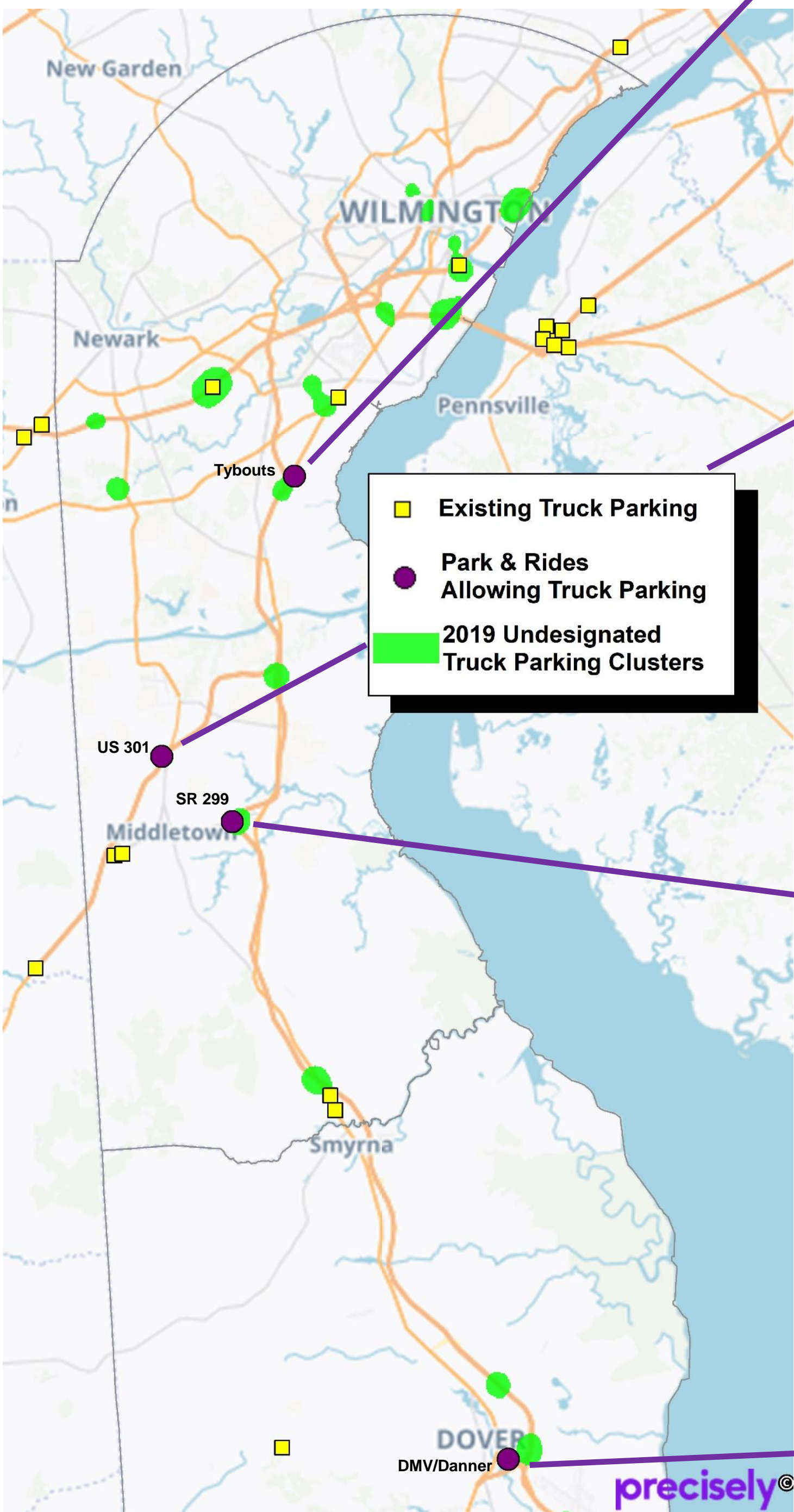# Additional Truck Parking Facilities

As of May of 2023, DelDOT and DTC are now allowing truck parking at 4 existing park & ride locations. Signage placed at each location indicating that it is permissible to park at these locations.

Tybouts

US 301 (new)

SR 299 (Middletown)

Dover DMV/Danner

Map Legend

- ☐ Existing Truck Parking
- ● Park & Rides Allowing Truck Parking
- ▮ 2019 Undesignated Truck Parking Clusters

Tybouts

US 301

SR 299

DMV/Danner

precisely©

Truck Parking Information Systems (TPIS)

Real Time Truck Parking Data Update Smyrna Rest Area

Project Background:

In 2019, the Volpe Center worked with DelDOT to identify potential truck parking locations in Delaware and develop a pilot system for providing parking availability information at these location(s) to CMV drivers in a safe and non-intrusive manner.

Infrastructure installed at Smyrna includes:

- TPIS Sensor Station with a broadband router that provides internet access to the four cameras.
- Four TPIS cameras mounted on lamp posts.
- Video analytics provided by WiseMoving.
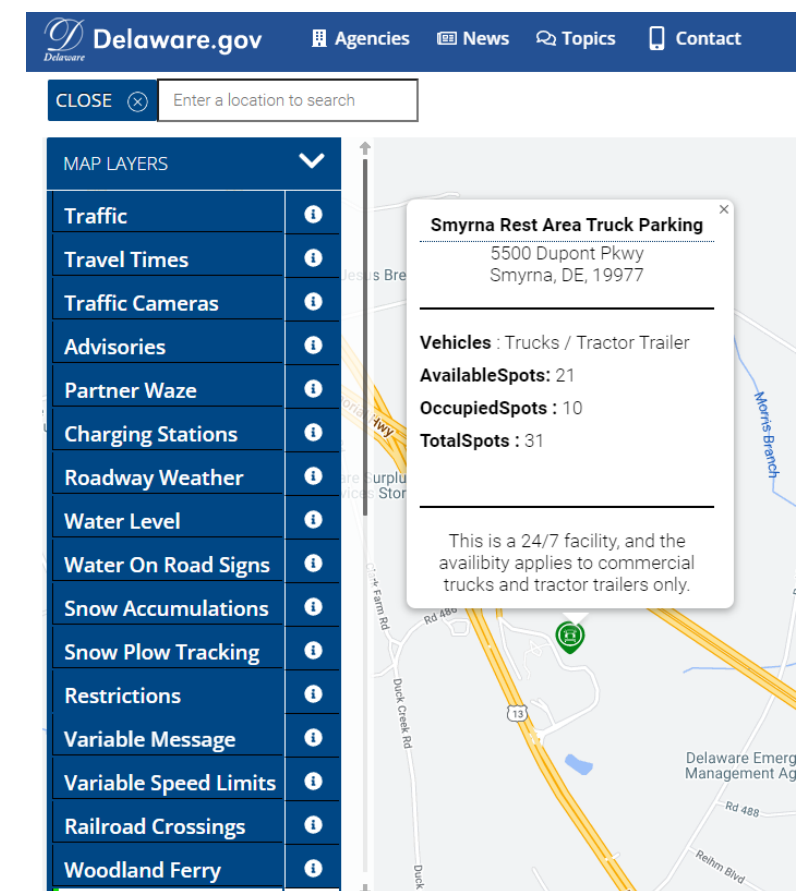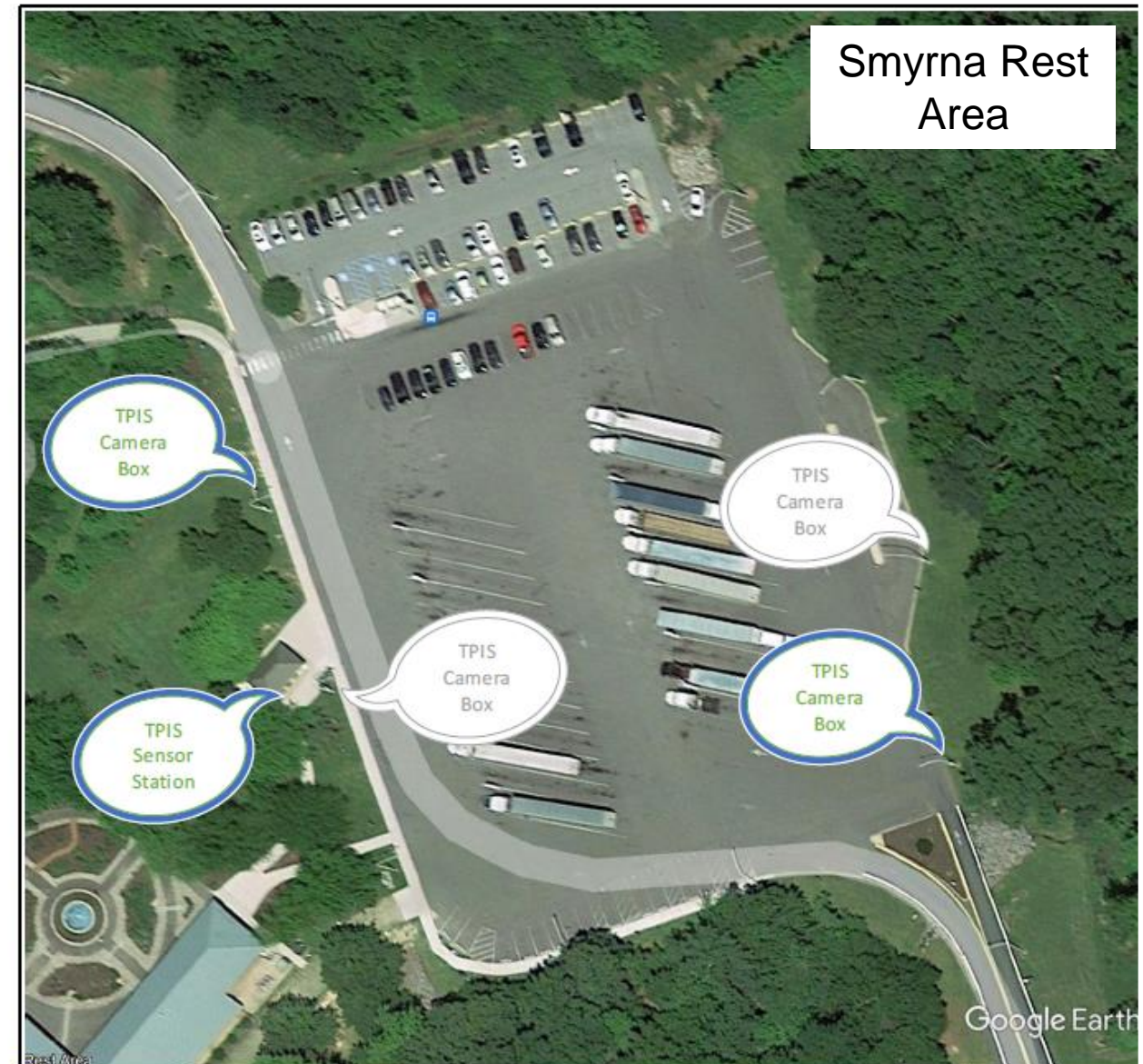
Data availability

- Up to the minute updates on spaces available on the DelDOT website and the free DelDOT App

Smyrna Rest Area

https://deldot.gov/map/

Parking Usage Results: May 2023

Historical data can be retrieved to track parking space usage and duration of stay.

Avg. Duration (in hours) of Stop: May 2023*

hour	Mon.	Tue.	Wed.	Thur.	Fri.	Sat.	Sun.
midnight	5:39	3:10	3:38	4:31	2:57	3:35	10:43
1am	3:40	1:41	7:03	2:42	5:21	4:55	3:23
2am	3:34	4:49	5:20	7:45	2:24	2:49	2:00
3am	2:53	6:26	4:02	2:45	2:09	1:54	0:12
4am	1:51	0:55	1:25	2:28	2:25	1:19	11:10
5am	2:39	1:48	1:29	0:45	2:02	1:56	0:44
6am	0:17	0:42	1:35	0:52	0:49	0:09	0:50
7am	0:24	0:14	0:50	1:04	0:27	0:09	7:45
8am	0:25	0:19	0:11	0:48	2:42	0:25	7:29
9am	0:38	0:24	1:07	0:15	2:00	0:23	0:15
10am	0:35	0:17	0:18	0:19	1:09	0:39	2:00
11am	0:28	0:18	0:30	0:19	1:11	1:13	0:15
noon	0:39	0:20	0:22	0:17	0:24	0:24	0:21
1pm	0:22	0:24	0:23	0:16	0:41	1:38	0:28
2pm	0:19	0:42	1:16	0:23	0:27	0:47	0:24
3pm	0:58	1:20	0:36	1:28	2:22	0:45	1:15
4pm	1:05	7:39	4:28	3:56	0:18	3:59	17:51
5pm	3:43	9:06	5:19	1:05	1:46	11:26	6:12
6pm	0:46	9:48	6:04	1:22	4:16	4:06	3:48
7pm	2:56	6:36	3:34	3:47	1:33	4:53	3:42
8pm	6:50	6:05	6:04	3:47	6:53	5:26	5:17
9pm	6:29	7:41	6:41	9:03	6:56	7:37	4:14
10pm	6:11	6:54	7:13	4:23	6:35	6:24	8:13
11pm	3:16	8:45	5:33	7:13	4:39	2:37	7:10

* Based on average parking duration of vehicles arriving in each hour

% of Spaces Used: May 2023

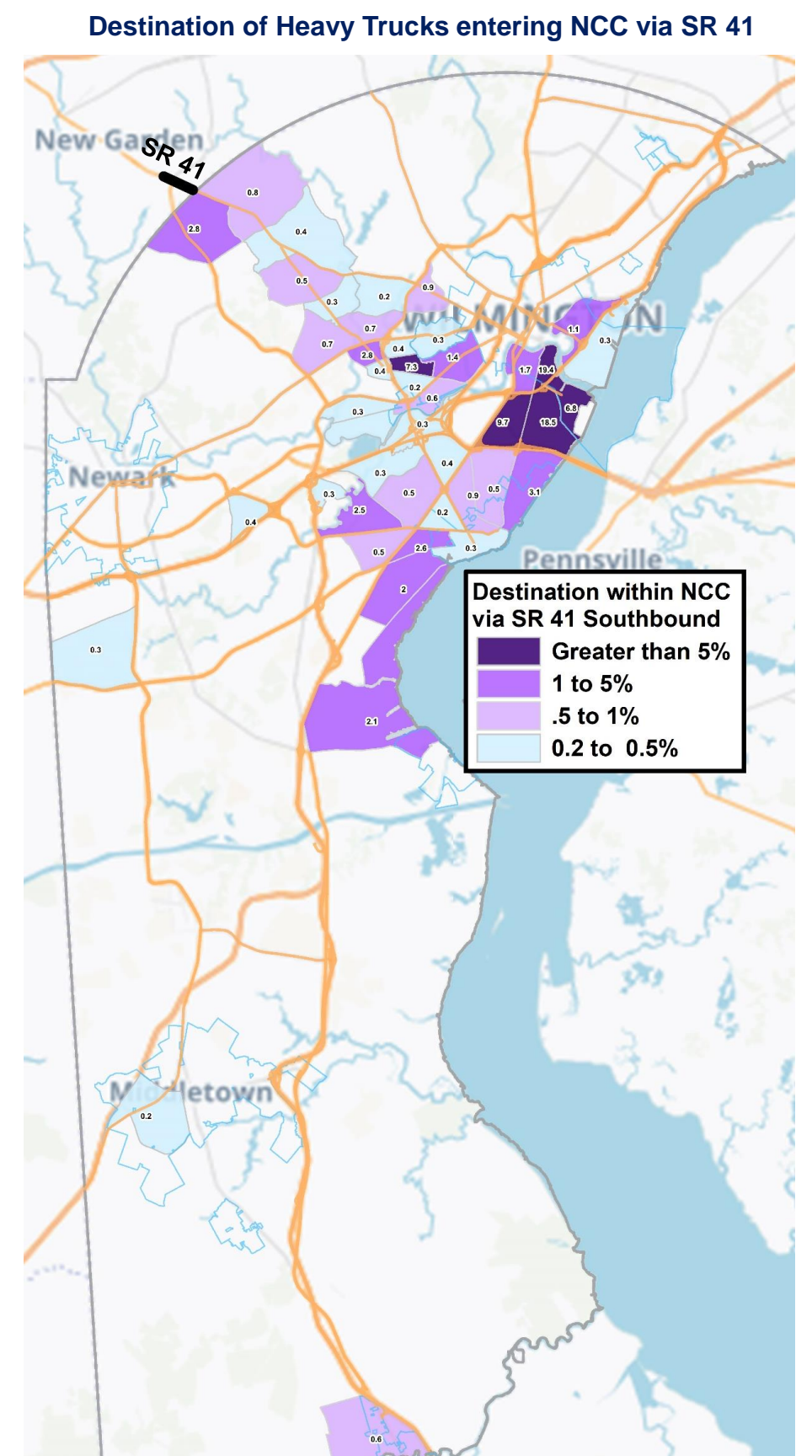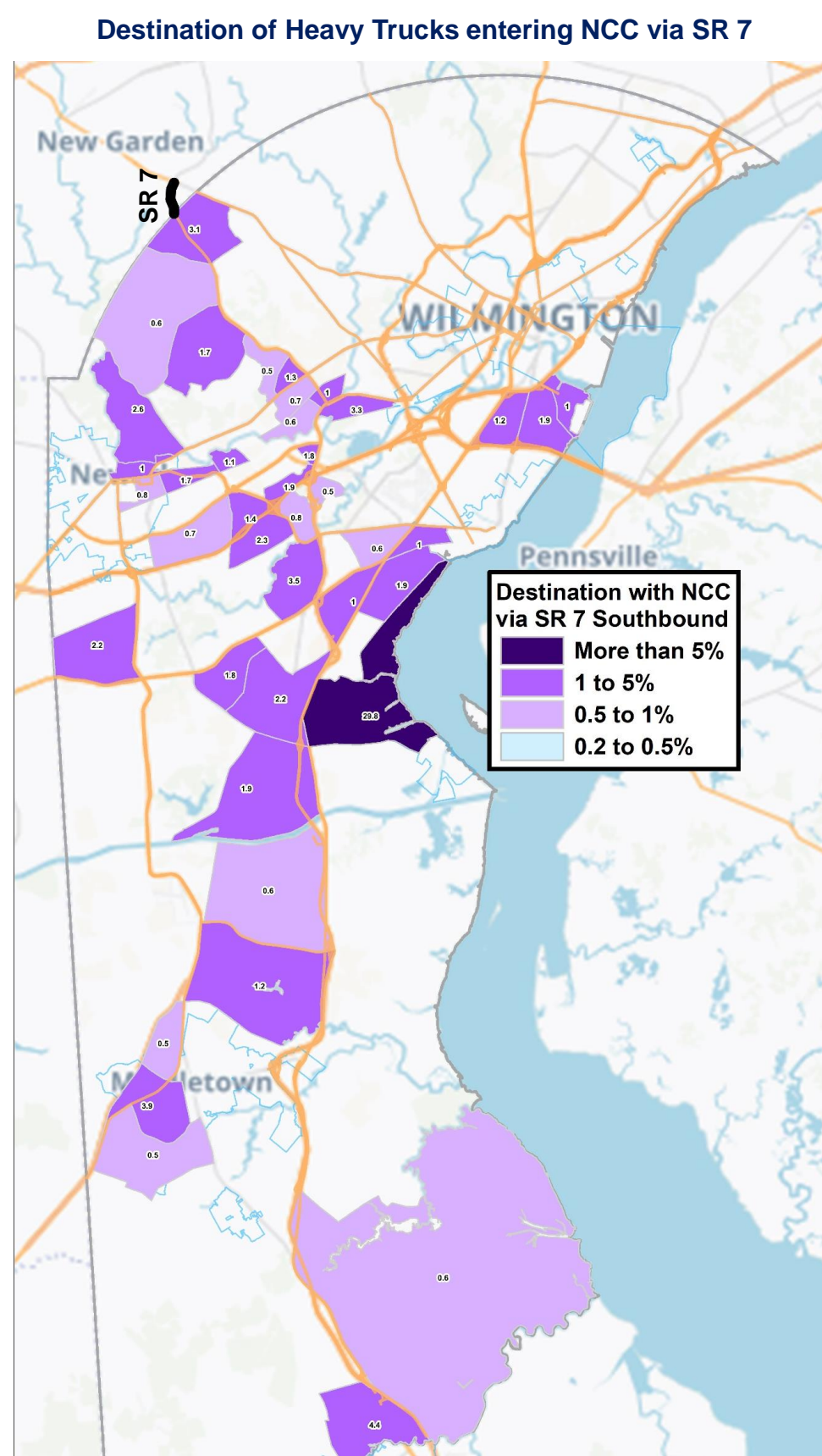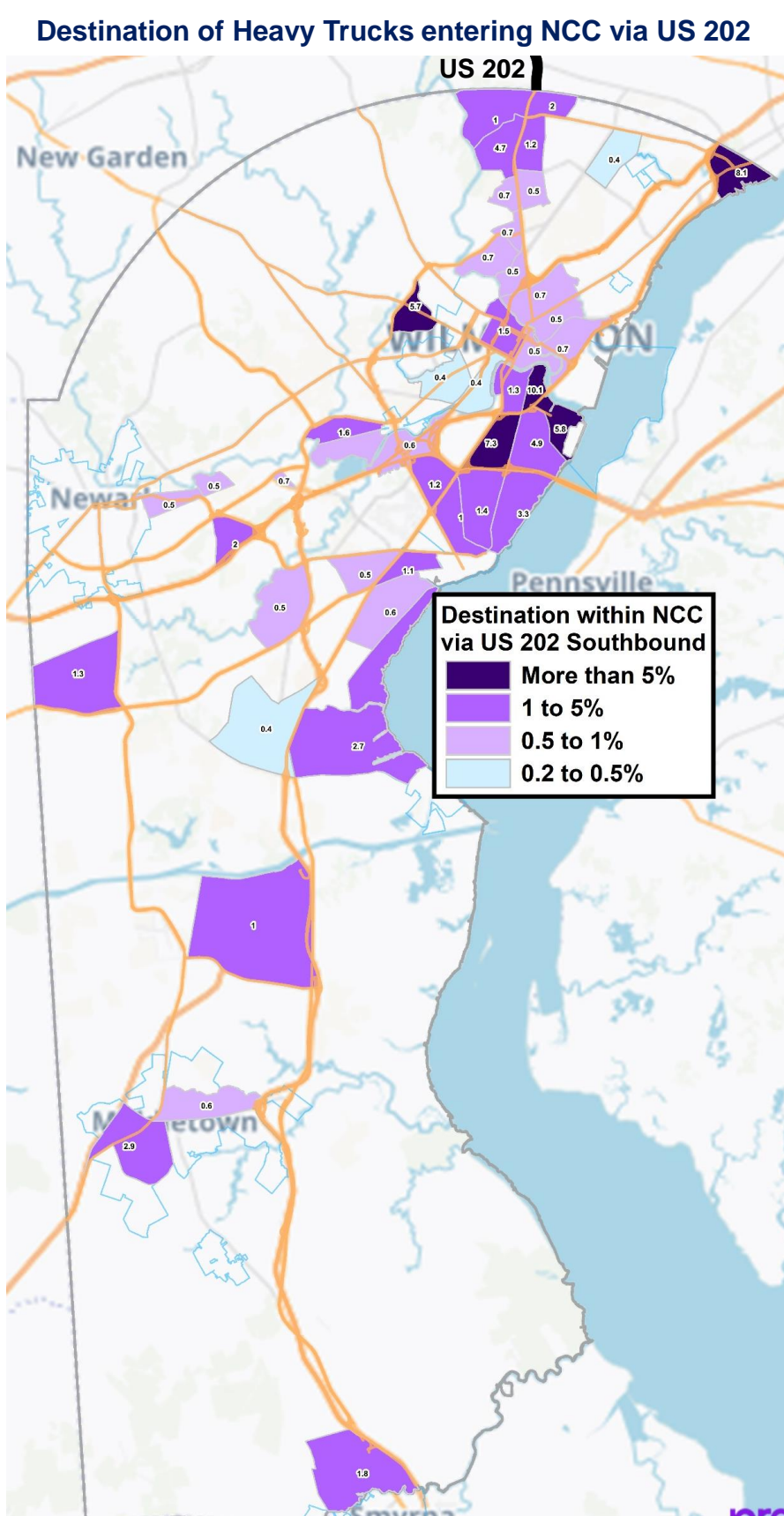| hour	Mon.	Tue.	Wed.	Thu.	Fri.	Sat.	Sun.
midnight	62.8%	75.3%	74.1%	77.2%	79.3%	55.8%	46.7%
1am	66.1%	75.8%	74.7%	77.4%	80.5%	59.5%	48.7%
2am	67.1%	77.2%	76.2%	76.9%	80.6%	61.5%	48.2%
3am	70.2%	77.0%	74.7%	76.4%	80.4%	63.0%	48.5%
4am	68.0%	75.1%	74.8%	73.6%	77.1%	61.7%	47.8%
5am	65.1%	68.3%	71.7%	71.6%	71.2%	58.8%	47.1%
6am	55.1%	60.3%	56.6%	64.9%	61.3%	48.4%	41.2%
7am	46.4%	49.4%	52.3%	47.7%	51.9%	39.5%	36.5%
8am	37.2%	36.4%	42.5%	35.2%	44.7%	34.6%	31.3%
9am	30.7%	27.4%	36.3%	29.5%	33.1%	27.5%	25.9%
10am	33.1%	28.5%	37.4%	30.7%	32.4%	21.7%	23.5%
11am	33.0%	27.6%	29.4%	27.9%	37.7%	22.2%	24.9%
noon	32.3%	25.6%	26.2%	25.4%	36.8%	21.4%	25.8%
1pm	29.8%	27.4%	27.0%	25.0%	38.4%	21.1%	26.9%
2pm	27.4%	30.5%	24.7%	26.1%	31.5%	24.4%	25.9%
3pm	28.1%	34.5%	21.2%	26.8%	30.3%	27.8%	27.3%
4pm	31.4%	38.0%	22.9%	33.1%	30.1%	27.1%	28.3%
5pm	33.7%	44.0%	29.5%	33.8%	33.5%	27.9%	33.6%
6pm	43.0%	49.1%	41.6%	41.7%	37.6%	29.9%	40.0%
7pm	49.3%	56.0%	47.3%	51.4%	39.6%	32.5%	42.1%
8pm	55.6%	61.0%	51.9%	60.9%	45.0%	38.5%	48.1%
9pm	58.9%	69.0%	59.4%	66.5%	49.1%	42.1%	48.8%
10pm	68.7%	72.2%	69.0%	75.3%	51.3%	44.2%	53.5%
11pm	73.1%	73.6%	74.7%	77.7%	53.6%	46.0%	58.5%

Using data analytics to develop origin - destination patterns

Numerous data products are now available that offer origin-destination and other related metrics through data collection from a wide range of geospatial data sources.

- Origin-destination (OD) data represents movements through geographic spaces from a given location.

- Local agencies are exploring these data sources for use in freight planning to better understand the supply chains of key Freight Intensive Sectors (FIS) for the region.

- Applications can range from measuring movements from one geographic location to another or how vehicles pass through an area (or stop within it) to examine how the transportation network is being used by all modes.

- Time of day and seasonal variations can also be measured or compared

Percentage of traffic distribution entering SR 1 via I-95/SR 7: 2022

All Vehicles Types (Autos +Trucks)

8% 5%
2%
16%
0.8%
4% 3%
7%
12%
35%

Heavy Trucks Only (26,000+ lbs.)

0.5% 0.2%
1%
3%
5%
0.6% 8%
1%
17%
62%

Source: Streetlight. Values represent the percentage of vehicles which originated on SR 1 just South of the Christiana Mall on weekdays (M-Th.) Data samples from 5/1/22 through 4/30/23
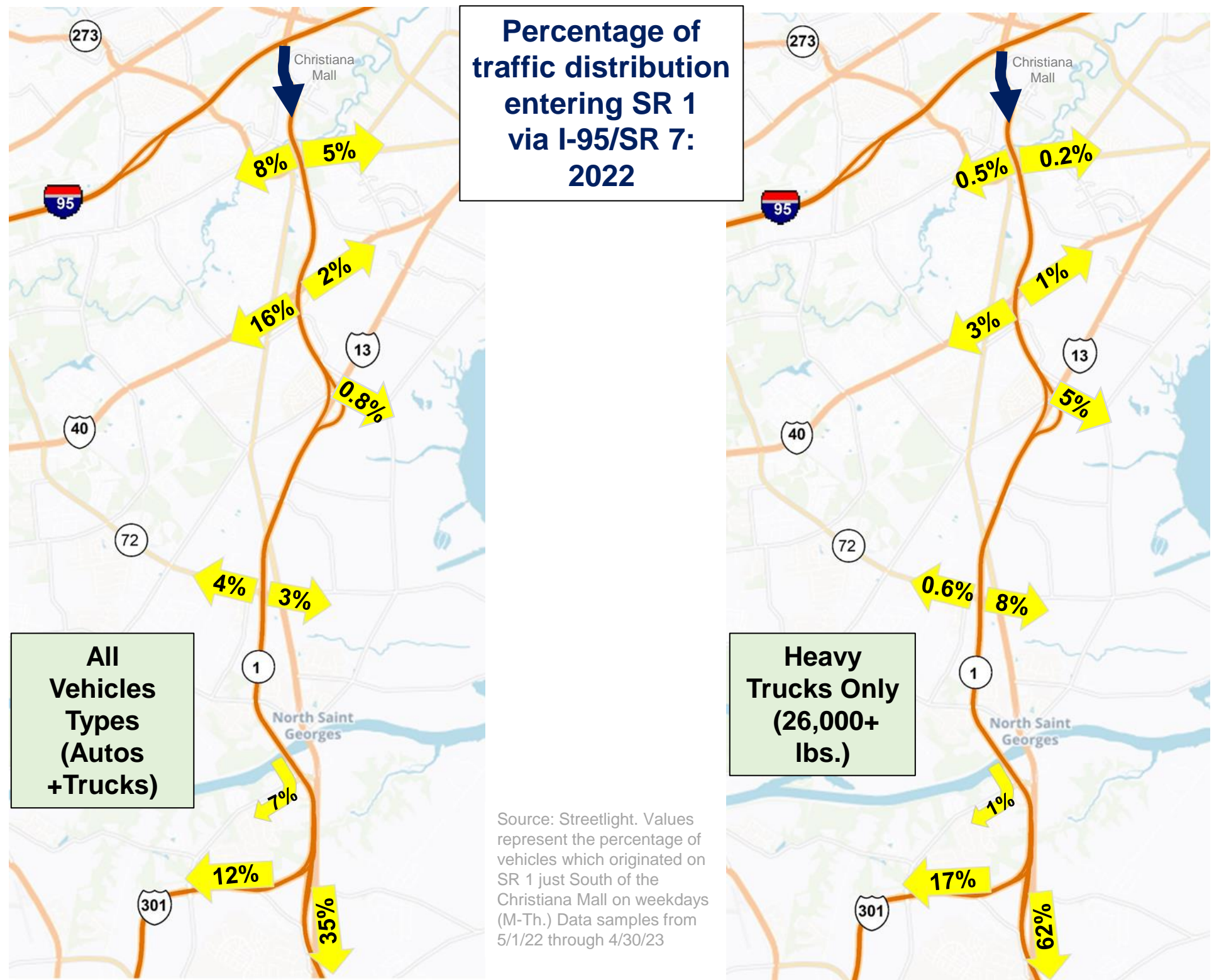
Example O/D Analysis: Heavy truck traffic flows into New Castle County from Pennsylvania

Destination of Heavy Trucks entering NCC via US 202

US 202

Destination within NCC via US 202 Southbound
- More than 5%
- 1 to 5%
- 0.5 to 1%
- 0.2 to 0.5%

Destination of Heavy Trucks entering NCC via SR 7

SR 7

Destination with NCC via SR 7 Southbound
- More than 5%
- 1 to 5%
- 0.5 to 1%
- 0.2 to 0.5%

Destination of Heavy Trucks entering NCC via SR 41

SR 41

Destination within NCC via SR 41 Southbound
- Greater than 5%
- 1 to 5%
- .5 to 1%
- 0.2 to 0.5%

Source: Streetlight, 2022. Data represents samples from all weekday heavy vehicle movements from 1/1/22 to 12/31/22

Truck Parking Amenities Study

Truck parking area at Dot Foods in Bear.

Smyrna Rest Area. Source: Visit Delaware.

Section 1401 (c) of the Moving Ahead for Progress in the 21st Century (MAP-21) Act, referred to as **Jason's Law**, directs the United States Department of Transportation (USDOT) to conduct a survey and comparative assessment to:

1. Evaluate the capability of each state to provide adequate parking and rest facilities for commercial motor vehicles engaged in interstate transportation,
2. Assess the volume of commercial motor vehicle traffic in each state, and
3. Develop a system of metrics to measure the adequacy of commercial motor vehicle parking facilities in each state.

	Small	Medium	Large
Site Acreage	3-7 acres	7-15 acres	15+ acres
Building Size	8,000 sq ft	10,000-12,000 sq ft	15,000 sq ft
Convenience Store Size	5,000 sq ft	7,000 sq ft	12,000 sq ft
Food Options	1 QSR	1 QSR, plus at least 1 additional option	1+ QSR, plus multiple additional options
Showers	2	6-10	10+
Laundry Facilities	Optional	Yes	Yes (at least 3 w/d)
Driver Lounge	No	Optional	Yes
Truck Parking Spots	15-30	50-70	75-100
Car Parking Spots	10	20	30
Diesel Fuel Pumps	4	6	8
Gas Fuel Pumps	4-8	6-10	8-12
EV Charging Stations	1-2	3-4	4-8
Wi-Fi Access Site-wide	Yes	Yes	Yes

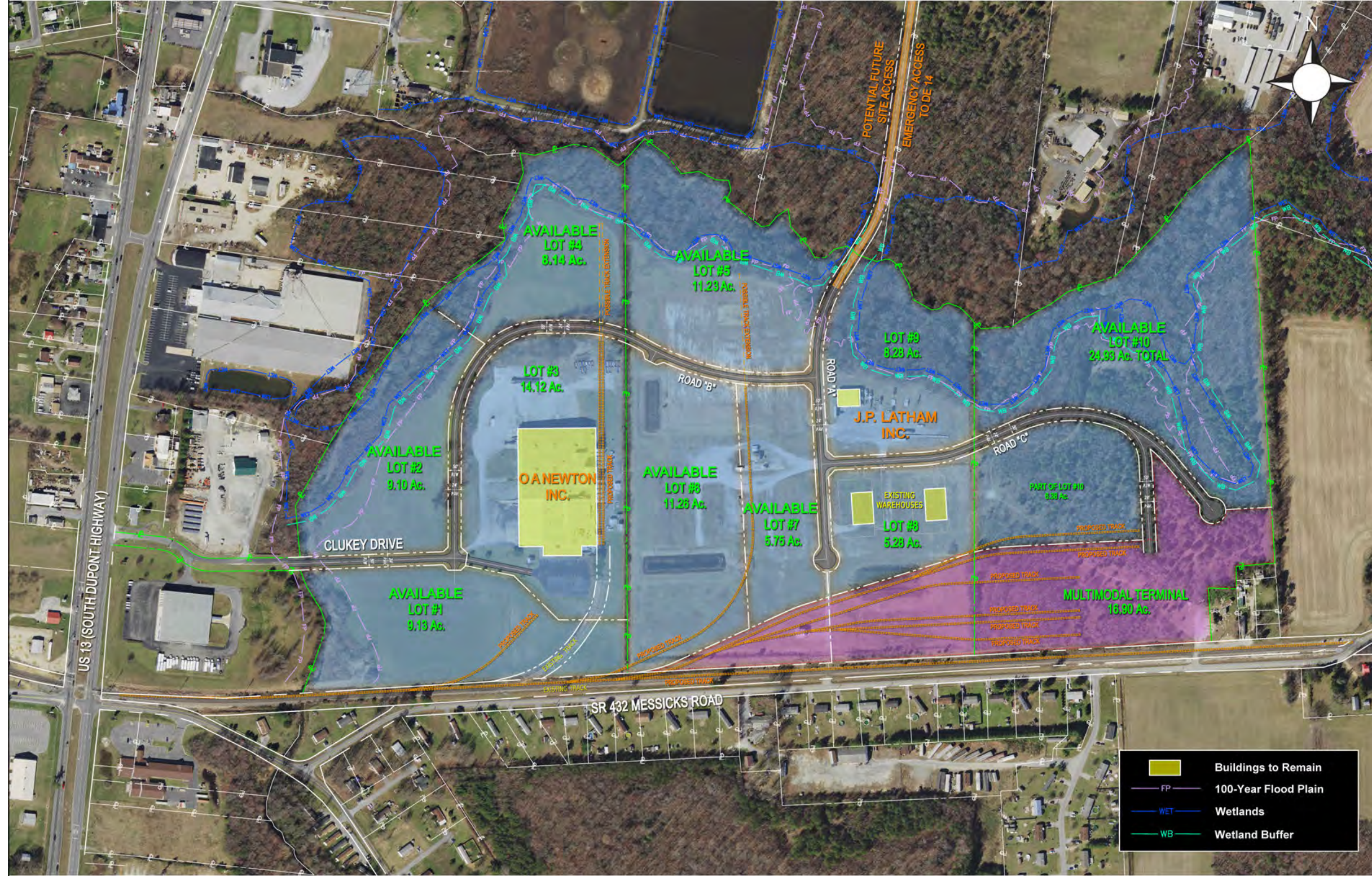**Subtitle D: Highway Safety - (Sec. 1401) Jason's Law:**

- Expresses the sense of Congress that it is a **national priority** to address projects for the **shortage of long-term parking for commercial motor vehicles** on the NHS to improve the safety of motorized and nonmotorized users and for commercial motor vehicle operators.
- Makes eligible to be a federal-aid highway project the **construction of long-term parking facilities for commercial motor vehicles** on the NHS.
- Directs the Secretary to **survey and assess the availability of parking facilities for commercial motor vehicles in each state**. Requires survey results be made available to the public on the DOT website.

Driver break room at Dot Foods in Bear.

DOVER/KENT COUNTY MPO
METROPOLITAN PLANNING ORGANIZATION

KENT COUNTY DE
KEP
KENT ECONOMIC PARTNERSHIP

Walmart in Milford. Source: Google Maps.

City of Harrington Multimodal Freight Terminal and Industrial Park

SITE PLAN
JUNE 2021