MARYLAND DEPARTMENT OF TRANSPORTATION

STATE HIGHWAY ADMINISTRATION

TRUCK PARKING INITIATIVES

MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

Nicole Katsikides, Ph.D.

Texas A&M Transportation Institute for MDOT SHA

RESOURCES CURRENTLY AVAILABLE

- MDOT's Statewide Truck Parking Study
- Truck Parking Data Application
- Truck Parking Portal
- Emergency Truck Parking Options – for operational/law enforcement awareness
- Property availability information
- MDOT's new INRIX Trips Truck Waypoint data

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RESOURCES COMING SOON

- Truck Parking dashboard – provides truck parking visualization over time (four years)
  - Includes usage statistics for all lots updated quarterly (space and ramp ratios)
  - Provides statewide view of parking by duration
  - Shows origins and destinations for parking by type at state lots
- In Work but Further Out
  - Truck Parking and Freight Traveler Information System
  - Data platforms for information sharing, CAV systems

- In other research:
  - Are the connected data reliable enough to predict parking and be used as TPIMS messages?
  - What other useful truck parking messages come out of the data a state DOT can share?

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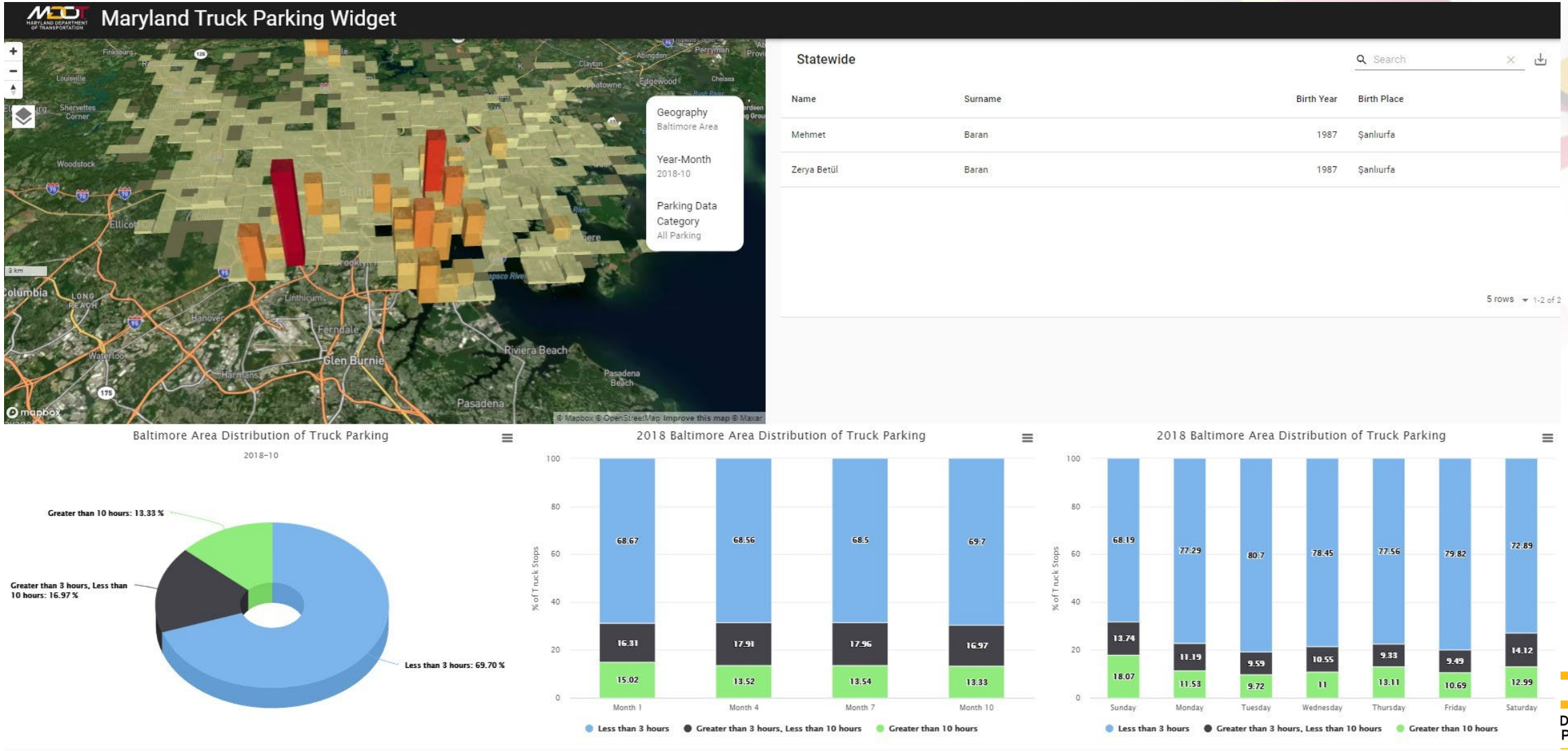
TRUCK PARKING DASHBOARD MOCK UP



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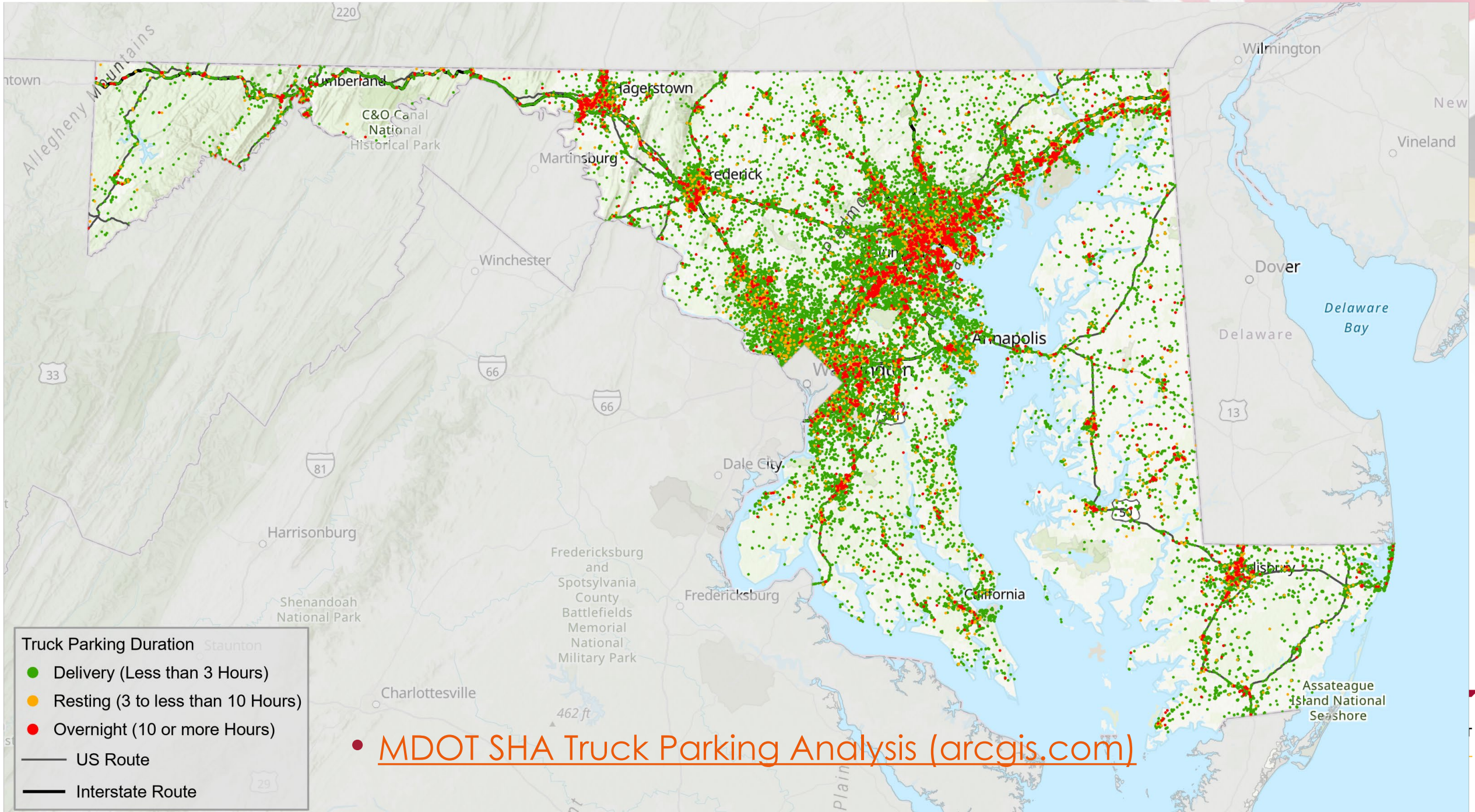
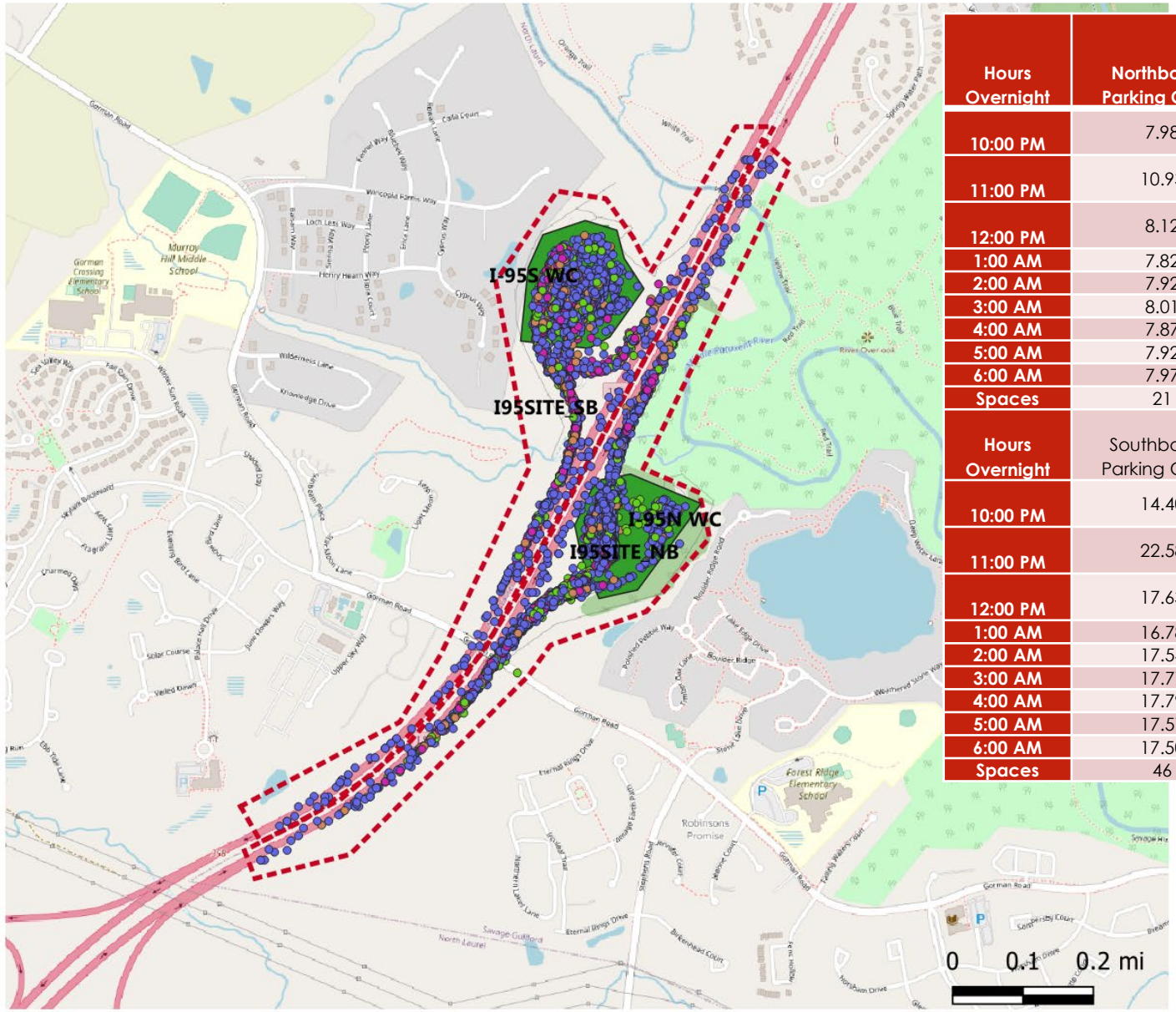
MARYLAND TRUCK PARKING BY DURATION



- [MDOT SHA Truck Parking Analysis (arcgis.com)]

EXAMPLE OUTPUT: QUARTER STATISTICS FOR PARKING DURATION



Hours Overnight	Northbound Parking Count	Northbound Ramp Count	Space Ratio	Ramp Ratio	Adjusted Parking Count	Adjusted Space Ratio
10:00 PM	7.98	3.12	38%	28%	39.89	190%
11:00 PM	10.93	5.71	52%	34%	54.67	260%
12:00 PM	8.12	5.58	39%	41%	40.61	193%
1:00 AM	7.82	5.36	37%	41%	39.11	186%
2:00 AM	7.92	6.04	38%	43%	39.61	189%
3:00 AM	8.01	6.66	38%	45%	40.06	191%
4:00 AM	7.87	7.00	37%	47%	39.33	187%
5:00 AM	7.92	7.34	38%	48%	39.61	189%
6:00 AM	7.97	7.49	38%	48%	39.83	190%
Spaces	21					

Hours Overnight	Southbound Parking Count	Southbound Ramp Count	Space Ratio	Ramp Ratio	Adjusted	Adjusted Space Ratio
10:00 PM	14.40	1.61	31%	10%	72.00	157%
11:00 PM	22.58	3.03	49%	12%	112.89	245%
12:00 PM	17.63	2.97	38%	14%	88.17	192%
1:00 AM	16.78	2.91	36%	15%	83.89	182%
2:00 AM	17.54	3.55	38%	17%	87.70	191%
3:00 AM	17.77	3.97	39%	18%	88.83	193%
4:00 AM	17.79	4.48	39%	20%	88.94	193%
5:00 AM	17.57	4.78	38%	21%	87.83	191%
6:00 AM	17.50	4.70	38%	21%	87.50	190%
Spaces	46					

Rest Time

- less than 1 hour
- 1-3 hours
- 3-10 hours
- longer than 10 hours

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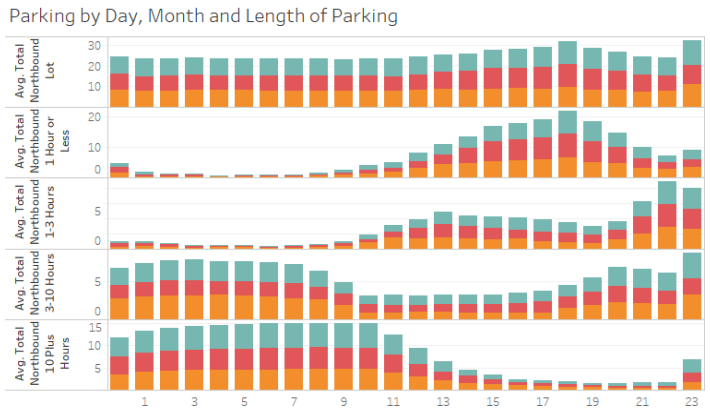
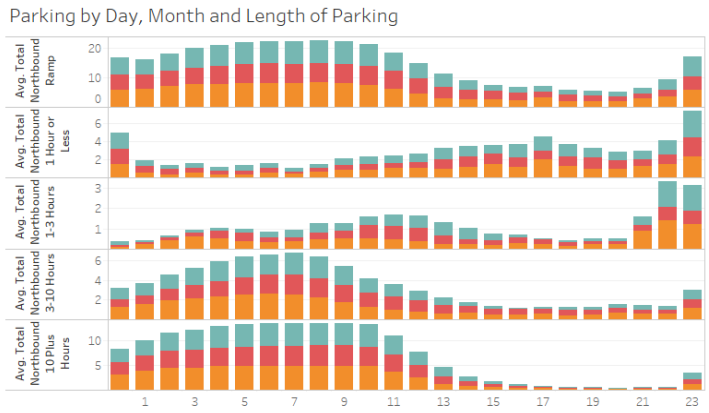
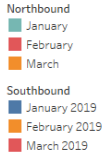
APPROXIMATING USAGE

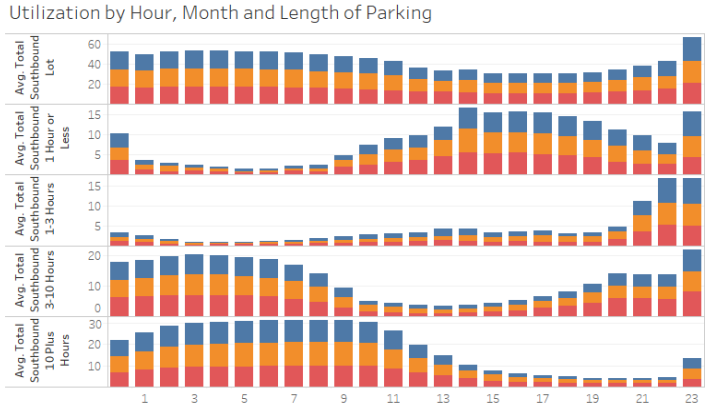
Manual Counts by MDOT

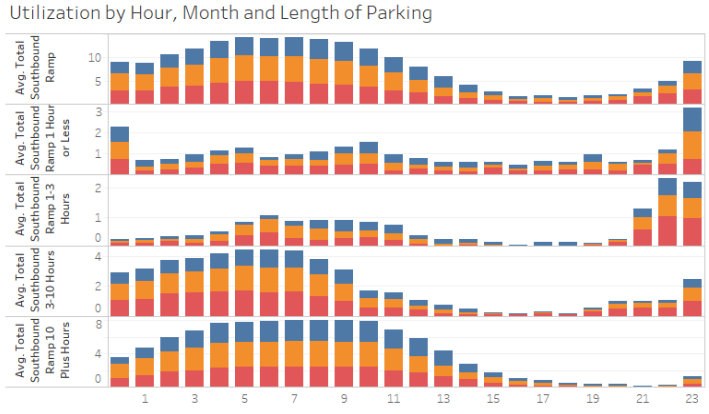
Truck Stop	Roadway	County	Municipality	2012	2013	2014	2016	2017	Average Space Ratio
I 95 Welcome Center - Northbound	I-95 NB Laurel	Howard	Laurel	152%	257%	238%	248%	376%	254%
I 95 Welcome Center - Southbound	I-95 SB Laurel	Howard	Laurel	87%	83%	93%	126%	111%	100%











INRIX Counts

Location	INRIX 2019 Quarter 1 Average Count (Lot and Ramp)	Space Ratio
I 95 Welcome Center - Northbound Lot and Ramp Combined	52	248%
I 95 Welcome Center - Southbound Lot and Ramp Combined	57	124%

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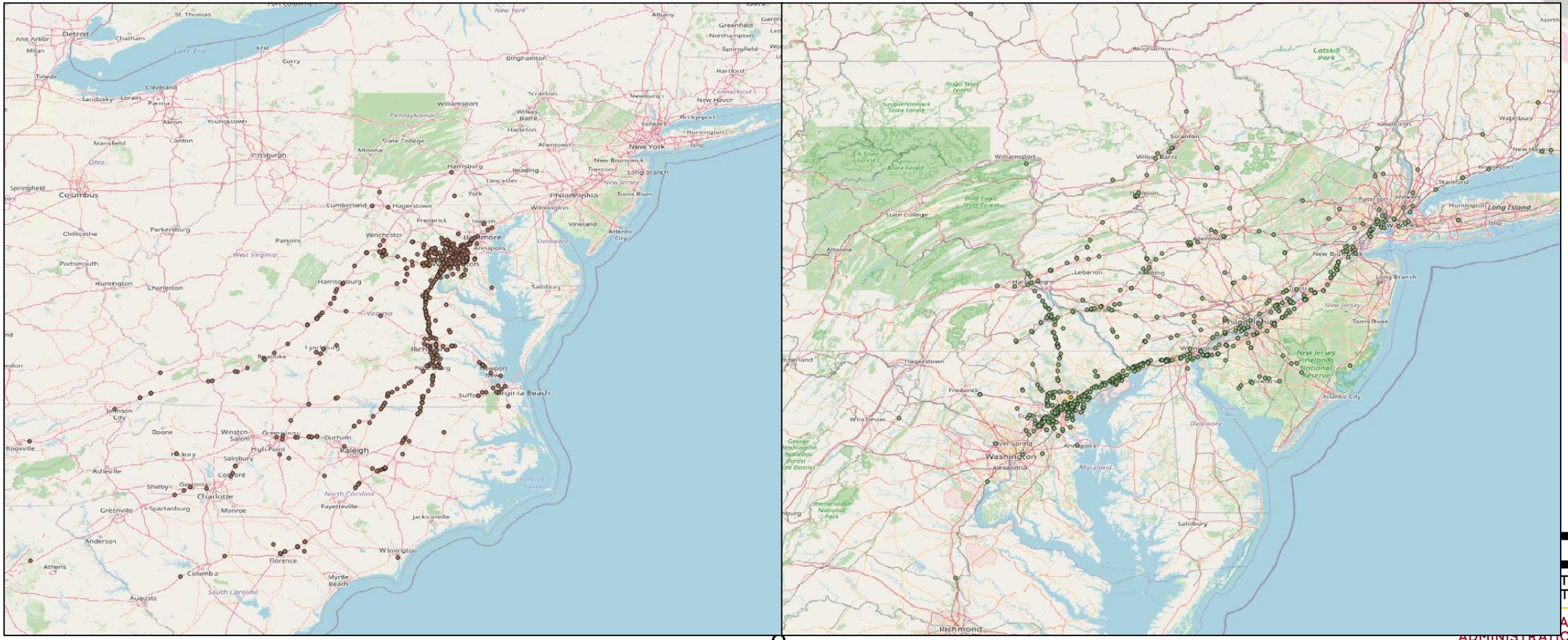
EXAMPLE: ORIGINS AND DESTINATIONS OF LESS THAN 1 HOUR RAMPS TRUCKS, NORTHBOUND



FOR MORE INFORMATION

- Nicole Katsikides, Ph.D.
- Texas A&M Transportation Institute (TTI) for MDOT State Highway Administration

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