

Delaware Truck Parking Focus Group Map Package

After developing Delaware's truck parking inventory, the Project Team proceeded with analysis of truck parking demand and impacts in the state. This packet provides a selection of maps illustrating initial results of the truck parking utilization, undesignated truck parking, and truck/trailer crash analysis in Delaware. This packet should be retained and used as a reference material for the first Truck Parking Focus Group meeting to be held on March 11, 2021.

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Truck Parking Inventory

Delaware has 12 truck parking locations that offer a total of 333 truck parking spaces. Figure 1 maps truck parking locations in Delaware, or within approximately 20 miles of the Delaware border, by number of truck parking spaces, and Figure 2 provides further detail on each truck parking location mapped.

Figure 1: Truck Parking Facilities In and Surrounding Delaware by Number of Spaces

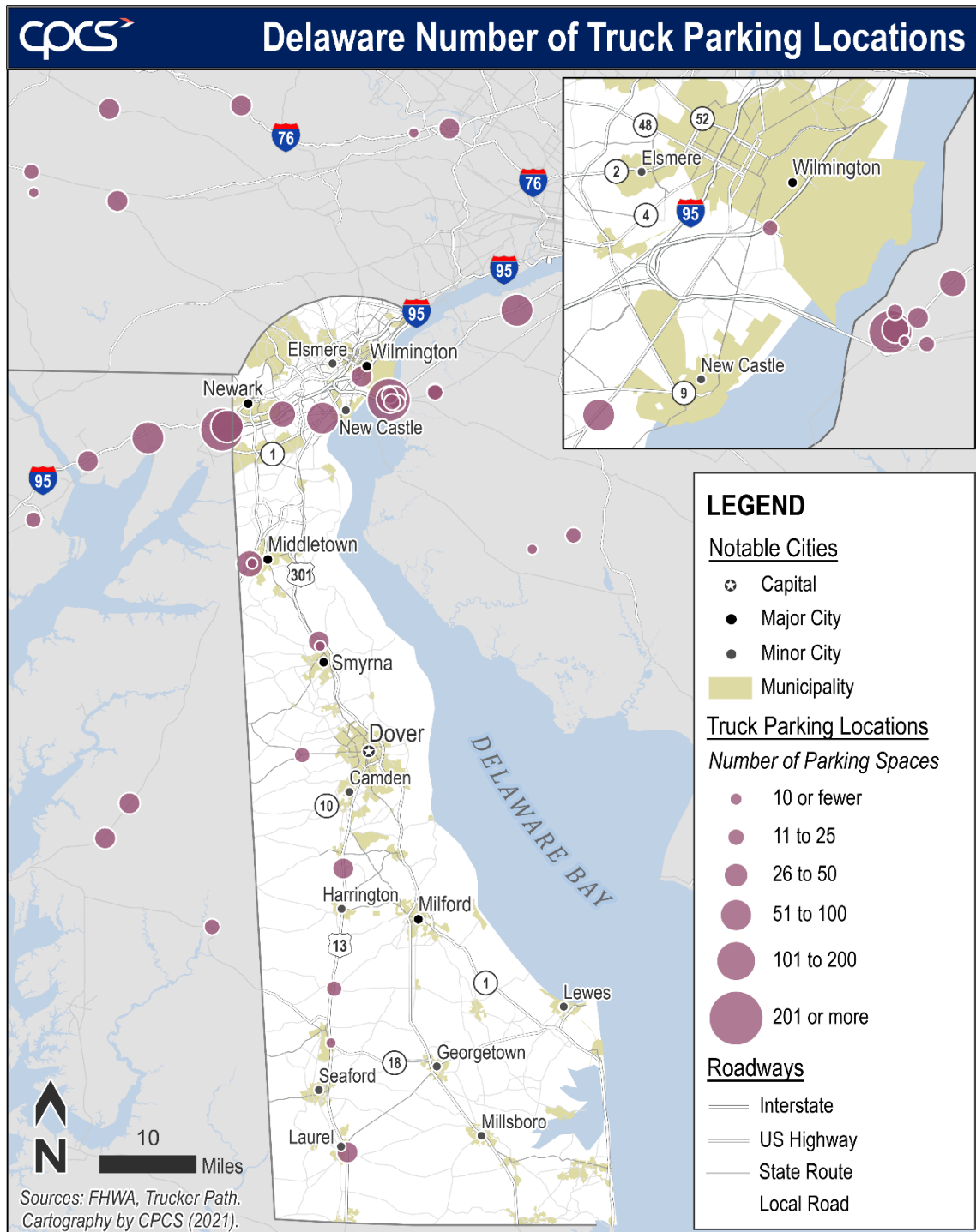


Figure 2: Truck Parking Inventory In and Surrounding Delaware

Title	Public/ Private	Validated Parking Spaces	State
Wawa	Private	3	DE
Smyrna Rest Area	Public	24	DE
Biden Welcome Center	Public	52	DE
Royal Farms	Private	5	DE
Royal Farms	Private	10	DE
Royal Farms	Private	15	DE
Royal Farms	Private	5	DE
Christiana Truck Stop	Private	20	DE
Oasis Travel Plaza	Private	20	DE
Shore Stop #288 - BP (paid parking)	Private	28	DE
301 Plaza	Private	42	DE
\$ Parking Delaware Truck Plaza	Private	109	DE
Wawa	Private	9	MD
Perryville Weigh Station	Public	56	MD
US-301 Bay Country Rest Area	Public	32	MD
Exxon	Private	10	MD
Aberdeen Sunoco	Private	19	MD
Pilot Travel Center #290	Private	24	MD
Trailway Truck Terminal	Private	30	MD
Flying J Travel Center #784	Private	145	MD
TA Elkton #19	Private	152	MD
Flying J Travel Center #875	Private	222	MD
SB Warwick Weigh Station	Public	23	MD
Wawa	Private	5	NJ
Wawa	Private	7	NJ
Wawa	Private	6	NJ
Wawa	Private	6	NJ
Deepwater Welcome Center	Public	33	NJ
John Fenwick Service Area 7006	Public	10	NJ
Pilot Travel Center #253	Private	11	NJ
Clara Barton Service Area	Public	11	NJ
Major Auto Truck Plaza	Private	14	NJ

Title	Public/ Private	Validated Parking Spaces	State
Deepwater Truck Center	Private	15	NJ
Lukoil Truck Stop	Private	16	NJ
Sunoco Truck Stop Carneys Point	Private	40	NJ
TA Paulsboro #218	Private	150	NJ
Flying J Travel Center #688	Private	240	NJ
Valley Forge Travel Plaza	Public	8	PA
Rutter's #70	Private	8	PA
Lancaster Travel Plaza	Private	18	PA
Peter J. Camiel Service Plaza	Public	25	PA
Conoco	Private	25	PA
PA Turnpike King of Prussia Rest Area	Public	26	PA
Martins Trailside Express PacPrd	Private	30	PA
Pennsylvania Welcome Center Boothwyn	Public	8	PA

Truck Parking Utilization

Truck parking utilization refers to the number of trucks parked at a truck parking location relative to the number of spaces at that location during a time period. The figures on the following pages display the utilization of public and private truck parking facilities from 8 am to 9 am (Figure 3), 2 pm to 3 pm (Figure 4), 8 pm to 9 pm (Figure 5), and 2 am to 3 am (Figure 6). Areas are classified from low utilization (lots of spaces available) to high utilization (full, i.e. no spaces available), represented on a scale from green (low utilization) to yellow (medium utilization) to red (high utilization).

Figure 3: Truck Parking Utilization (8 am to 9 am)

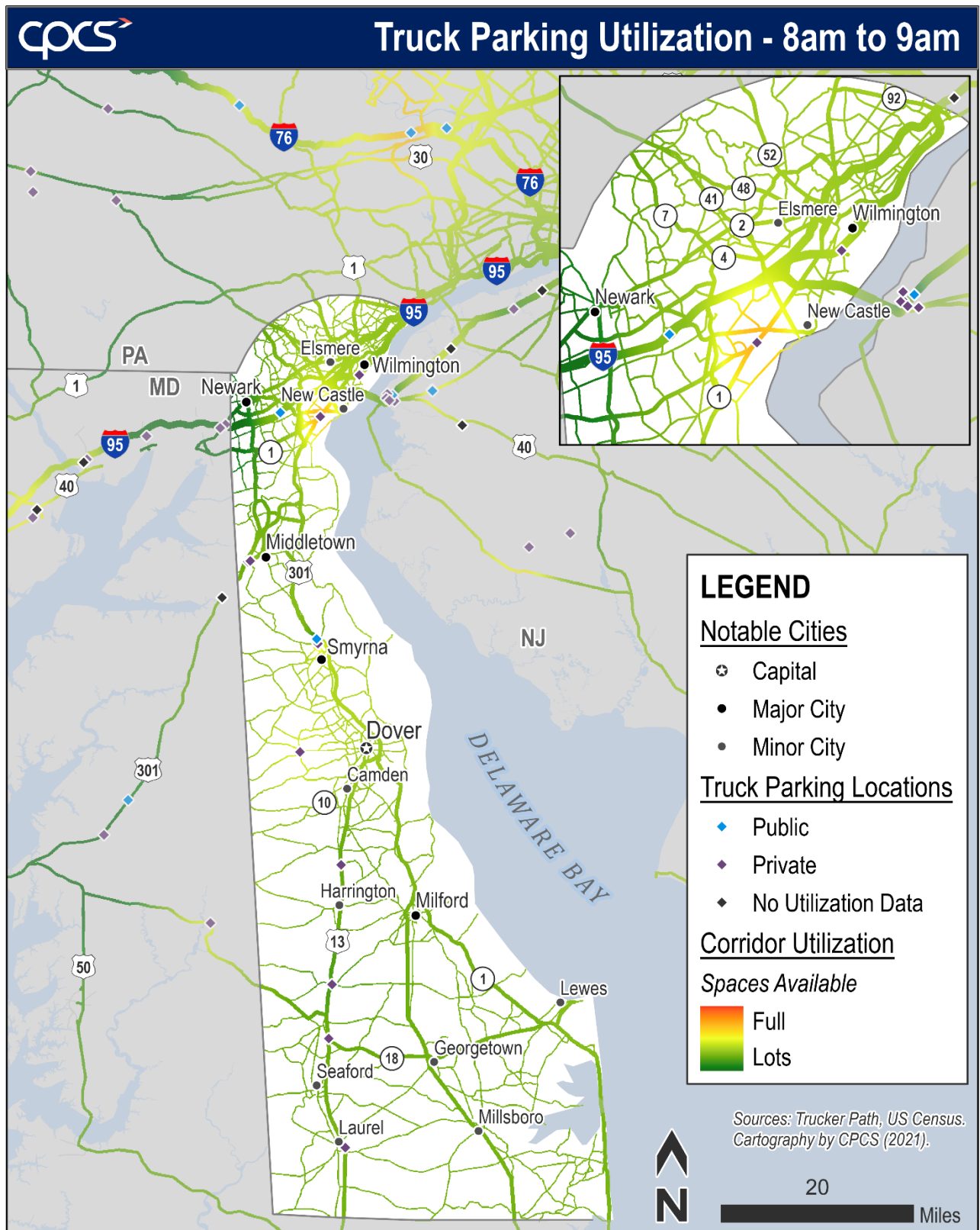


Figure 4: Truck Parking Utilization (2 pm to 3 pm)

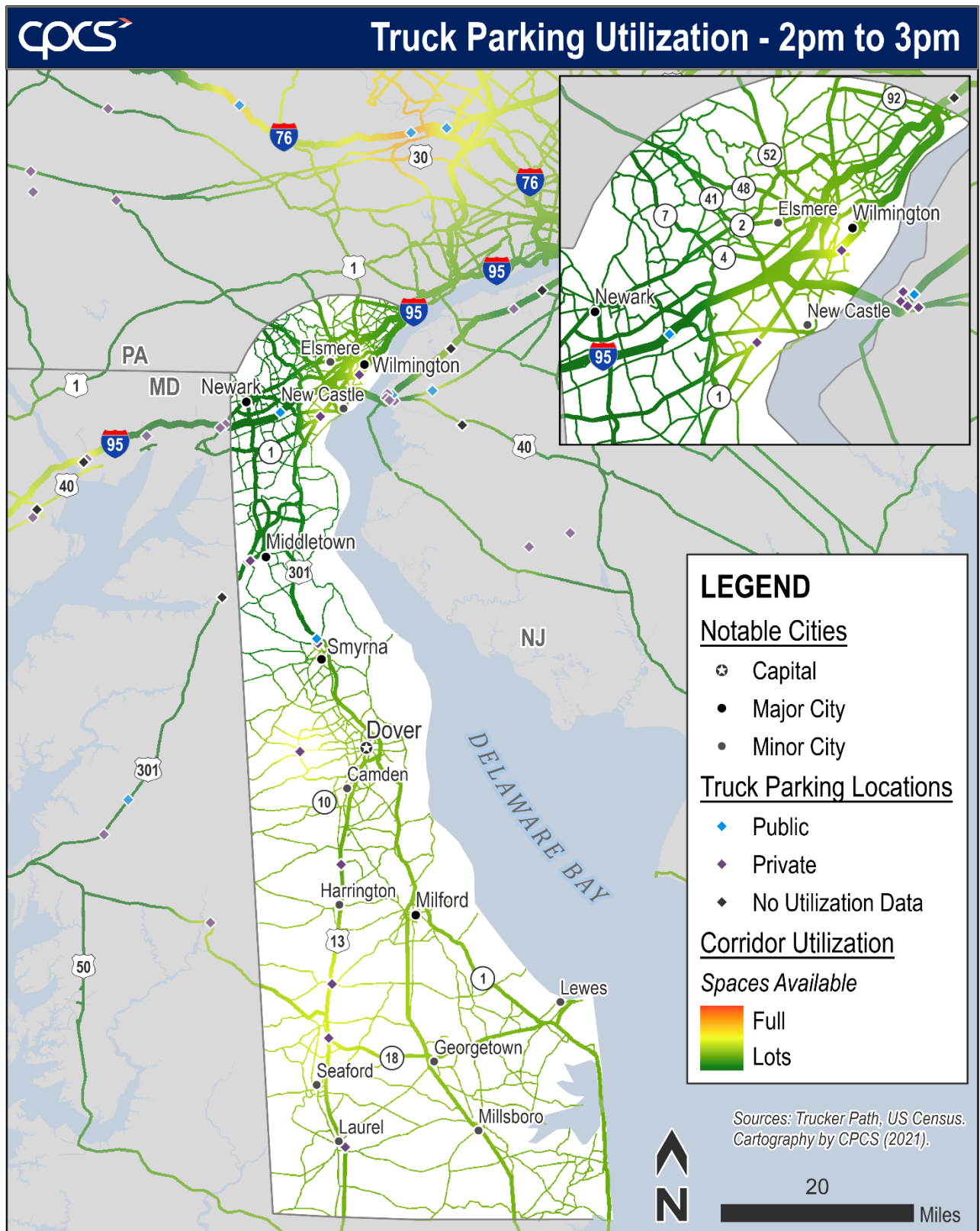


Figure 5: Truck Parking Utilization (8 pm to 9 pm)

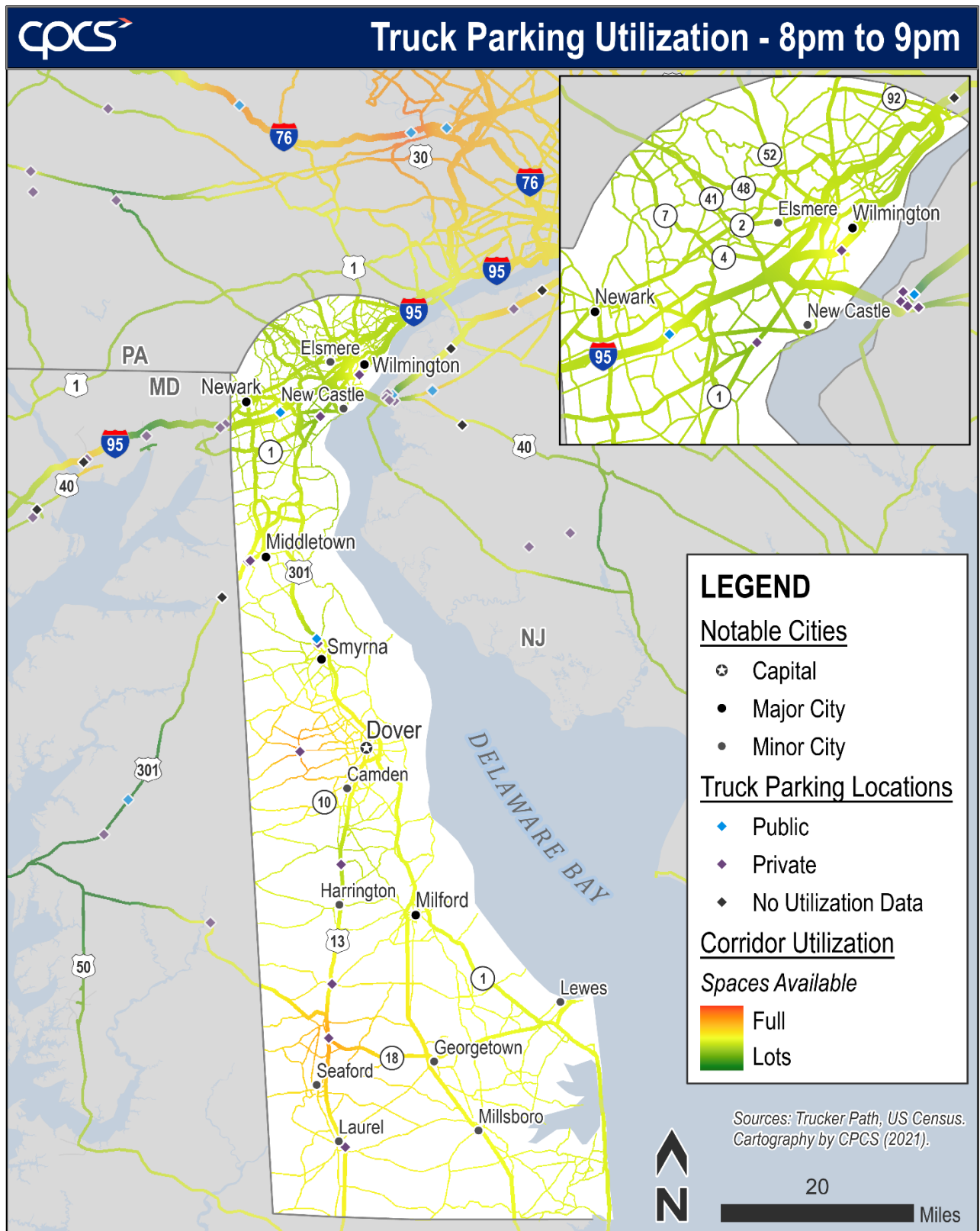
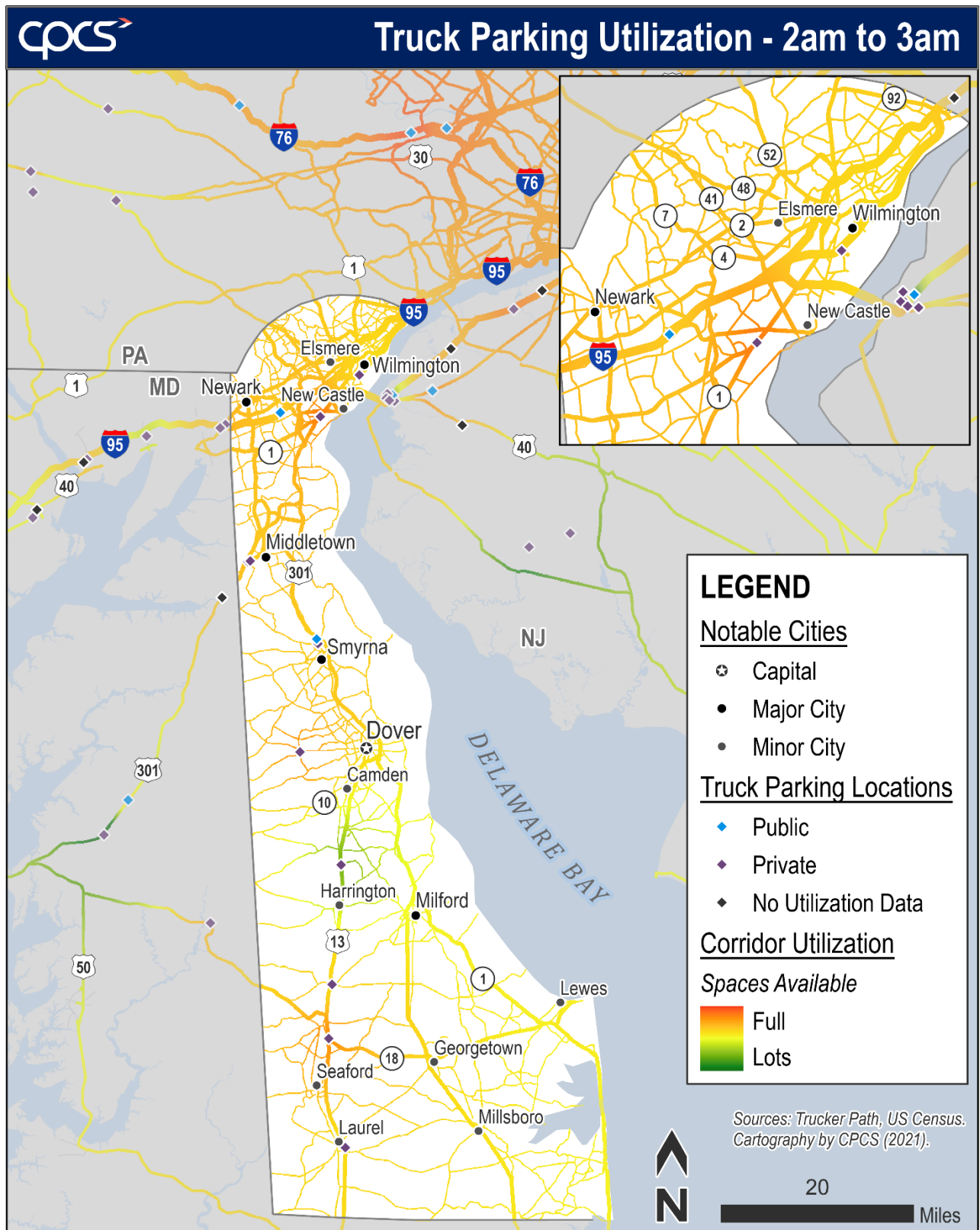


Figure 6: Truck Parking Utilization (2 am to 3 am)



Undesignated Truck Parking

Undesignated truck parking refers to unmarked locations where trucks park. The Project Team identified, validated, and classified 22 clusters of undesignated truck parking occurring at rest areas and along roadways in Delaware.

Each cluster is classified into one of the following undesignated parking types:

- **Rest Area:** Occurring in areas outside of defined parking spaces at public rest areas, such as on/off ramps and areas designated for passenger vehicles.
- **On/Off Ramp:** Occurring on interstate and other highway on/off ramp shoulders.
- **Corridor Shoulder:** Occurring on interstate and other highway corridor shoulders.
- **Last-Mile:** Occurring on local roadways in both industrial and non-industrial areas, particularly on last-mile connectors leading to freight generators.
- **Near Truck Stop:** Occurring near private truck stops, but not on-site.
- **Urban:** Occurring in urban areas. This is often sporadic, and it is difficult to differentiate deliveries from undesignated truck parking due to limited space for trucks to park in concentrated numbers in urban areas.

These clusters are mapped in Figure 7, with further details for each cluster provide in Figure 8.

Figure 7: Undesignated Truck Parking Clusters by Type

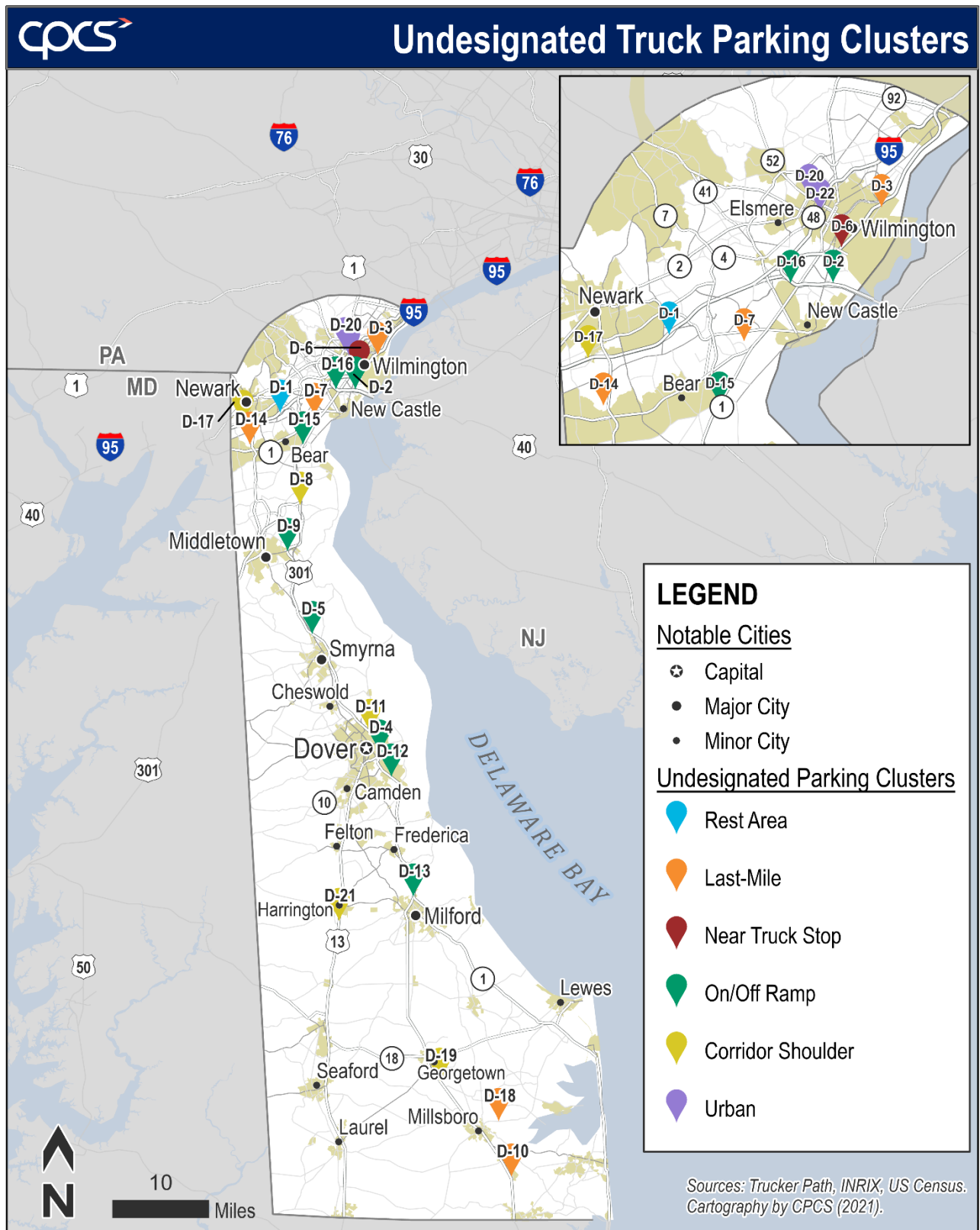


Figure 8: Undesignated Truck Parking Clusters

Cluster Number	County	Total Count of Undesignated Stops	Type	Total Duration of Undesignated Stops (Hours)	Average Stop Duration (Hours)	Percentage of Stops < 3 Hours	Percentage of Stops 3 to 8 Hours	Percentage of Stops 8+ Hours
D-1	New Castle	157	Rest Area	1128	7	29%	15%	57%
D-2	New Castle	43	On/off ramp	126	3	74%	16%	9%
D-3	New Castle	35	Last-mile	341	10	11%	9%	80%
D-4	Kent	27	On/off ramp	45	2	96%	0%	4%
D-5	New Castle	25	On/off ramp	55	2	84%	12%	4%
D-6	New Castle	22	Near truck stop	220	10	23%	18%	59%
D-7	New Castle	22	Last-mile	182	8	23%	32%	45%
D-8	New Castle	17	Corridor shoulder	45	3	82%	6%	12%
D-9	New Castle	17	On/off ramp	42	2	71%	24%	6%
D-10	Sussex	17	Last-mile	36	2	88%	0%	12%
D-11	Kent	16	Corridor shoulder	35	2	69%	31%	0%
D-12	Kent	15	On/off ramp	59	4	40%	47%	13%
D-13	Kent	14	On/off ramp	34	2	79%	14%	7%
D-14	New Castle	12	Last-mile	191	16	0%	8%	92%
D-15	New Castle	12	On/off ramp	15	1	100%	0%	0%
D-16	New Castle	9	On/off ramp	28	3	67%	11%	22%
D-17	New Castle	9	Corridor shoulder	11	1	100%	0%	0%
D-18	Sussex	9	Last-mile	55	6	44%	11%	44%
D-19	Sussex	8	Corridor shoulder	16	2	75%	25%	0%
D-20	New Castle	6	Urban	6	1	100%	0%	0%
D-21	Kent	6	Corridor shoulder	24	4	50%	33%	17%
D-22	New Castle	5	Urban	76	15	20%	0%	80%

Truck Safety

An imbalance in the supply of and demand for truck parking spaces can lead to safety issues for truck drivers and other road users. As drivers become fatigued, they lose the ability to stay vigilant and appropriately time their psychomotor and cognitive responses. However, if fatigued truck drivers are unable to find safe parking for rest, they are faced with a difficult choice: continue driving, or park at an undesignated location. Figure 9 maps truck/trailer-involved crashes in Delaware between 2014 and 2019, with markers for crashes resulting in fatality. Figure 10 displays commercial vehicle parking violations in Delaware by municipality for 2019 and 2020.

Figure 9: Truck/Trailer Crashes 2014-2019

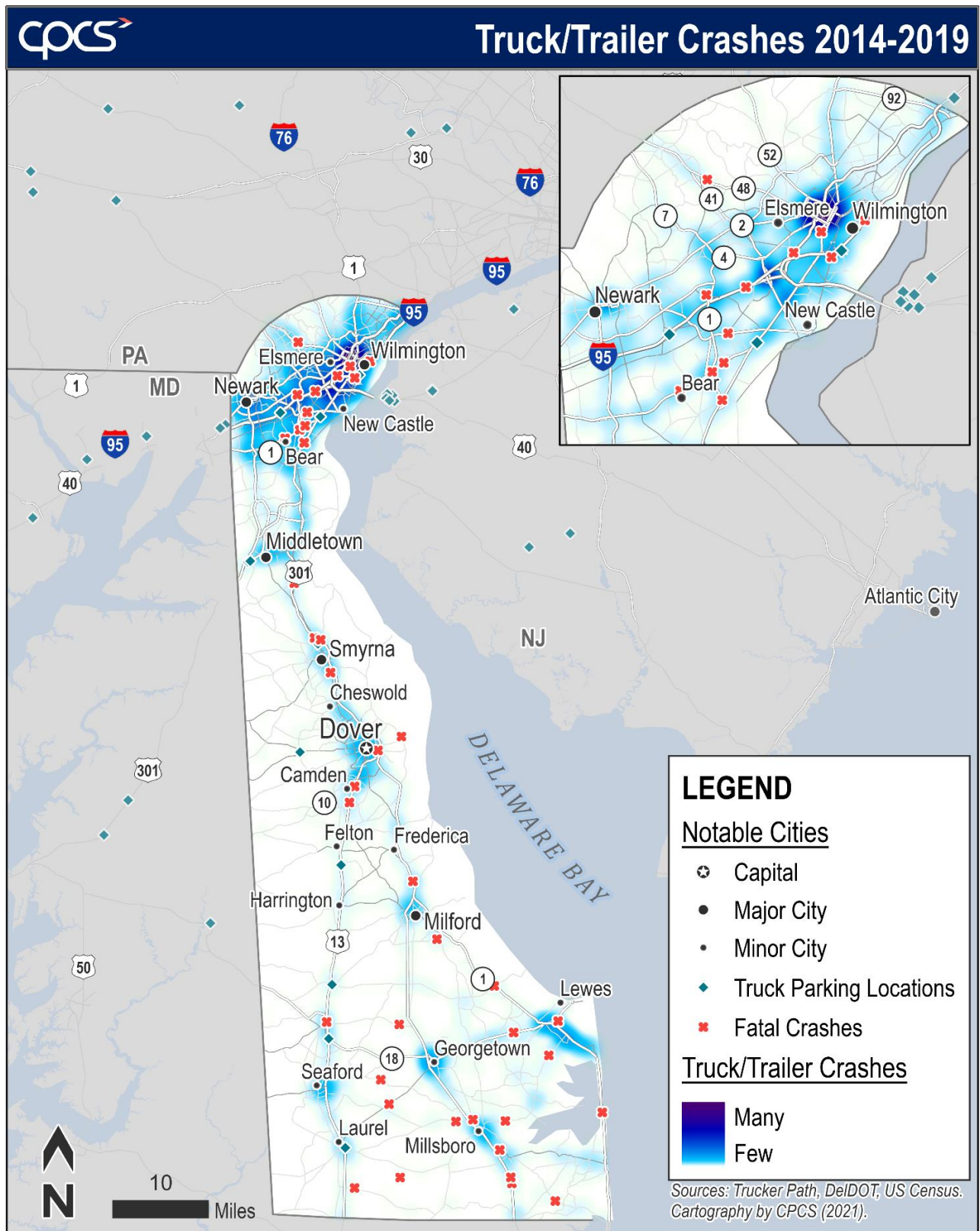


Figure 10: Commercial Vehicle Parking Violations by Municipality, 2019-2020

