WASHINGTON-BALTIMORE REGIONAL AIR PASSENGER SURVEY 2019

General Findings Report

Arianna Koudounas, AICP Transportation Planner

TPB Technical Committee May 1, 2020



OVERVIEW

- Key Takeaways
- PassengerCharacteristics
- Ground Access
- Preferences & Behavior
- Next Steps





Survey Instrument New Additions

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

Question B6 – New Mode Options: Biking and Walking

Question B8 – Ground Transportation Spending

How much air passengers spend on ground access to airport

Question B9 – Carpooling

If air passengers carpooled 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: 28.6%

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

Airport Spending: Most air passengers spend \$1-\$24 at the airport



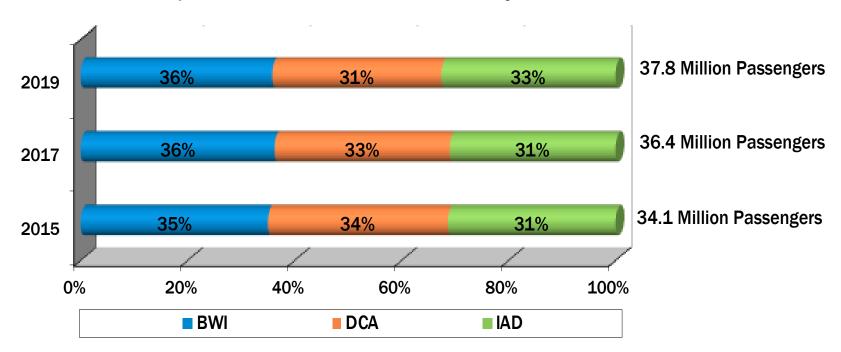
Enplanement by Type and Airport

- Annual air passenger enplanements increased by 1.3 million to 37.8 million in 2019, compared to 36.5 million in 2017
- Local originations increased at all three airports. Overall, they increased from 73% to 80% of total enplanements.
 - BWI: +17%
 - DCA: +4%
 - IAD: +20%
- Connections decreased at all airports (compared with 2017)
 - BWI: -28%
 - DCA: -29%
 - IAD: +-11%



Enplanement Share by Airport: Total

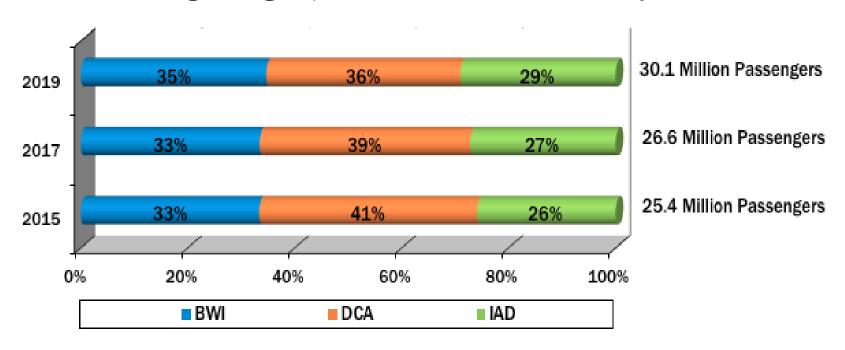
- BWI total enplanement share remained the same as 2017
- DCA total enplanement share decreased by 2%
- IAD total enplanement share increased by 2%





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%





PASSENGER CHARACTERISTICS



Air Traveler Characteristics

- Most air travelers were middle-aged, affluent and non-resident
- 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	
	2017	2019	2017	2019	2017	2019	2017	2019
Resident Number	3,043	3,202	2,842	2,586	2,247	2,297	8,132	8,085
Percent	42%	46%	34%	34%	49%	45%	40%	41%
Non-Res Number	4,213	3,733	5,480	5,089	2,327	2,761	12,020	11,583
Percent	58%	54%	66%	66%	51%	55%	60%	59%
TOTAL Number	7,256	6,935	8,322	7,675	4,574	5,058	20,152	19,668
Percent	100%	100%	100%	100%	100%	100%	100%	100%



Trip Purpose

Dominant Trip Purpose By Airport

BWI: Personal and Vacation

DCA: Business – Government and Other

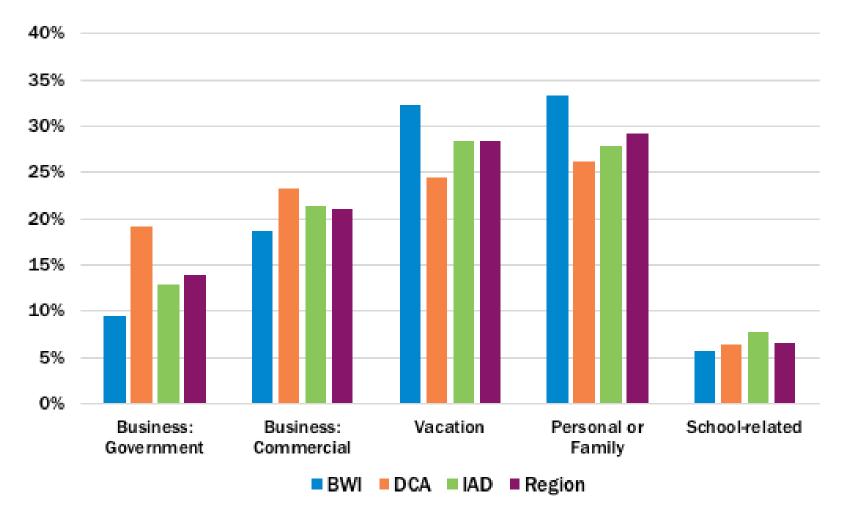
IAD: School-related

Resident Status

- Business: 35% of air passengers overall 31% resident, 40% nonresident, 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% nonresident, and 28% resident status unknown

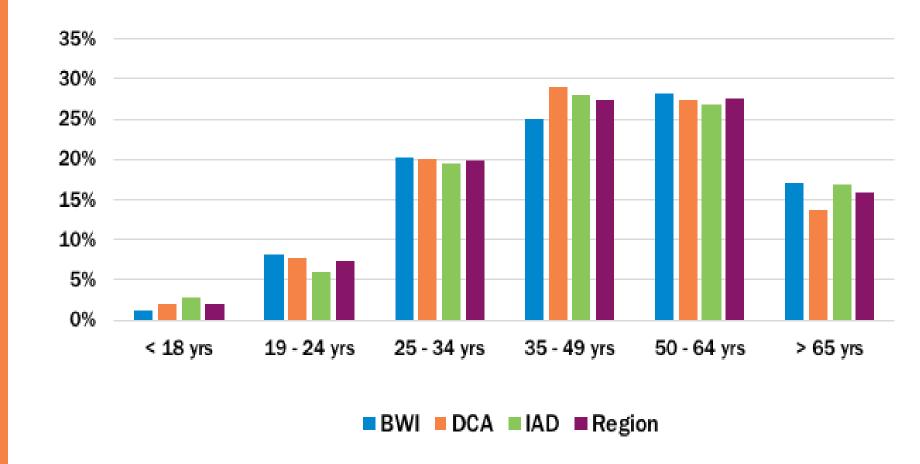


Trip Purpose



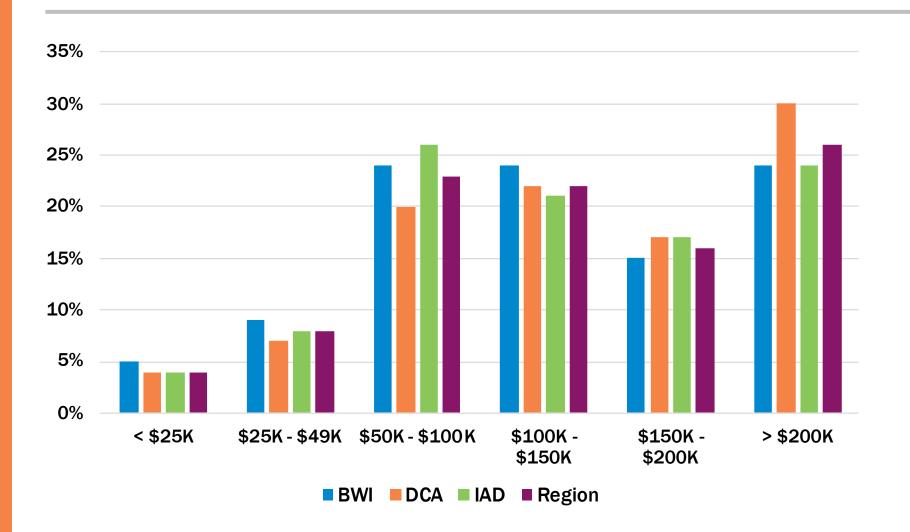


Age Distribution





Household Income



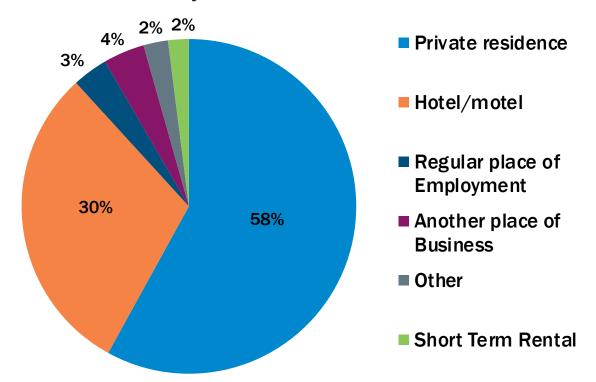


GROUND ACCESS



Local Air Passenger Trip Origin

- Short-term rental made up 2% of origins at each airport
- Private residence decreased by 2%: 5% BWI, 4% DCA, IAD unchanged
- Hotel/motel increased by 2%: 2% DCA and IAD; 4% BWI

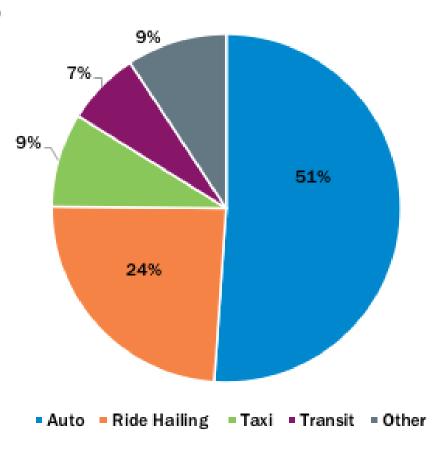


Note:- Non-respondents are not included



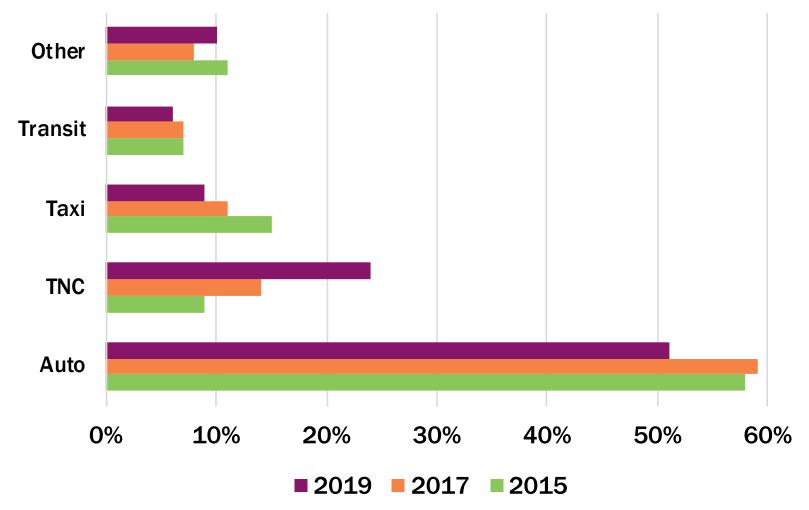
Local Air Passenger Mode of Access

- Auto share (private & rental cars)
 decreased 59%→51%
- Taxi share decreased 11%→9%
- TNC share increased $14\% \rightarrow 24\%$
 - BWI: 8%→13%
 - DCA: 21%→36%
 - IAD: 13%→22%
- Transit remained at 7%
- Other = Hotel Bus (5%), Airport Bus/Limo (2%), Walk (1%), Bike (0%), and "Other" (2%)



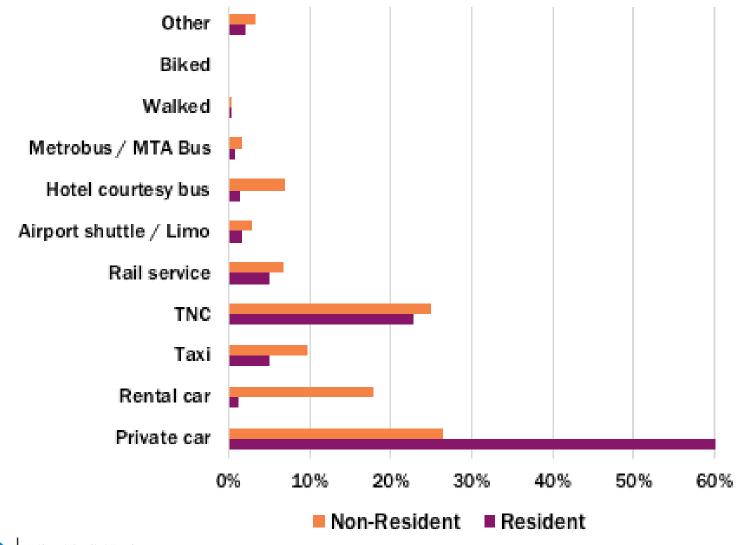


Departing Passengers by Mode of Access





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 workrelated 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



Carpooling

Nearly a quarter of those who took a car (including TNCs) to the airport carpooled. Carpooling was highest at DCA and lowest at BWI.

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



Parking

Across the region, 77% of air passengers did not use a parking facility. This number was lowest at BWI (65%), highest at DCA (87%) and precisely at 77% for IAD.

Parking Facility Use		BWI	DCA	IAD	REGION
Used Parking Facility	Number Percent	1,969 19%	543 5%	819 9%	3,331 11%
Not Parked	Number Percent				23,023 77%
Non-respondents	Number Percent	1,675 16%	865 8%	1,176 13%	3,716 12%
TOTAL		10,426	10,918	8,726	30,070

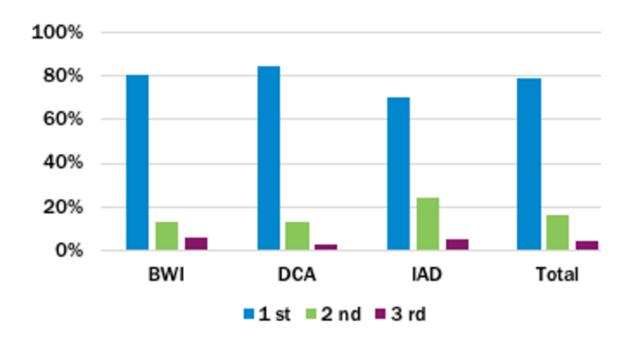


PREFERENCES AND BEHAVIOR



Airport Ranking (New Question - 2019)

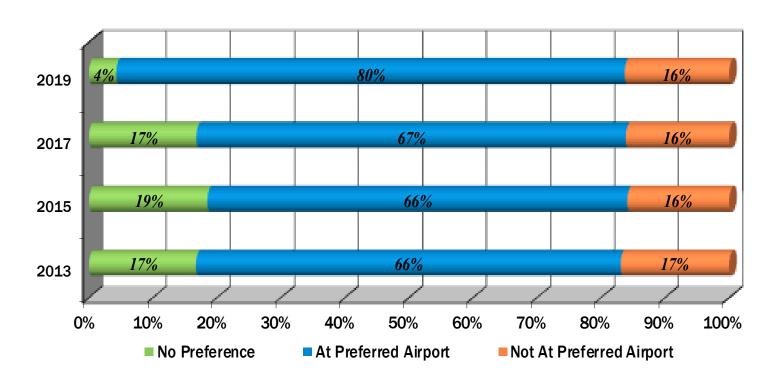
Air travelers primarily selected the airport they were traveling from as their top choice (BWI: 81%, DCA: 85%, IAD: 71%). Nearly a quarter of IAD travelers ranked it as their second choice; this was true for 13% at BWI and DCA.





Longitudinal Airport Satisfaction

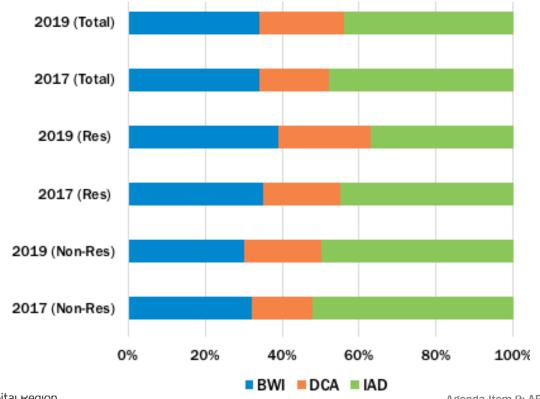
Longitudinal airport satisfaction numbers are somewhat skewed due to the lack of a "no preference" option in the 2019 instrument.





Annual Originating Air Passengers by Preferred Airport and Resident Status

- Resident preference increased for BWI & IAD; decreased for DCA
- Non-resident preference increased for IAD; decreased for BWI and DCA
- Preference increased for IAD; decreased for DCA; no change for BWI





Reason for Choosing Airport

Accessibility

Closest airport: 58% *Top Reason*

BWI: 61% - up from 59% in 2017

DCA: 69% - down from 70% in 2017

IAD: 44% - down from 47% in 2017

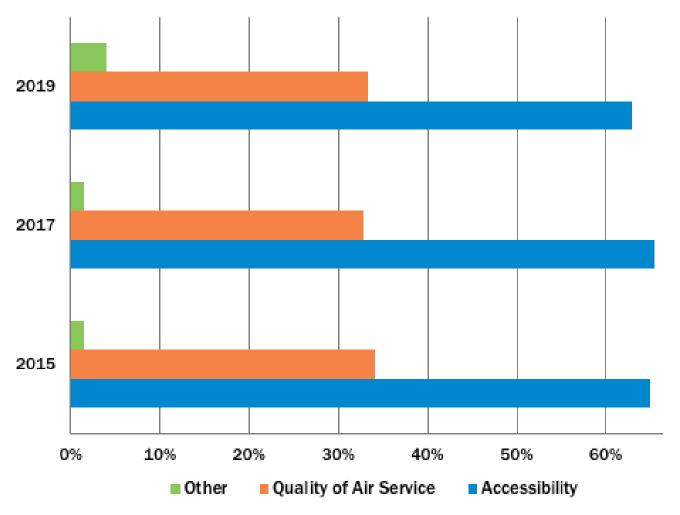
- Easy road access
- Easy access by Metrorail or public transit
- Convenient van/limo or shuttle bus service
- Good parking facilities

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



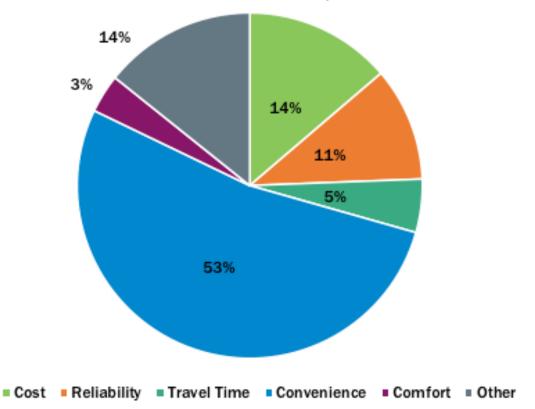
Reason for Choosing Airport Cont'd





Reason for Choosing Mode of Access

- 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; reliability is more of a factor at IAD





Mode of Access and 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% BWI

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

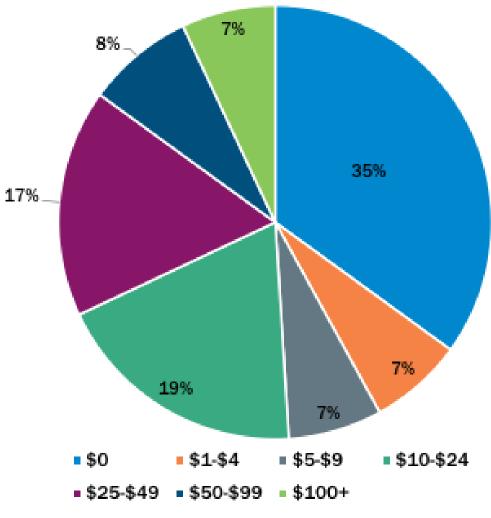
\$5-\$9: Nearly equal; 8% BWI

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

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

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

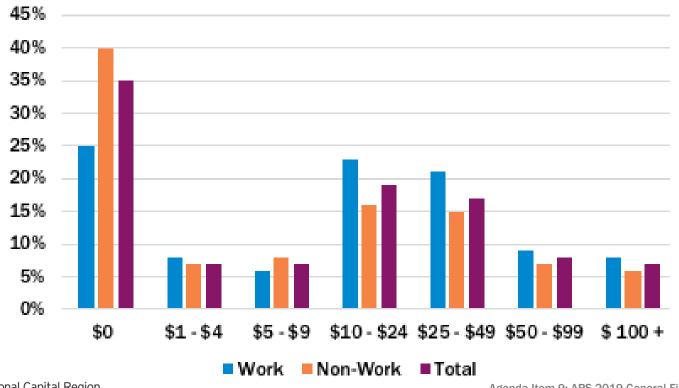
\$100 or more: 9% at BWI





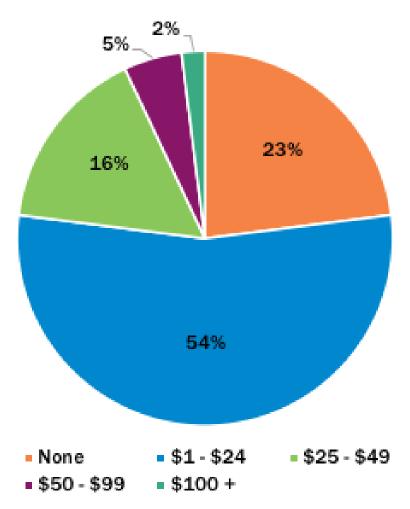
Travel Cost and Trip Purpose

- Over 1/3 of air passengers (25% work; 40% non-work) reported spending \$0 on their trip to the airport.
- Nearly 20% (21% work; 15% non-work) spent \$10-24.



Airport Spending

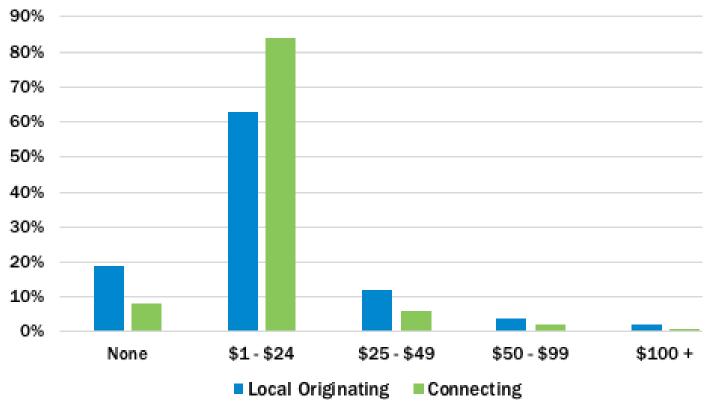
- Most spent between \$1-\$24, with little time-based variation
- 23% of overall air passengers did not spend money at the airport
- In each range highest income spent most; lowest spent least
- For the three highest price brackets, most spending happened with those at the airport for the least and greatest amounts of time





Airport Spending & Arrival Type

- 16% of passengers (19% originating; 8% connecting) spend \$0
- 84% of connecting and 63% of originating passengers spend \$1-\$24
- Originating passengers spend larger sums (\$25-\$100+)





NEXT STEPS

- General Findings Report Published Online: Check It Out!
- https://www.mwcog.org/documents/2018/06/29/washington-baltimore-regional-air-passenger-survey-general-findings-report-airport-access/
- Geo-Coding Survey File Analysis: Summer 2020
- Prepare Geographic Findings Report: Fall 2020



Arianna Koudounas

Transportation Planner
Department of Transportation Planning
202.962.3312
akoudounas@mwcog.org

Abdurahman Mohammed

Senior Transportation Engineer
Department of Transportation Planning
202.962.3370
abdul@mwcog.org

mwcog.org/tpb

Metropolitan Washington Council of Governments 777 North Capitol Street NE, Suite 300 Washington, DC 20002

