WASHINGTON-BALTIMORE REGIONAL AIR PASSENGER SURVEY 2017

Geographic Findings Draft Final Report

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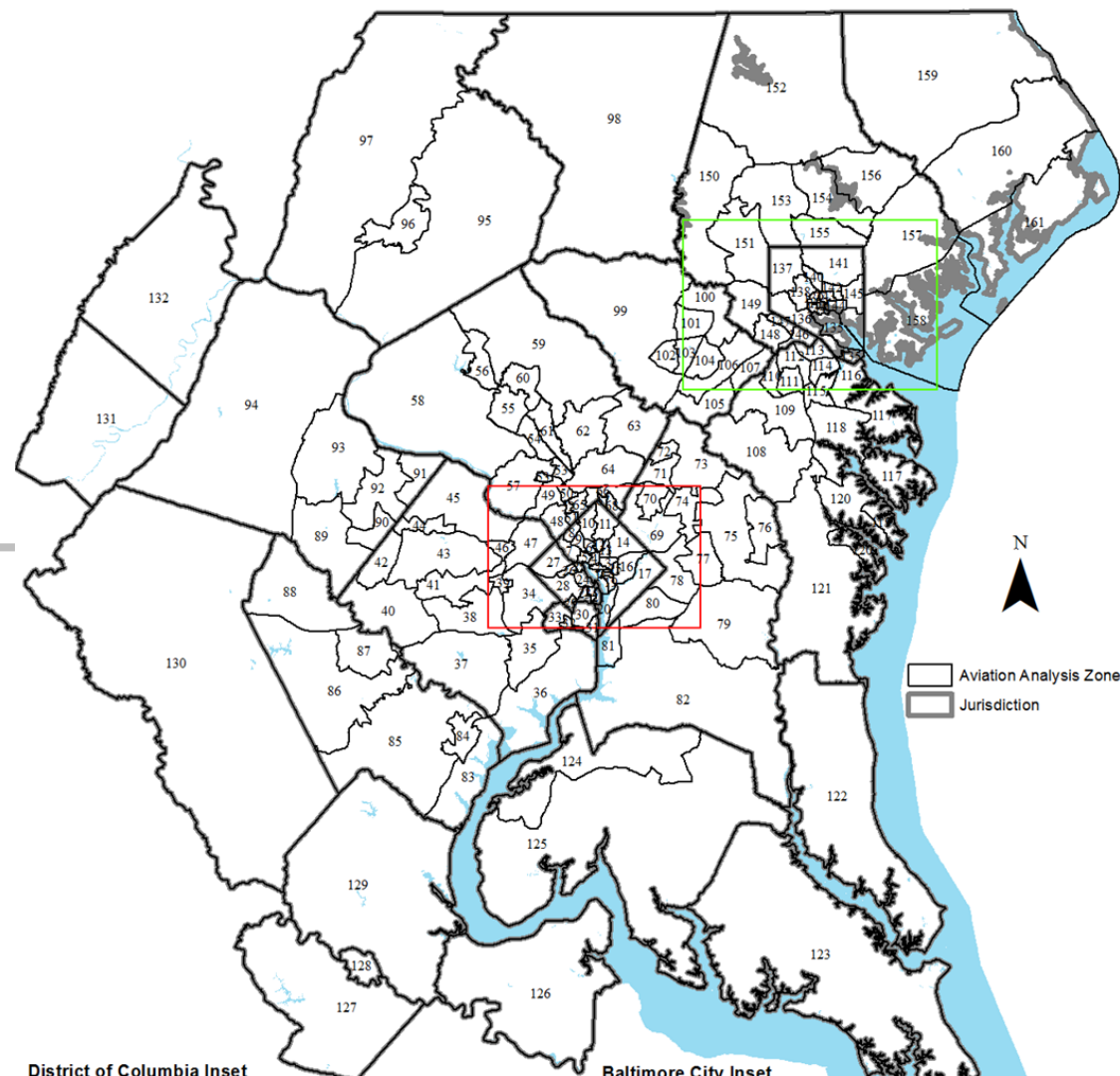
Travel Forecasting Subcommittee
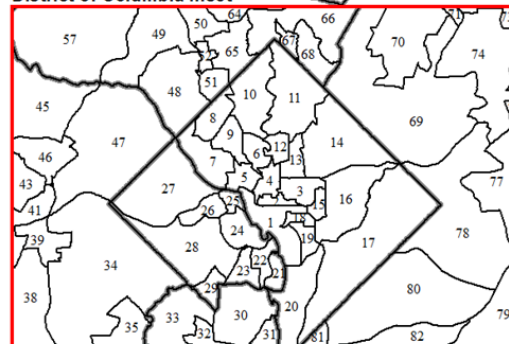**March 15, 2019**

National Capital Region
Transportation Planning Board

Washington-Baltimore Air Systems Region at a Glance

The Region is Divided into 161 Aviation Analysis Zones (AAZs)
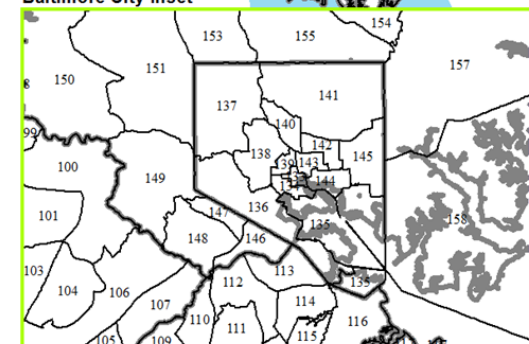
Local Originating Passenger Survey Records

Geo-Coding		BWI	DCA	IAD	Total
Hand-Coded	*Number*	4,552	4,301	3,404	**12,257**
	Percent	76%	75%	68%	**73%**
Partial-Address	*Number*	1,405	1,379	1,596	**4,380**
	Percent	23%	24%	32%	**26%**
Allocated	*Number*	45	29	24	**98**
	Percent	1%	1%	0%	**1%**
Total	***Number***	**6,002**	**5,709**	**5,024**	**16,735**
	Percent	**100%**	**100%**	**100%**	**100%**

Annual Internal/External Trip Originations by Airport (thousands)

Enplanement Type		BWI		DCA		IAD		Region	
		2015	2017	2015	2017	2015	2017	2015	2017
Within Air System Planning Region	#	7,267	7,723	10,152	10,281	6,095	6,730	23,514	24,734
(Internal)	%	85%	87%	98%	98%	92%	93%	92%	93%
Outside Air System Planning Region	#	1,233	1,190	219	218	497	514	1,949	1,922
(External)	%	15%	13%	2%	2%	8%	7%	8%	7%
Total Enplanements	#	8,500	8,913	10,371	10,499	6,592	7,245	25,463	26,657
	%	100%	100%	100%	100%	100%	100%	100%	100%

AIRPORT SERVICE AREAS

Airport Service Area by AAZ

Airport Service Area

⊕ Airports

▮ BWI
▮ DCA
▮ IAD

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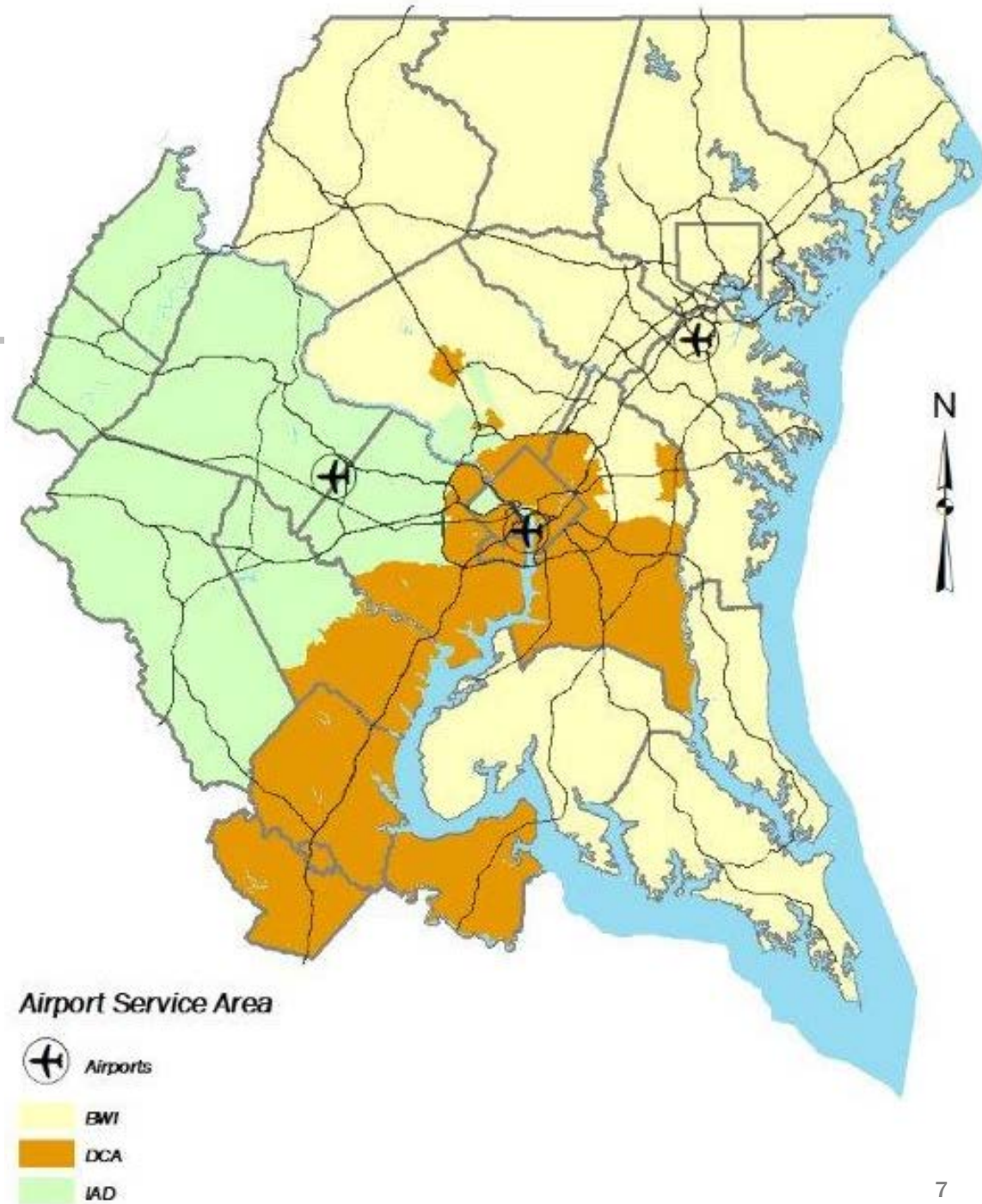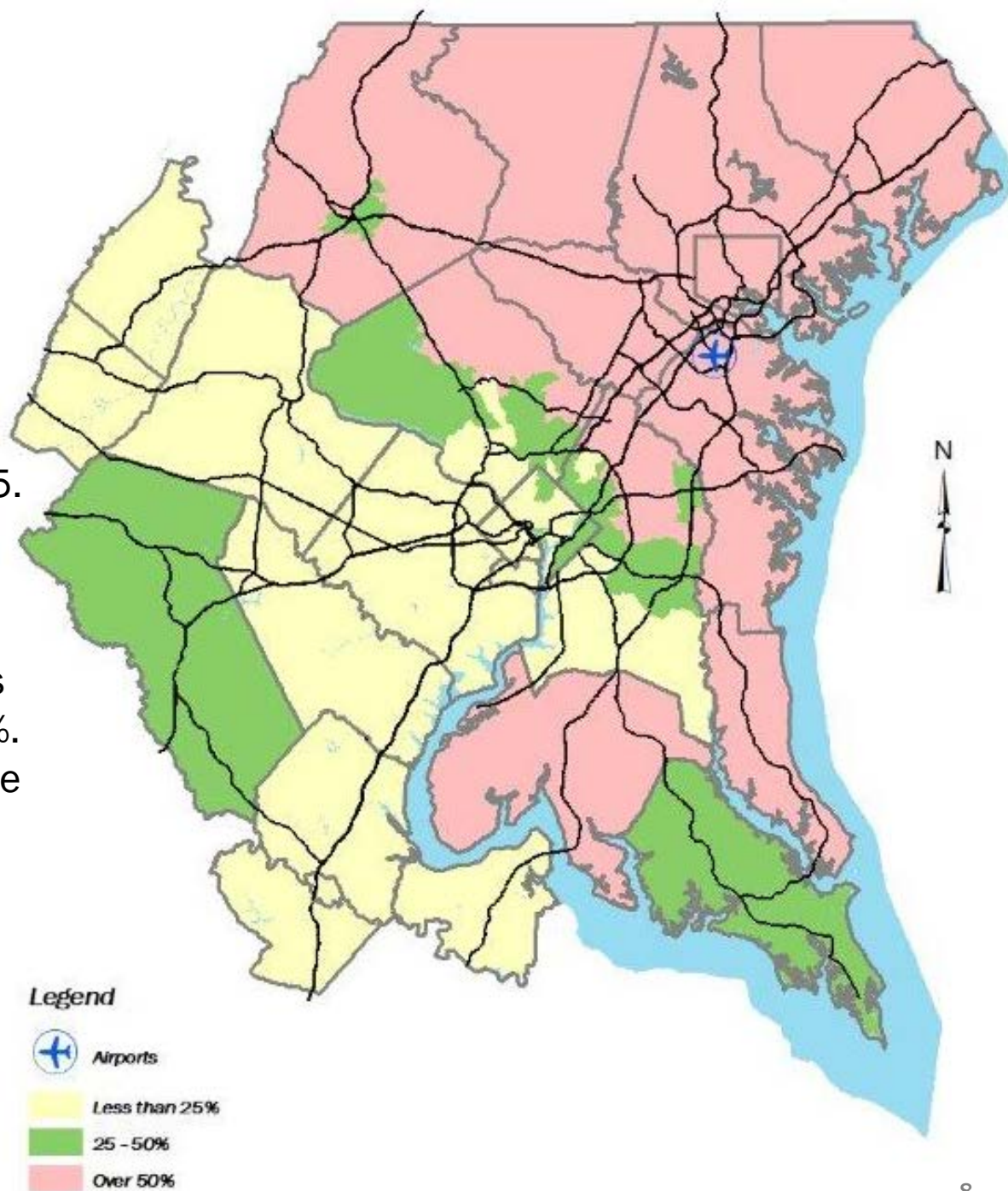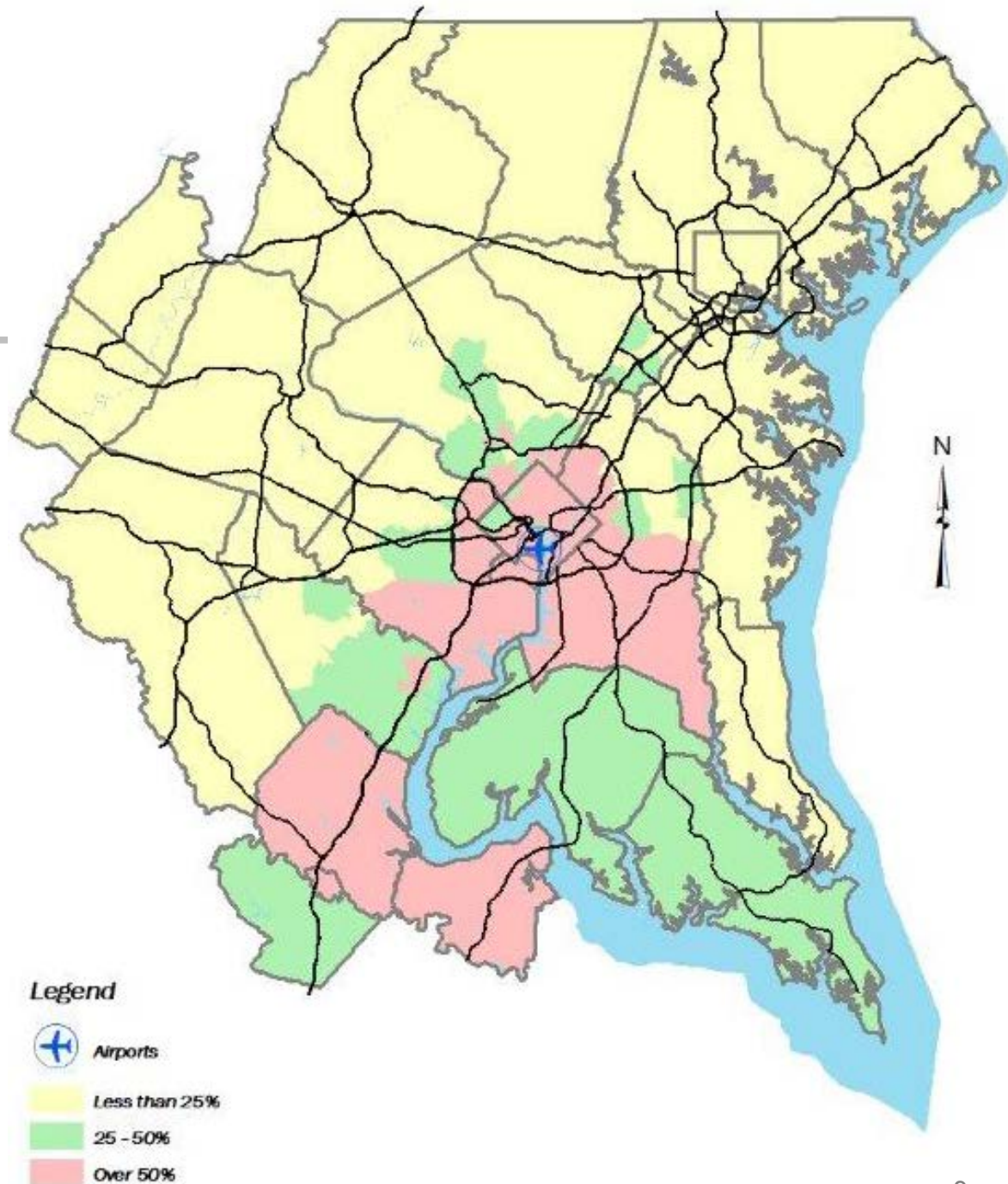
Percentage of Passengers Using BWI

Local originations at BWI increased by 5% from 2015. Passengers traveling to BWI from the Virginia suburbs increased by 24%, from the Maryland suburbs by 16%, and from DC by 2%. Originations to BWI from the outlying jurisdictions dropped by 5%.

Legend

✈ Airports

Less than 25%

25 – 50%

Over 50%

National Capital Region
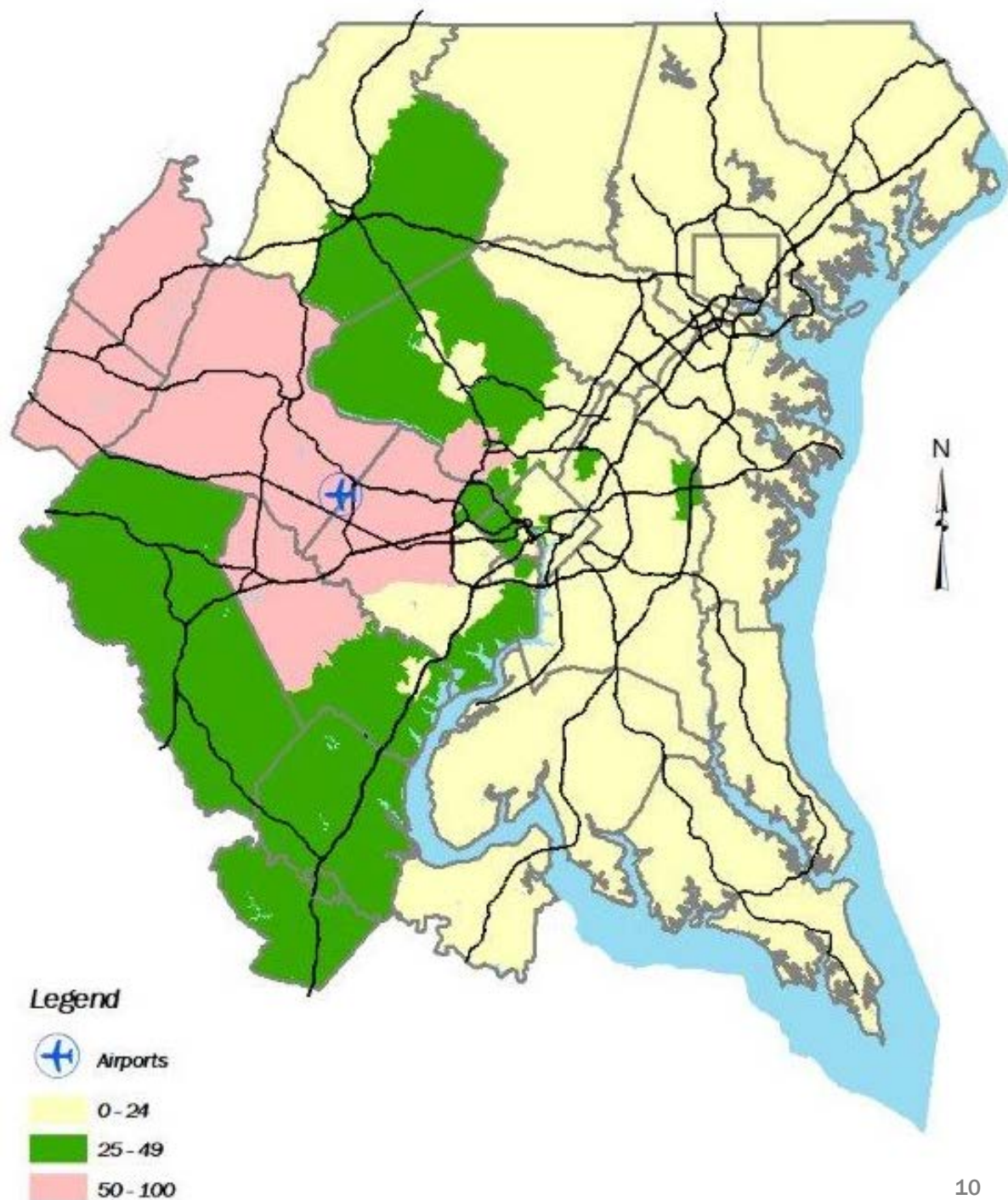Transportation Planning Board

Percentage of Passengers Using DCA

Local originations at DCA increased by 1% from 2015. 71% of the Washington Core flew out of DCA. Portions of Montgomery, Prince George's, Prince William, and Stafford Counties along the I-95 corridor account for significant numbers of passengers using DCA.

Legend

✈ Airports

Less than 25%

25 – 50%

Over 50%

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Percentage of Passengers Using IAD

Local originations at IAD increased by 10% from 2015. 71% of IAD passengers were from the Virginia Suburbs and DC. Originations from the Maryland suburbs and the Baltimore metropolitan area increased by 59 percent and decreased by 12 percent, respectively.

Legend

✈ Airports

0 – 24
25 – 49
50 – 100

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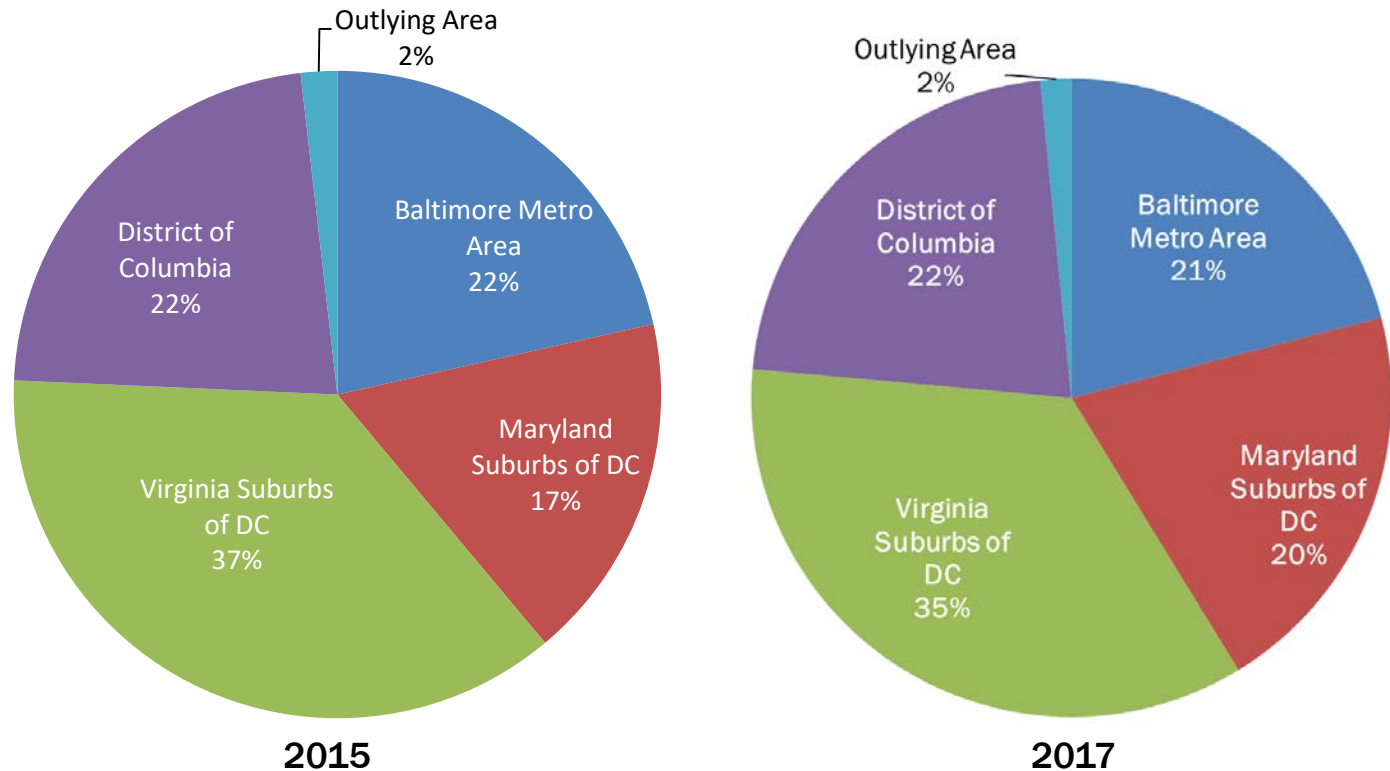**Transportation Planning Board**

Air Systems Region Super Districts

Legend:
- Baltimore Metro Area
- District of Columbia
- Maryland Suburbs of DC
- Virginia Suburbs of DC
- Outlying Areas

Local Air Passenger Originations

2015

2017

While the Virginia Suburbs of DC continue to generate the highest concentration of passenger originations, this percentage decreased to 35% (from 37%) in 2017, while the Maryland Suburbs increased to 20% (from 17%).

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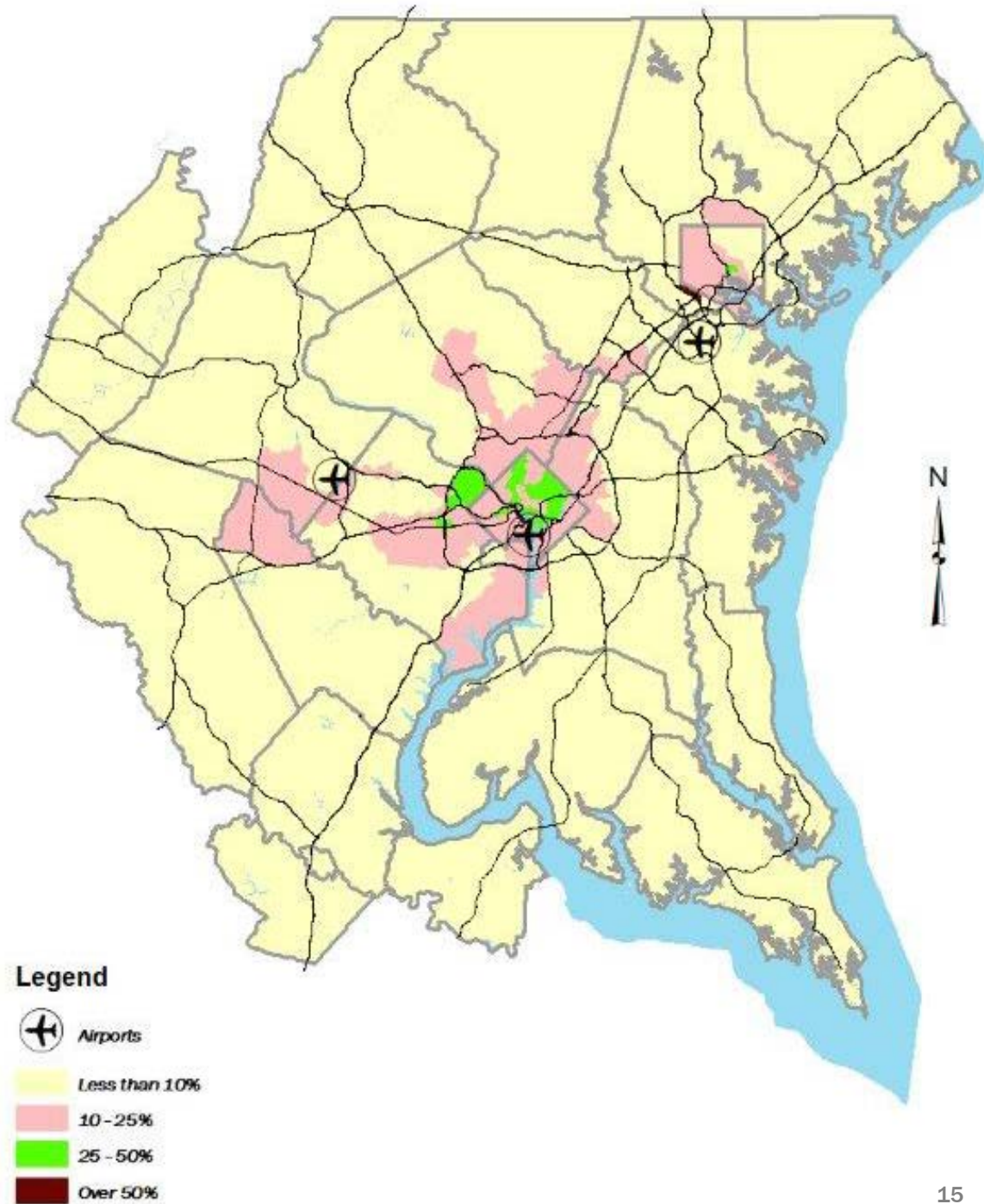
MODE OF ACCESS

Percentage of Passengers Using Taxicabs

11% of the region's passengers traveled by taxicab –down from 15% in 2015. The The areas with the highest concentrations of taxicab usage are located within the Washington Core (20%) and the Baltimore Core (9%).

Legend

✈ Airports

Less than 25%

25 - 50%

Over 50%

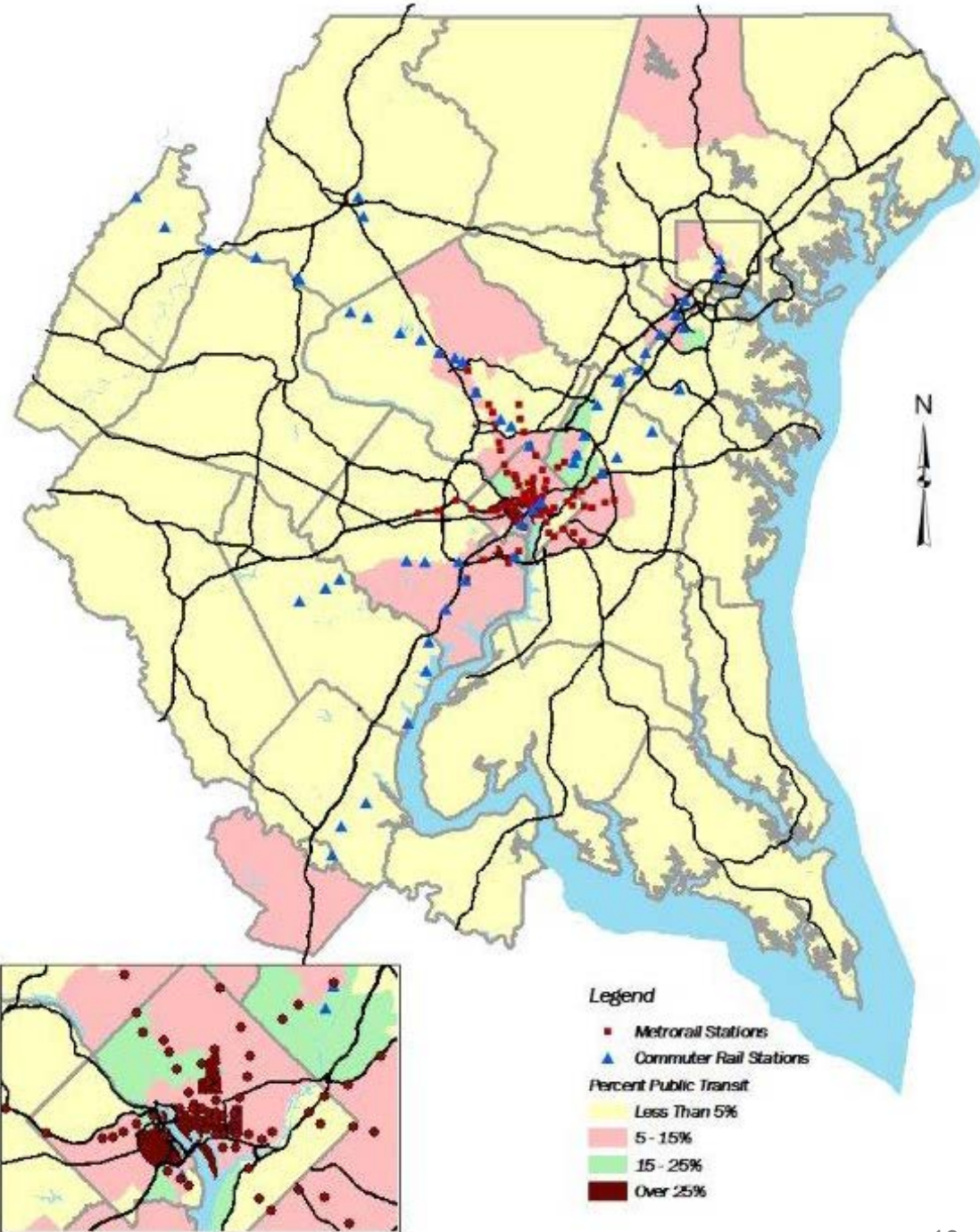National Capital Region
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Percentage of Passengers Using TNCs

14% of the region's passengers traveled by TNC –up from 9% in 2015. 19% of the Baltimore Core and 22% Washington Core travel by TNC, respectively.

Legend

⊕ Airports

	Less than 10%
	10 - 25%
	25 - 50%
	Over 50%

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Percentage of Passengers Using Metrorail, Commuter Rail, Metrobus, and/or Local Bus

Public transportation carried 9% of the region's passengers. Usage of public transportation within the Washington Core was double the regional average and triple that of the Baltimore Core.

Legend
- Metrorail Stations
- Commuter Rail Stations

Percent Public Transit
- Less Than 5%
- 5 - 15%
- 15 - 25%
- Over 25%

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Percentage of Passengers Using Airport Bus/Van/Limo

The usage of this mode was low throughout the region, with the exception of AAZs in the Washington Core and Baltimore Core, as well as areas surrounding BWI and IAD.

Legend
- Less than 25%
- 25 - 50%
- Over 50%

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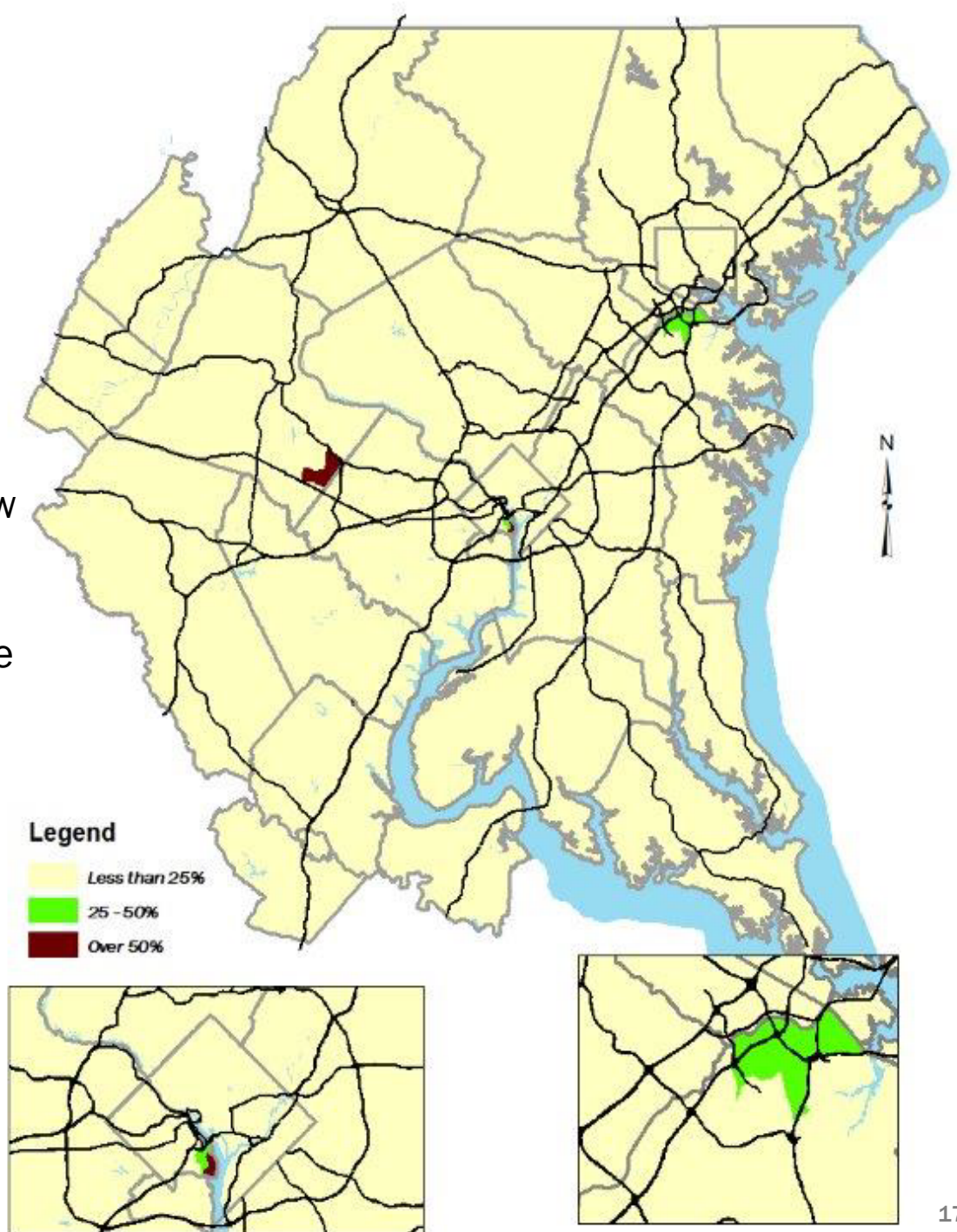
Airport Passenger Originations for Baltimore and Washington Sub-regional Cores, by Airport (thousands)

| Airport Used	Baltimore Core		Washington Core		All Other		Region	
	No.	%	No.	%	No.	%	No.	%
BWI	1,149	95%	659	8%	7,106	43%	8,913	33%
DCA	27	2%	6,243	71%	4,229	25%	10,499	39%
IAD	35	3%	1,831	21%	5,379	32%	7,245	27%
Total	1,210	100%	8,733	100%	16,714	100%	26,657	100%

- 95% of passengers originating in the Baltimore Core travel out of BWI

- 71% of passengers originating in the Washington Core travel out of DCA

- 3% and 21%, respectively, travel out of IAD
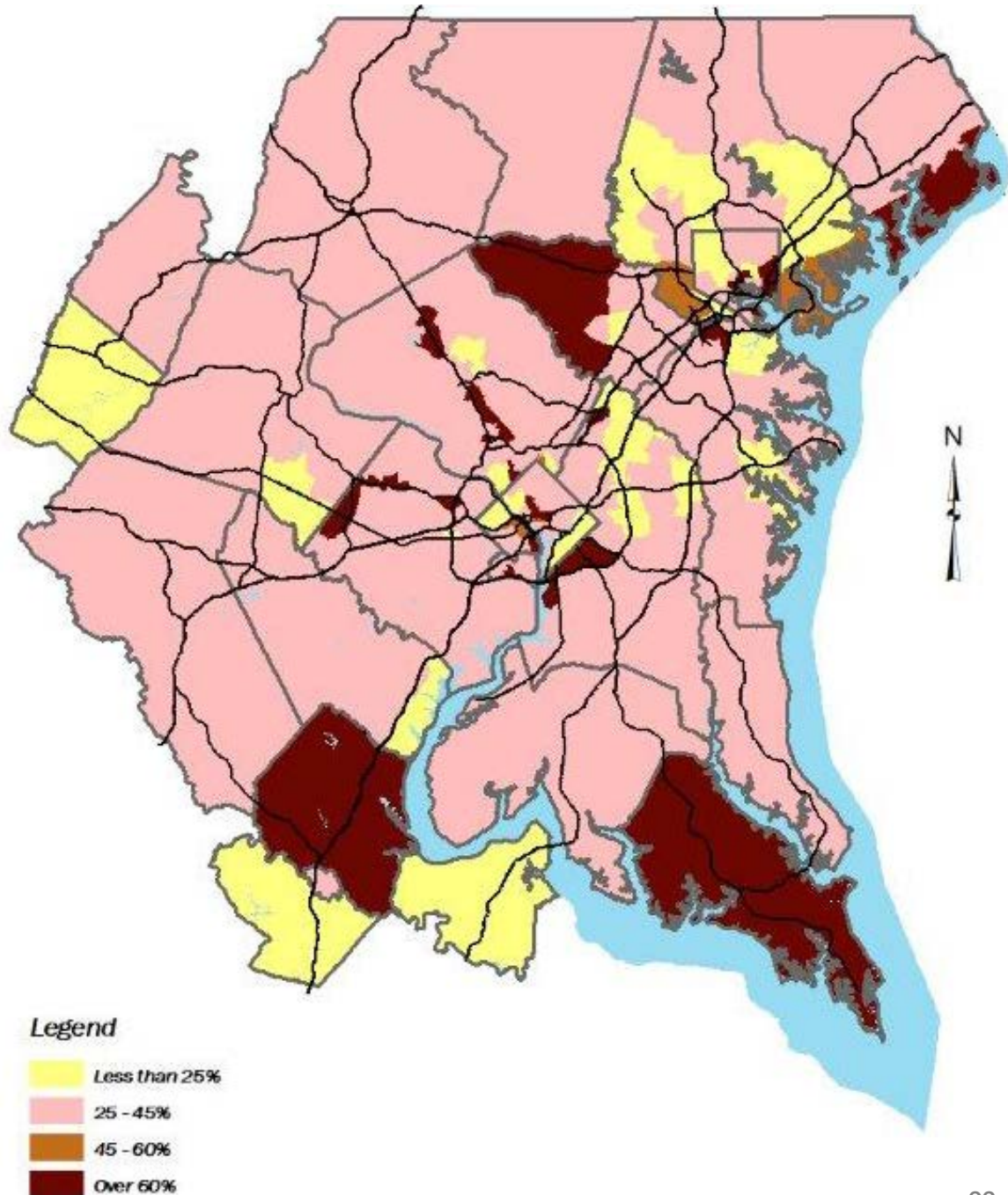
PATTERNS OF USE: PREFERENCE, PURPOSE, ORIGIN

Percentage of Passengers Flying from Preferred Airport

63% of passengers were satisfied with their airport choice; the highest percentage of which came from the Baltimore region and outlying areas.

Legend

Less than 50%

50 – 75%

75 – 99%

100%
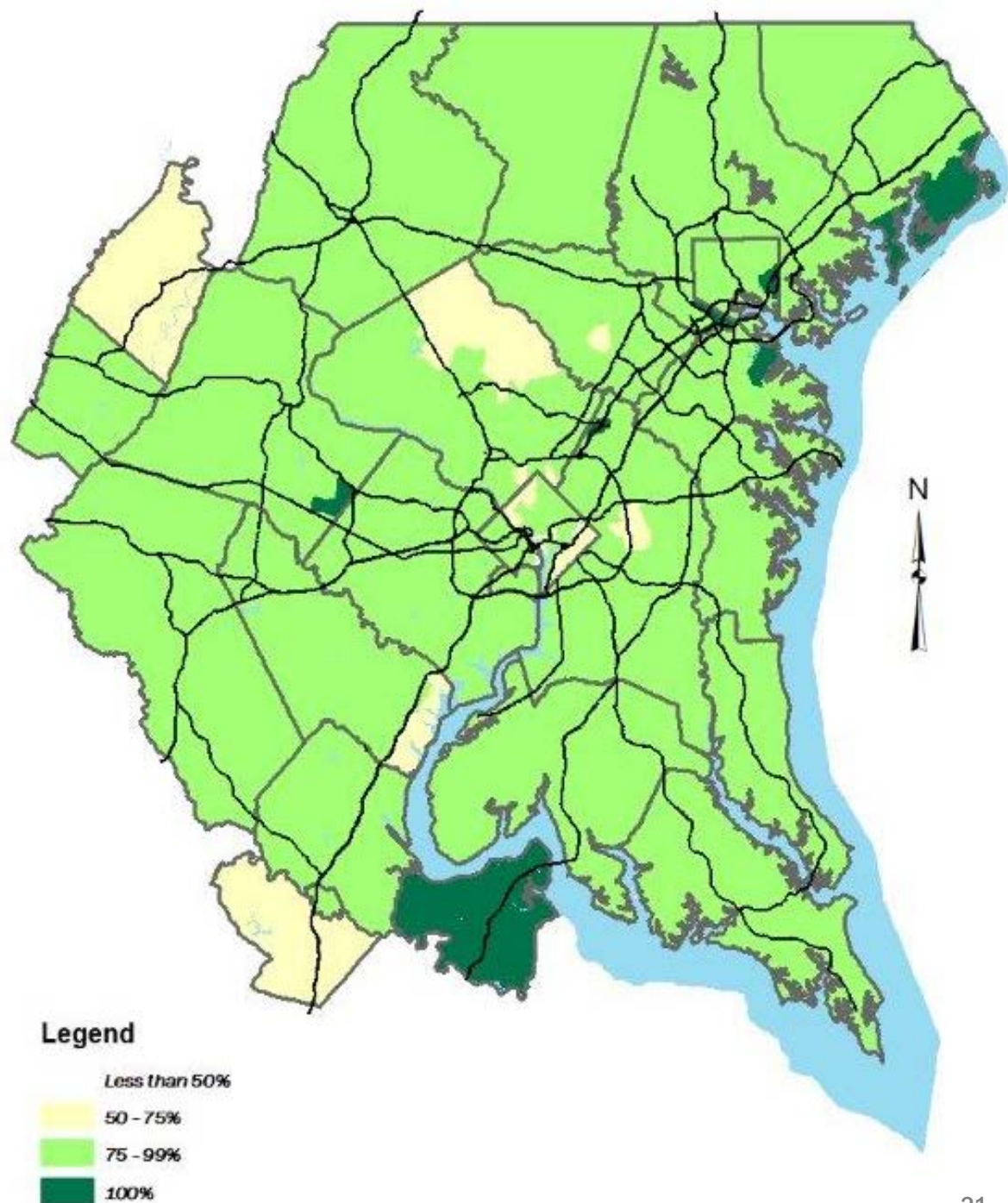
Percentage of Passengers Flying on Business

Those traveling for business are located around the Washington and Baltimore Cores, along major roadways, and near the region's military bases.

Legend
- Less than 25%
- 25 - 45%
- 45 - 60%
- Over 60%

National Capital Region
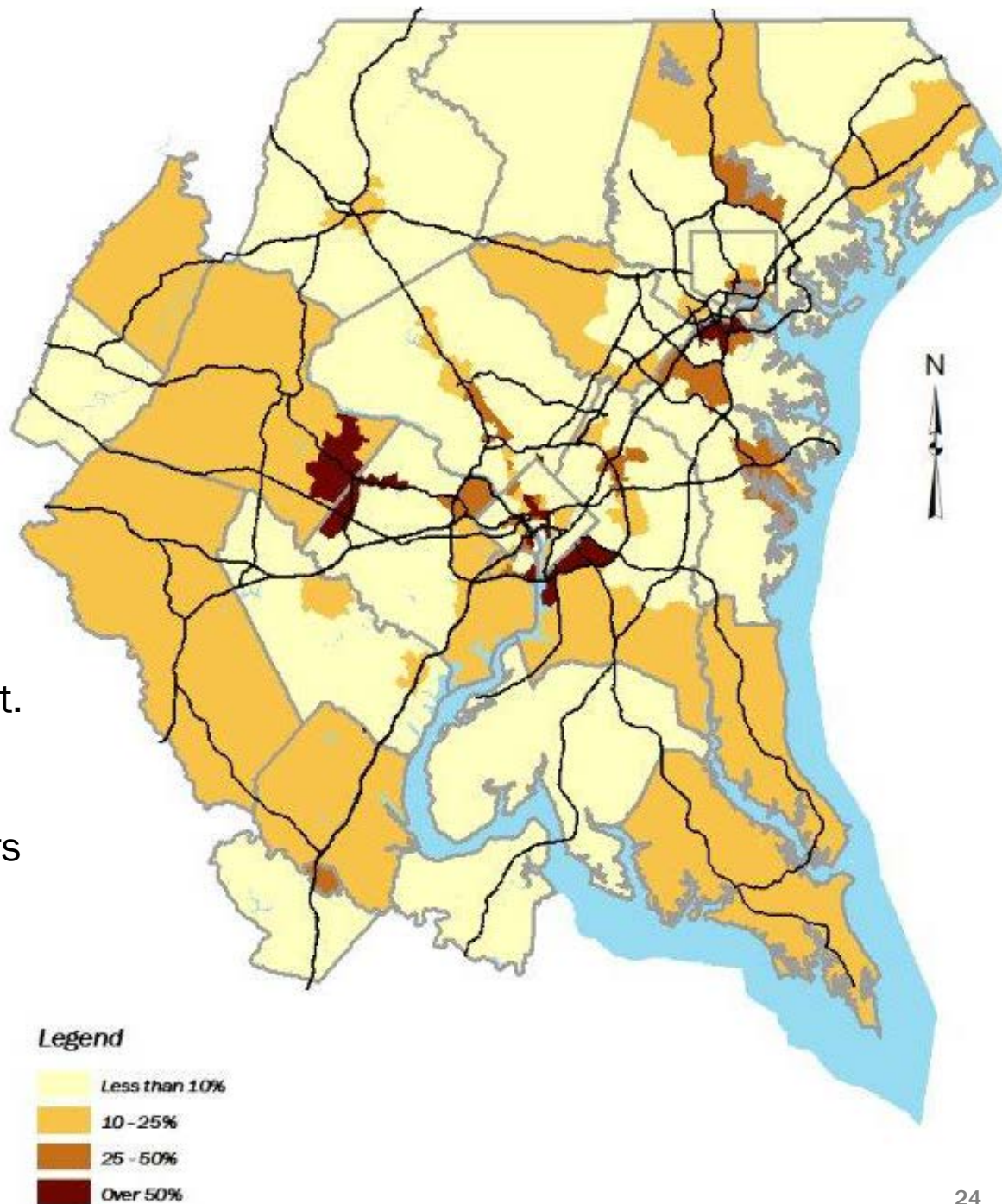**Transportation Planning Board**

Percentage of Passengers Leaving from Work

The greatest concentrations of passengers leaving directly from work are those with work places located closest to the three airports. 11% of Baltimore Core passengers and 12% of Washington Core passengers leave from work.

N

Legend

Les than 10%	
10 - 25%	
25 - 50%	
More than 50%	
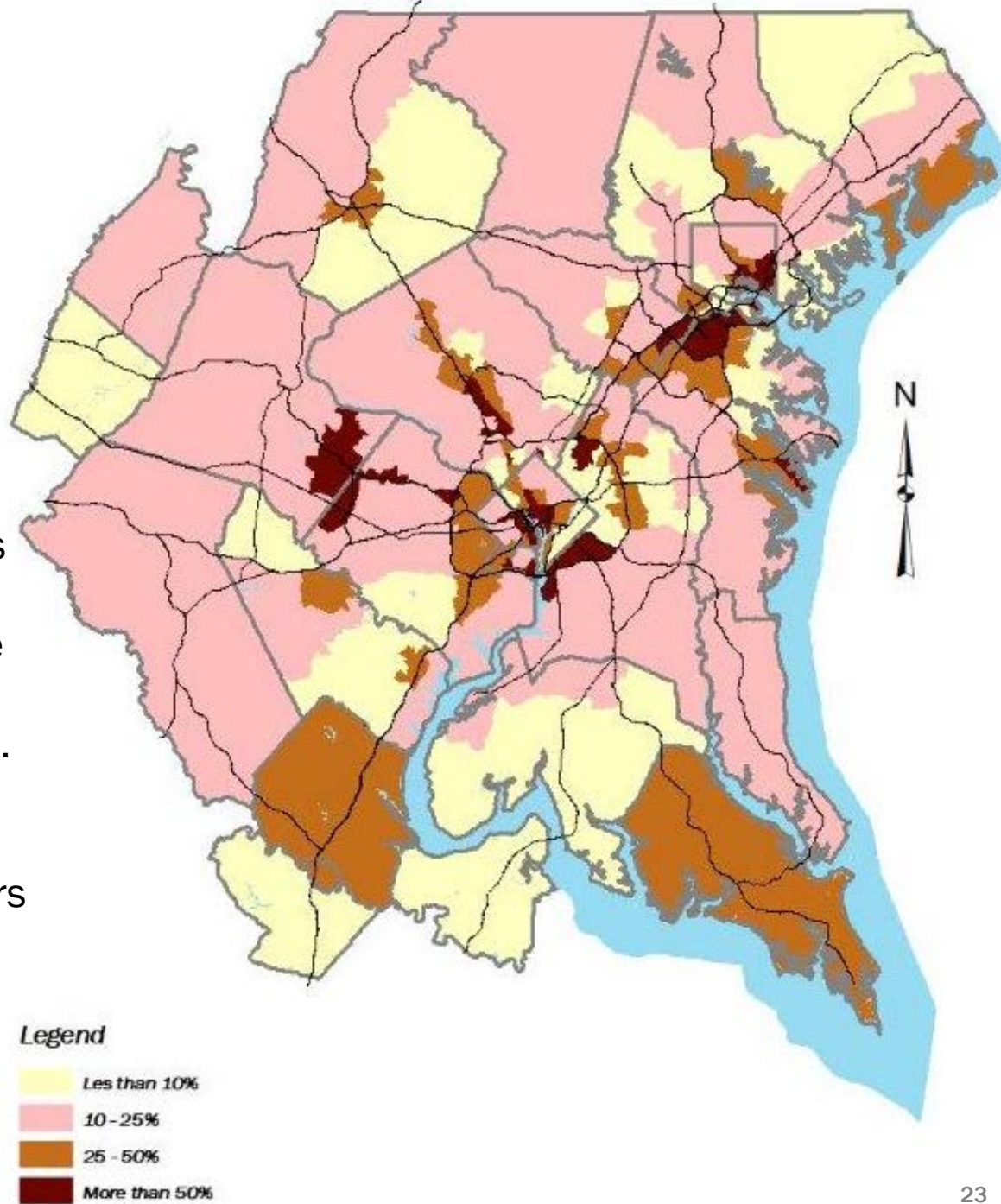
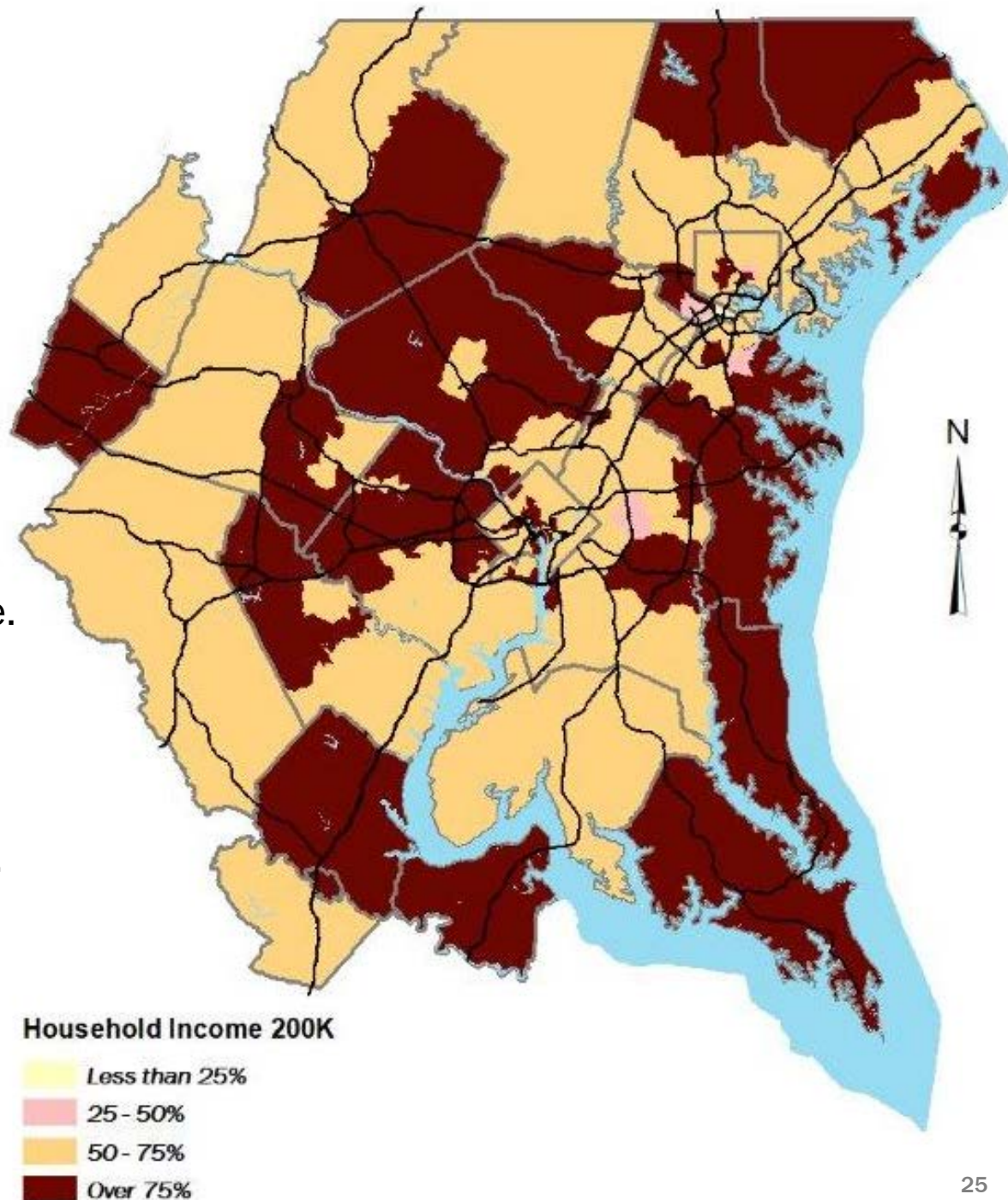# Percentage of Passengers Leaving from Hotel/Motel

The greatest concentrations of passengers leaving from hotel/motel are those located closest to the airport. 30% of Baltimore Core passengers and 42% of Washington Core passengers leave from a hotel/motel.

Legend

	Less than 10%
	10 - 25%
	25 - 50%
	Over 50%

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Annual Household Income

Passengers in the upper income bracket are widespread. Only a handful of zones show less than 50 percent in this income range. 73 percent of all departing air passengers from this region, including non-residents, have a household income of $80,000 or more.

N

Household Income 200K

Less than 25%	
25 - 50%	
50 - 75%	
Over 75%	

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AIR PASSENGER DESTINATIONS

Passenger Regional Allocations Strata

Legend
- Atlantic
- Midwest
- New England
- New York
- Pacific West
- Plains
- South Central
- South East
- West
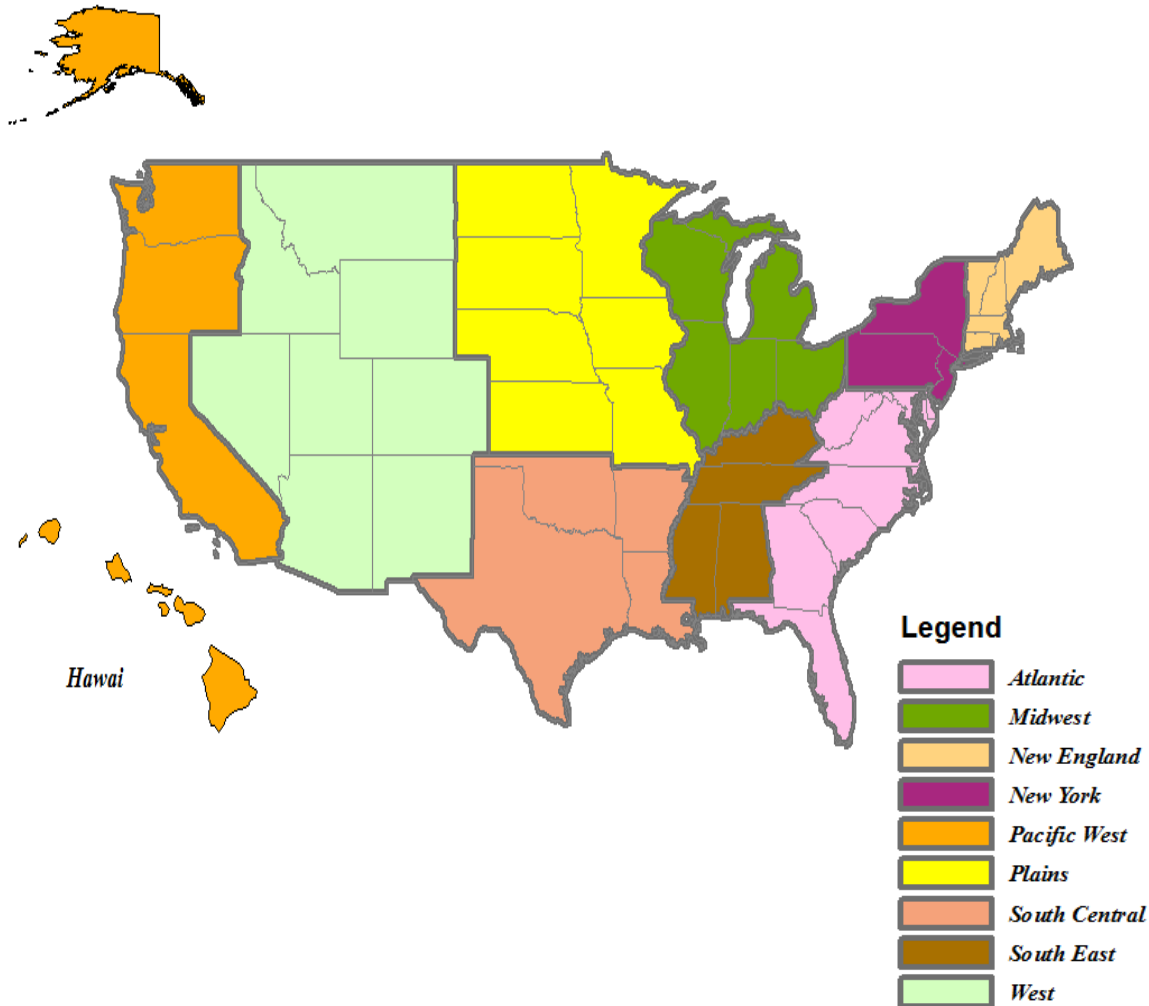
- The Atlantic and Midwest regions combined received 41% of all departing passengers

- The 2017 distribution of travel is consistent with 2015 findings

IAD remained dominant for international travel

Annual Departing Flights by Destination Region and Airport (thousands)

Destination Region	BWI		DCA		IAD		TOTAL		Airport Share of Trips to Destination Region		
	No.	% of BWI Originations	No.	% of DCA Originations	No.	% of IAD Originations	No.	% of Total Originations	BWI	DCA	IAD
Atlantic	2,843	32%	3,037	29%	1,167	16%	7,047	26%	40%	43%	17%
Midwest	1,483	17%	2,057	20%	544	8%	4,084	15%	36%	50%	13%
New England	422	5%	930	9%	421	6%	1,774	7%	24%	52%	24%
New York	896	10%	1,077	10%	263	4%	2,236	8%	40%	48%	12%
Pacific West	780	9%	486	5%	1,009	14%	2,275	9%	34%	21%	44%
Plains	284	3%	552	5%	202	3%	1,037	4%	27%	53%	19%
South Central	834	9%	1,349	13%	419	6%	2,601	10%	32%	52%	16%
Southeast	232	3%	236	2%	93	1%	561	2%	41%	42%	17%
West	706	8%	548	5%	655	9%	1,909	7%	37%	29%	34%
Domestic Subtotal	**8,479**	**95%**	**10,271**	**98%**	**4,774**	**66%**	**23,524**	**88%**	**36%**	**44%**	**20%**
International	434	5%	227	2%	2,471	34%	3,133	12%	14%	7%	79%
Total	8,913	100%	10,499	100%	7,245	100%	26,657	100%	33%	39%	27%

Note: Destinations refer to scheduled flight destinations and do not refer to final destination of passengers

Conclusions

- The Geographic Findings Report reflects similar patterns observed in previous Air Passenger Survey Results, with the exception of shifts in travel trends based on the emergence and growth of TNCs

- The Washington-Baltimore Air Systems Region continues to perform competitively across all three airports, with 5% overall growth in local originations – a trend that is anticipated to maintain in 2019.

- As the Maryland suburbs of DC experience significant growth in local originations and outlying areas experience a significant decline, it is worth considering the range of factors that are influencing these shifts.

Next Steps

- Finalize and Approve Geographic Findings Report at March 28, 2019 Aviation Technical Subcommittee Meeting

- Publish Geographic Findings Report

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