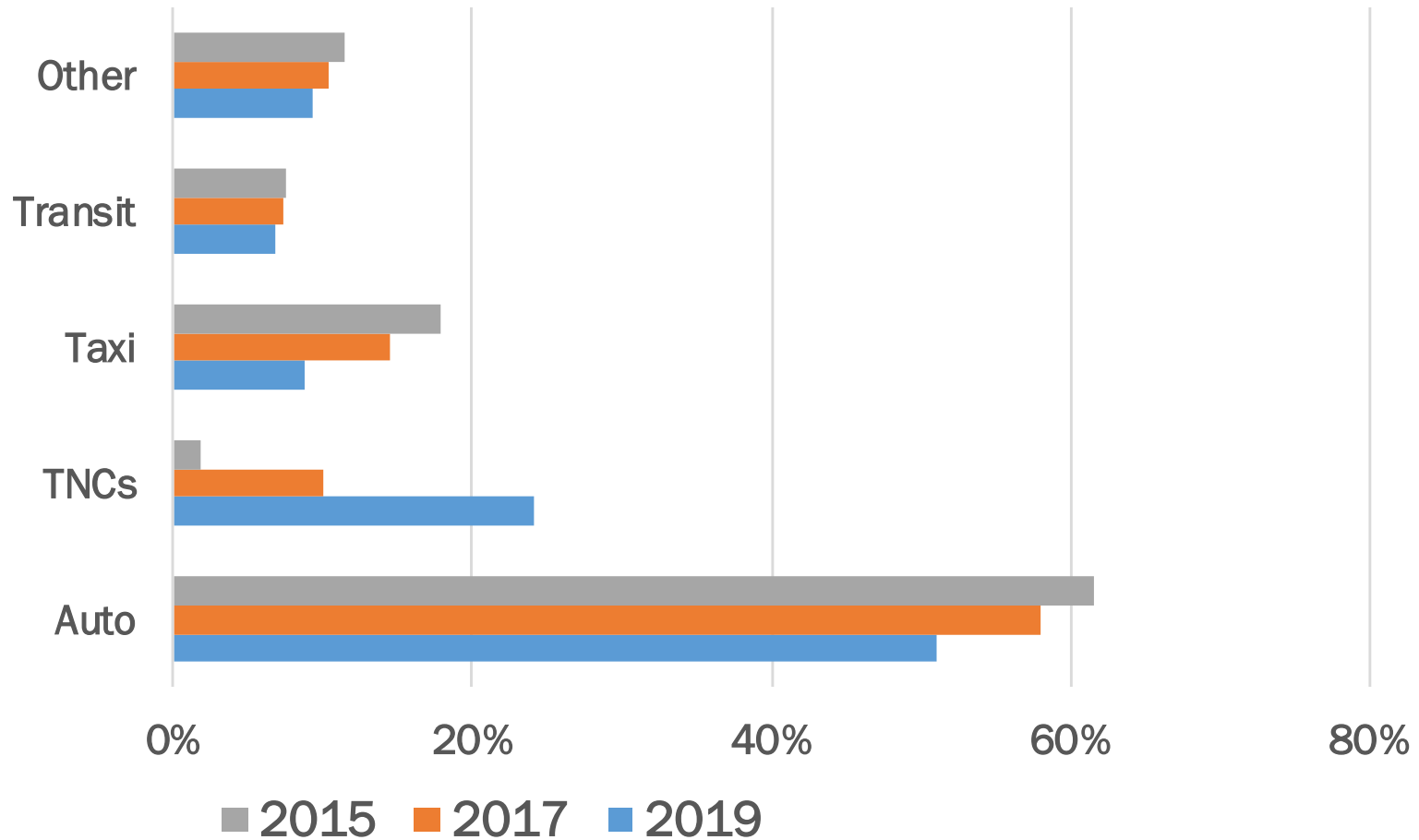
- Auto share (private & rental cars) decreased 58% → 51%
- Taxi share decreased 14% → 9%
- TNC share increased 10% → 24%
 - BWI: 8% → 13%
 - DCA: 14% → 36%
 - IAD: 7% → 22%
- Metrorail decreased from 5% to 4% overall and remained the same at DCA: 12%



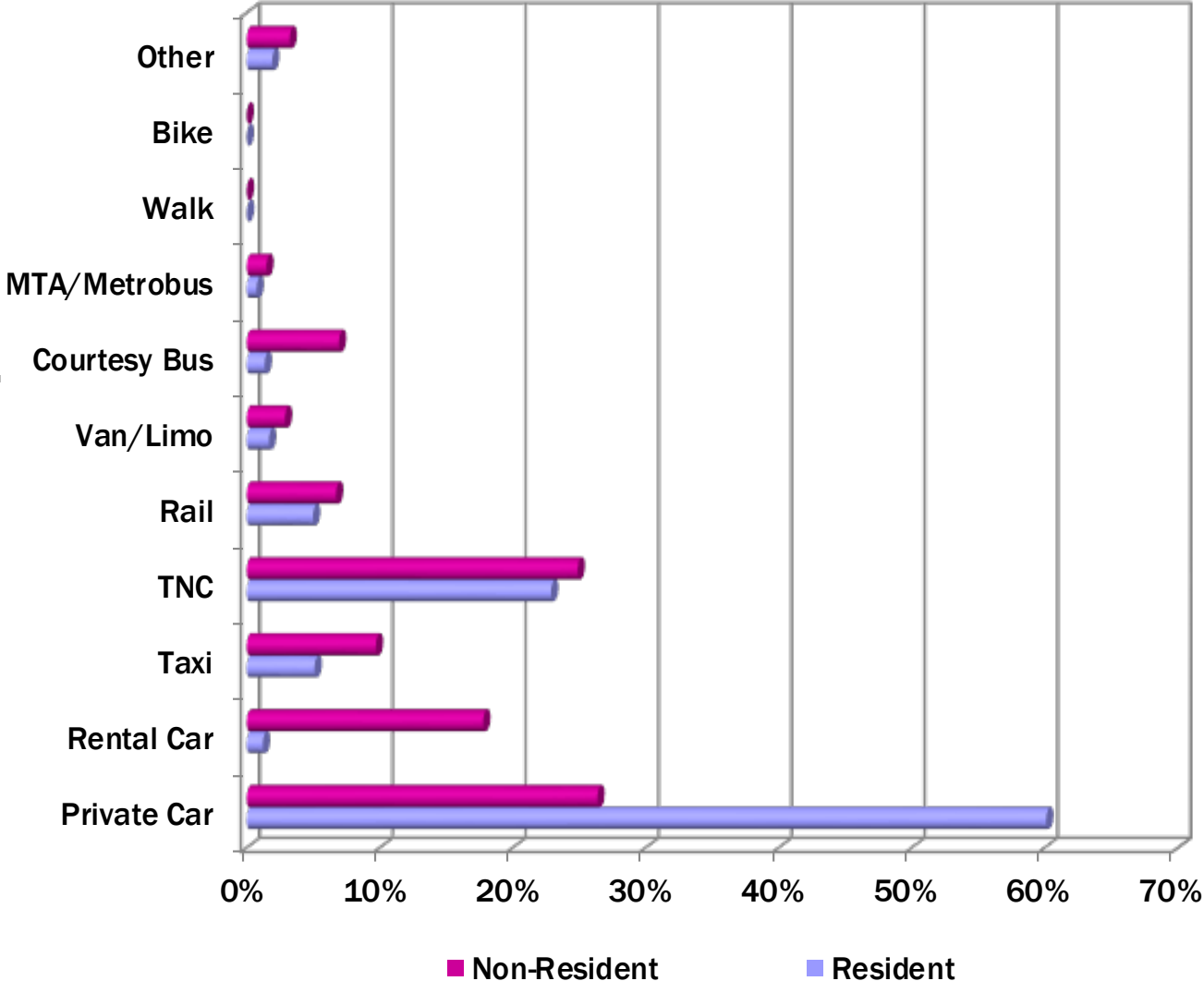
* Walk and Bike mode of access are included in other



Departing Passengers by Mode of Access



Mode of Access by Resident Status



Mode of Access & Trip Origin

- 62% of home originating trips and only 11% of non-home originating trips are by private car
- 29% of non-home and 20% of home trips are by TNC
- 18% of non-home and only 5% of home trips are by rental car
- 14% of non-home and only 5% of home trips are by taxi



Mode of Access & Trip Purpose

- Private car use accounts for 49% of non-work travel and 28% of work-related travel
- TNCs make up 31% of work travel and 19% of non-work travel
- Metrorail, airport shuttle/limo, and rail service are used equally for work and non-work at 4%, 2%, and 1%, respectively



Travel Cost and Trip Purpose

- Over 1/3 of air passengers report not spending money on their trip to the airport; 25% of work travelers and 40% non-work travelers
- Nearly 20% of air passengers spend \$10-24 on ground access – 21% of work travelers and 15% of non-work travelers

Travel Cost		Trip Purpose		Total
		Work	Non-Work	
None	Number	2,084	6,014	8,098
	Percent	25%	40%	35%
\$1 - \$4	Number	636	1,097	1,732
	Percent	8%	7%	7%
\$5 - \$9	Number	459	1,172	1,632
	Percent	6%	8%	7%
\$10 - \$24	Number	1,880	2,458	4,337
	Percent	23%	16%	19%
\$25 - \$49	Number	1,697	2,277	3,974
	Percent	21%	15%	17%
\$50 - \$99	Number	758	1,044	1,802
	Percent	9%	7%	8%
\$100.00 +	Number	688	895	1,583
	Percent	8%	6%	7%
TOTAL	Number	8,202	14,957	23,159
	Percent	100%	100%	100%



Parking

77% of air passengers do not park at the airport

- BWI: 65%
- DCA: 87%
- IAD: 77%

Parking facilities most used by air passengers by airport:

- BWI
 - 6% Daily
 - 5% Long-term A/B
- DCA
 - 1% Short-term Hour
 - 1% Long-term Econ
 - 2% Long-term/Daily
- IAD
 - 3% Short-term Hour
 - 3% Long-term/Daily
 - 3% Long-term Econ



Carpooling

Carpool		BWI	DCA	IAD	Total
Yes	<i>Number</i>	1,814	2,192	1,681	5,687
	<i>Percent</i>	21%	26%	24%	24%
No	<i>Number</i>	3,723	3,981	3,588	11,292
	<i>Percent</i>	44%	48%	50%	47%
Non-Respondents	<i>Number</i>	2,946	2,106	1,881	6,933
	<i>Percent</i>	35%	25%	26%	29%
Total		8,483	8,279	7,150	23,912
		100%	100%	100%	100%



AIR PASSENGER CHARACTERISTICS



Air Traveler Characteristics

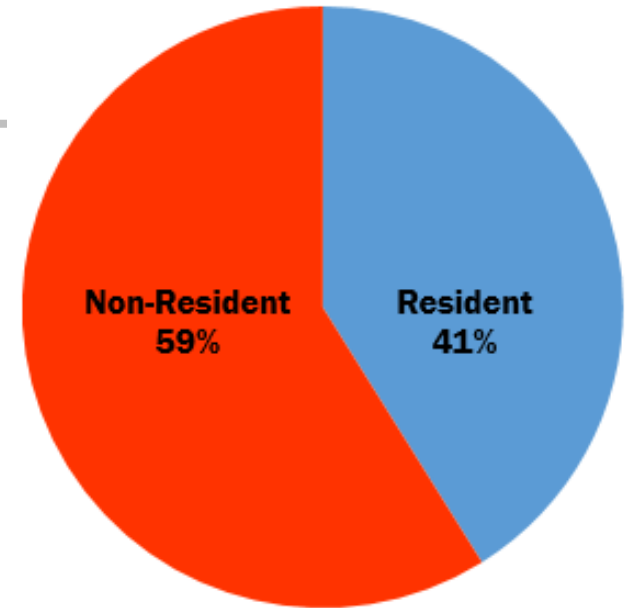
- In 2019, most departing air travelers at the region's three major airports were middle-aged, affluent and non-resident (do not live within air system planning area).
- Non-residents accounted for 59% of total departing air passengers
- Dominant Travel Purpose by Airport
 - BWI: Personal and Vacation
 - DCA: Business – Government and Other
 - IAD: School-related
- 35% of overall air passengers traveled for business
- 26% of air passengers have a household income of \$200K+



Annual Originating Air Passengers by Resident Status

Residents account for 59% of air passengers; a 1% decrease from 2017

- BWI: 58% → 54%
- DCA 66% (no change)
- IAD: 51% → 55%



Resident Status		BWI			DCA			IAD			REGION		
		2015	2017	2019	2015	2017	2019	2015	2017	2019	2015	2017	2019
Resident	Number	2,531	3,043	3,202	2,440	2,842	2,586	1,851	2,247	2,297	6,822	8,132	8,085
	Percent	36%	42%	46%	29%	34%	34%	44%	49%	45%	35%	40%	41%
Non-Resident	Number	4,447	4,213	3,733	5,989	5,480	5,089	2,389	2,327	2,761	12,825	12,020	11,583
	Percent	64%	58%	54%	71%	66%	66%	56%	51%	55%	65%	60%	59%
TOTAL	Number	6,978	7,256	6,935	8,429	8,322	7,675	4,240	4,574	5,058	19,647	20,152	19,668
	Percent	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%



Trip Purpose

By Airport

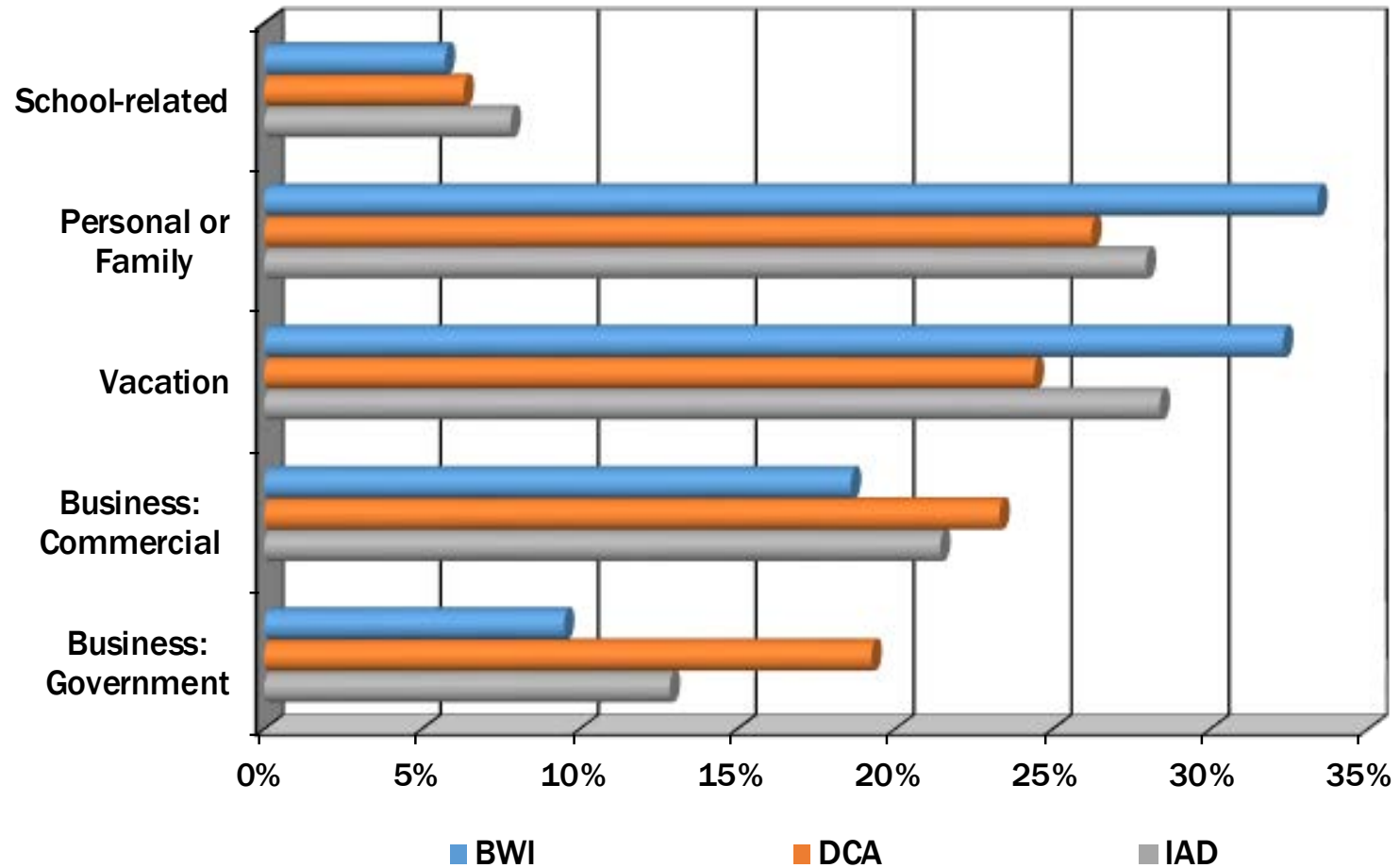
- **BWI:** Personal and Vacation
- **DCA:** Business – Government and Other
- **IAD:** School-related

Resident Status

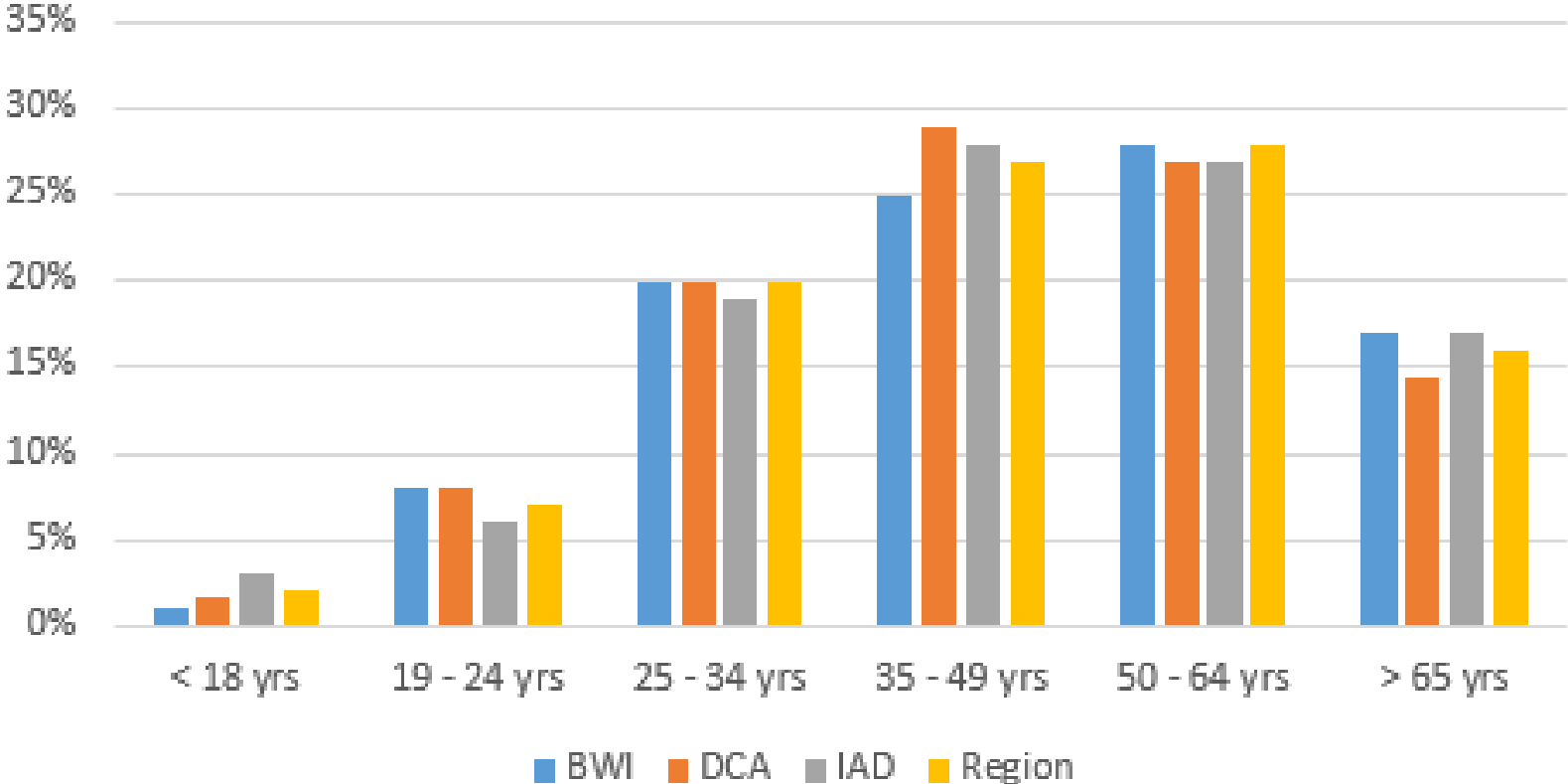
- **Business:** 35% of air passengers overall – 31% resident, 40% non-resident, and 32% resident status unknown
- **Personal:** 29% of air passengers overall – 32% resident, 27% non-resident, and 30% resident status unknown
- **Vacation:** 28% of air passengers overall – 32% resident, 26% non-resident, and 28% resident status unknown



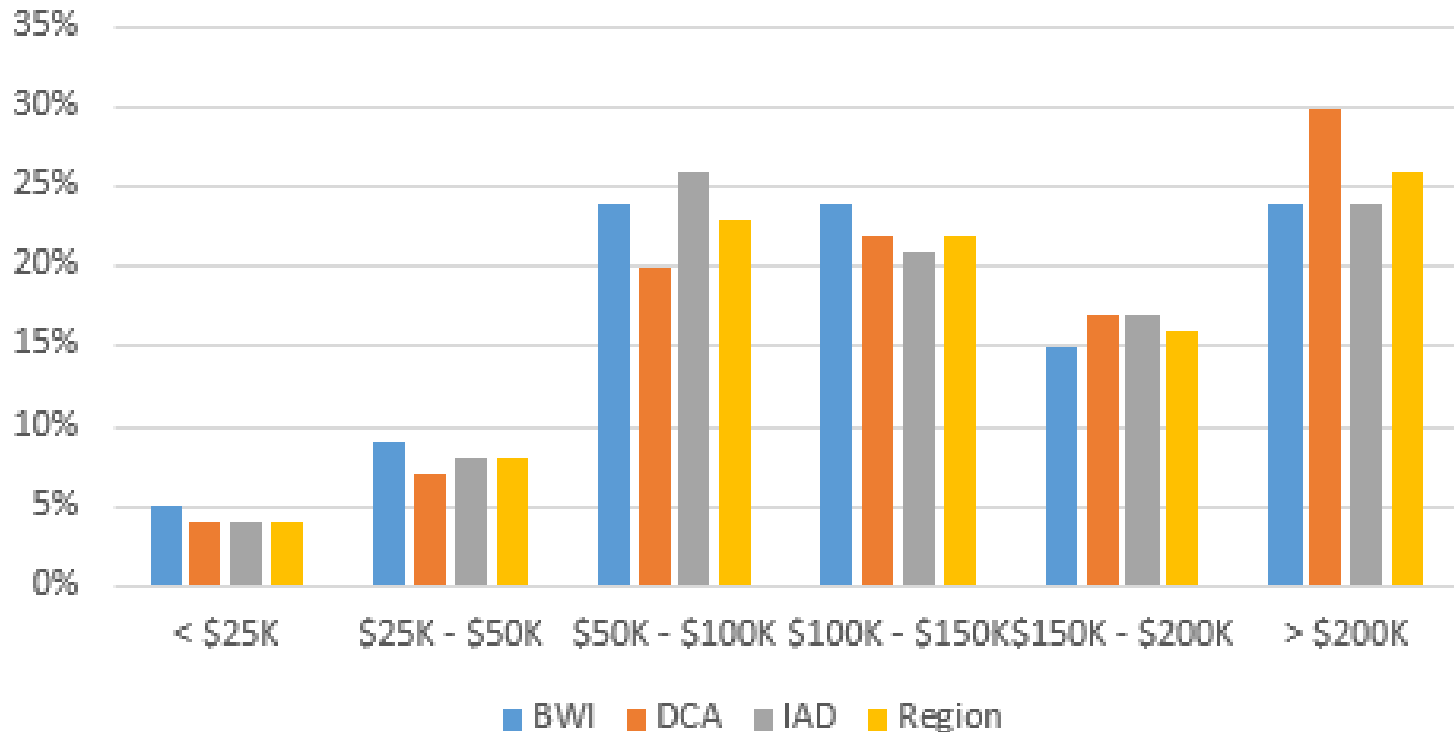
Trip Purpose



Air Passengers by Age and Airport



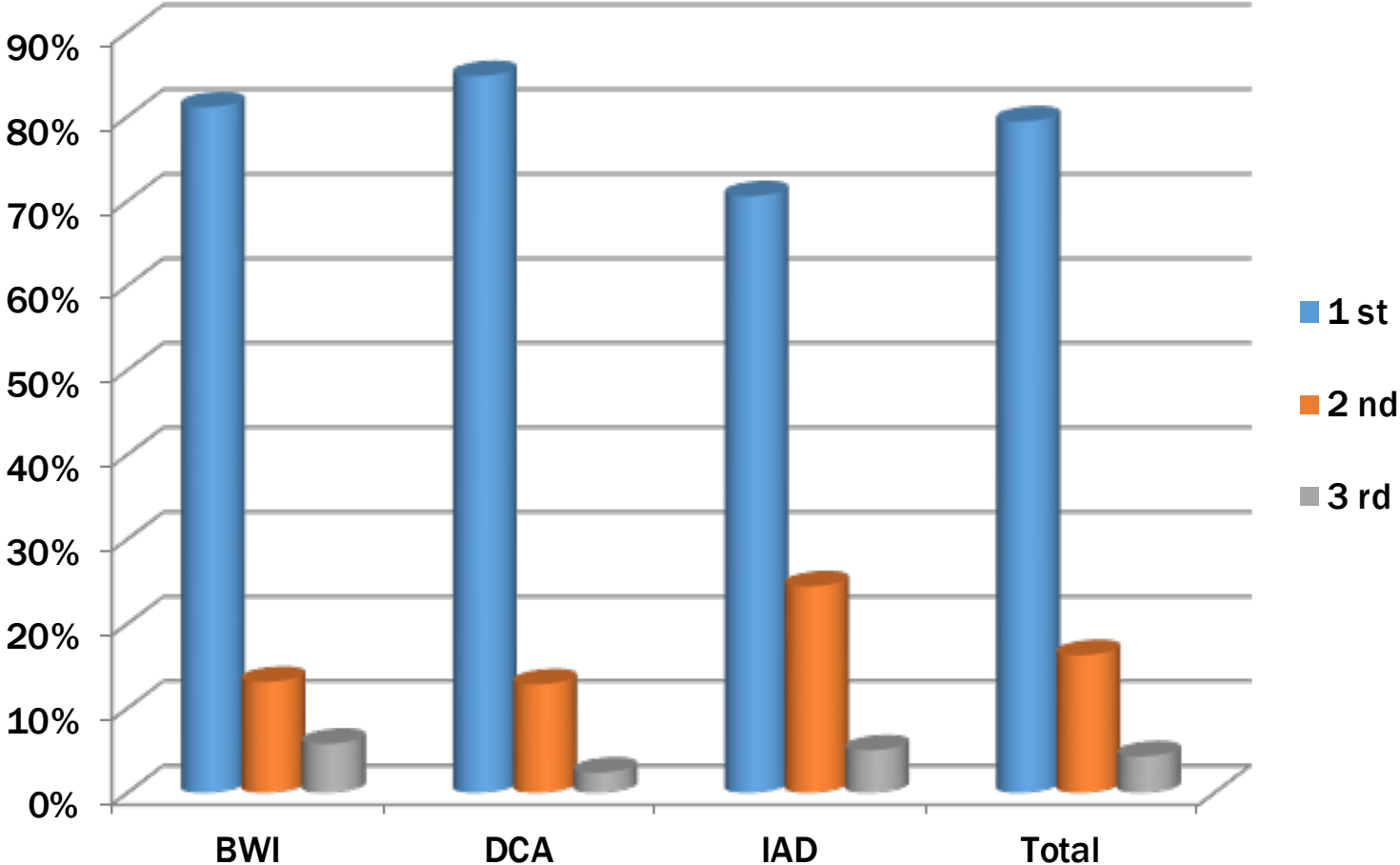
Income Distribution by Airport



PREFERENCES AND BEHAVIOR



Airport Ranking (New Question - 2019)

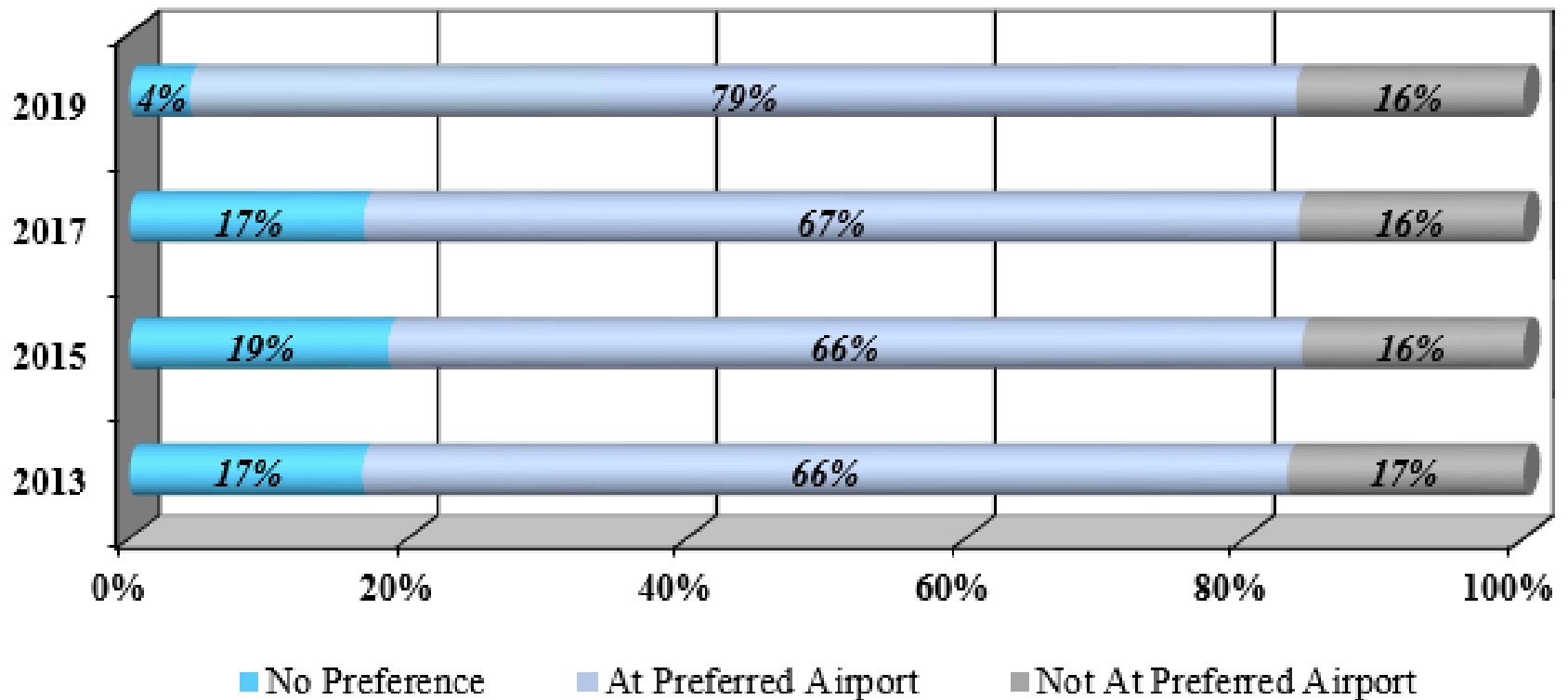


Airport Ranking - Continued

Preferred Airport				
Rank	BWI	DCA	IAD	Total
1 st	6,104 81%	6,886 85%	4,493 71%	17,483 79%
2 nd	987 13%	1,042 13%	1,555 24%	3,584 16%
3 rd	435 6%	193 2%	319 5%	947 4%
TOTAL	7,526	8,121	6,367	22,014



Longitudinal Airport Satisfaction



Annual Originating Air Passengers by Preferred Airport and Resident Status

- Resident preference increased for BWI and IAD, while decreasing for DCA
- Non-resident preference increased for IAD, while decreasing for BWI and DCA
- Overall preference increased for IAD and decreased for DCA; no change for BWI

Preferred Airport		Resident			Non-Resident			Total		
		2015	2017	2019	2015	2017	2019	2015	2017	2019
BWI	<i>Number</i>	2,285	2,631	2,951	3,163	3,038	2,863	5,448	5,669	5,814
	<i>Percent</i>	36%	35%	39%	33%	32%	29%	34%	34%	34%
DCA	<i>Number</i>	2,592	3,298	2,808	4,942	4,834	4,903	7,534	8,132	7,711
	<i>Percent</i>	41%	44%	37%	51%	52%	50%	47%	48%	45%
IAD	<i>Number</i>	1,433	1,515	1,784	1,596	1,485	1,991	3,029	3,000	3,775
	<i>Percent</i>	23%	20%	24%	16%	16%	20%	19%	18%	22%
TOTAL	<i>Number</i>	6,310	7,444	7,543	9,701	9,357	9,757	16,011	16,801	17,300
	<i>Percent</i>	100%	100%	100%	100%	100%	100%	100%	100%	100%

Notes:

* Totals do not include non-respondents, resident unknown and no preference



Primary Reason for Choosing Airport

Accessibility

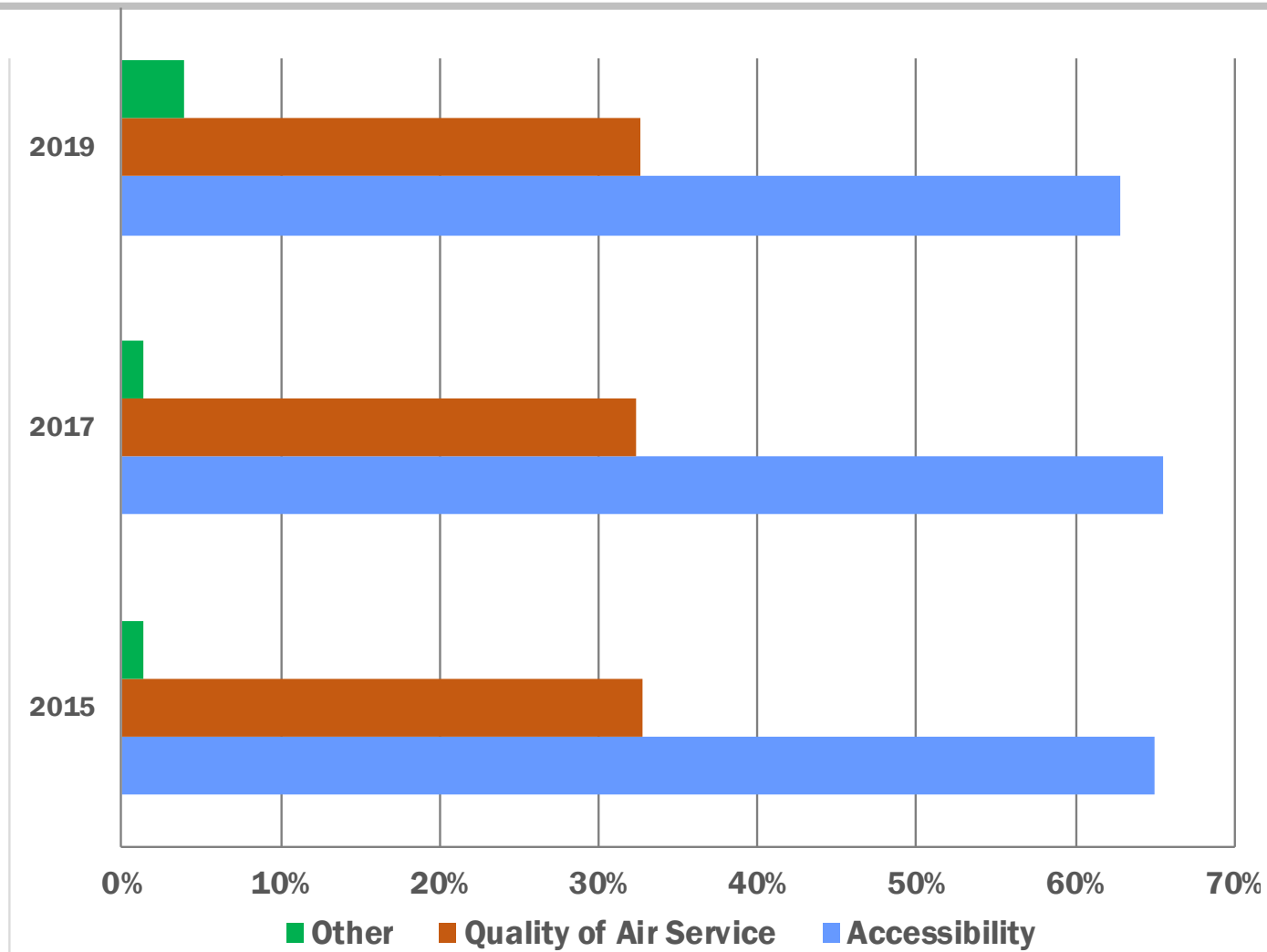
- Closest airport – **top reason by far – 58% overall**
 - BWI: 61% - up from 59% in 2017
 - DCA: 69% - down from 70% in 2017
 - IAD: 44% - down from 47% in 2017
- Easy road access
- Easy access by Metrorail or public transit
- Convenient van/limo or shuttle bus service
- Good parking facilities

Quality of Air Service

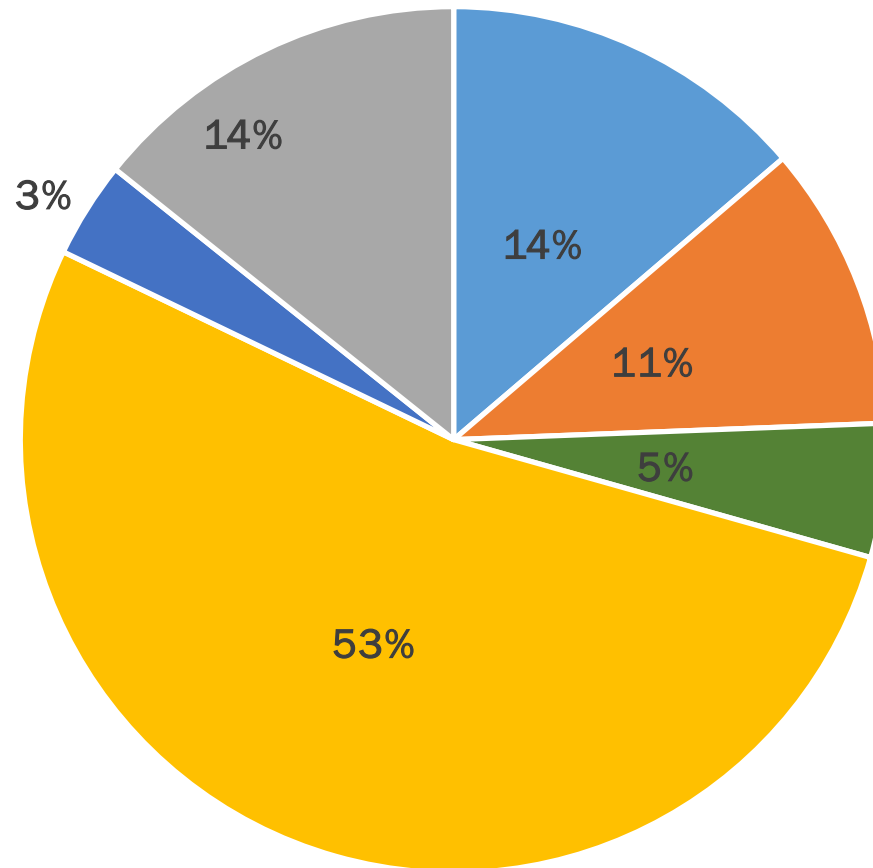
- More convenient flight times
- Less expensive airfare
- Only airport with non-stop flights
- Only airport serving destination
- Frequent flyer / airline loyalty program



Local Originating Air Passenger Airport Choice (Regionwide)



Reason for Choosing Mode of Access



■ Cost ■ Reliability ■ Travel Time ■ Convenience ■ Comfort ■ Other



Mode of Access Choice by Airport

- 53% of all air passengers choose their mode of access for convenience
- Convenience is less of a factor at IAD than at BWI and DCA
- Cost is less of a factor at DCA, and reliability of transportation is more of a factor at IAD

Reason for Choosing Mode of Access		BWI	DCA	IAD	Total
Cost	<i>Number</i>	1,279	1,121	1,105	3,505
	<i>Percent</i>	15%	12%	15%	14%
Reliability	<i>Number</i>	889	915	911	2,715
	<i>Percent</i>	10%	10%	12%	11%
Travel Time	<i>Number</i>	345	548	381	1,274
	<i>Percent</i>	4.0%	6%	5%	5%
Convenience	<i>Number</i>	4,676	5,083	3,693	13,452
	<i>Percent</i>	54%	55%	49%	53%
Comfort	<i>Number</i>	294	240	383	917
	<i>Percent</i>	3%	3%	5%	4%
Other	<i>Number</i>	1,237	1,367	1,033	3,637
	<i>Percent</i>	14%	15%	14%	14%
TOTAL	<i>Number</i>	8,720	9,274	7,506	25,500
	<i>Percent</i>	100%	100%	100%	100%



Mode of Access & Age

- 41% overall; 45% of 65 years+ travel by car
- 24% overall; 32% of 25-34 travel by TNC
- 9% overall; 14% of 65+ travel by taxi; 4-5% of three youngest groups
- 4% overall and 8% of 19-24 travel by Metro



Mode of Access and Travel Cost

- **No cost:** 77% by private car
- **\$1-\$4:** 35% by Metrorail to DCA; 47% by private car
- **\$5-\$9:** 51% by private car
- **\$10-\$24:** 51% by ride-hailing
- **\$25-\$49:** 58% by ride-hailing
- **\$50-\$99:** 38% by ride-hailing
- **\$100 or more:** 71% are rental cars



Travel Cost by Airport

No Cost: 35% overall;
43% at BWI

\$1-\$4: 10% at DCA

\$5-\$9: Nearly equal;
8% at BWI

\$10-\$24: 30% at DCA

\$25-\$49: 22% at IAD

\$50-\$99: 12% at IAD

\$100 or more: 9% at BWI

Travel Cost		BWI	DCA	IAD	REGION
None	<i>Number</i>	3,672	2,192	2,720	8,584
	<i>Percent</i>	43%	24%	38%	35%
\$1 - \$4	<i>Number</i>	603	951	291	1,845
	<i>Percent</i>	7%	10%	4%	7%
\$5 - \$9	<i>Number</i>	662	657	439	1,758
	<i>Percent</i>	8%	7%	6%	7%
\$10 - \$24	<i>Number</i>	1,125	2,755	809	4,690
	<i>Percent</i>	13%	30%	11%	19%
\$25 - \$49	<i>Number</i>	1,107	1,608	1,571	4,285
	<i>Percent</i>	13%	18%	22%	17%
\$50 - \$99	<i>Number</i>	581	494	829	1,904
	<i>Percent</i>	7%	5%	12%	8%
\$100.00 +	<i>Number</i>	764	444	495	1,703
	<i>Percent</i>	9%	5%	7%	7%
TOTAL	<i>Number</i>	8,514	9,101	7,153	24,769
	<i>Percent</i>	100%	100%	100%	100%
Non-Respondents		1,912	1,817	1,573	5,302
Total Originations		10,426	10,918	8,726	30,070



Travel Cost and Trip Purpose

- 40% of non-work trips spend nothing on travel, versus 25% of work-related trips
- Work-related trips tend to spend more on travel than those traveling on non-work trips

Travel Cost		Trip Purpose		Total
		Work	Non-Work	
None	Number	2,084	6,014	8,098
	Percent	25%	40%	35%
\$1 - \$4	Number	636	1,097	1,732
	Percent	8%	7%	7%
\$5 - \$9	Number	459	1,172	1,632
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	Percent	21%	15%	17%
\$50 - \$99	Number	758	1,044	1,802
	Percent	9%	7%	8%
\$100.00 +	Number	688	895	1,583
	Percent	8%	6%	7%
TOTAL	Number	8,202	14,957	23,159
	Percent	100%	100%	100%



Airport Spending: Household Income; Time Spent at Airport

Income

- Highest income bracket spent most in each range
- Lowest income bracket spent least in each range
- \$150-200K spent less than \$50-100K and \$100-150K

Time Spent at Airport

- 23% of overall air passengers do not spend money at the airport
- Most spend between \$1-\$24, with little time-based variation
- For the last three price brackets, most spending happens with those at the airport for the least and greatest amounts of time



Airport Spending & Arrival Type

- 19% of originating and 8% of connecting passengers do not make purchases
- 84% of connecting and 63% of originating passengers spend \$1-\$24
- A greater proportion of originating passengers spend larger sums (\$25-\$100+)

Money Spent at Airport		Originating Passengers	Connecting Passengers	Total
None	<i>Number</i>	5,597	599	6,196
	<i>Percent</i>	19%	8%	16%
\$1 - \$24	<i>Number</i>	18,989	6,481	25,470
	<i>Percent</i>	63%	84%	67%
\$25 - \$49	<i>Number</i>	3,730	455	4,185
	<i>Percent</i>	12%	6%	11%
\$50 - \$99	<i>Number</i>	1,188	152	1,339
	<i>Percent</i>	4%	2%	4%
\$100 or More	<i>Number</i>	565	63	629
	<i>Percent</i>	2%	1%	2%
TOTAL	<i>Number</i>	30,070	7,750	37,820
	<i>Percent</i>	100%	100%	100%



NEXT STEPS

- Complete Draft General Findings Report ATS Review: **April 16**
- TPB Staff Finalize General Findings Report: **April 23**
- General Findings Key Findings Presentation to TPB Tech: **May 1**
- Geo-Coding Survey File Analysis: **Summer 2020**
- Prepare Geographic Findings Report: **Fall 2020**



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