Delaware Statewide Truck Parking Study – Data Update

Technical Memo: Data Update

Prepared for:

WILMAPCO and DelDOT

Prepared by:

CPCS Ref: 23080
June 30, 2023
www.cpcstrans.com

Delaware Statewide Truck Parking Study – Data Update

The objective of the Delaware Statewide Truck Parking Study – Data Update is to update the analysis of truck parking conditions in Delaware to inform the identification and implementation of truck parking solutions in the state.

Technical Memo

This Technical Memo serves as an update to Technical Memo 2 developed as part of the 2021 Study. This Technical Memo updates the analysis of truck parking utilization and undesignated truck parking in Delaware to evaluate how truck parking trends, strengths, weaknesses, opportunities, and threats have evolved in the state, and guide future implementation of truck parking solutions.

Acknowledgements

The CPCS Team acknowledges and is thankful for the input of those consulted in the development of this Technical Memo, as well as the guidance and input of representatives from WILMAPCO, DelDOT and their study partners.

Opinions

Unless otherwise indicated, the opinions herein are those of the authors and do not necessarily reflect the views of WILMAPCO or DelDOT.

Contact

Questions and comments on this Technical Memo can be directed to:

Julia Thompson
Project Manager
T: 571-214-4509
jthompson@cpcstrans.com

Table of Contents

Table of Figures

Acronyms / Abbreviations

ATRI	American Transportation Research Institute
DelDOT	Delaware Department of Transportation
FHWA	Federal Highway Administration
GPS	Global positioning system
HOS	Hours of service
NIMBY	Not In My Backyard
SR	State Route
SWOT	Strengths, Weaknesses, Opportunities, and Threats
U.S.	United States
WILMAPCO	Wilmington Area Planning Council

1 Introduction

1.1 Background and Objectives

Truck parking is essential to the efficient movement of goods throughout the nation. In Delaware, truck parking is particularly critical to goods movement along the freight-heavy corridors of I-95, I-295, I-495, US 301, US 13, US 113, and SR 1. Truck parking remains a top issue for the trucking industry, with truck drivers in Delaware and nationwide facing truck parking shortages.

A statewide Truck Parking Study conducted in 2021 inventoried the state's truck parking facilities, analyzed truck parking supply and demand (using 2019 data), and identified needs, issues, and solutions. This Data Update uses 2022 data to update this analysis of truck parking supply, demand, and issues.

- **Supply (Inventory):** Delaware is home to 13 truck parking locations, providing a total of 337 spaces for truck drivers. Truck parking utilization provides insight into the balance of supply and demand of truck parking in Delaware.
- **Demand (Utilization):** Truck parking utilization refers to the number of trucks parked at a given location, relative to the number of spaces at that location. It provides a snapshot of where truck parking is easy or difficult to find at any given time. In Delaware, truck parking utilization remains highest during overnight and early morning hours, as truck drivers take their overnight rest breaks, particularly in northern Delaware near I-95 and in urban areas.
- **Issues (Undesignated Truck Parking)**: Delaware also continues to experience undesignated truck parking, which refers to the issue of trucks parked at unmarked or unauthorized locations. In Delaware, observations of undesignated parking remain concentrated in the same areas – this includes trucks parked at unmarked areas within public rest areas, along on/off ramp and corridor shoulders, and along last-mile connectors. This has negative consequences for the state's economy, safety, infrastructure, and quality of life.

This updated analysis provides stakeholders with an understanding of the current state of truck parking conditions in Delaware, as well as how truck parking needs and issues have persisted or changed over the past few years. Building off this updated data analysis, this Technical Memo also updates the strengths, weaknesses, opportunities, and threats (SWOT) for truck parking in Delaware, enabling the Delaware Department of Transportation (DelDOT), the Wilmington Area Planning Council (WILMAPCO), and other state and regional truck parking stakeholders to prioritize and implement effective truck parking solutions.

1.2 Overview of this Technical Memo

Purpose

The purpose of this Technical Memo is to provide a current understanding of the supply, demand, and impacts of truck parking in Delaware. Specifically, this memo updates the state's inventory of truck parking, the analysis of utilization using Trucker Path data, and the identification of undesignated truck parking using American Transportation Research Institute (ATRI) truck global positioning system (GPS) data. Additionally, the memo presents a new truck trips analysis to demonstrate the connection between truck parking and the economy in Delaware. This updated analysis informs an updated SWOT

identification for truck parking to inform the prioritization and implementation of solutions to meet Delaware's truck parking needs.

Methodology

This Technical Memo was prepared using CPCS analysis of a full year of 2022 Trucker Path data and 12 weeks of 2022 ATRI truck GPS data (February 6-26, May 1-21, August 7-27, October 2-22).

Limitations

Some of the findings in this report are based on the analysis of third-party data. While CPCS makes efforts to validate data, CPCS cannot warrant the accuracy of third-party data.

2 Truck Parking Inventory

2.1 Introduction

The truck parking inventory presents the supply of truck parking facilities and spaces in Delaware. The consulting team updated the inventory, reported in the 2021 Study, by reviewing 2022 data purchased from Trucker Path, validated with satellite imagery and online research.

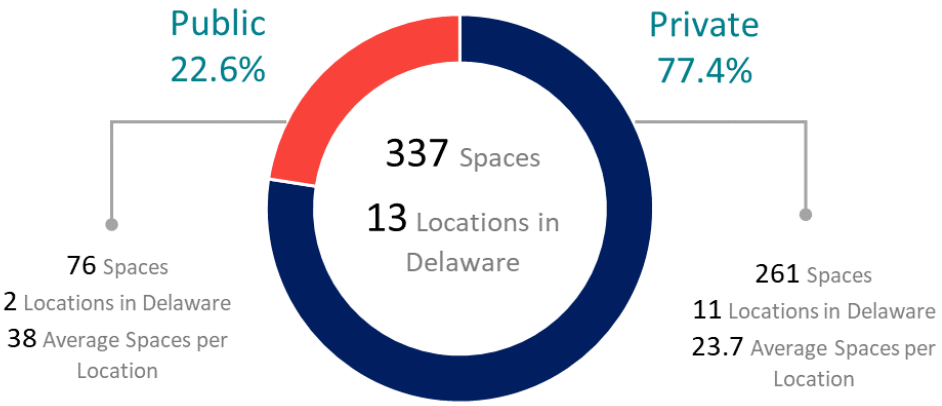
Trucker Path is a smartphone application that relies on crowdsourced data from almost one million drivers to visually identify and communicate truck parking availability to other drivers. Trucker Path collects and provides information including truck parking location, parking space availability, amenities, and directions, among other information.

Designated truck parking locations allow truck drivers to take federally required hours of service (HOS) breaks, wait for shipper or receiver appointments (known as staging), and use amenities such as restrooms or refueling stations. In addition to designated truck parking locations at public rest areas and private truck stop facilities, truck drivers park at other, less formal locations. These locations include restaurants (e.g., McDonald's), parking lots at retail businesses (e.g., Walmart), and other vacant lots (e.g., gravel lots). However, less formal truck parking locations are subject to change, given truck parking is not core to private restaurant and retail businesses. Therefore, for the purposes of this study, the Project Team focused on identifying formal rest areas and truck stops.

2.2 Delaware's Truck Parking Inventory

Delaware has 13 truck parking locations that offer a total of 337 truck parking spaces (Figure 1). Among these truck parking locations, there are 11 private locations and 2 public locations, representing 77.4 percent and 22.6 percent of truck parking spaces, respectively. Classified among the public locations are the Smyrna Rest Area and the Biden Welcome Center.

Figure 1: Total, Public, and Private Truck Parking Locations in Delaware



Source: FWHA Jason's Law, Trucker Path (2022)

Figure 2 provides further detail on Delaware's truck parking locations, including the number of validated spaces[1] and whether overnight parking is permitted.

Figure 2: Truck Parking Facilities In Delaware

Title	Public/ Private	Validated Parking Spaces	State	Overnight Parking Authorized
Wawa – Smyrna (Dupont Parkway)	Private	3	DE	No
Smyrna Rest Area	Public	24	DE	Yes
Biden Welcome Center	Public	52	DE	Yes
Royal Farms – Middletown	Private	5	DE	No
Royal Farms – Greenwood	Private	10	DE	No
Royal Farms – Hartly	Private	15	DE	No
Royal Farms – Bridgeville	Private	5	DE	No
Christiana Truck Stop	Private	20	DE	Yes
Oasis Travel Plaza	Private	20	DE	Yes
Shore Stop #288 - BP (paid parking)	Private	28	DE	Yes
301 Plaza	Private	42	DE	Yes
$ Parking Delaware Truck Plaza	Private	109	DE	Yes
Wawa – New Castle (Dupont Highway)	Private	4	DE	No

Source: CPCS analysis of Federal Highway Administration (FHWA) Jason's Law, Trucker Path. Note: Whether overnight parking is authorized for locations within Delaware was determined through consultation, phone calls, and/or email.

The following pages map the locations of truck parking facilities in Delaware, or within approximately 20 miles of the Delaware border, classified by public and private location (Figure 3) and by number of truck parking spaces (Figure 4). As shown, truck parking spaces in Delaware are highly concentrated in the northern part of the state, with the largest facilities located along I-95 and in the Wilmington and New Castle urban areas.

[1] The Project Team validated the number of truck parking spaces at each facility using satellite imagery.

Figure 3: Public and Private Truck Parking Facilities in and Surrounding Delaware

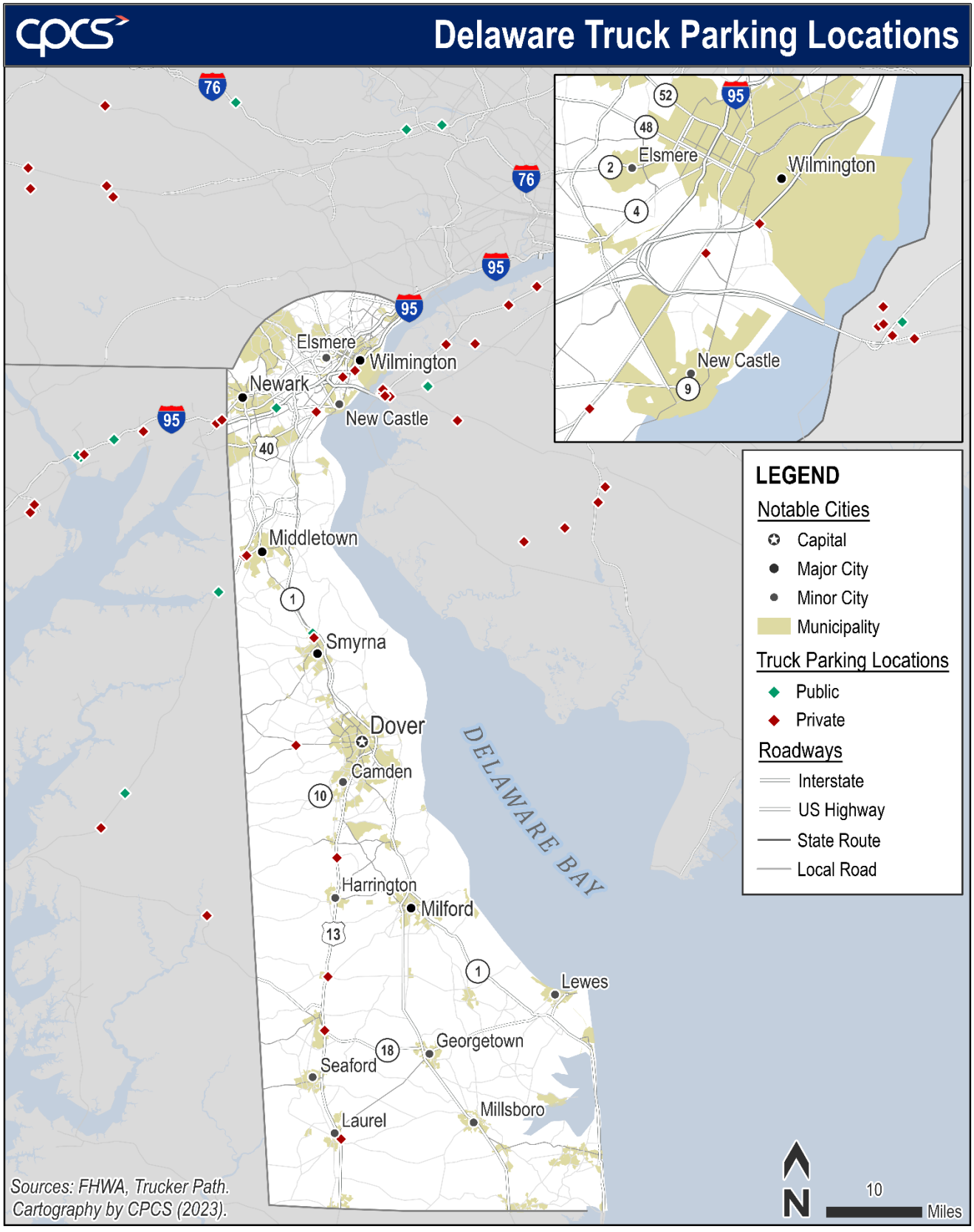
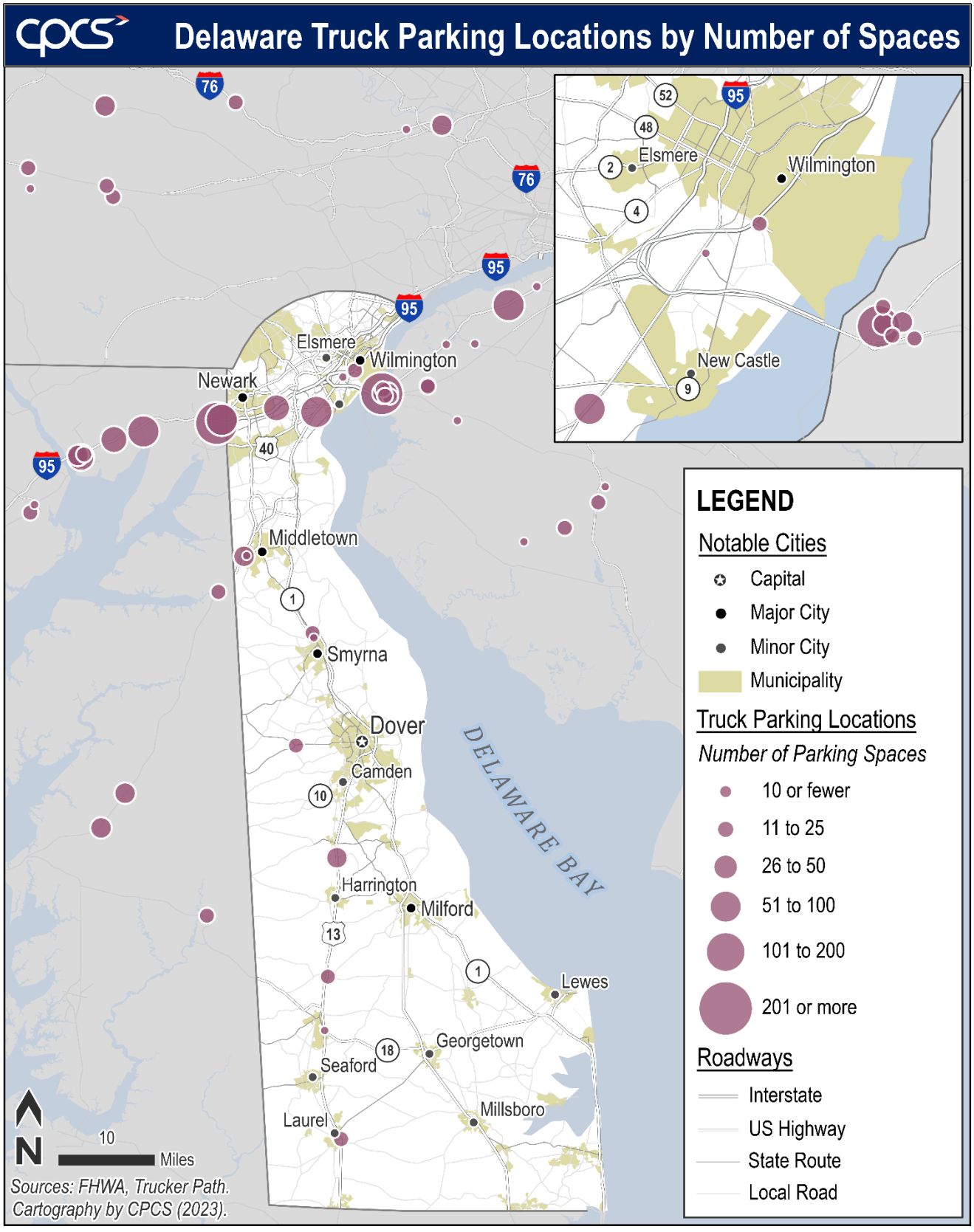


Figure 4: Truck Parking Facilities in and Surrounding Delaware by Number of Spaces



3 Truck Parking Utilization

3.1 Introduction

Truck parking utilization refers to the number of trucks parked at a truck parking location relative to the number of spaces at that location at a given time. The supply of and demand for spaces at a truck parking location impacts truck parking utilization. Truck parking utilization provides a snapshot of where truck parking is easy or difficult to find, and when combined with data on where undesignated parking is occurring, helps define the opportunities for addressing truck parking needs.

3.2 Approach to Analyzing Truck Parking Utilization

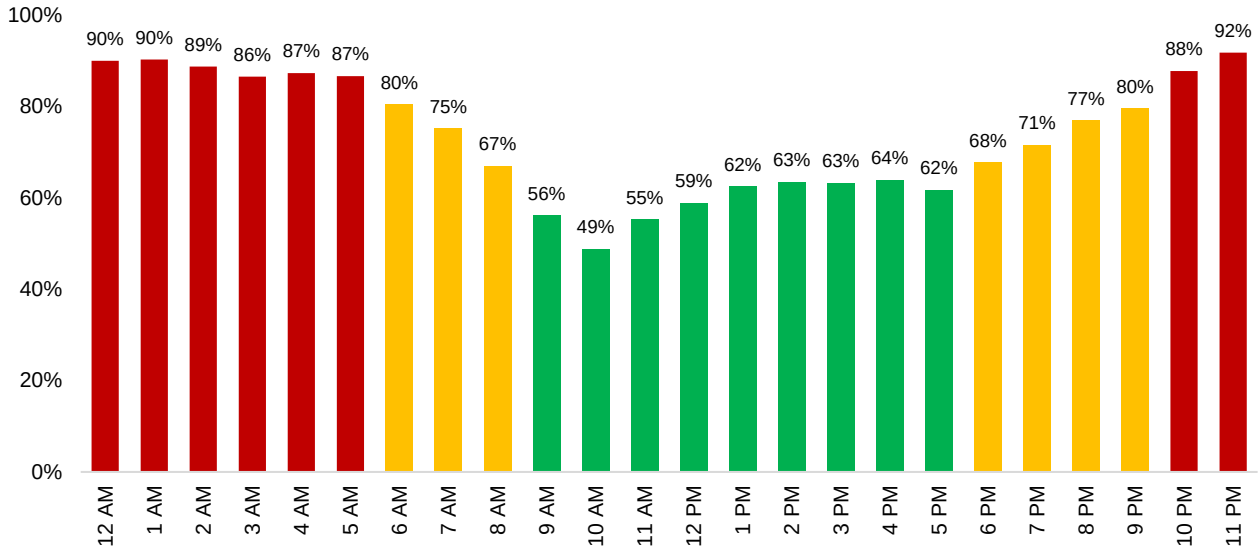
The truck parking utilization analysis builds on the inventory of public and private truck parking locations. Similar to the initial Study, the utilization analysis used a year of data from Trucker Path. The Trucker Path app uses the location of the phone to identify when a driver is located within one and a half miles of a truck parking facility and then prompts the user to categorize the truck parking location's availability as "lots," "some," or "full."

The updated utilization analysis uses this Trucker Path data from 2022 to calculate hourly utilization for each parking location in Delaware. Four months of ATRI truck GPS data from 2022 were also used to validate results. This updated analysis provides a more current picture of truck parking demand in Delaware, as well as insight into any changes in recent years when compared to the analysis of 2019 Trucker Path data.

3.2.1 Statewide Truck Parking Utilization

The updated utilization analysis produced hourly truck parking utilization for public and private truck parking facilities statewide, as shown in Figure 5. Utilization of truck parking facilities in Delaware is lowest from late morning to early evening. As the evening progresses, truck parking facilities fill up with truck drivers stopping for their overnight rest breaks. Peak utilization occurs from 12 am to 1 pm.

Figure 5: Statewide Truck Parking Utilization (2022)



Source: CPCS analysis of Trucker Path (2022). Note: Represents 85th percentile utilization.

The results of the utilization analysis were also routed along the state's corridors to develop maps that depict truck parking utilization along Delaware's road network. Each corridor segment reflects utilization for all truck parking facilities nearby, with nearby referring to within an hour's drive in urban areas and within a 30-minute drive in rural areas. Utilization is represented on a scale from green (low utilization, i.e., many spaces available) to red (high utilization, i.e., few spaces available).

Accounting for Overnight Truck Parking Policies

Several truck parking facilities in Delaware do not authorize overnight truck parking. To account for this in the utilization analysis, the results for daytime hours consider all truck parking facilities, while the results for overnight hours only consider truck parking facilities that allow overnight parking. For this analysis, daytime hours span from 6 am to 10 pm, with overnight hours running from 10 pm to 6 am. As a result, trucks located near truck parking facilities that do now allow overnight truck parking have a more limited supply of truck parking during overnight hours.

The maps on the following pages illustrate the utilization of Delaware's truck parking facilities during the morning (6 to 7 am), mid-day (12 to 1 pm), evening (6 to 7 pm), and overnight (12 to 1 am) hours. Comparing utilization maps during different times of the day further demonstrates truck parking utilization trends throughout the day. See **Appendix A** for utilization maps across all hours of the day.

- **6 to 7 am (Figure 6):** Utilization starts to decrease throughout the state as drivers complete their overnight rest breaks. Corridors in New Castle County experience the highest utilization, followed by Kent, then Sussex Counties.
- **12 to 1 pm (Figure 7):** Truck parking utilization decreases, with facilities statewide experiencing some of their lowest utilization levels of the day.
- **6 to 7 pm (Figure 8):** Higher utilization levels statewide compared to mid-day hours.
- **12 to 1 am (Figure 9):** Truck parking utilization peaks statewide, with low availability along most corridors. Truck parking facilities are particularly constrained along corridors in New Castle and Kent Counties.

Comparing corridors across the state, utilization is highest throughout the day in the urban areas of Wilmington, New Castle, Newark, Smyrna, Milford, and Harrington. However, truck parking utilization does not reach full capacity in Delaware, even during the peak early morning hours. Meanwhile, utilization remains low in many areas of the state during midday hours.

Figure 6: Truck Parking Utilization (2022) – 6 am to 7 am

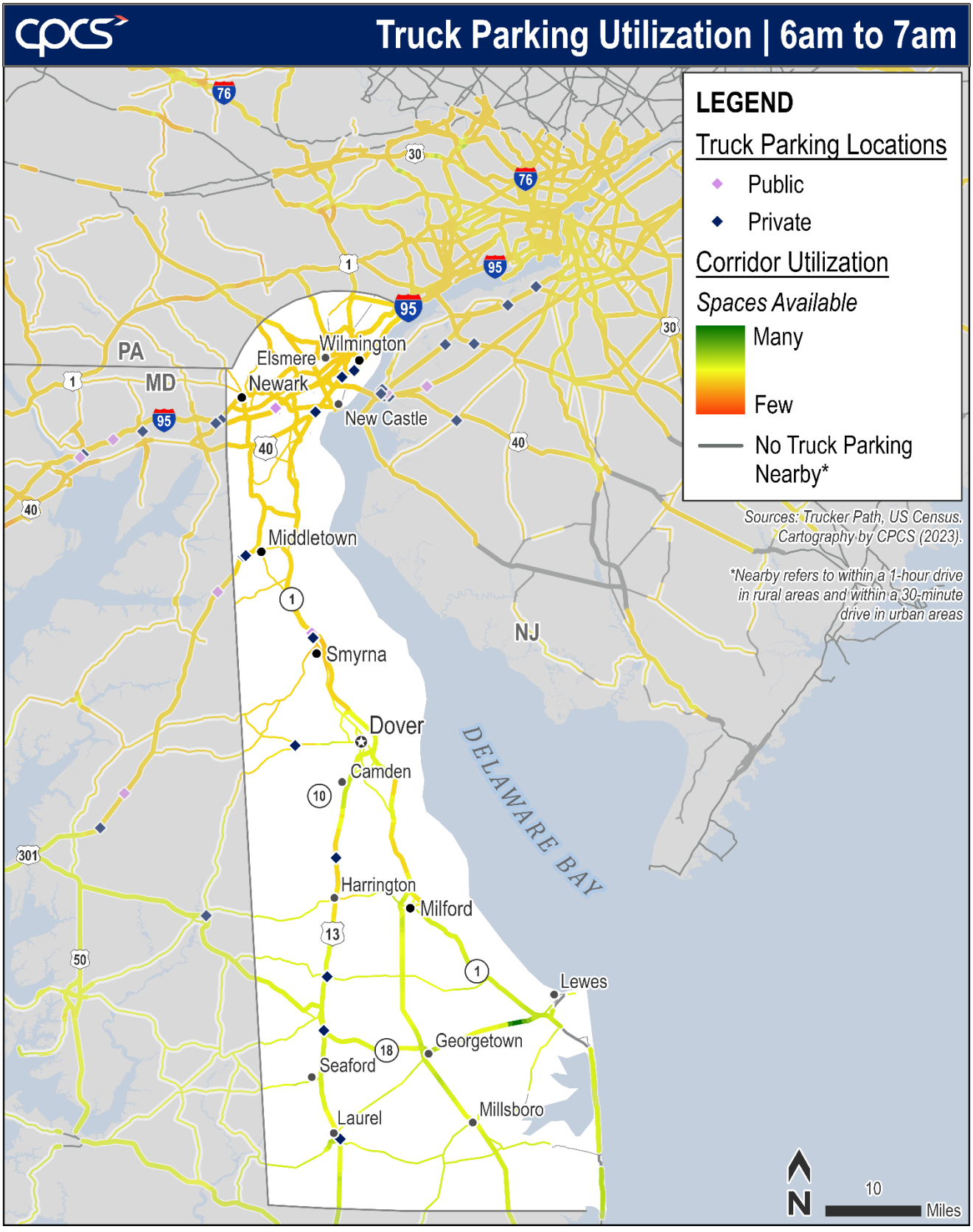


Figure 7: Truck Parking Utilization (2022) – 12 pm to 1 pm

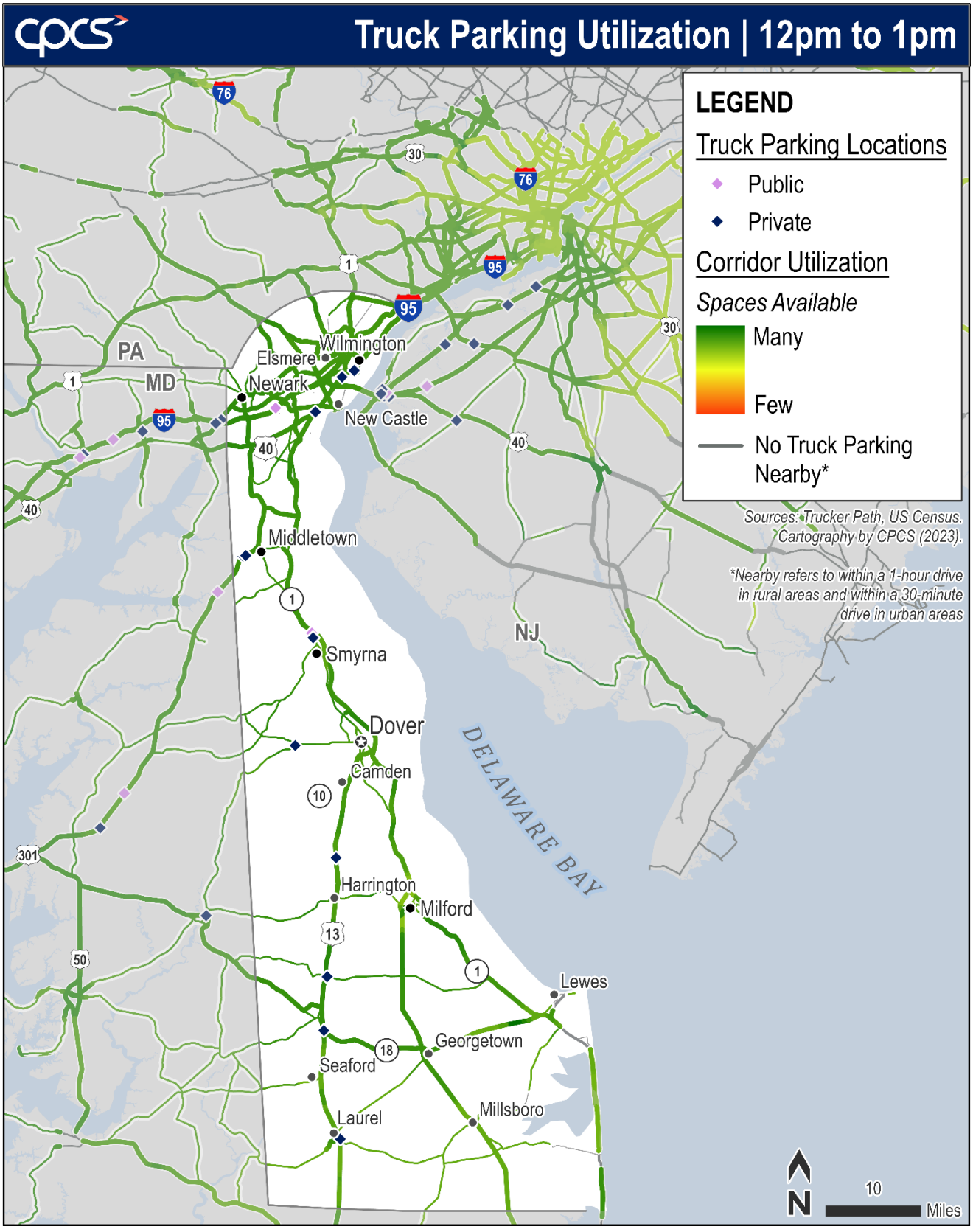


Figure 8: Truck Parking Utilization (2022) – 6 pm to 7 pm

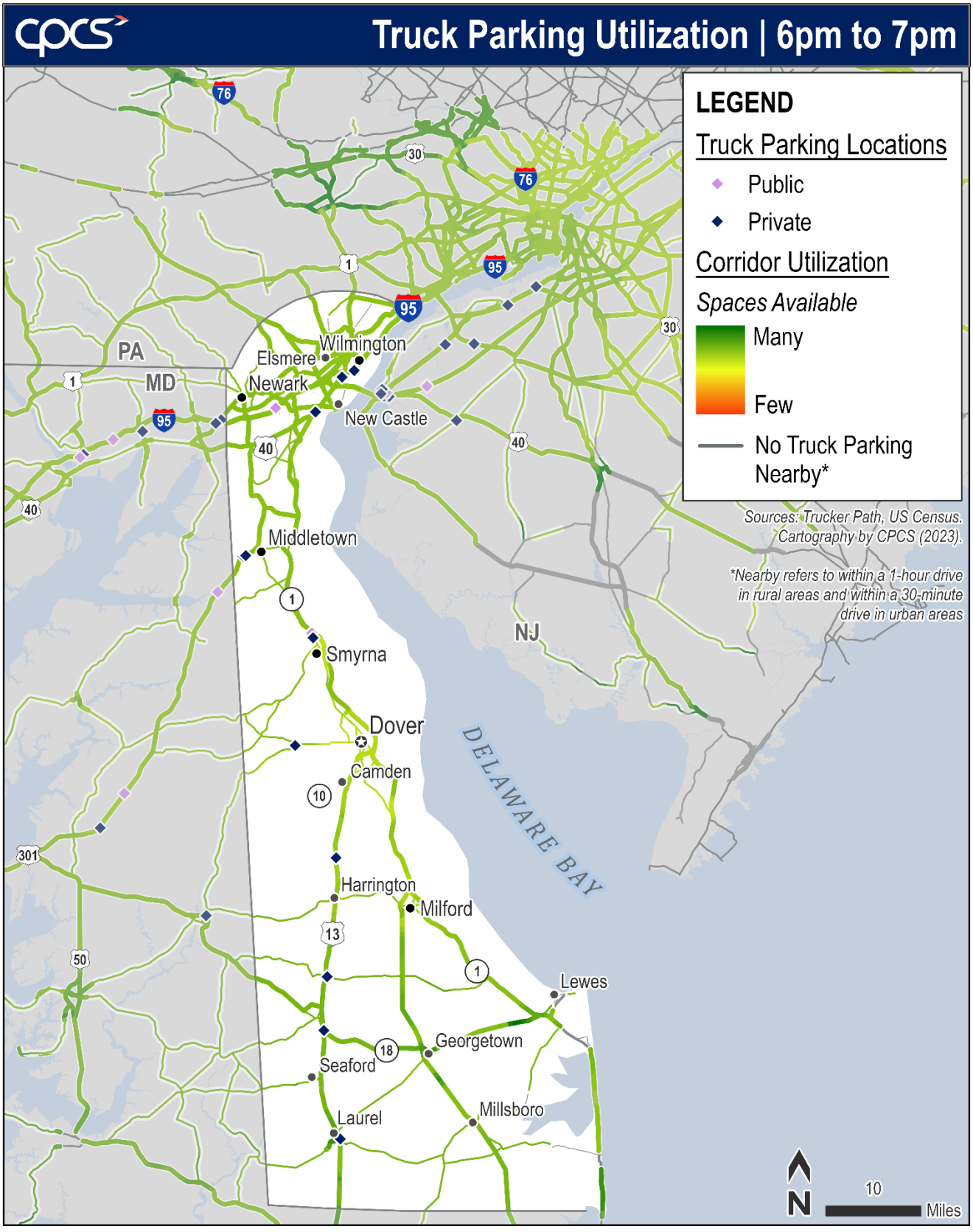
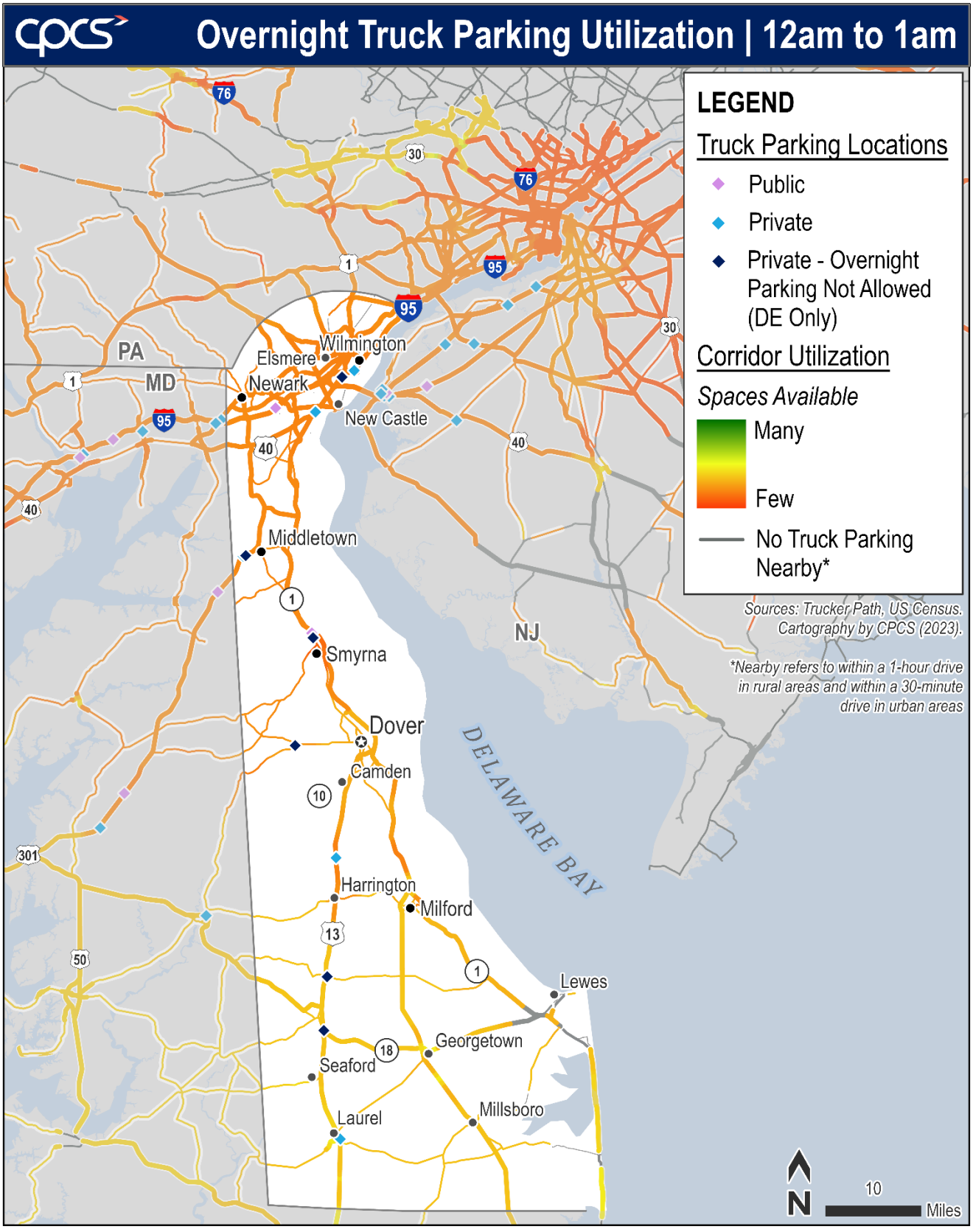


Figure 9: Truck Parking Utilization (2022) – 12 am to 1 am



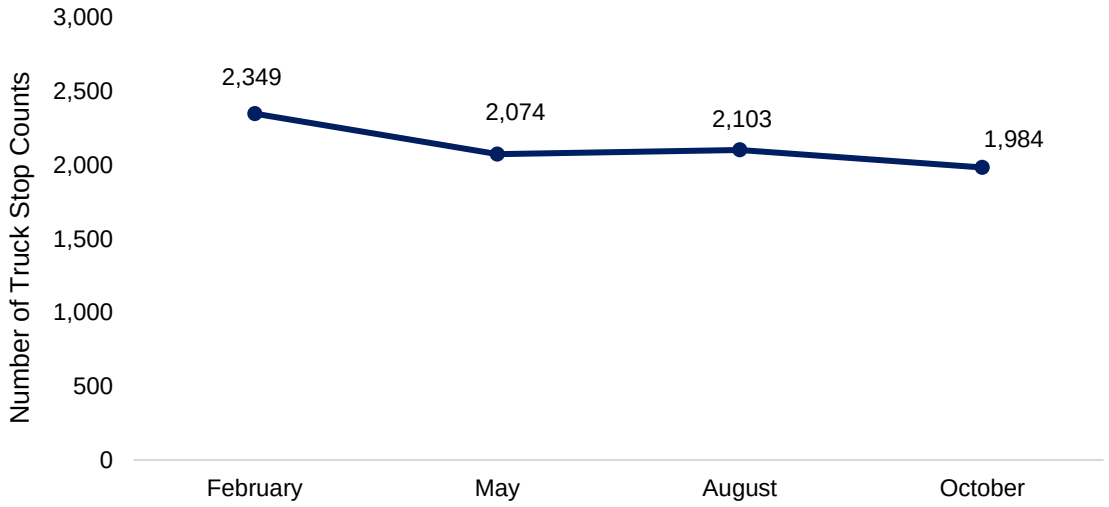
3.3 Seasonality Impacts

Seasonal trends, driven by tourism, agriculture, and weather events, impact truck traffic moving through Delaware. As a result, these trends also influence truck parking demand, and therefore truck parking facility utilization, in the region.

3.3.1 Statewide

The following figure illustrates seasonal differences in truck parking in Delaware at designated truck parking locations. This analysis is based on variations in ATRI truck GPS data collected and analyzed across four months in 2022 – February, May, August, and October. Figure 10 displays the number of truck parking counts at designated truck parking locations. As shown, consistent with the results of the 2019 analysis, the number of designated truck stops in October is typically lower than in February, May, and August.

Figure 10: Designated Parking Truck Stop Counts by Month (2022)



Source: CPCS analysis of FHWA, ATRI, Trucker Path (2022).

3.3.2 By Location

Figure 11 further provides truck stop counts by month for each designated truck parking location to illustrate seasonal differences in truck parking in Delaware. At most locations, the number of truck stops at designated parking locations is highest in February and lowest in October. This is similar to patterns identified in the prior Study.

Figure 11: Designated Truck Parking Locations – Truck Stop Counts by Month (2022)

Public/ Private	February	May	August	October	Trend
Public	851	825	896	793	
Public	323	274	269	268	

Public/ Private	February	May	August	October	Trend
Private	351	261	213	237	
Private	89	63	72	53	
Private	60	48	42	50	
Private	10	24	16	11	
Private	50	41	44	43	
Private	54	21	18	33	
Private	30	39	28	33	
Private	78	94	56	66	
Private	325	273	304	264	
Private	116	101	129	123	
Private	12	10	16	10	
All	**2,349**	**2,074**	**2,103**	**1,984**	

Source: CPCS analysis for FHWA, Trucker Path, ATRI (2022). Note: Due to data confidentiality, additional classification information cannot be provided for truck parking facilities.

4 Undesignated Truck Parking

4.1 Introduction

Undesignated truck parking refers to unmarked locations where trucks park. While truck parking utilization provides insight into where truck parking is available and where truck parking is difficult to find, understanding undesignated truck parking provides additional insight into the magnitude of unmet truck parking demand. Truck drivers may choose to park in undesignated locations if they have difficulty finding truck parking and they are nearing the end of their HOS. Undesignated truck parking serves as the most noticeable indication of a truck parking issue and has negative impacts on the economy, safety, infrastructure, and quality of life.

4.2 Identifying Undesignated Truck Parking

In total, the Project Team parsed through and analyzed over 31.9 million truck GPS waypoints during the 12 weeks of ATRI data analyzed (February 6-26, May 1-21, August 7-27, and October 2-22). These waypoint data are, in essence, markers that trucks leave when traveling from their origin to their destination. Waypoints allow data users to calculate distance traveled, speed, route, location, and duration of time stopped, among other insights.

Consistent with the approach taken to identify undesignated truck parking in the initial Study, the process for the updated undesignated truck parking analysis began with using ATRI truck GPS data to identify when trucks stopped for more than 30 minutes. Approximately 332,617 stops were identified as parked truck stop events during the 12 weeks of data analyzed. Using the inventory of truck parking locations, approximately 7,093 stops were parked in designated truck parking areas (blue areas in the below figures) and 540 stops were parked in undesignated areas at Delaware's two public rest stops (red areas in Figure 12 and Figure 13). The remaining stops needed additional classification (e.g., trucks parked along roadways, at shippers/receivers, at truck terminals, etc.). Of these, 5,061 stops were identified as stops on the road network and investigated by the Project Team as locations of undesignated parking.

Figure 12: Public Truck Parking Location – Biden Welcome Center

Figure 13: Public Truck Parking Location – Smyrna Rest Area

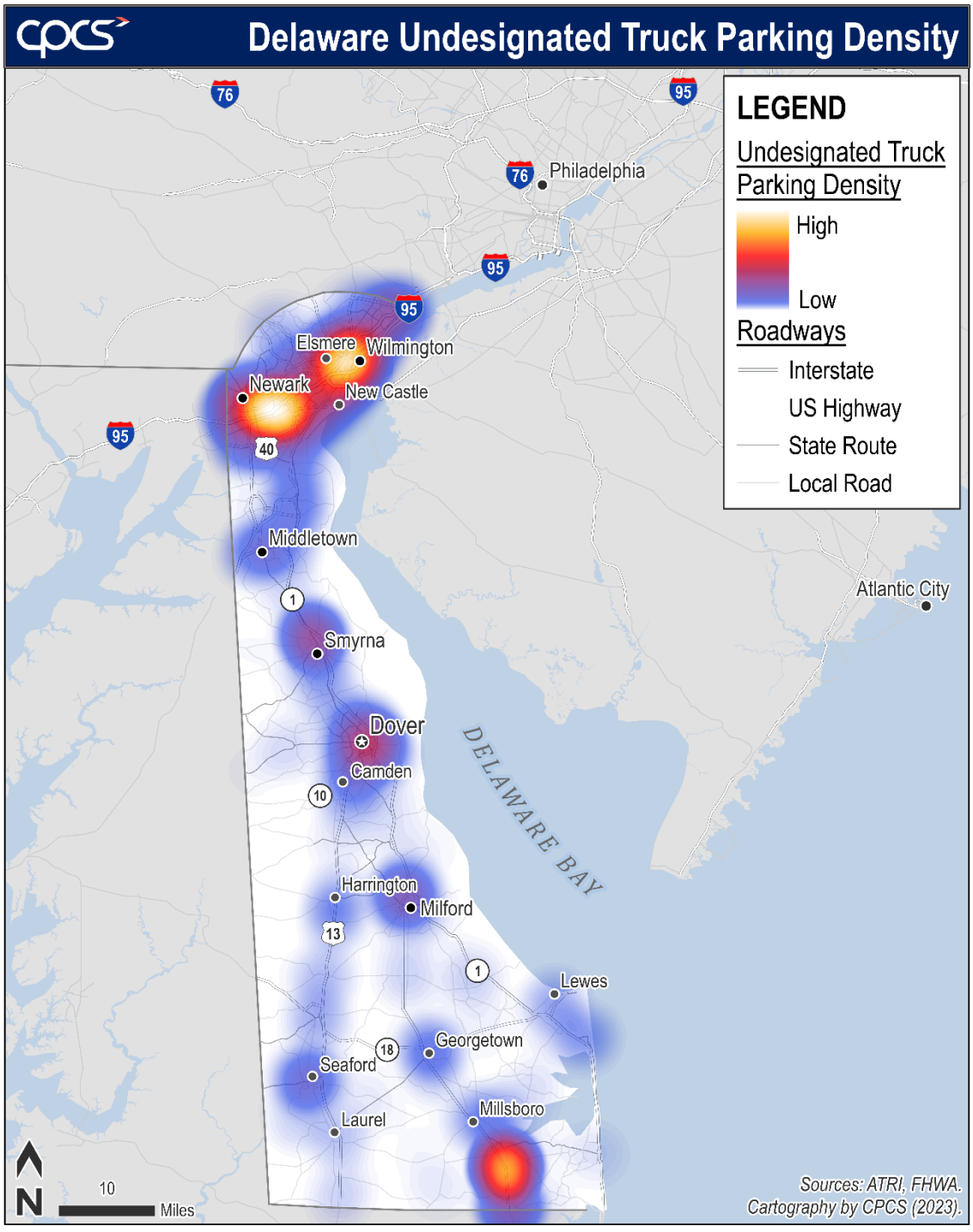
Figure 14: Private Truck Parking Location – 301 Travel Plaza

Source: Google Maps, Imagery ©2023 Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2023. Note: Undesignated parking area at Smyrna Rest Area expanded to account for stops on the on/off ramps.

4.3 Statewide Undesignated Truck Parking

Figure 15 illustrates the locations of undesignated truck parking across Delaware. As shown, urban and freight-intensive corridors experience the highest levels of undesignated truck parking. This includes near I-95 and I-295, as well as nearby Wilmington, New Castle, and Newark in northern Delaware. Undesignated truck parking also occurs at locations along US 13, US 113, and SR 1 throughout the state, with particular concentrations south of Millsboro, as well as in Smyrna and Dover.

Figure 15: Undesignated Truck Parking Density (2022)



4.4 Classifying Undesignated Truck Parking

The Project Team further classified undesignated truck parking based on location characteristics. This included the identification of undesignated truck parking occurring in areas outside of defined parking spaces at public rest areas, such as areas designated for passenger vehicles and on/off ramps near the public rest area. The Project Team also identified undesignated truck parking occurring at locations other than public rest areas, such as along on/off ramp and corridor shoulders, on last-mile roads, near truck stops, and in urban areas. The following section provides more detail on the different types of undesignated truck parking.

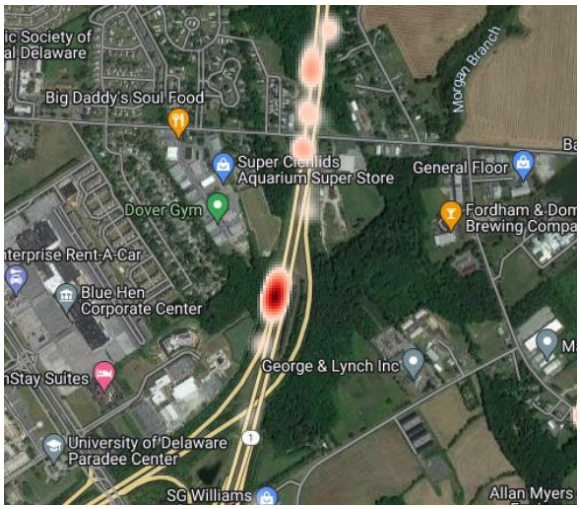
Rest Area: undesignated truck parking occurring in areas outside of defined parking spaces at public rest areas, such as unmarked areas, on/off ramps, and areas designated for passenger vehicles. Figure 16 displays undesignated truck parking at the Biden Welcome Center, with designated parking areas indicated in blue.

Figure 16: Undesignated Truck Parking Cluster Near Biden Welcome Center

Source: CPCS Analysis of ATRI (2022); Google Maps, Imagery ©2023 Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2023, with CPCS polygons overlaid based on analysis of Trucker Path data.

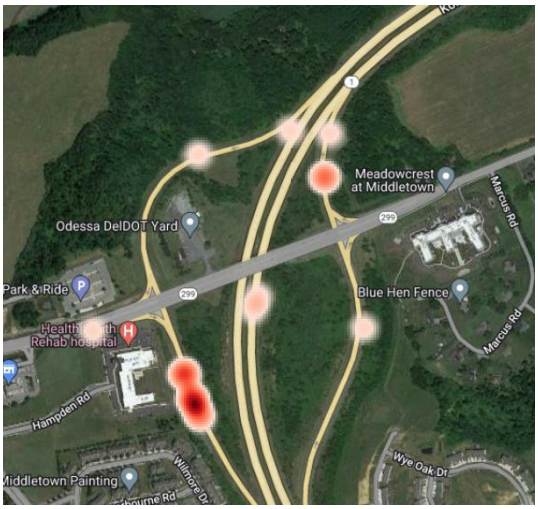
On/off ramp shoulders: undesignated truck parking occurring on interstate and other highway on/off ramp shoulders. This creates safety hazards for both truck drivers and other roadway users. Trucks parked in these undesignated areas are large, fixed objects that block the sight distance for other roadway users and are susceptible to collision. Further, when trucks re-enter the traffic stream from the shoulder, they pose a safety risk due to a shorter distance to reach roadway speeds, resulting in a high speed differential. Figure 17 and Figure 18 display undesignated truck parking occurring at on/off ramps in Delaware.

Figure 17: Undesignated Truck Parking Cluster on SR 1/Puncheon Run Connector On/Off Ramps



Source: CPCS Analysis of ATRI (2022); Google Maps, ©2023 CNES/Airbus, Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2023.

Figure 18: Undesignated Truck Parking Cluster on SR 1/SR 299 On/Off Ramps



Source: CPCS Analysis of ATRI (2022); Google Maps, ©2023 Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2023.

Corridor shoulders: undesignated truck parking occurring on interstate and other highway corridor shoulders. This creates safety hazards, for both truck drivers and other roadway users, similar to undesignated truck parking at on/off ramp shoulders. Trucks parked on corridor shoulders pose safety risks as large fixed objects susceptible to collision, as visual obstacles to sight distance, and when re-entering the traffic stream. However, compared to on/off ramp shoulders, trucks re-entering the traffic stream from corridor shoulders face a higher speed differential, particularly on interstate and other highway shoulders. Figure 19 shows undesignated truck parking occurring on highway shoulders. Figure 20 also illustrates undesignated parking on a corridor shoulder, from a street view.

Figure 19: Undesignated Truck Parking Cluster on SR 1 Shoulders

Source: CPCS Analysis of ATRI (2022); Google Maps, ©2023 CNES/Airbus, Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2023.

Figure 20: Undesignated Truck Parking Street View on I-295 Corridor Shoulder

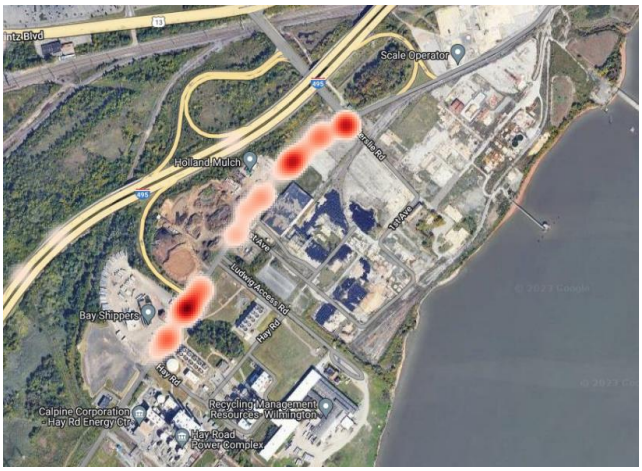
Source: Google Street View, ©2021 Google, Image Capture: Sept. 2019

Last-mile: undesignated truck parking occurs on local roadways in both industrial and non-industrial areas – particularly on last-mile connectors leading to freight generators. Undesignated truck parking on local roadways is less of a safety hazard, compared to heavy traffic corridors and on/off ramps, due

to slower speeds and lower traffic volumes. However, undesignated truck parking on local roadways still poses safety and quality of life issues by impeding traffic, blocking roadways, and spilling onto busier roads.

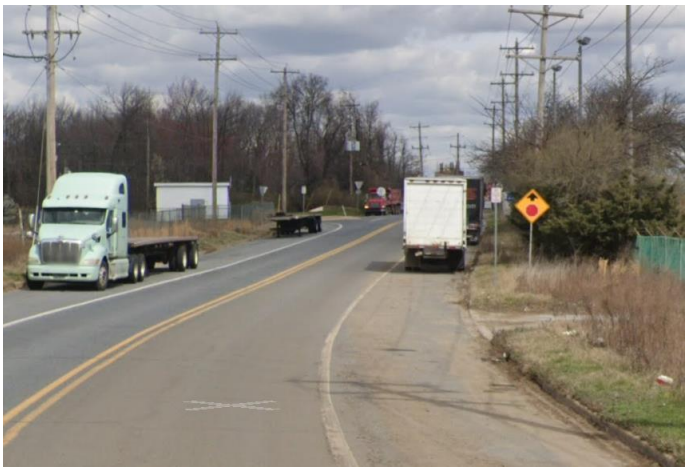
Undesignated truck parking at last-mile connectors leading to freight generators is typically associated with staging for pick-up and delivery. Figure 21 shows undesignated truck parking occurring on roadways in Edgemoor near several freight-generating facilities, and Figure 22 provides a street view of undesignated parking at the same location.

Figure 21: Undesignated Truck Parking Cluster at Edgemoor



Source: CPCS Analysis of ATRI (2022); Google Maps ©2023 Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2023.

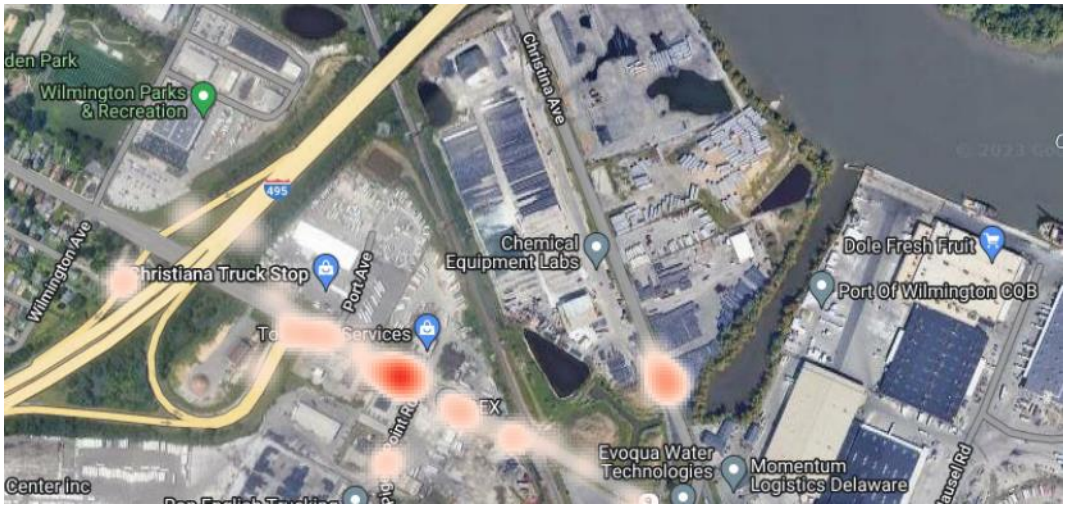
Figure 22: Undesignated Truck Parking Street View at Edgemoor



Source: Google Street View, ©2021 Google, Image Capture: Sept. 2019

Near truck stop: undesignated truck parking occurring near private truck stops, but not on-site, likely due to a lack of capacity at the given truck stop. The safety concerns of parking near truck stops are similar to undesignated truck parking on last-mile corridors, due to lower speeds and traffic volumes. Figure 23 shows undesignated parking near the Christiana truck stop.

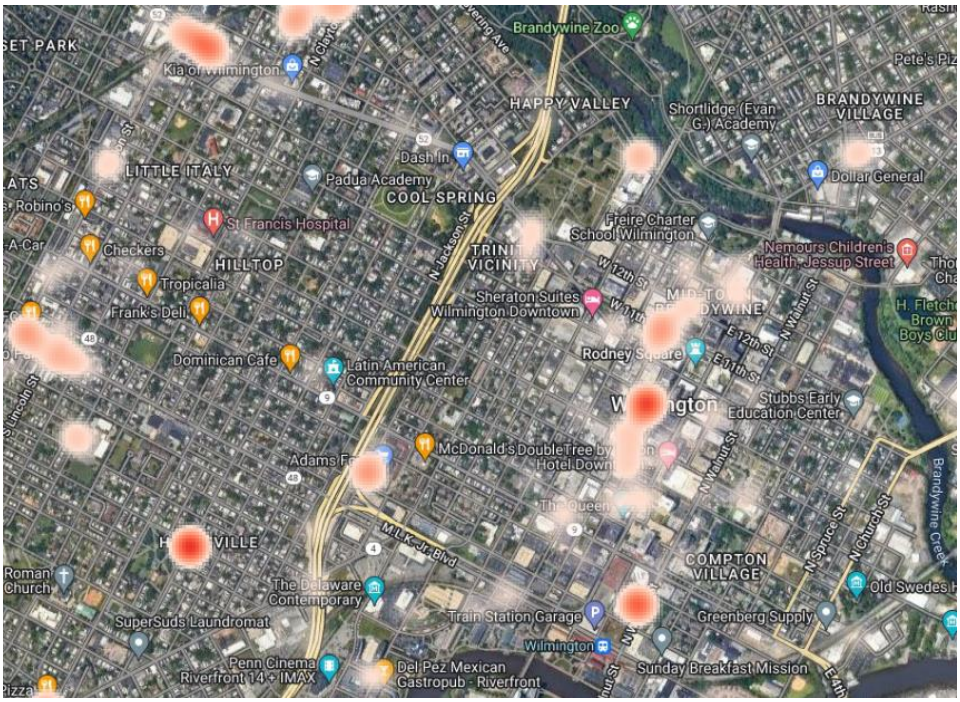
Figure 23: Undesignated Truck Parking Cluster Near Christiana Truck Stop



Source: CPCS Analysis of ATRI (2022); Google Maps ©2023 Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2023.

Urban: undesignated truck parking 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. This difficulty demonstrates the need for collaboration with local jurisdictions to address truck parking needs and issues in urban areas. Figure 24 shows undesignated parking in the Wilmington urban area.

Figure 24: Undesignated Truck Parking Cluster in Wilmington Urban Area



Source: CPCS Analysis of ATRI (2022); Google Maps ©CNES/Airbus, Maxar Technologies, U.S. Geological Survey, USDA/FPAC/GEO, Map data ©2023.

4.5 Undesignated Truck Parking Clusters

Through the updated undesignated truck parking identification and classification, the Project Team identified, validated, and analyzed 37 clusters of undesignated truck parking occurring in Delaware. This includes the 32 clusters identified as part of the initial Study analysis; however, one location exhibited significantly lower levels of undesignated truck parking in the updated analysis. Additionally, five new clusters of undesignated truck parking were identified.

In 60 percent of Delaware's undesignated truck parking clusters, the analysis of truck GPS data identified fewer than 50 counts of undesignated truck parking across 12 weeks. Though this GPS data represents a sample of total truck stops, the low total counts in the majority of the identified clusters indicate that Delaware's undesignated parking issues remain concentrated in a few select locations.

Figure 25 maps the 37 identified undesignated truck parking clusters in Delaware, classified by type. While undesignated parking in last-mile areas and on corridor shoulders are the most common cluster types, the largest single cluster of undesignated parking remains at the Biden Welcome Center rest area.

Figure 25: Undesignated Truck Parking Clusters (2022) – Map

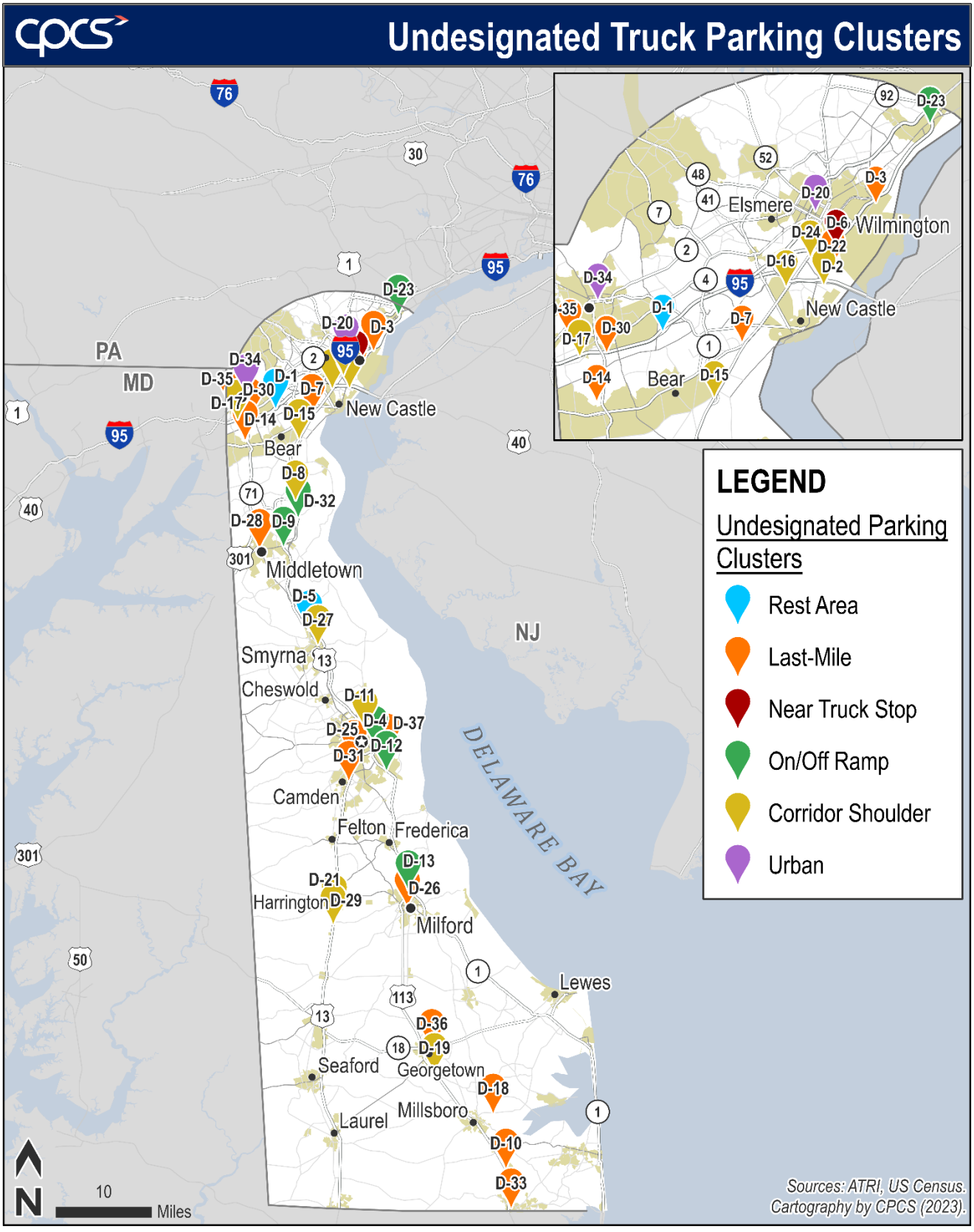


Figure 27, on the next page, provides additional details for each undesignated parking cluster corresponding to the markers shown in Figure 25. The additional details include:

- **County:** County in which the cluster is located.
- **Location Description:** Description of where the cluster is located.
- **Type:** Type of undesignated truck parking, determined based on where undesignated truck parking occurs.
- **Total Count of Undesignated Stops:** Number of undesignated trucks stopped within the cluster during the 12 weeks of ATRI truck GPS data.
- **Total Duration of Undesignated Stops (Hours):** The total number of hours trucks were parked in an undesignated location.
- **Median Stop Duration (Hours):** Median number of hours that a truck parked in an undesignated location.
- **Average Stop Duration (Hours):** Average number of hours that a truck parked in an undesignated location.
- **Percent of Stops < 3 Hours:** Percentage of undesignated trucks stopped within the cluster for less than three hours.
- **Percent of Stops 3-7 Hours:** Percentage of undesignated trucks stopped within the cluster for three to seven hours.
- **Percent of Stops > 7 Hours:** Percentage of undesignated trucks stopped within the cluster for more than seven hours.
- **Period of Day with Highest Number of Undesignated Stops:** The period of day when the highest number of stops occur within the cluster, based on the hour of the day with the highest number of stops during the 12 weeks of ATRI truck GPS data. Figure 26 illustrates the times of day that correspond to each period. In cases where the highest average number of stops occurred over several consecutive hours of the day, several periods were noted. In cases where there were several, non-consecutive hours of the day with the highest average number of stops, undesignated parking was classified as “recurring” in the cluster.

Figure 26: Corresponding Period and Times of Day

Period of Day	Time of Day
Overnight (AM)	12 am (Midnight) – 6 am
Morning	6 am – 12 pm (Noon)
Afternoon	12 pm (Noon) – 6 pm
Evening	6 pm – 12 am (Midnight)

- **Undesignated Stops Trend:** Whether undesignated truck stop volumes have increased, decreased, or remained similar when comparing the 2019 and 2022 analyses.

Figure 27: Undesignated Truck Parking Clusters (2022) – Table

Map Marker	County	Location Description	Type	Total Count of Undes. Stops	Total Duration of Undes. Stops (Hours)	Median Stop Duration (Hours)	Average Stop Duration (Hours)	% of Stops < 3 Hours	% of Stops 3 to 8 Hours	% of Stops > 8 Hours	Period of Day with Highest Number of Undes. Stops	Undes. Stops Trend
D-1	New Castle	Biden Welcome Center in Newark on I-95/ Delaware Turnpike	Rest Area	515	5,477	7.5	10.6	43%	6%	51%	Afternoon, Evening	More undesignated stops, remains the top cluster
D-2	New Castle	I-295 in New Castle off the Delaware Memorial Bridge	Corridor Shoulder	24	288	1.0	12.0	75%	--	25%	Recurring	Fewer undesignated stops
D-3	New Castle	First/last-mile roads (Lighthouse Rd, Hay Rd) at Edgemoor	Last-mile	62	1,082	8.4	17.5	34%	10%	56%	Afternoon	Fewer undesignated stops
D-4	Kent	SR 1 interchange with Puncheon Run Connector in Dover	On/Off Ramp	67	95	0.9	1.4	90%	10%	--	Overnight (AM)	More undesignated stops
D-5	New Castle	Smyrna Rest Area in Smyrna on US-13/Dupont Pkwy and nearby US-13/SR 1 interchange on/off-ramps	Rest Area	163	982	2.3	6.0	53%	9%	38%	Overnight (AM), Morning	More undesignated stops[2]
D-6	New Castle	Christiana Truck Stop at the Port of Wilmington on SR 9/Terminal Ave near I-495 on/off-ramps for Exit 2	Near truck stop	68	754	1.1	11.1	59%	7%	34%	Morning	More undesignated stops
D-7	New Castle	US-13/Dupont Pkwy/S Dupont Hwy and US-40/Pulaski Hwy intersection, and near Wilton Blvd and US-40/Pulaski Hwy intersection in New Castle	Last-mile	76	733	1.7	9.6	61%	7%	33%	Recurring	Similar patterns
D-8	New Castle	SR 1/Korean War Veterans Memorial Hwy (Toll Road) at Biddle's Corner Toll Plaza near SR 1/US-301 interchange near Middletown	Corridor Shoulder	39	229	1.0	5.9	72%	21%	8%	Evening, Overnight (AM)	More undesignated stops
D-9	New Castle	SR 1 on/off ramps at Exit 136 to/from SR 299/Main St /Middletown Odessa Rd in Middletown	On/Off Ramp	25	67	1.0	2.7	68%	20%	12%	Overnight (AM)	Similar patterns
D-10	Sussex	Daisey St between Dupont Blvd and Rte 401/Clayton Ave in Frankford	Last-mile	512	1,048	0.7	2.0	92%	3%	5%	Morning, Afternoon	More undesignated stops
D-11	Kent	SR 1/Korean War Veterans Memorial Hwy (Toll Road) at Dover Toll Plaza	Corridor Shoulder	28	69	1.6	2.5	82%	7%	11%	Morning	Similar patterns
D-12	Kent	SR 1 /Bay Rd near off-ramp at Exit 92 in Dover	On/Off Ramp	2	1	0.7	0.7	100%	--	--	Recurring	Fewer undesignated stops, no longer a top cluster

[2] Note undesignated truck parking area at Smyrna Rest Area was expanded to account for truck parking stops on the road connecting to and from the designated truck parking area.

Map Marker	County	Location Description	Type	Total Count of Undes. Stops	Total Duration of Undes. Stops (Hours)	Median Stop Duration (Hours)	Average Stop Duration (Hours)	% of Stops < 3 Hours	% of Stops 3 to 8 Hours	% of Stops > 8 Hours	Period of Day with Highest Number of Undes. Stops	Undes. Stops Trend
D-13	Kent	US 113/Dupont Blvd connection to SR 1/Bay Rd in Milford	On/Off Ramp	52	148	1.2	2.9	69%	19%	12%	Evening, Overnight (AM)	Similar patterns
D-14	New Castle	First/last-mile roads (Executive Dr) in Newark	Last-mile	36	667	0.8	18.5	89%	3%	8%	Afternoon	Similar patterns
D-15	New Castle	US-13/SR 1/S Dupont Hwy near on/off ramps to/from SR 1/Korean War Veterans Memorial Hwy near Bear	Corridor Shoulder	29	105	1.0	3.6	69%	14%	17%	Evening, Overnight (AM)	Similar patterns
D-16	New Castle	US 13/N Dupont Hwy/N Dupont Pkwy interchange with I-295/Delaware Turnpike near New Castle	Corridor Shoulder	32	97	0.8	3.0	78%	6%	16%	Morning, Afternoon	Similar patterns
D-17	New Castle	I-95/Delaware Turnpike (toll road) at Newark Toll Plaza	Corridor Shoulder	10	54	0.8	5.4	80%	--	20%	Evening	Similar patterns
D-18	Sussex	SR 24/John J Williams Hwy near Rd 304 intersection in Millsboro	Last-mile	24	200	1.5	8.3	67%	21%	13%	Recurring	Similar patterns
D-19	Sussex	US-113/Dupont Blvd near S Bedford St/Shortly Rd near Georgetown	Corridor Shoulder	23	71	1.4	3.1	70%	17%	13%	Evening, Overnight (AM)	Similar patterns
D-20	New Castle	Wilmington urban area	Urban	478	1,539	1.0	3.2	86%	7%	8%	Morning	More undesignated stops
D-21	Kent	US-13/S Dupont Hwy between Tower Hill Rd and Raceway Blvd near Harrington	Corridor Shoulder	13	42	1.5	3.3	62%	31%	8%	Recurring	Similar patterns
D-22	New Castle	First/last-mile roads near (southwest of) the Port of Wilmington	Last-mile	62	657	3.0	10.6	50%	11%	39%	Morning, Afternoon	More undesignated stops
D-23	New Castle	I-495 near and at US-13/Philadelphia Pike interchange in Claymont	On/Off Ramp	117	1,572	0.9	13.4	69%	6%	25%	Overnight (AM), Morning	More undesignated stops
D-24	New Castle	US-13/N Dupont Hwy interchange with I-495, south of Wilmington and north of New Castle	Corridor Shoulder	34	92	1.2	2.7	71%	15%	15%	Recurring	Similar patterns
D-25	Kent	US-13/S Dupont Hwy near Puncheon Run Connector and Webbs Ln in Dover	Last-mile	43	191	1.2	4.4	70%	12%	19%	Morning	Similar patterns
D-26	Kent	First/last-mile roads (various, east and west of US 113) in Milford	Last-mile	73	394	1.5	5.4	77%	1%	22%	Morning	More undesignated stops
D-27	Kent	US-13/SR 6/N Dupont Blvd in Smyrna	Corridor Shoulder	15	100	0.7	6.7	93%	--	7%	Evening, Overnight (AM)	Similar patterns

Map Marker	County	Location Description	Type	Total Count of Undes. Stops	Total Duration of Undes. Stops (Hours)	Median Stop Duration (Hours)	Average Stop Duration (Hours)	% of Stops < 3 Hours	% of Stops 3 to 8 Hours	% of Stops > 8 Hours	Period of Day with Highest Number of Undes. Stops	Undes. Stops Trend
D-28	New Castle	First/last-mile roads (Industrial Dr, Tower Ln, off N Cass St) in Middletown	Last-mile	24	100	1.3	4.2	75%	--	25%	Morning	Similar patterns
D-29	Kent	US-13/S Dupont Hwy between Rd 435 and Hammondtown Rd/Williamsville Rd/Rd 116 near Harrington	Corridor Shoulder	21	78	3.1	3.7	48%	33%	19%	Recurring	Similar patterns
D-30	New Castle	I-95/Delaware Turnpike interchange with SR 896/S College Ave near Newark	Last-mile	30	90	1.7	3.0	77%	10%	13%	Morning	More undesignated stops
D-31	Kent	US-13/S Dupont Hwy between Lochmeath Way and Voshells Mill Starr Hill Rd near Dover	Last-mile	18	58	0.8	3.2	94%	--	6%	Afternoon	Similar patterns
D-32	New Castle	SR 1 interchange with Pole Bridge Rd at Exit 142 near Odessa	On/Off Ramp	17	30	0.8	1.7	88%	6%	6%	Overnight (AM), Morning	Similar patterns
D-33	Sussex	First/last-mile roads (Hosier St) in Selbyville	Last-mile	146	1,392	4.3	9.5	40%	27%	33%	Recurring	New cluster
D-34	New Castle	Newark urban area	Urban	111	149	1.1	1.3	92%	8%	--	Evening, Overnight (AM)	New cluster
D-35	New Castle	First/last-mile roads (Markus Ct, Sandy Dr) in Newark	Last-mile	109	1,724	12.8	15.8	16%	--	84%	Afternoon	New cluster
D-36	Sussex	First/last-mile roads (Savannah Rd) in Georgetown	Last-mile	36	334	11.2	9.3	28%	17%	56%	Recurring	New cluster
D-37	Kent	First/last-mile roads (Starlifter Ave, Galaxy Dr) in Dover	Last-mile	28	42	0.7	1.5	96%	--	4%	Morning, Afternoon	New cluster

Source: CPCS analysis of ATRI, Trucker Path (2022).

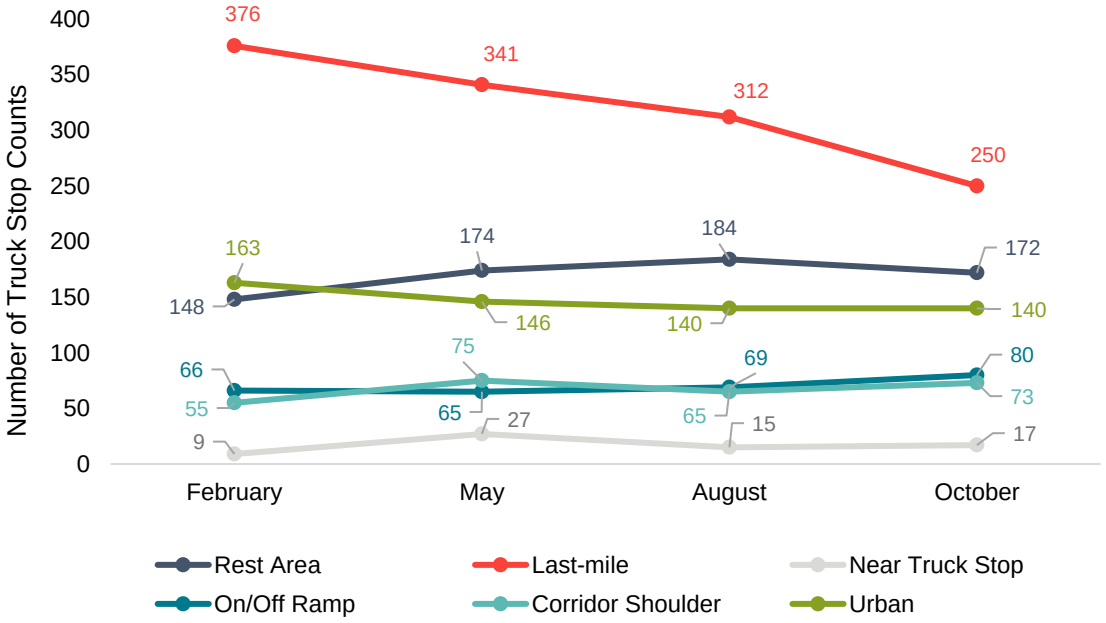
4.6 Seasonality Impacts

Similar to how seasonal trends impact truck parking facility utilization due to variations in truck traffic across seasons, these seasonal trends also influence the levels of undesignated truck parking that occur statewide.

4.6.1 Statewide

The following figures illustrate seasonal differences in truck parking in Delaware within the state's undesignated truck parking clusters. This analysis is based on variations in four months of 2019 ATRI truck GPS data. Figure 28 displays the number of undesignated truck parking counts at identified undesignated clusters. Similar to designated stops, across all undesignated clusters, truck parking counts are higher in February, May, and August compared to October. However, there is more variation when examining undesignated stops within clusters by type.

Figure 28: Undesignated Parking Truck Stop Counts by Type and Month (2022)



Source: CPCS analysis of ATRI, Trucker Path (2022).

4.6.2 By Location

Figure 29 further provides undesignated truck stop counts by month for each undesignated truck parking cluster to illustrate seasonal differences in truck parking in Delaware. There is variation across undesignated truck parking clusters in months with the highest and lowest number of stops.

Figure 29: Undesignated Truck Parking Clusters – Undesignated Truck Stop Counts by Month (2022)

Map Marker	Type	February	May	August	October	Trend
D-1	Rest Area	105	132	144	134	

Map Marker	Type	February	May	August	October	Trend
D-2	Corridor Shoulder	3	8	8	5	
D-3	Last-mile	7	15	24	16	
D-4	On/Off Ramp	20	16	12	19	
D-5	Rest Area	43	42	40	38	
D-6	Near truck stop	9	27	15	17	
D-7	Last-mile	17	16	23	20	
D-8	Corridor Shoulder	9	9	6	15	
D-9	On/Off Ramp	6	5	9	5	
D-10	Last-mile	182	137	115	78	
D-11	Corridor Shoulder	8	7	6	7	
D-12	On/Off Ramp	--	1	1	--	
D-13	On/Off Ramp	10	12	17	13	
D-14	Last-mile	15	7	10	4	
D-15	Corridor Shoulder	6	8	3	12	
D-16	Corridor Shoulder	7	12	8	5	

Map Marker	Type	February	May	August	October	Trend
D-17	Corridor Shoulder	2	4	2	2	
D-18	Last-mile	4	10	4	6	
D-19	Corridor Shoulder	5	8	5	5	
D-20	Urban	140	121	111	106	
D-21	Corridor Shoulder	1	3	6	3	
D-22	Last-mile	18	17	17	10	
D-23	On/Off Ramp	25	26	26	40	
D-24	Corridor Shoulder	7	10	9	8	
D-25	Last-mile	12	10	9	12	
D-26	Last-mile	18	16	24	15	
D-27	Corridor Shoulder	2	2	6	5	
D-28	Last-mile	6	7	4	7	
D-29	Corridor Shoulder	5	4	6	6	
D-30	Last-mile	8	8	5	9	
D-31	Last-mile	5	6	3	4	

Map Marker	Type	February	May	August	October	Trend
D-32	On/Off Ramp	5	5	4	3	
D-33	Last-mile	43	46	27	30	
D-34	Urban	23	25	29	34	
D-35	Last-mile	23	34	35	17	
D-36	Last-mile	12	6	8	10	
D-37	Last-mile	6	6	4	12	
All		**789**	**808**	**766**	**714**	

Source: CPCS analysis of Trucker Path, ATRI (2022).

5 Connection Between Truck Parking and Delaware's Economy

5.1 Introduction

The Project Team further analyzed the ATRI truck GPS data to understand the origins and destinations of trucks stopped to park in Delaware. This analysis demonstrates the importance of truck parking to the trucks moving goods into and out of Delaware. As a result, this analysis can be used to demonstrate and communicate the importance of and need for truck parking to support the state's freight-reliant industries and economy.

5.2 Truck Trips Analysis

The Project Team identified truck trips with origins and destinations in Delaware. Then, these trips were filtered down to those that stopped at a designated truck parking facility or within an undesignated truck parking cluster. The connecting origins and destinations were then mapped, as illustrated in Figure 31 on the following page, to demonstrate where within Delaware trucks come from before parking and where in the state they go after parking. Longer truck stops were also separately examined, as shown in Figure 32. This analysis removes stops exceeding three hours (i.e., for staging, 30-minute breaks) to provide insight into the true origins and destinations of trucks that park in Delaware.

As represented in the below graphic (Figure 30), the darker cells in the maps represent higher volumes of trips connected to truck parking stops, indicating those locations in Delaware that both drive truck parking demand and rely on the state's truck parking for efficient freight operations. As illustrated in the maps, urban and freight-intensive areas stand out – notably Wilmington, New Castle, Newark, and Dover, among others.

Figure 30: Trips Associated with Truck Parking

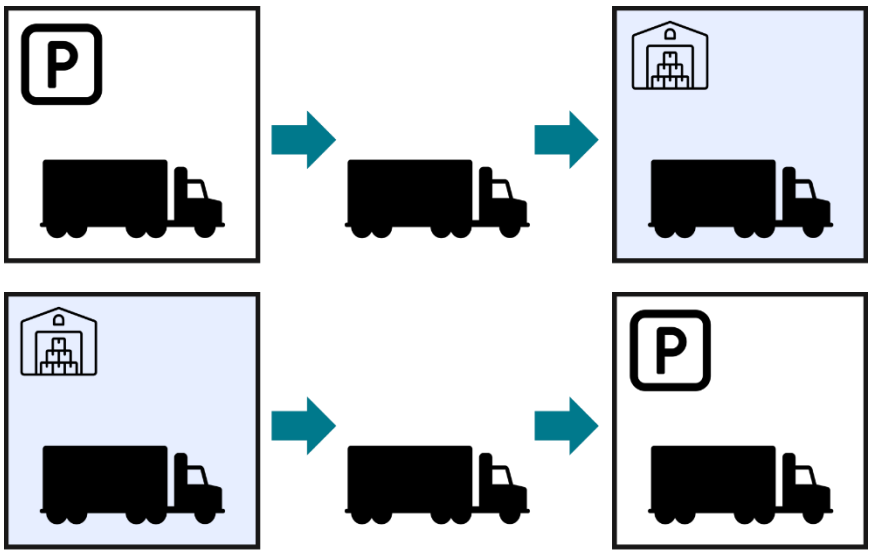


Figure 31: Origins and Destinations of Trips Associated with Truck Parking (All Stops) in Delaware

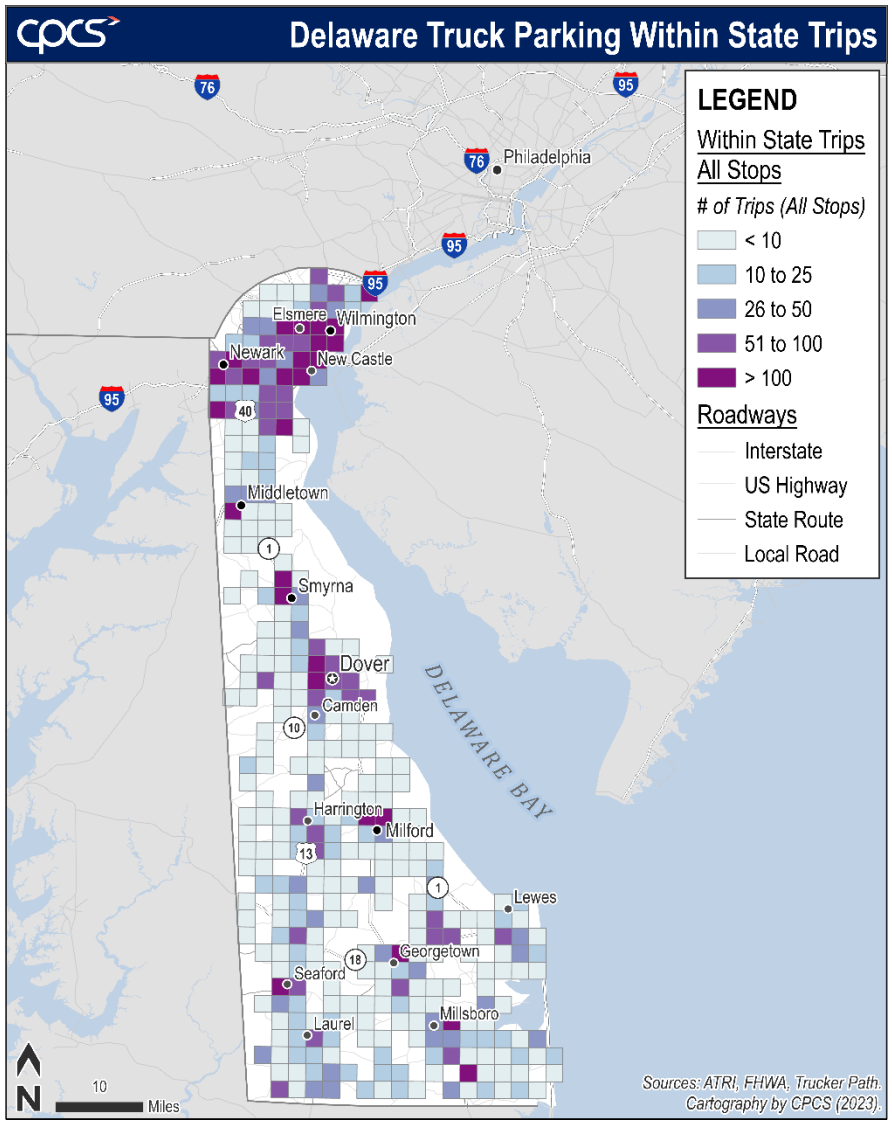
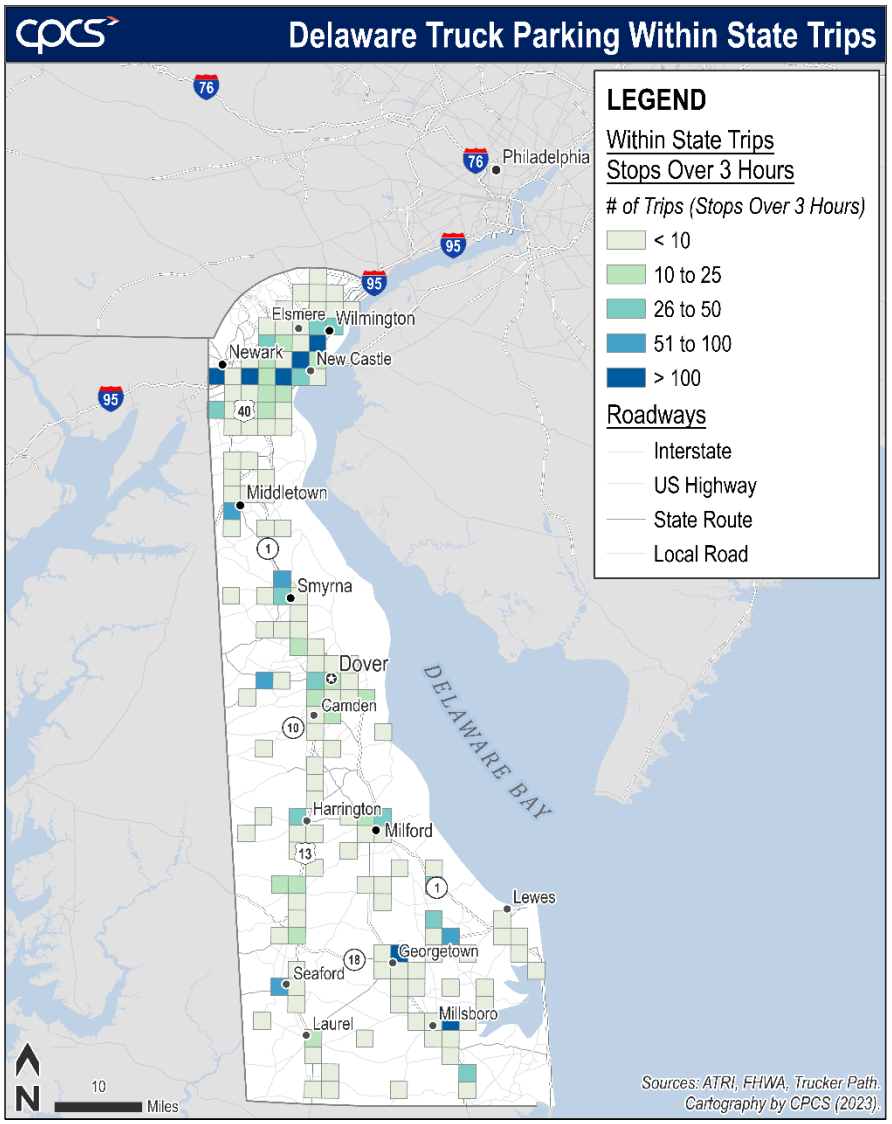


Figure 32: Origins and Destinations of Trips Associated with Truck Parking (Stops Over 3 Hours) in Delaware

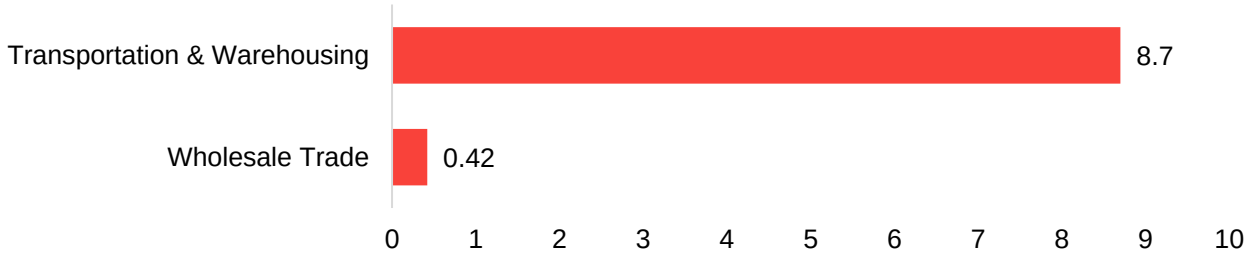


5.3 Industry Analysis

The Project Team further explored the connection between truck parking and the economy by developing a model to identify the relationship between employment in freight-reliant industries (using 2022 Data Axle employment) and truck trips associated with designated truck parking.

The results of the model show that employment in transportation, warehousing, and wholesale trade has a statistically significant positive relationship with truck trips tied to truck parking at facilities in Delaware (Figure 33). In other words, as employment in these industries increases within a given area (a half mile in this analysis), we expect to see an increase in trucks coming from or moving to the state's truck parking facilities within the same area. For example, for every 10 transportation and warehousing employees within a given area, there would be an increase of 8.7 truck trips (in the truck GPS sample data) within the area coming from or moving to a truck parking facility in Delaware.

Figure 33: Number of Trips To/From Delaware Truck Parking for Every 10 Industry Employees



Source: CPCS Analysis of ATRI, Trucker Path, Data Axle (2022).

Figure 34 on the following page maps the locations of transportation and warehousing employment in Delaware, indicating the locations connected to trips coming from or moving to truck parking facilities in the state. As shown, transportation and warehousing industry employment is most concentrated in New Castle County, particularly in the north along I-95. Transportation and warehousing are also present in Kent and Sussex Counties – particularly in Dover, Camden, and Seaford, among other locations.

Meanwhile, Figure 35 maps the locations of warehousing development in Delaware, with details about locations that are new (active or completed), under construction, planned or in planning, or being promoted. New warehousing developments are primarily located in New Castle and Kent Counties. Given the connection between the transportation and warehousing industry and truck parking trips, these new warehousing developments will likely drive increased demand for truck parking in the state.

Figure 34: Transportation and Warehousing Employment

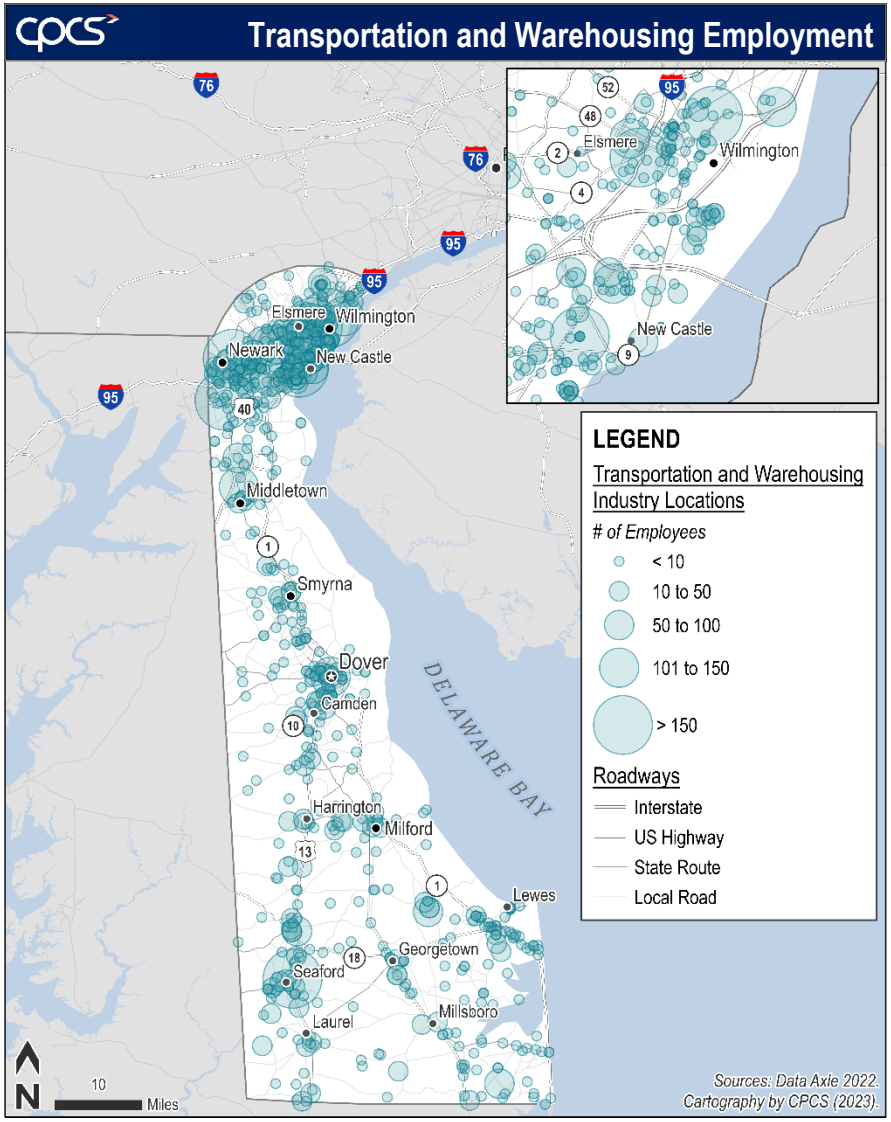
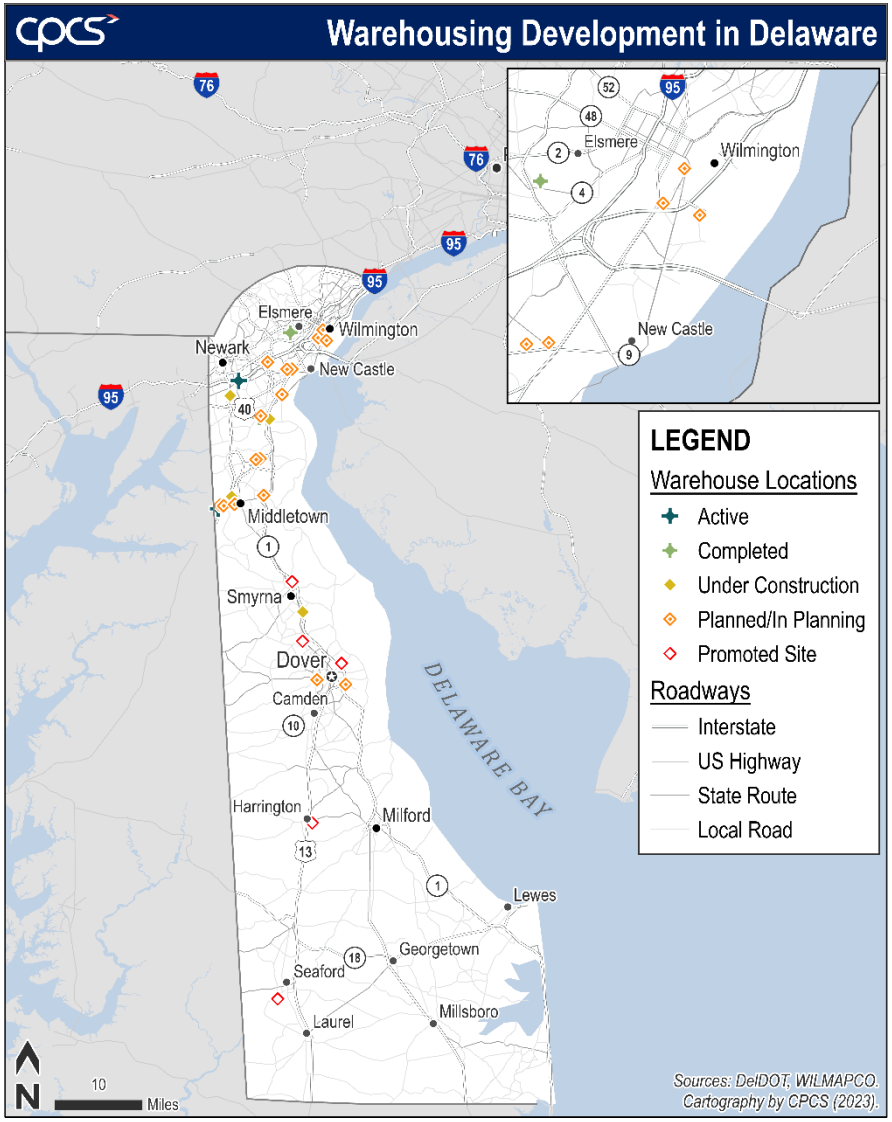


Figure 35: New Warehousing Developments



6 Next Steps

6.1 Introduction

The updated analysis of truck parking utilization, undesignated parking, and truck parking connections to the economy provides a picture of the current state of truck parking conditions in Delaware, to inform how the state's truck parking strengths, weaknesses, opportunities, and threats have persisted or evolved over the past few years. This will further guide DelDOT, WILMAPCO, and other stakeholders in advancing and implementing truck parking solutions in Delaware.

6.2 Strengths, Weaknesses, Opportunities, and Threats

The updated analysis in this Technical Memo, informs the update of the SWOT identification for truck parking in Delaware, as presented in Figure 36. Those bullets highlighted in red reflect findings that have been reinforced and/or updated based on the current truck parking analysis and conditions. DelDOT, WILMAPCO, and their partners can use this SWOT to guide the future identification and implementation of truck parking projects in Delaware.

Figure 36: Delaware's Truck Parking SWOT Analysis

Strengths

- **Truck parking utilization still does not reach full capacity statewide, even during peak hours. Utilization remains low in many areas during non-peak hours.**
- **Limited undesignated parking observations, with relatively low counts of undesignated stops at several clusters.**
- Biden Welcome Center rest area is the result of a public-private partnership.
- **Data update provides a current understanding of truck parking conditions in the state.**
- **Delaware has advanced several truck parking efforts in recent years,** including adding spaces and installing a truck parking information management system at Smyrna Rest Area, authorizing and striping truck parking at four park and rides (Tybouts, US 301, SR 299 in Middletown, and Dover), and considering several locations for new truck parking capacity.

Weaknesses

- Limited geographic coverage of truck parking facilities, with a notable absence of truck parking locations in southeast Delaware.
- Limited overnight truck parking locations in central and southern Delaware (Kent and Sussex Counties), as select private facilities do not allow overnight truck parking. **This creates gaps in available truck parking during overnight hours.**
- **There remains insufficient space for staging near Port of Wilmington and Edgemoor.**
- **Continued high utilization of truck parking facilities during peak hours in urban areas and freight corridors** (primarily near Wilmington, New Castle, and Smyrna, followed by Dover, Milford, and Harrington).
- **Undesignated parking continues to remain concentrated at and near public rest areas** (Biden Welcome Center and Smyrna Rest Area), **in urban areas** (Wilmington, New Castle, Newark, Smyrna, and Dover), **and along key freight corridors** (I-95, I-295, I-495, US 13, US 113, SR 1).
- Crash data reporting limitations, with limited insight on truck parking-related crashes from statewide truck/trailer-involved crash data.

Opportunities

- **Use the updated data analysis to support and guide ongoing truck parking efforts in Delaware.**
- **Seek federal funding through discretionary grant opportunities to advance truck parking projects.**
- Continue to monitor, discuss, and conduct outreach on truck parking in the state and region (e.g., through Standing Committee, champion, outreach and education, etc.), in order to identify changes in truck parking needs and issues.
- Integrate truck parking into statewide and local planning to actively prepare for and mitigate against increasing freight development, truck traffic, and associated demand for parking.
- Explore truck parking capacity expansion near undesignated parking clusters, particularly where vacant lots and/or state-owned land have been identified nearby.
- Explore truck parking capacity expansion near existing truck parking facilities, such as through a public-private partnership.
- In areas with limited existing overnight parking (in Kent and Sussex Counties), explore new locations for truck parking facility development, such as through a public-private partnership.
- Disseminate information about truck parking locations and/or parking availability to truck drivers through static and/or dynamic signs, particularly at existing truck parking locations with low utilization.
- Collaborate with local agencies to identify and address truck parking issues, particularly in urban areas.
- Collaborate with local agencies and freight-reliant industries (e.g., manufacturing, warehousing) to promote the availability of designated truck parking near new freight-generating developments.
- Coordinate truck parking planning and signage at state borders with neighboring state DOTs.
- Collaborate with the trucking industry to provide truck parking facility updates, promote the use of underutilized facilities, and gather information on truck parking needs and issues in Delaware and the surrounding region.

Threats

- Increasing goods movement, driven by the growth of freight-reliant industries and potential port expansion. **New warehousing developments will drive increased demand for truck parking in Delaware.**
- Need for expanded access to truck parking and staging in urban areas where capacity is most strained, but land is difficult and expensive to acquire.
- “Not In My Backyard” (NIMBY) community concerns about idling, noise and air emissions, and real and perceived safety hazards pose a challenge to the expansion of truck parking.
- Lack of truck parking-dedicated funding.
- Lack of clear public and private roles to address truck parking issues.

6.3 Capacity Expansion Opportunities

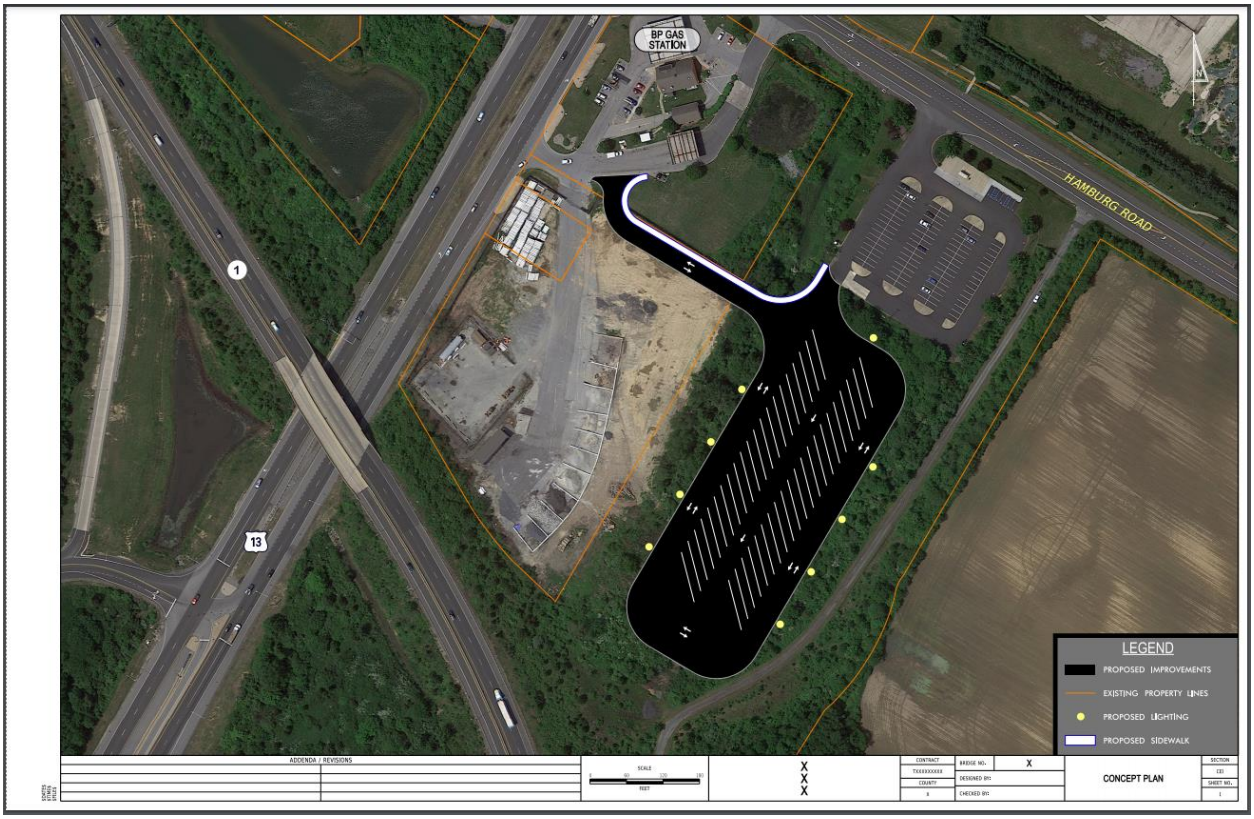
The 2021 Truck Parking Study identified a range of opportunities to advance truck parking in Delaware. This included statewide policies and programs, as well as location-specific projects. Among the projects identified, the Study provided conceptual drawings and high-level cost estimates for three *new* truck parking location opportunities – one in each region of the state – to inform DelDOT’s future considerations related to new truck parking development in the states. The following section re-evaluates these opportunities based on the updated truck parking conditions analysis to provide DelDOT with a current view of Delaware’s truck parking needs and solutions.

6.3.1 Northern Delaware

For northern Delaware, the study identified the opportunity to **leverage existing state-owned facilities and land for new truck parking capacity at the intersection of US 13 and Bear Rd./Hamburg Rd. in New Castle** (see Figure 37 for concept graphic).

This area was identified as suitable for a truck parking project given the nearby undesignated truck parking, as well as its proximity to several key freight corridors. Similar to the analysis conducted during the previous Study, undesignated truck parking is lower at this specific location (cluster D-15), compared to other clusters in Delaware. However, the location remains proximate to many other areas that continue to experience high levels of undesignated parking. The intersection is less than ten miles south along US-13 from the Wilmington urban area, Port of Wilmington, and northern interstates (I-95, I-295, I-495), where undesignated truck parking is concentrated in the state. Undesignated truck parking also takes place along US 13 and SR 1 north and south of this intersection. Nearly all of these locations exhibit similar, if not higher, levels of undesignated truck parking in the updated analysis.

Figure 37: Concept Graphic for Truck Parking Capacity Expansion Opportunity at Intersection of US 13 and Bear Rd./Hamburg Rd.



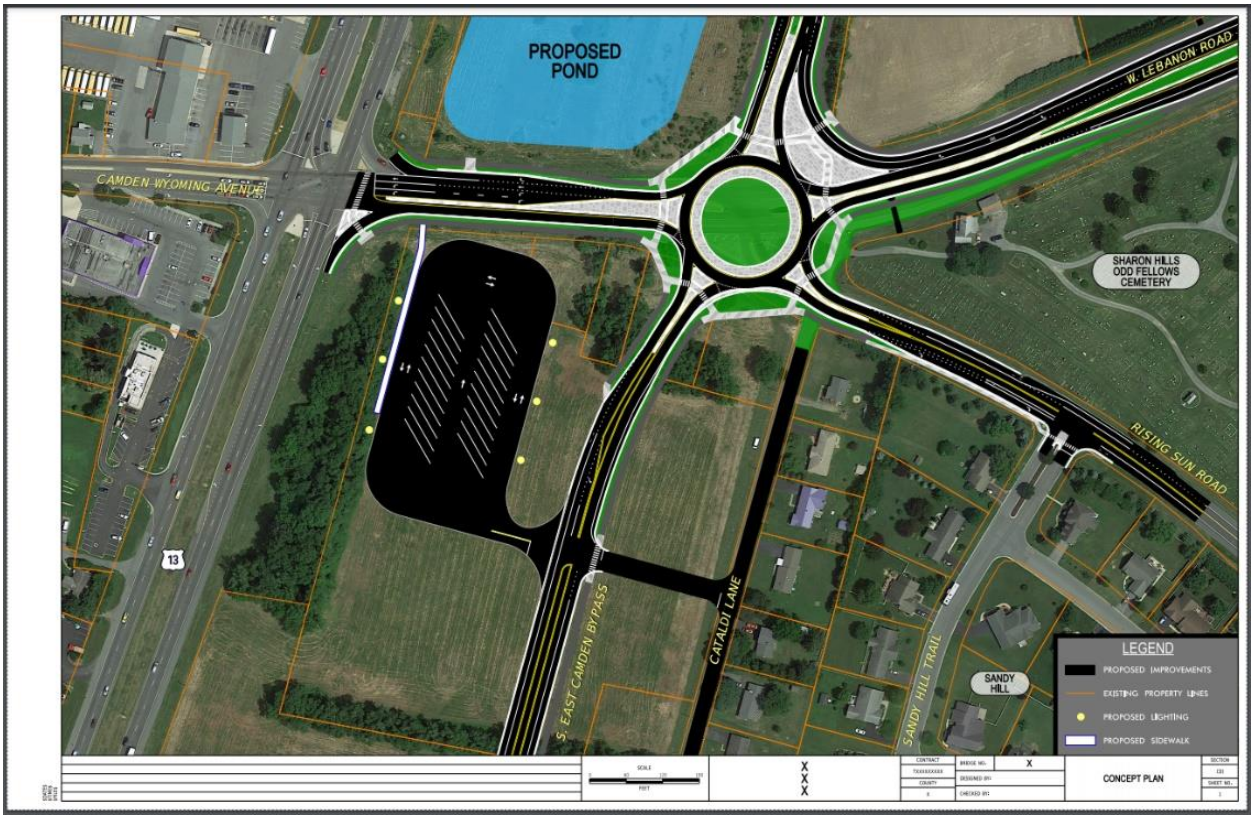
Source: Century Engineering. Concept plan developed using Pennsylvania standard (PennDOT publication 13M), as Delaware does not have a truck parking manual.

6.3.2 North-Central Delaware

For north-central Delaware, the Study identified the opportunity to **leverage existing state-owned land for new truck parking capacity at the intersection of US 13 and West Lebanon Rod/SR 10 in Camden** (see Figure 38 for concept graphic).

This area was identified as suitable for a truck parking project given nearby undesignated truck parking, as well as its location on a key freight corridor and its proximity to amenity access at restaurants. Undesignated truck parking clusters remain present both north (cluster D-25) and south (cluster D-31) of this location. There are also many undesignated truck parking clusters nearby in Dover, where the updated analysis identifies similar patterns, if not a higher volume, of undesignated parking occurrences. There is also a new last-mile cluster located nearby. Additionally, there are two warehousing developments planned for the Dover area, which will attract additional truck traffic and demand for truck parking to the area.

Figure 38: Concept Graphic for Truck Parking Capacity Expansion Opportunity at Intersection of US 13 and West Lebanon Rd./SR 10 in Camden



Source: Century Engineering. Concept plan developed using Pennsylvania standard (PennDOT publication 13M), as Delaware does not have a truck parking manual.

6.3.3 Southern Delaware

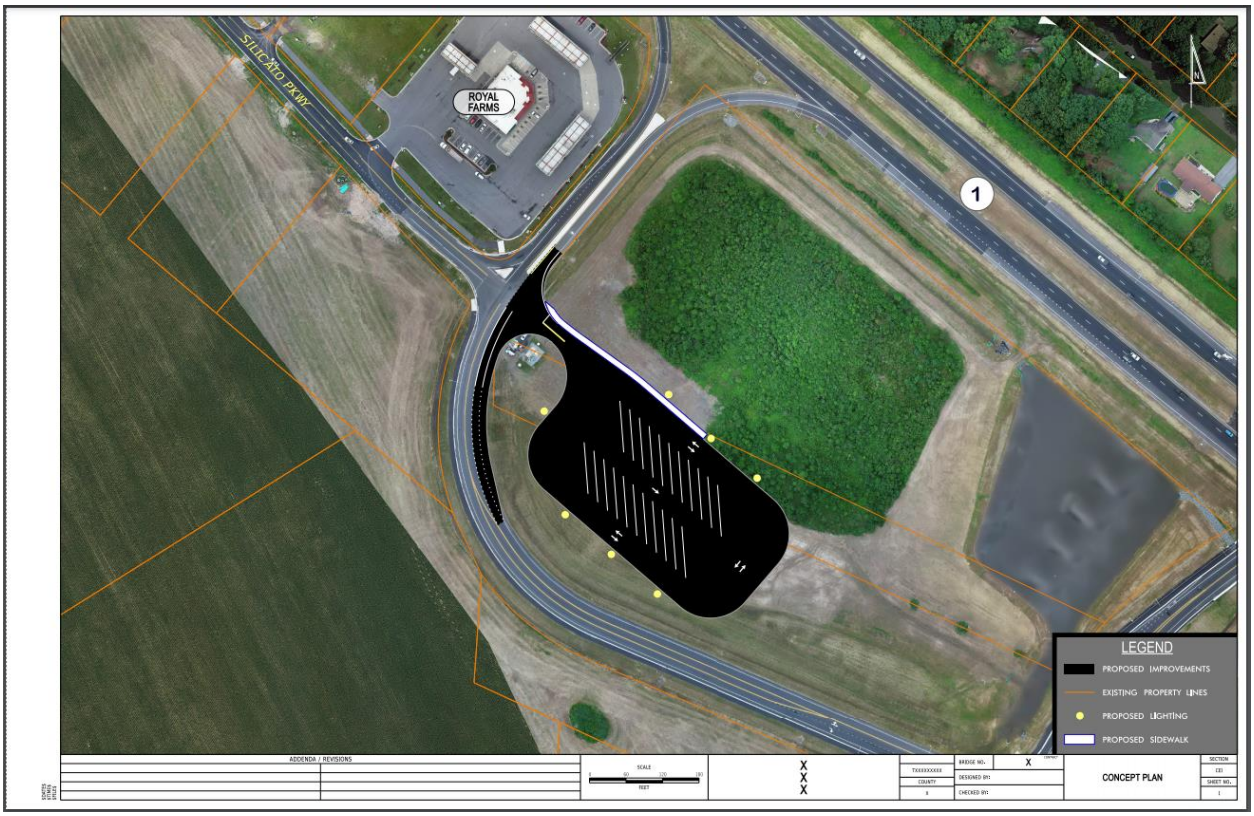
For southern Delaware, the Study identified the opportunity to **leverage existing state-owned land to develop new truck parking capacity at the intersection of SR 1/Bay Rd/Milford Bypass and NE Front Street in Milford** (see Figure 39 for concept graphic).

This area was identified as suitable for a truck parking project given it is located on a key freight corridor near undesignated truck parking clusters (clusters D-14 and D-26). Undesignated truck parking continues to occur at these nearby locations, with increased levels of undesignated parking occurring on last-mile roads in Milford.

Compared to other locations in the state, there are currently no truck parking locations in southeast Delaware. Providing additional truck parking capacity at this location may help alleviate undesignated truck parking nearby, as well as truck parking issues occurring along connected north-south routes.

The location is also easily accessible by trucks traveling both northbound and southbound on SR 1. It is also located near the US 113 and SR 1 intersection, and undesignated truck parking continues to occur along US 113 south of this location in Kent County.

Figure 39: Concept Graphic for Truck Parking Capacity Expansion Opportunity at Intersection of SR 1/Bay Rd./Milford Bypass and NE Front St.



Source: Century Engineering. Concept plan developed using Pennsylvania standard (PennDOT publication 13M), as Delaware does not have a truck parking manual.

6.4 Conclusion and Next Steps

Delaware continues to experience many of the same truck parking conditions and issues identified in the 2021 Statewide Truck Parking Study. With a current understanding of where truck parking challenges continue to occur, and where they have gotten worse, DelDOT, WILMAPCO, and their partners can prioritize and advance those solutions that seek to address persistent truck parking issues. An additional analysis demonstrating the connection between truck parking and Delaware's economy can further serve to communicate the importance of and need for truck parking to support the state's freight-reliant industries and economy.

Appendix A Truck Parking Utilization Maps

Appendix A includes maps demonstrating truck parking utilization for all hours of the day in Delaware.

Figure 40: Truck Parking Utilization (2022) – 12 am to 1 am

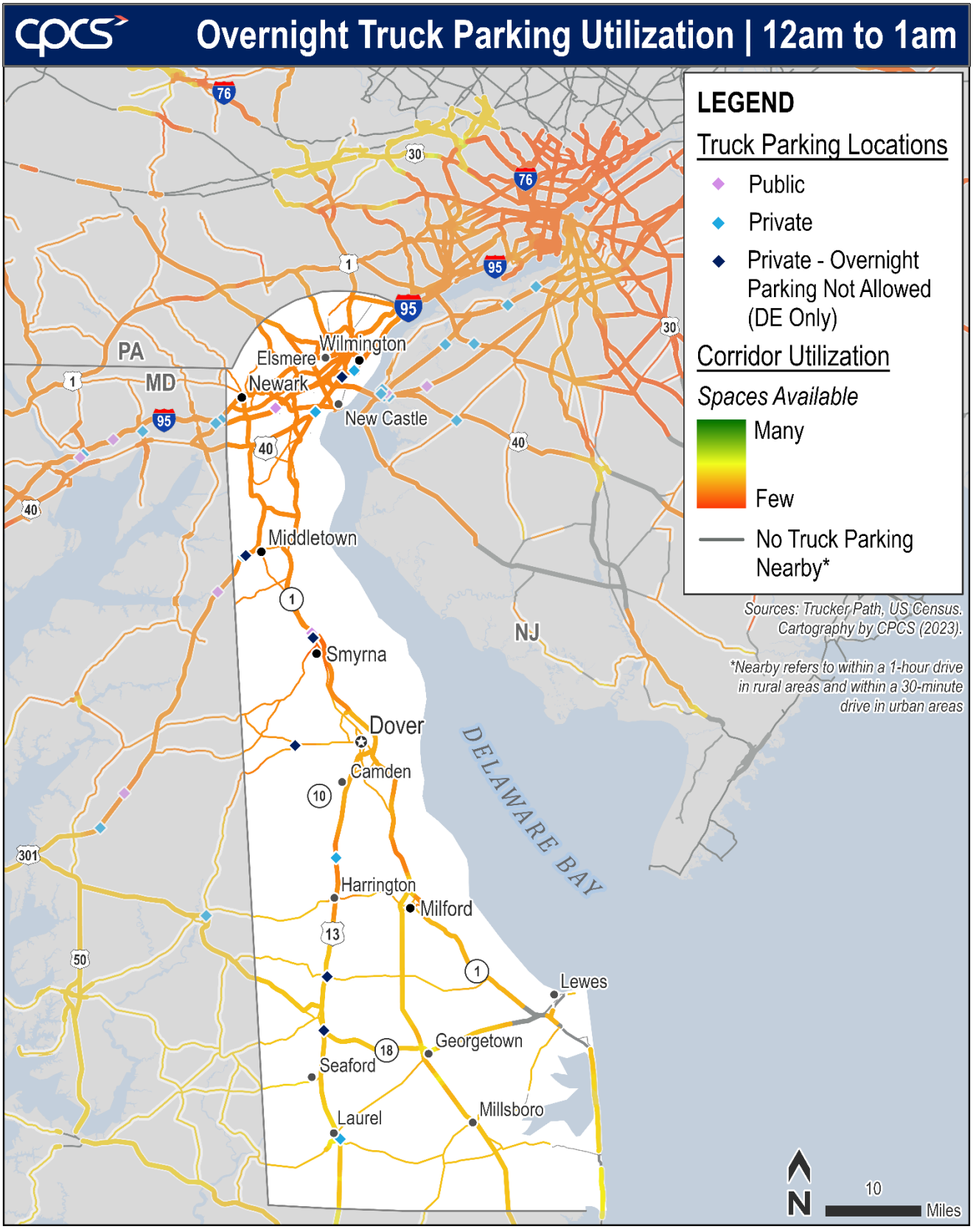


Figure 41: Truck Parking Utilization (2022) – 1 am to 2 am

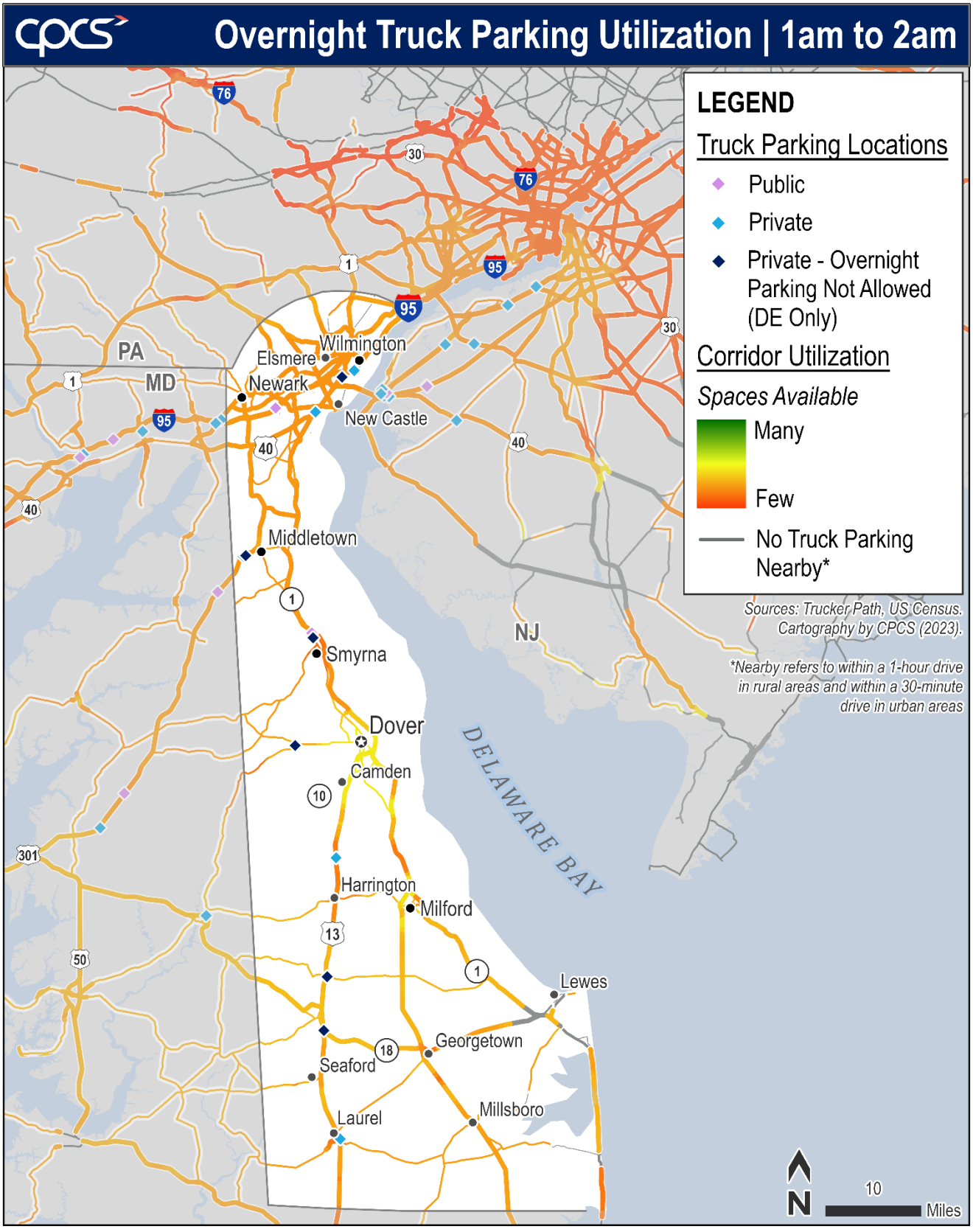


Figure 42: Truck Parking Utilization (2022) – 2 am to 3 am

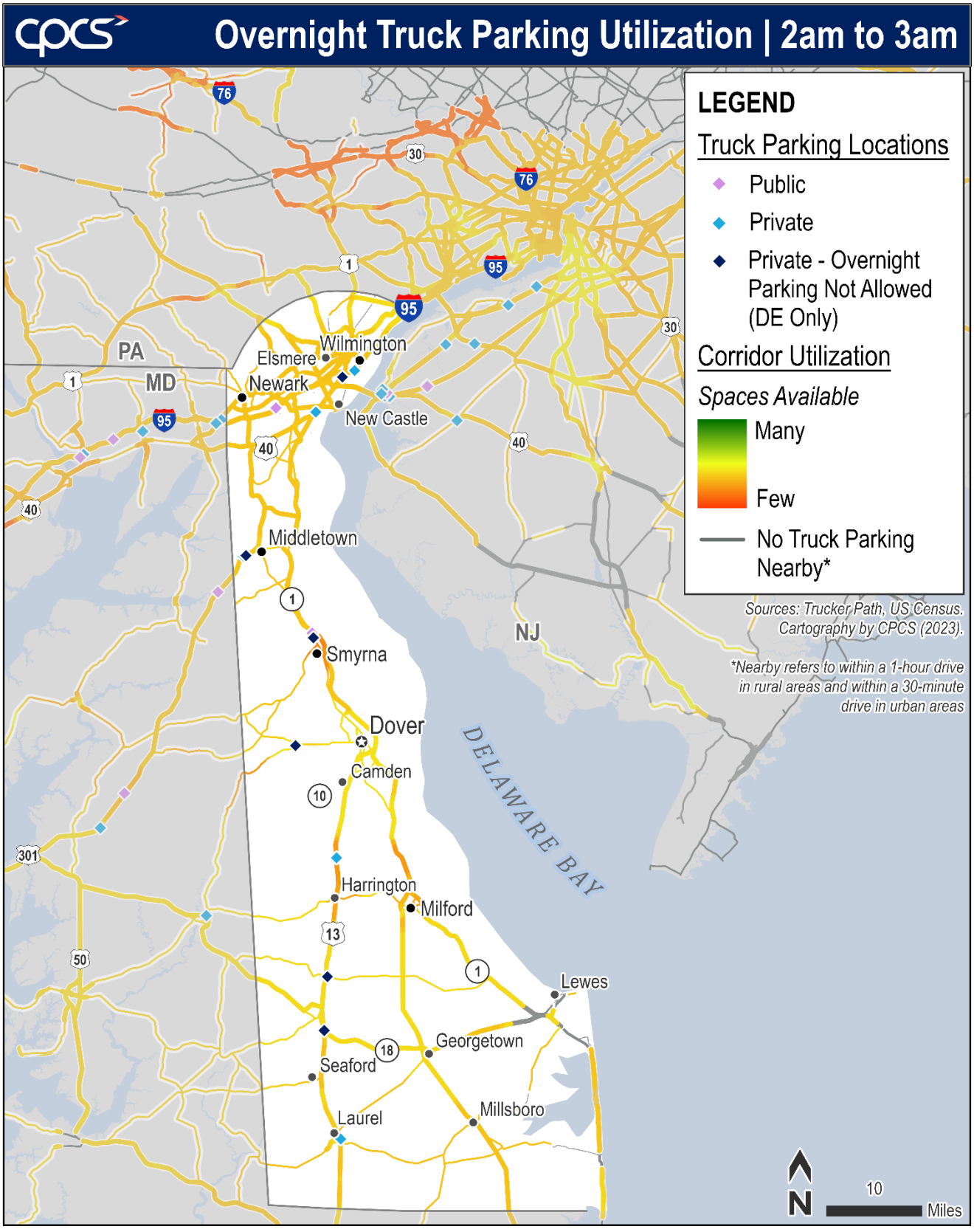


Figure 43: Truck Parking Utilization (2022) – 3 am to 4 am

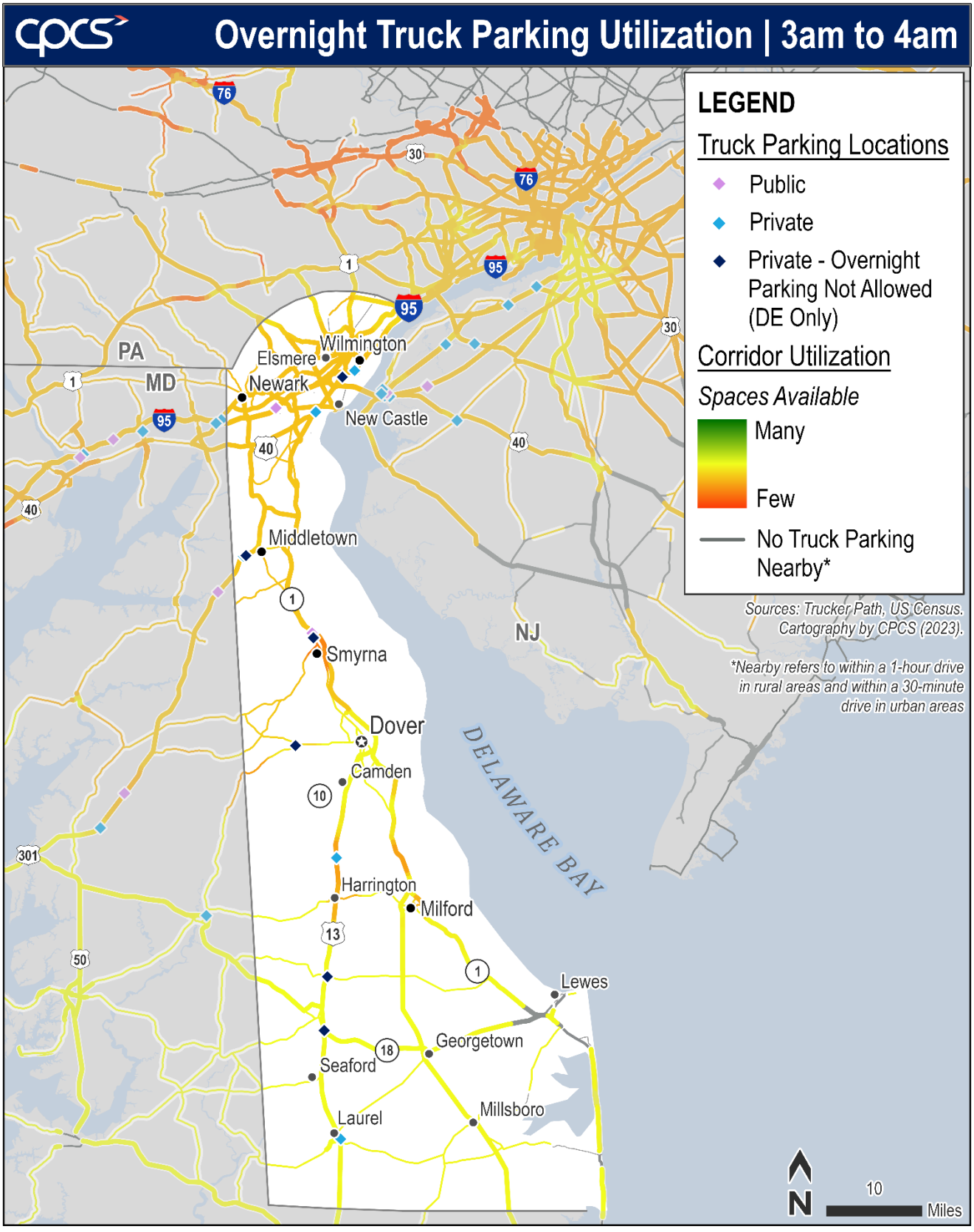


Figure 44: Truck Parking Utilization (2022) – 4 am to 5 am

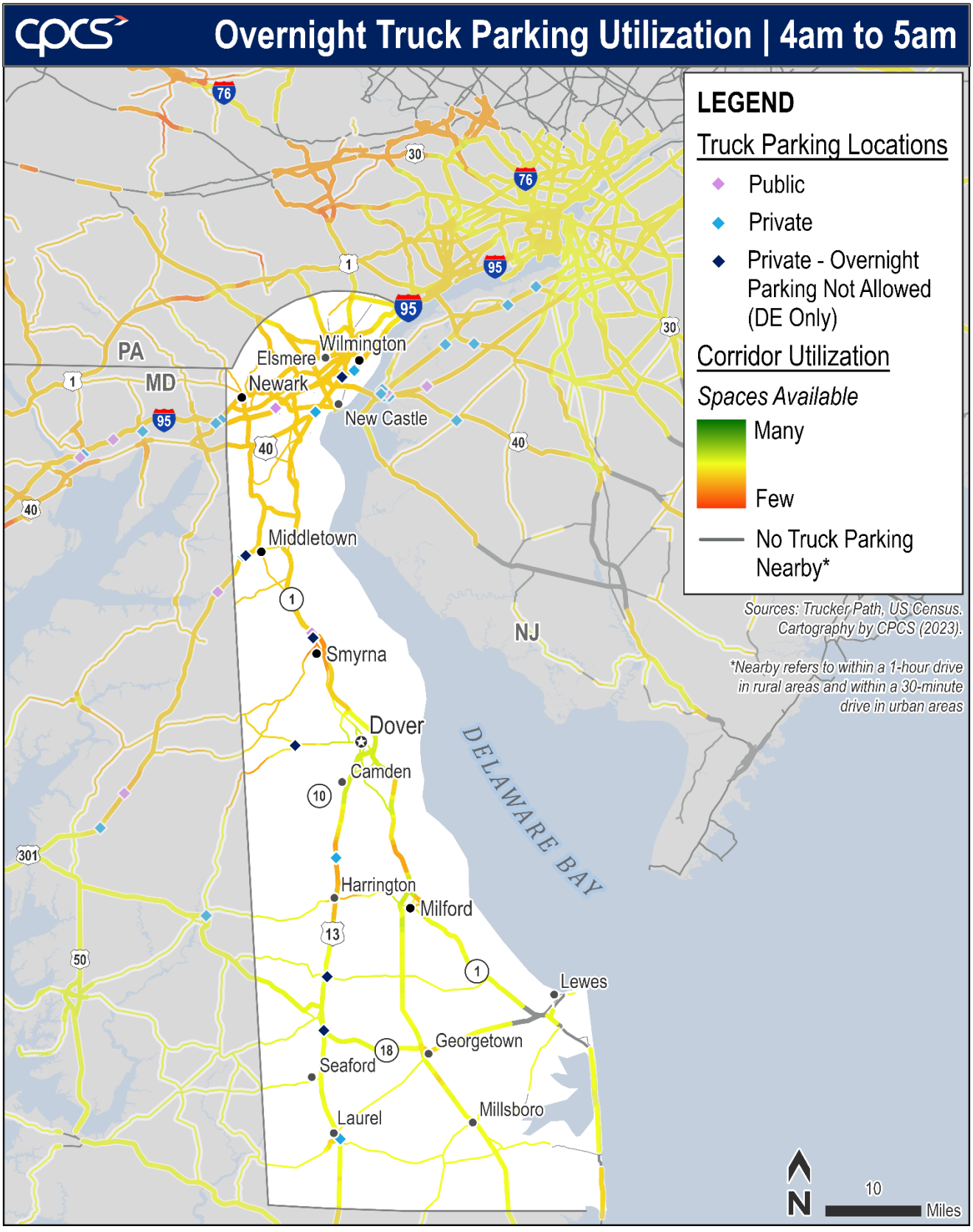


Figure 45: Truck Parking Utilization (2022) – 5 am to 6 am

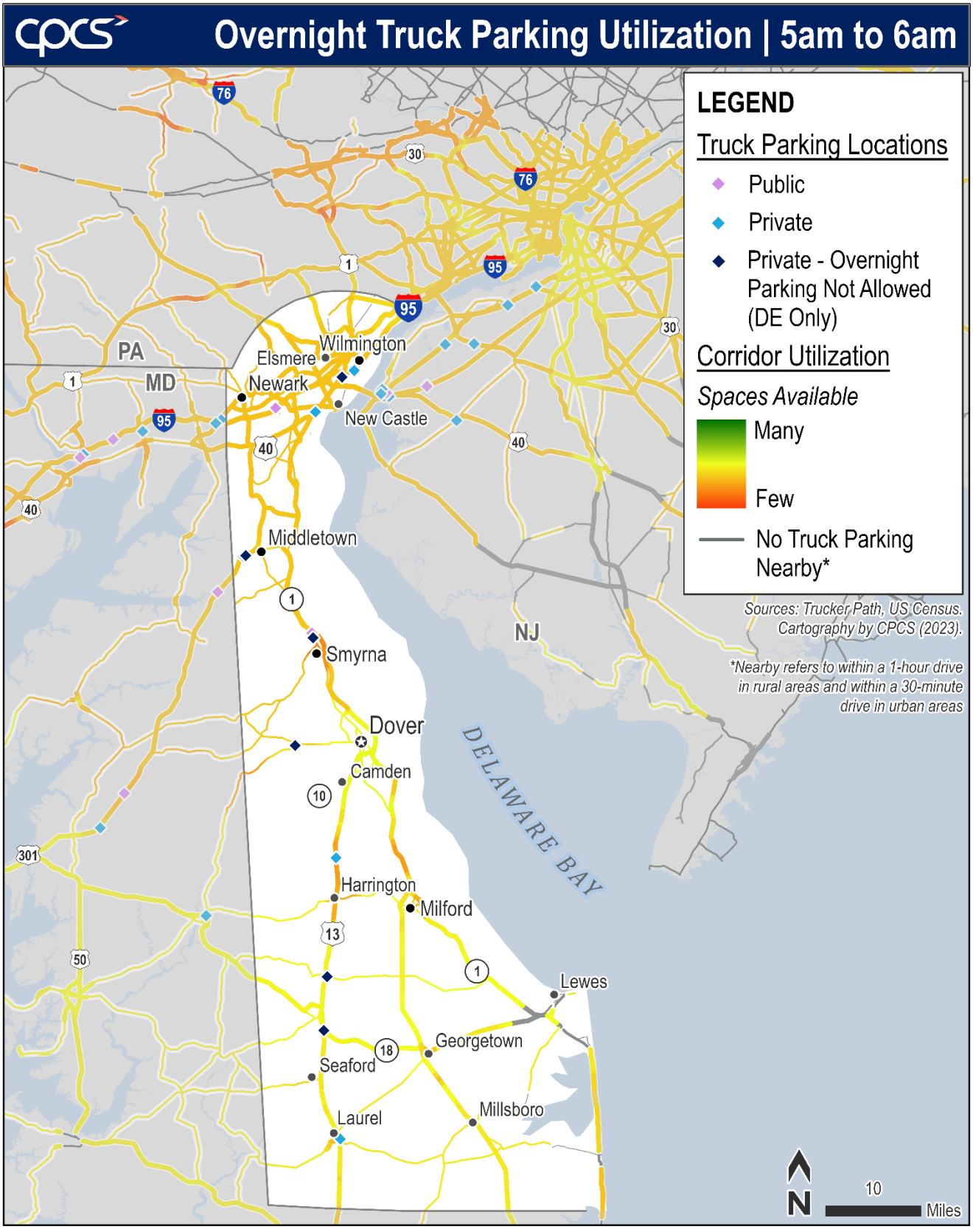


Figure 46: Truck Parking Utilization (2022) – 6 am to 7 am

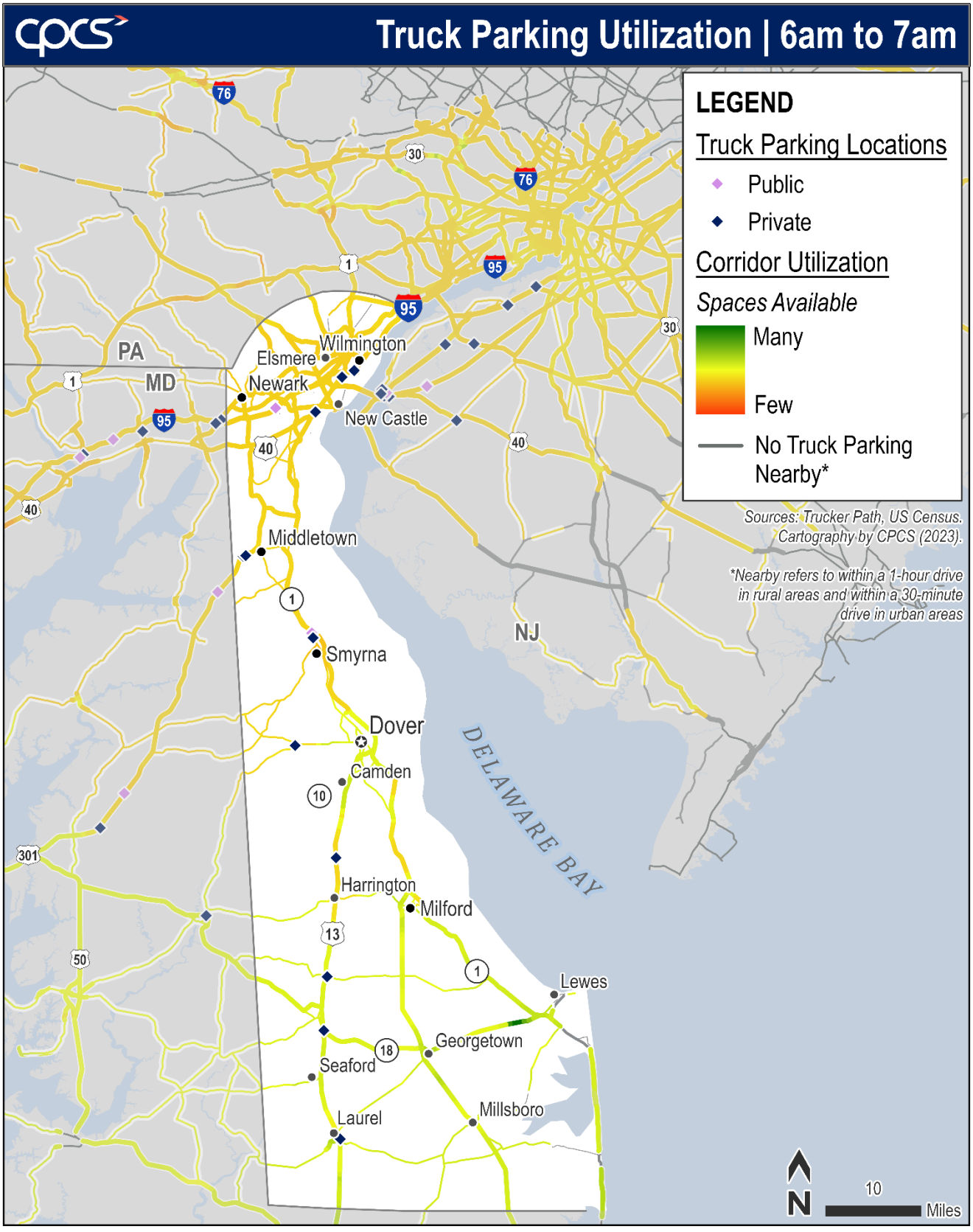


Figure 47: Truck Parking Utilization (2022) – 7 am to 8 am

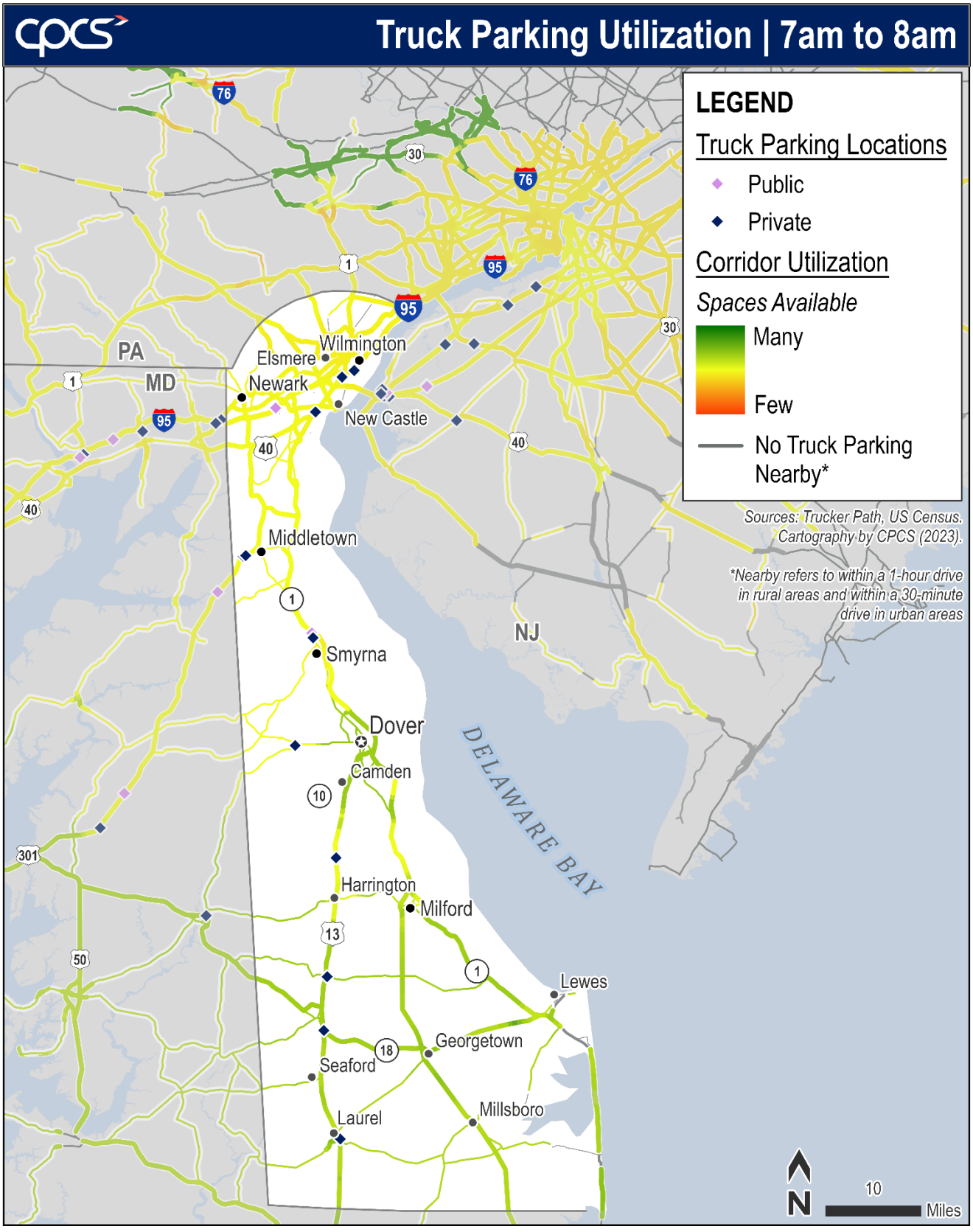


Figure 48: Truck Parking Utilization (2022) – 8 am to 9 am

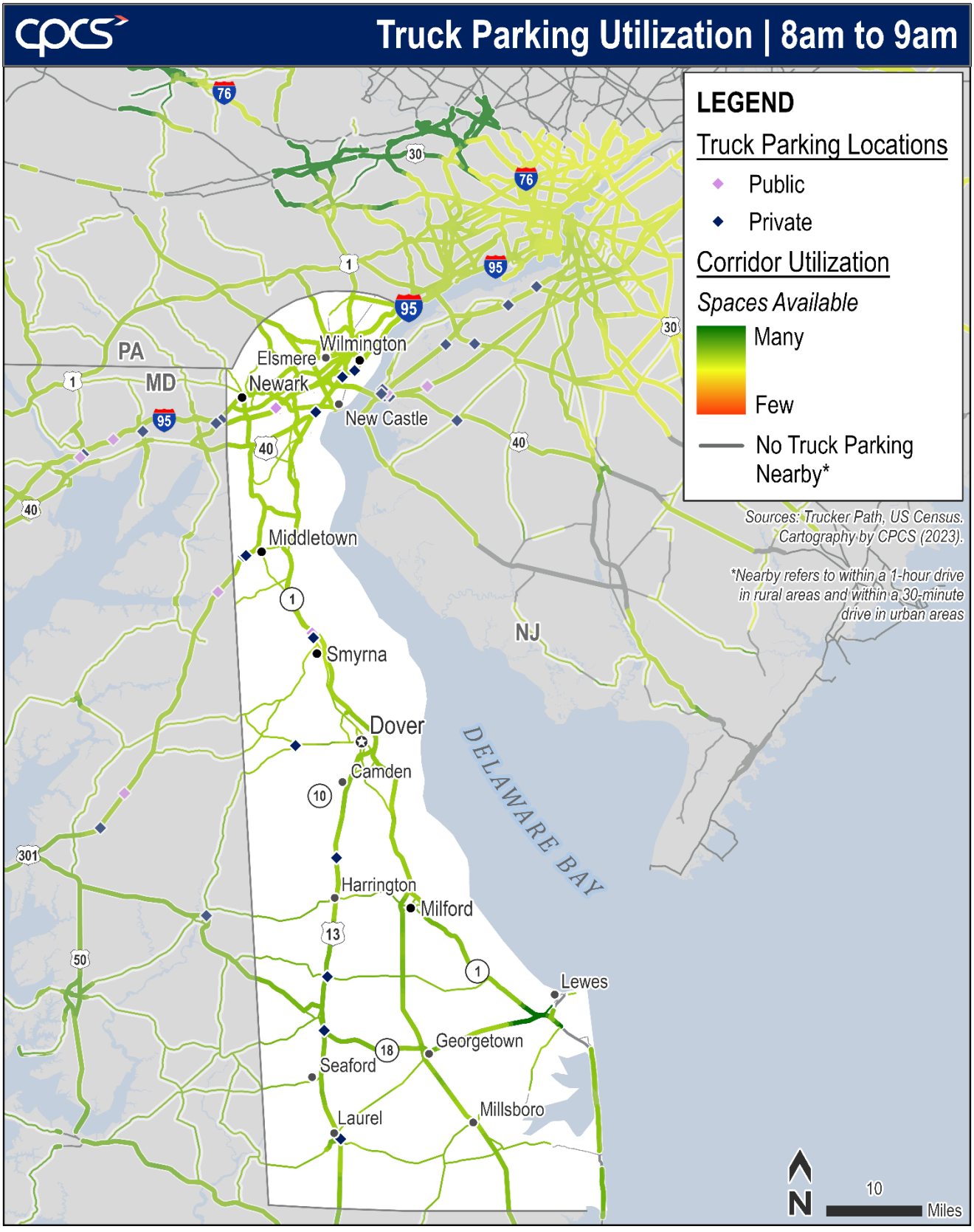


Figure 49: Truck Parking Utilization (2022) – 9 am to 10 am

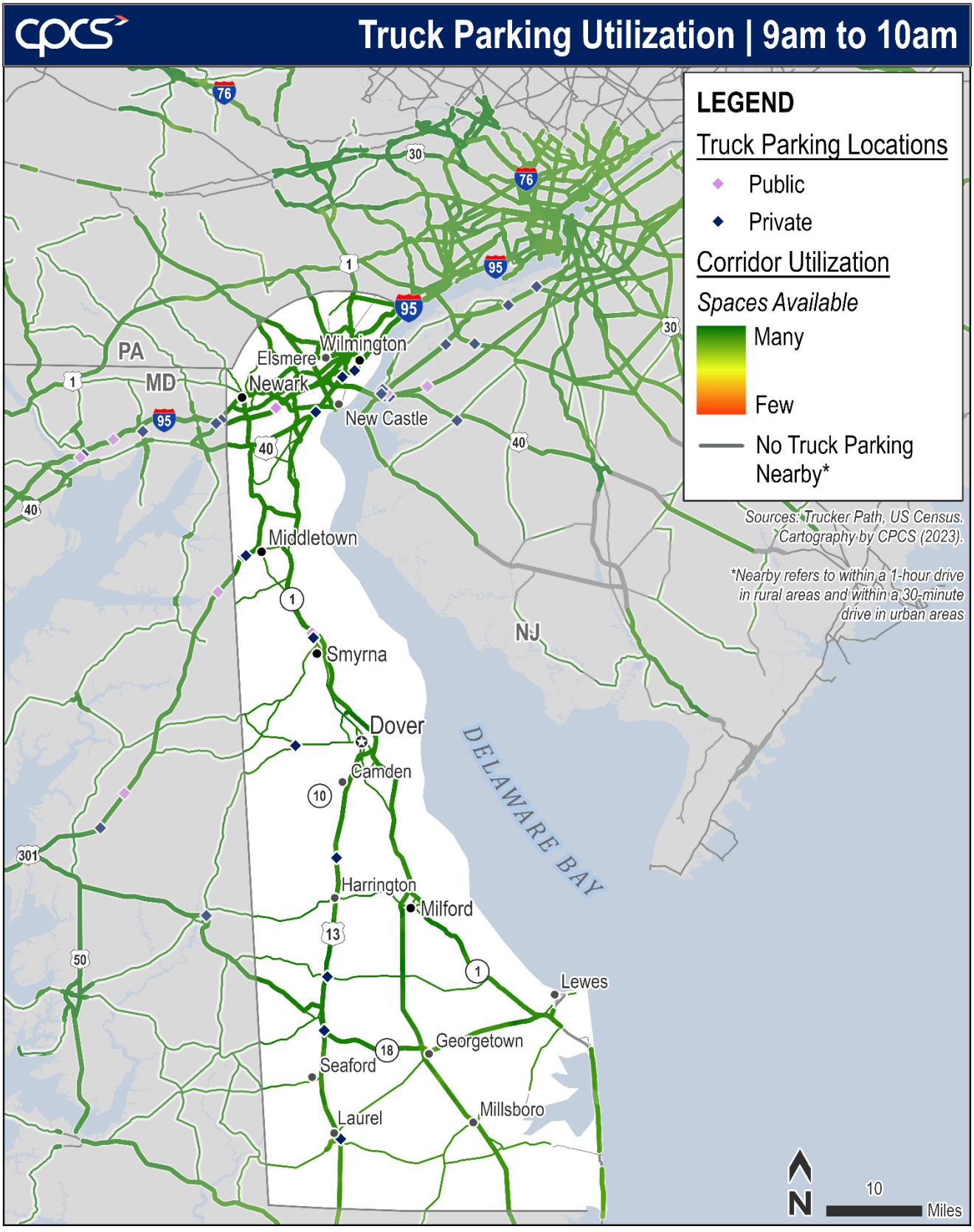


Figure 50: Truck Parking Utilization (2022) – 10 am to 11 am

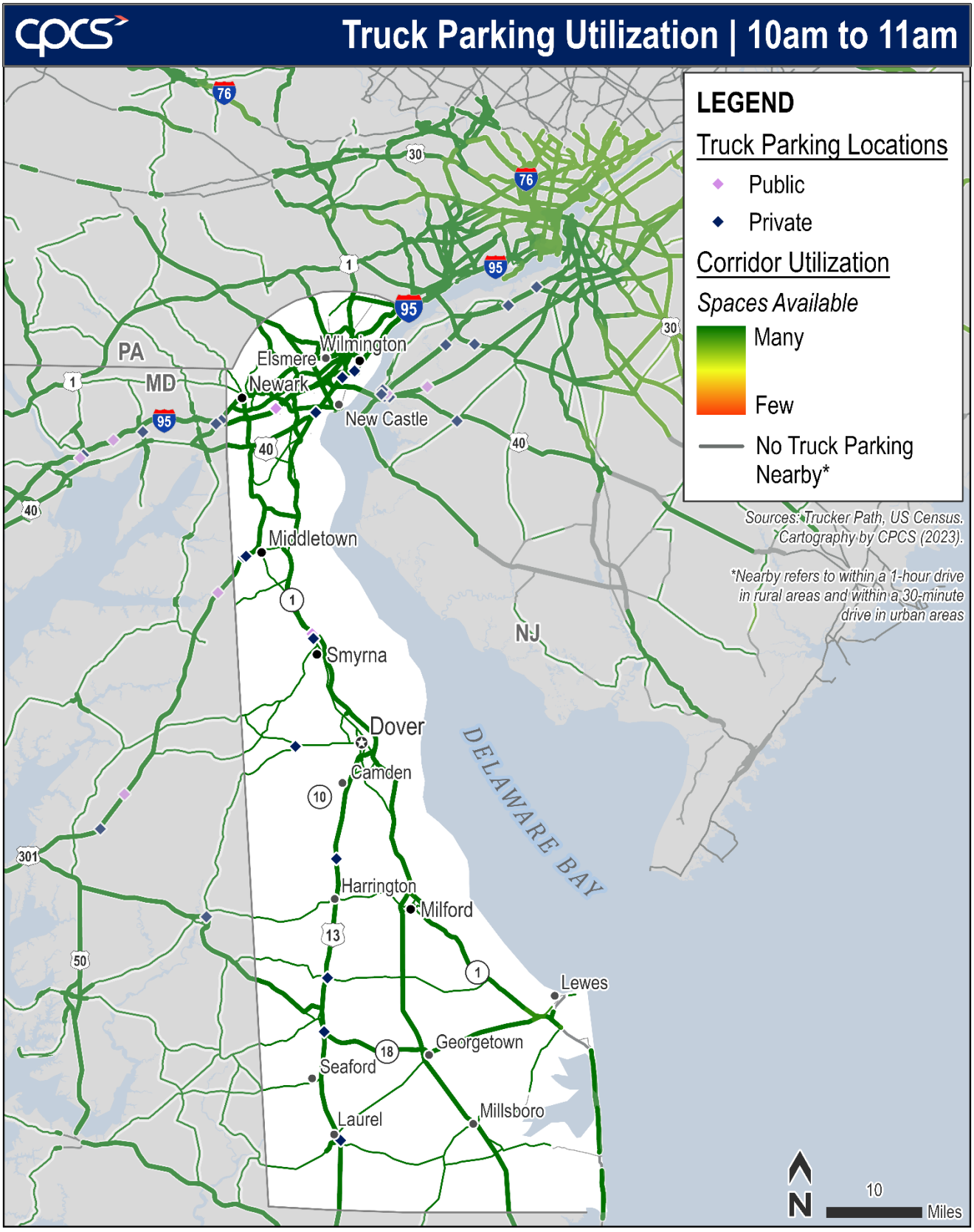


Figure 51: Truck Parking Utilization (2022) – 11 am to 12 pm

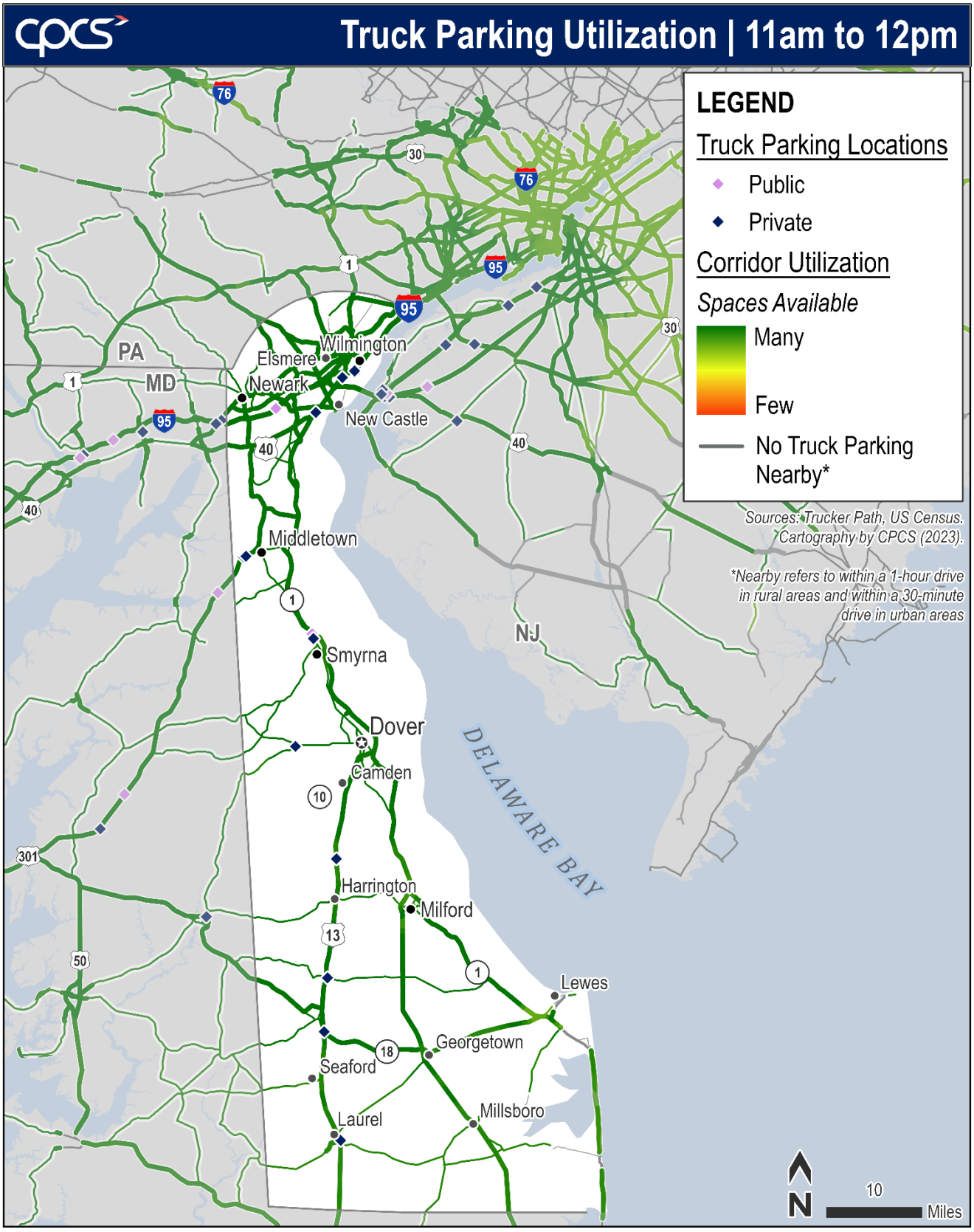


Figure 52: Truck Parking Utilization (2022) – 12 pm to 1 pm

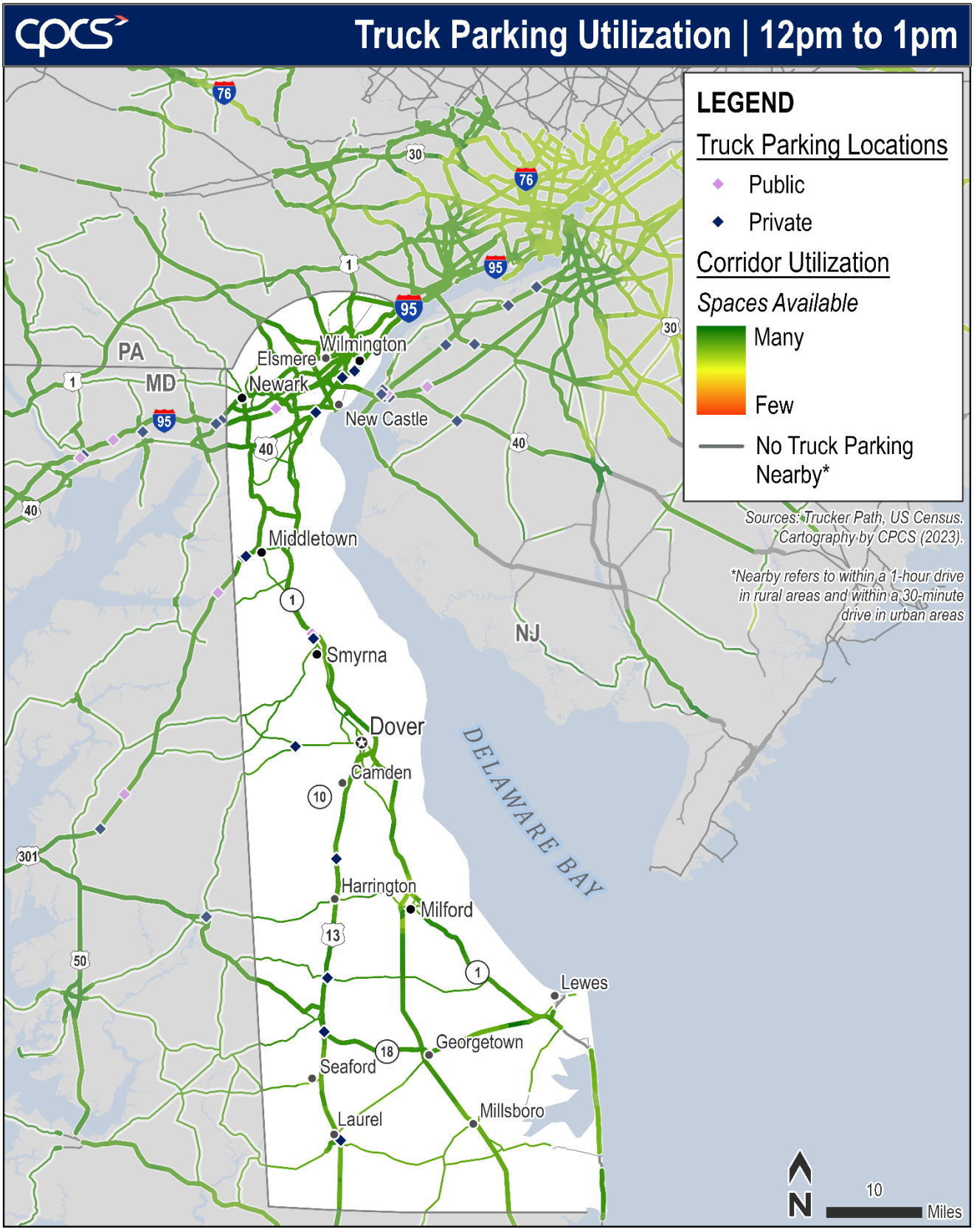


Figure 53: Truck Parking Utilization (2022) – 1 pm to 2 pm

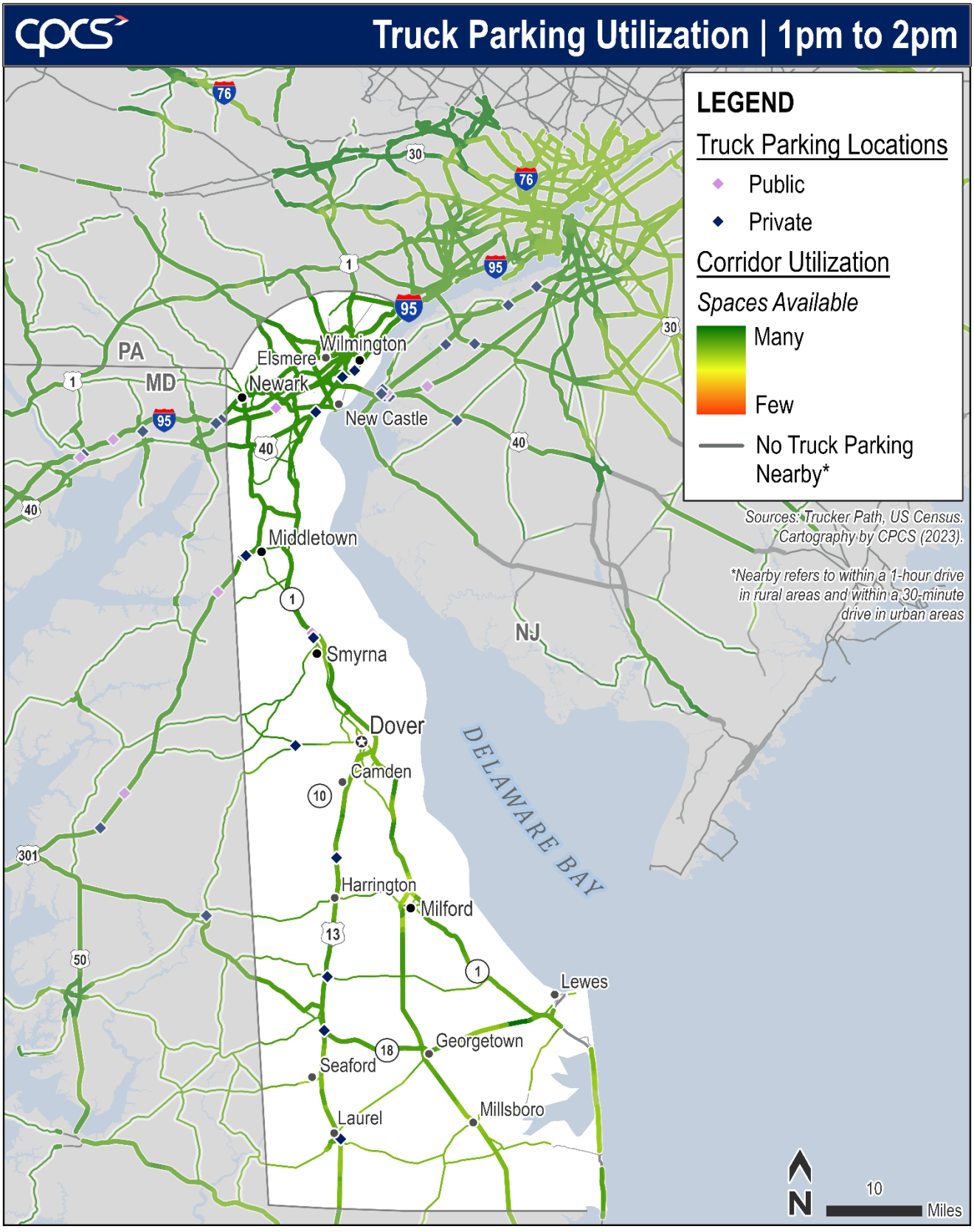


Figure 54: Truck Parking Utilization (2022) – 2 pm to 3 pm

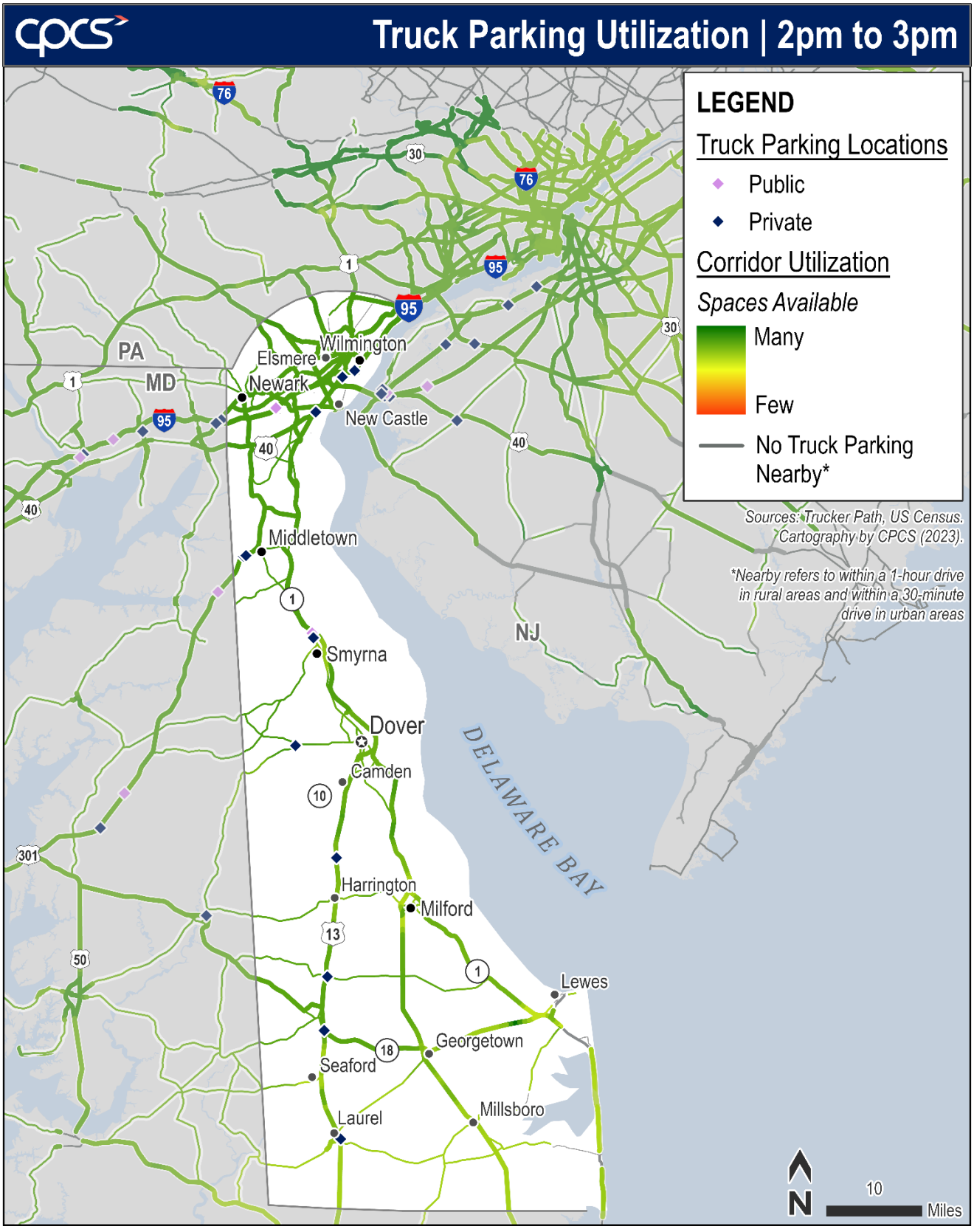


Figure 55: Truck Parking Utilization (2022) – 3 pm to 4 pm

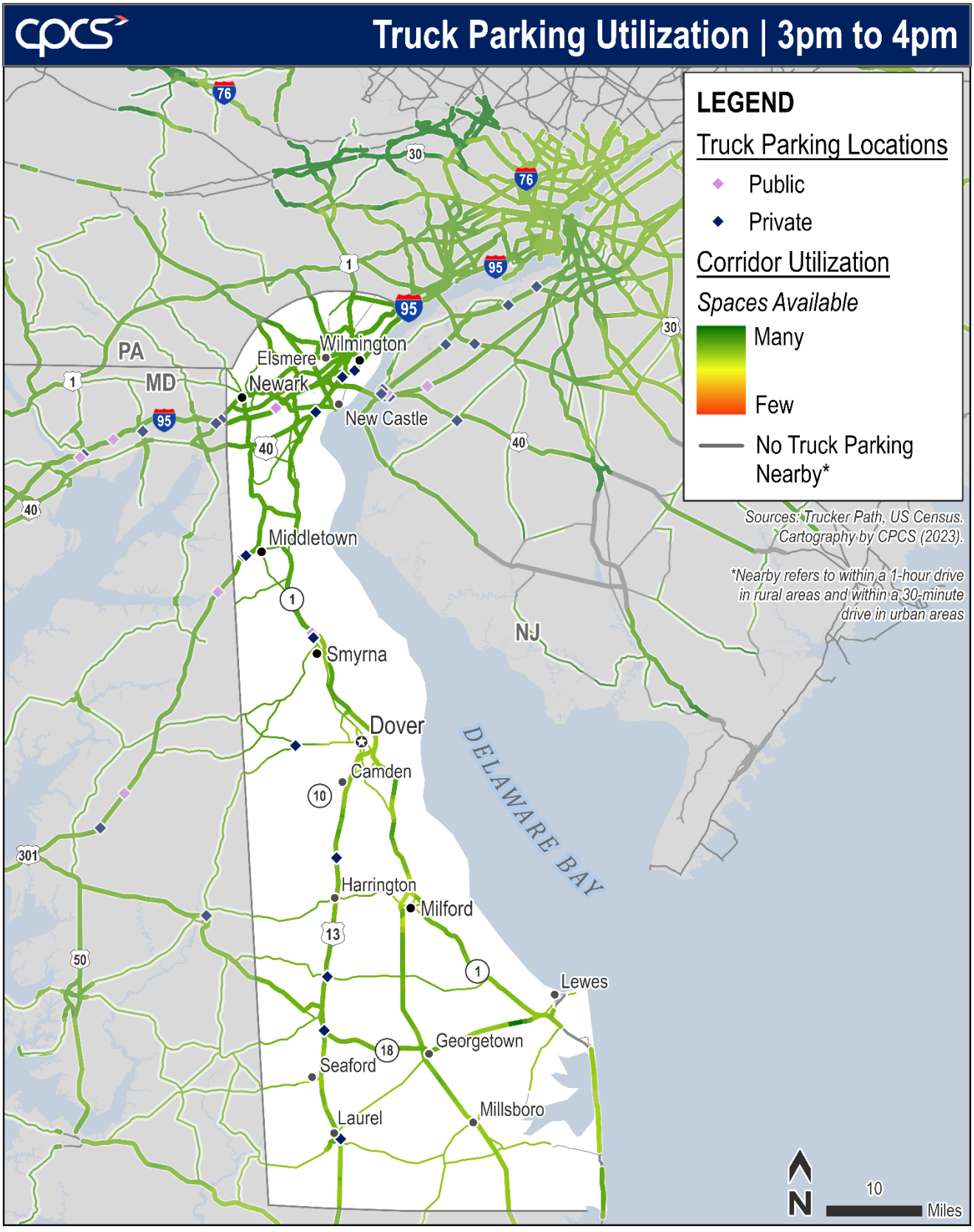


Figure 56: Truck Parking Utilization (2022) – 4 pm to 5 pm

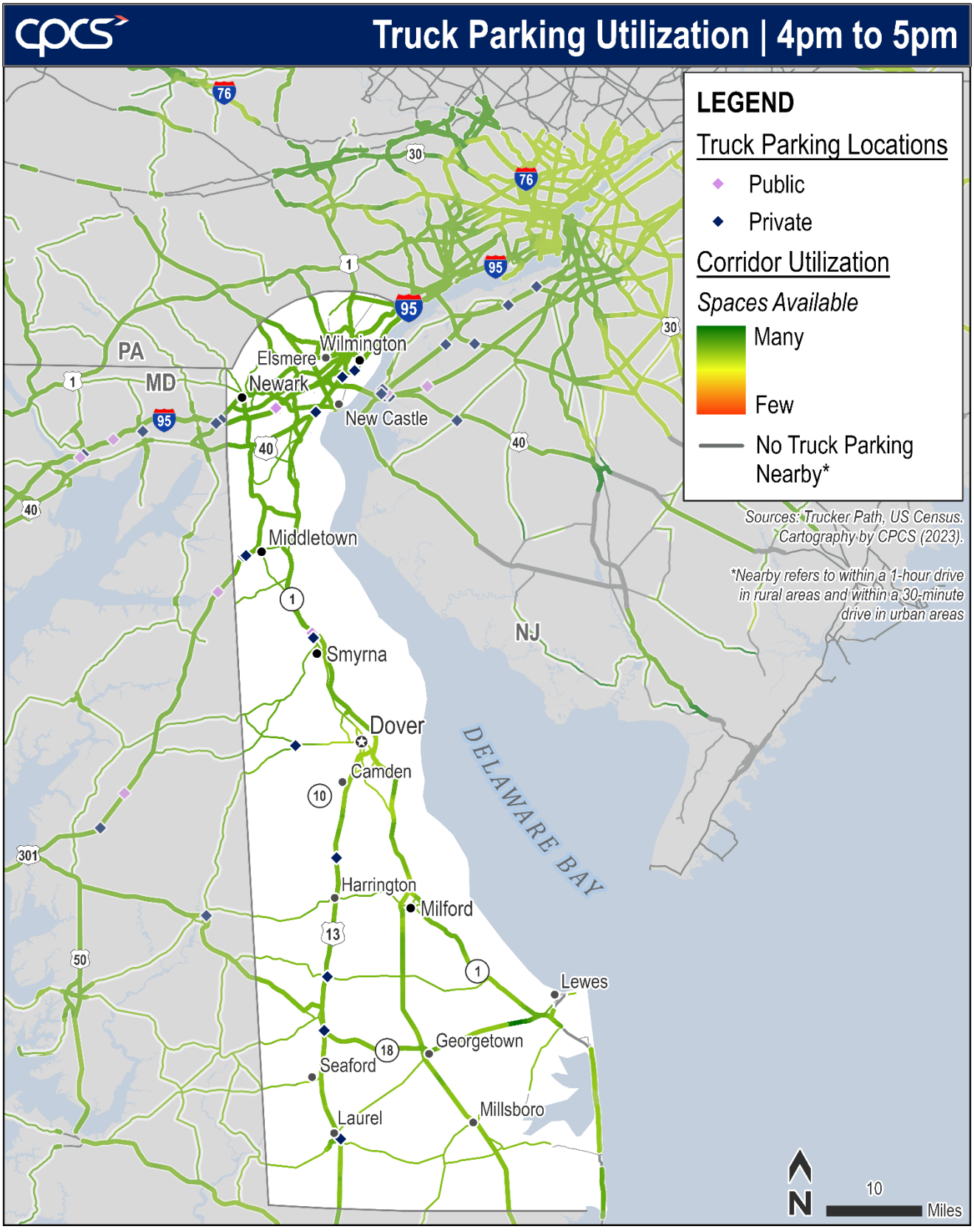


Figure 57: Truck Parking Utilization (2022) – 5 pm to 6 pm

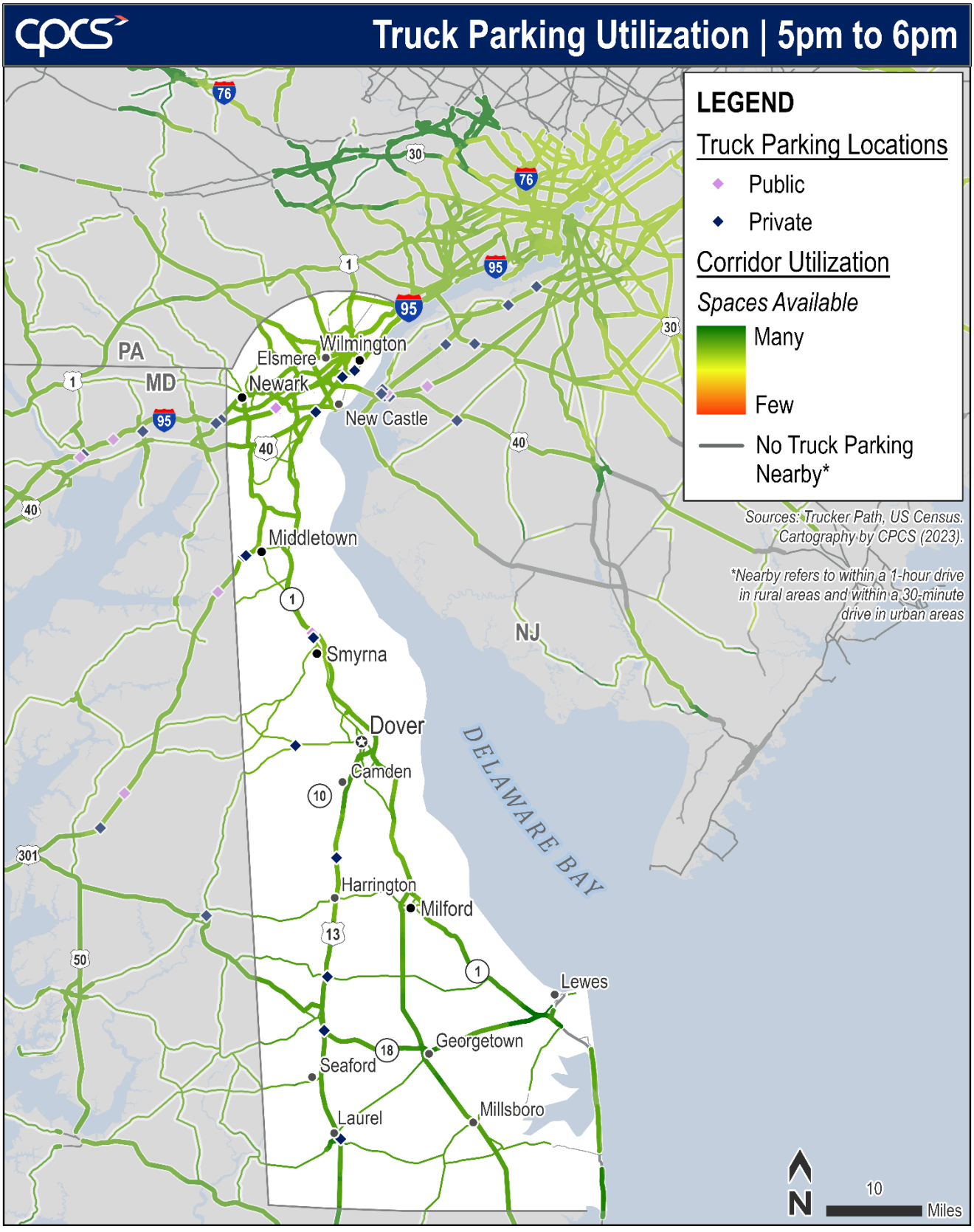


Figure 58: Truck Parking Utilization (2022) – 6 pm to 7 pm

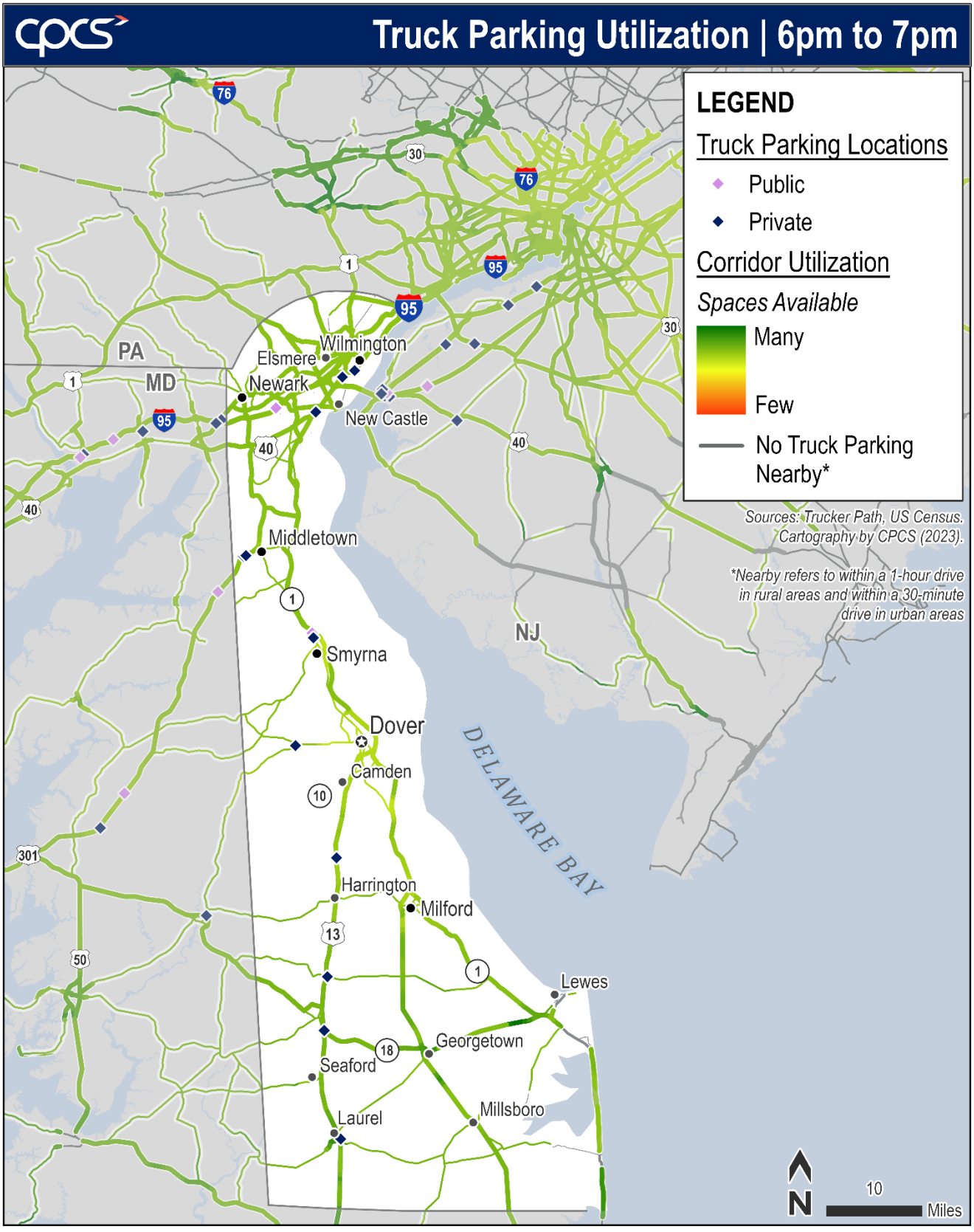


Figure 59: Truck Parking Utilization (2022) – 7 pm to 8 pm

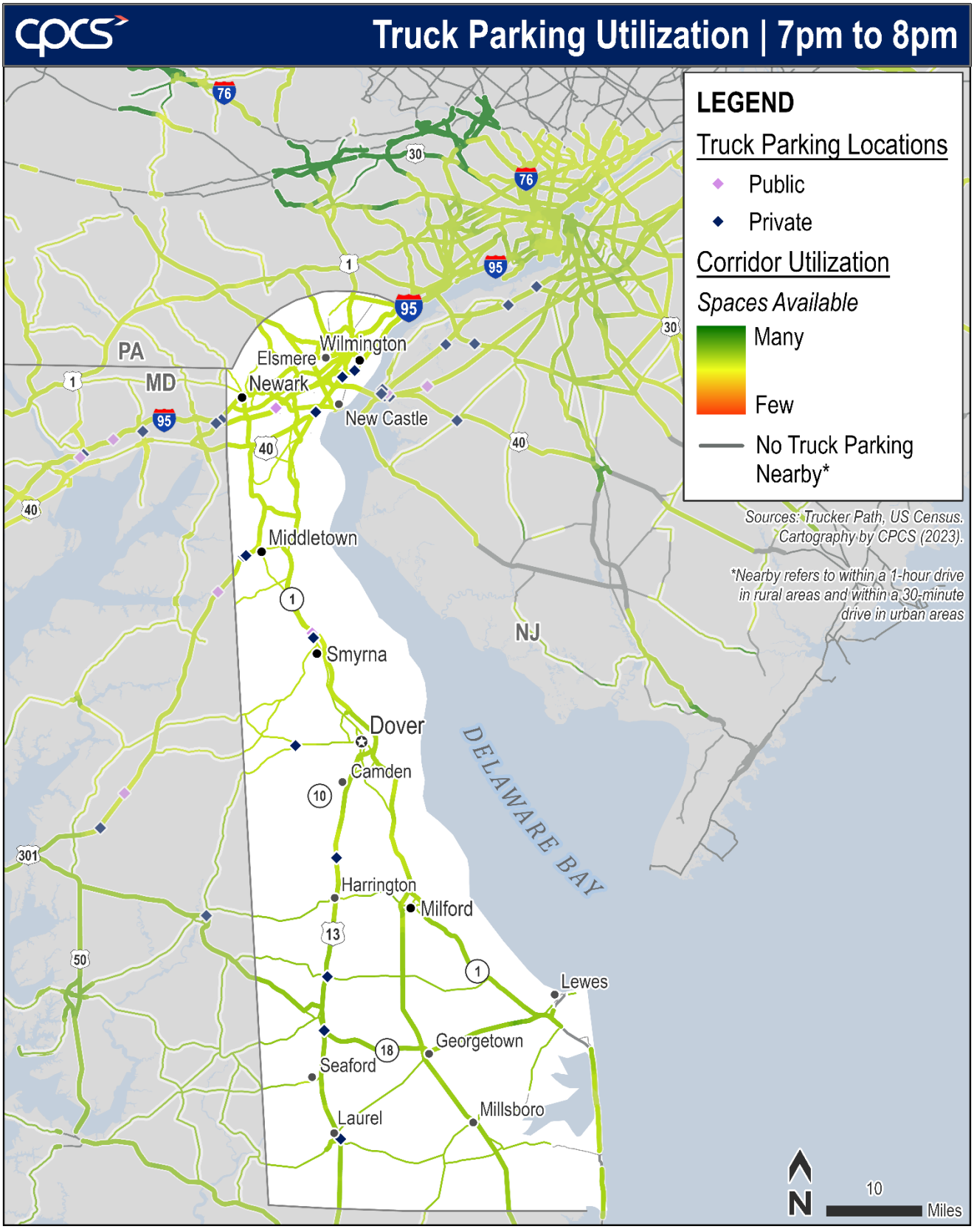


Figure 60: Truck Parking Utilization (2022) – 8 pm to 9 pm

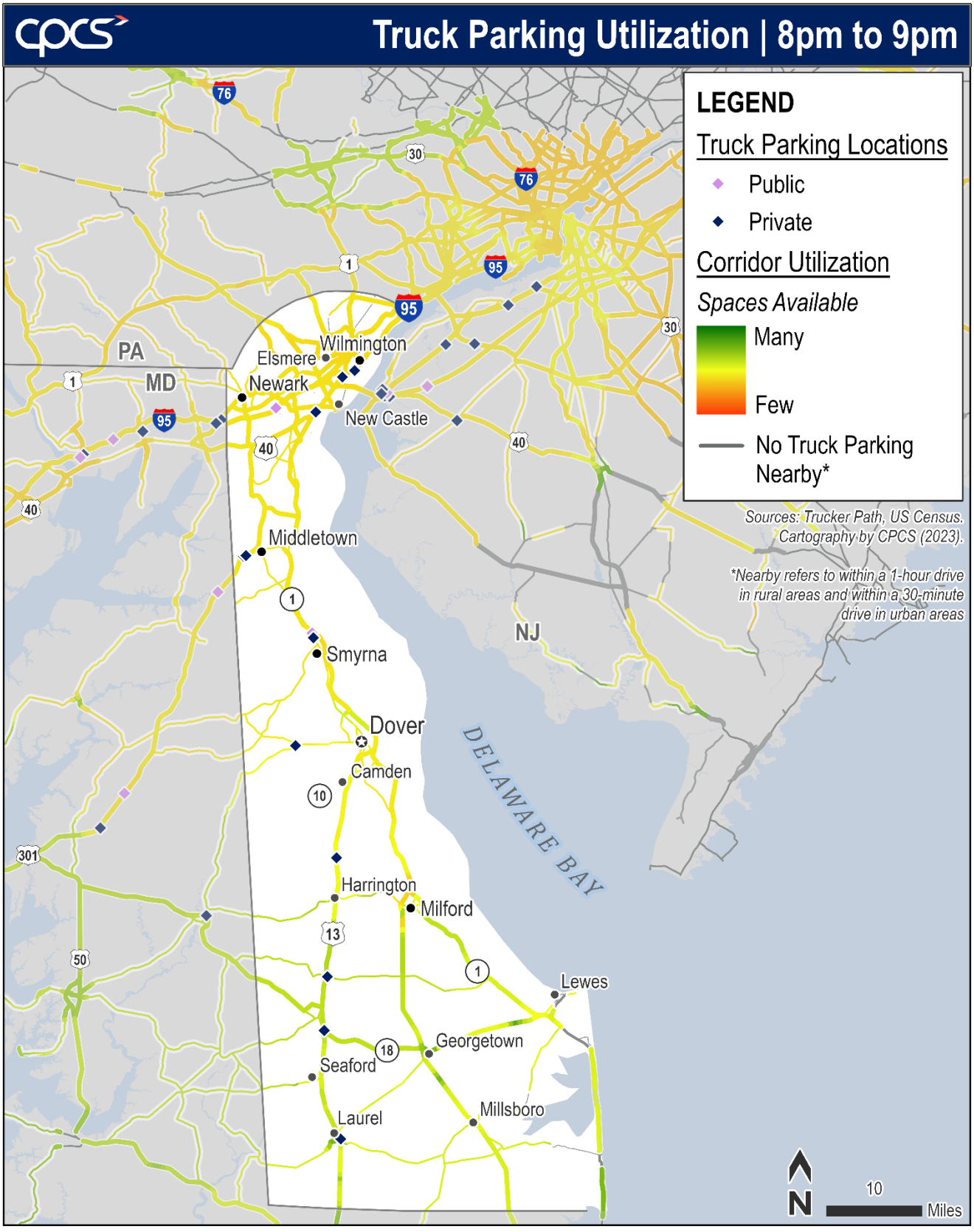


Figure 61: Truck Parking Utilization (2022) – 9 pm to 10 pm

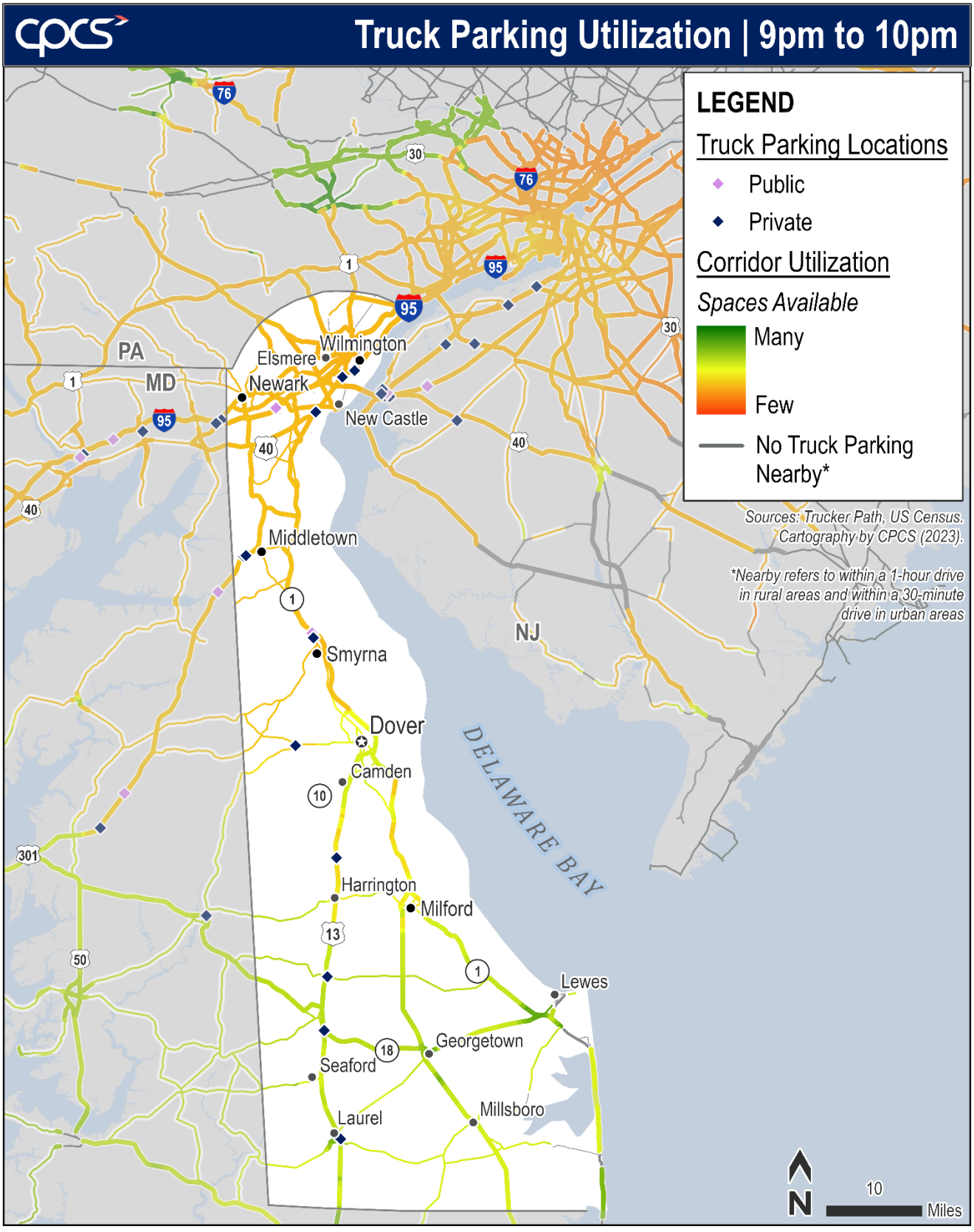


Figure 62: Truck Parking Utilization (2022) – 10 pm to 11 pm

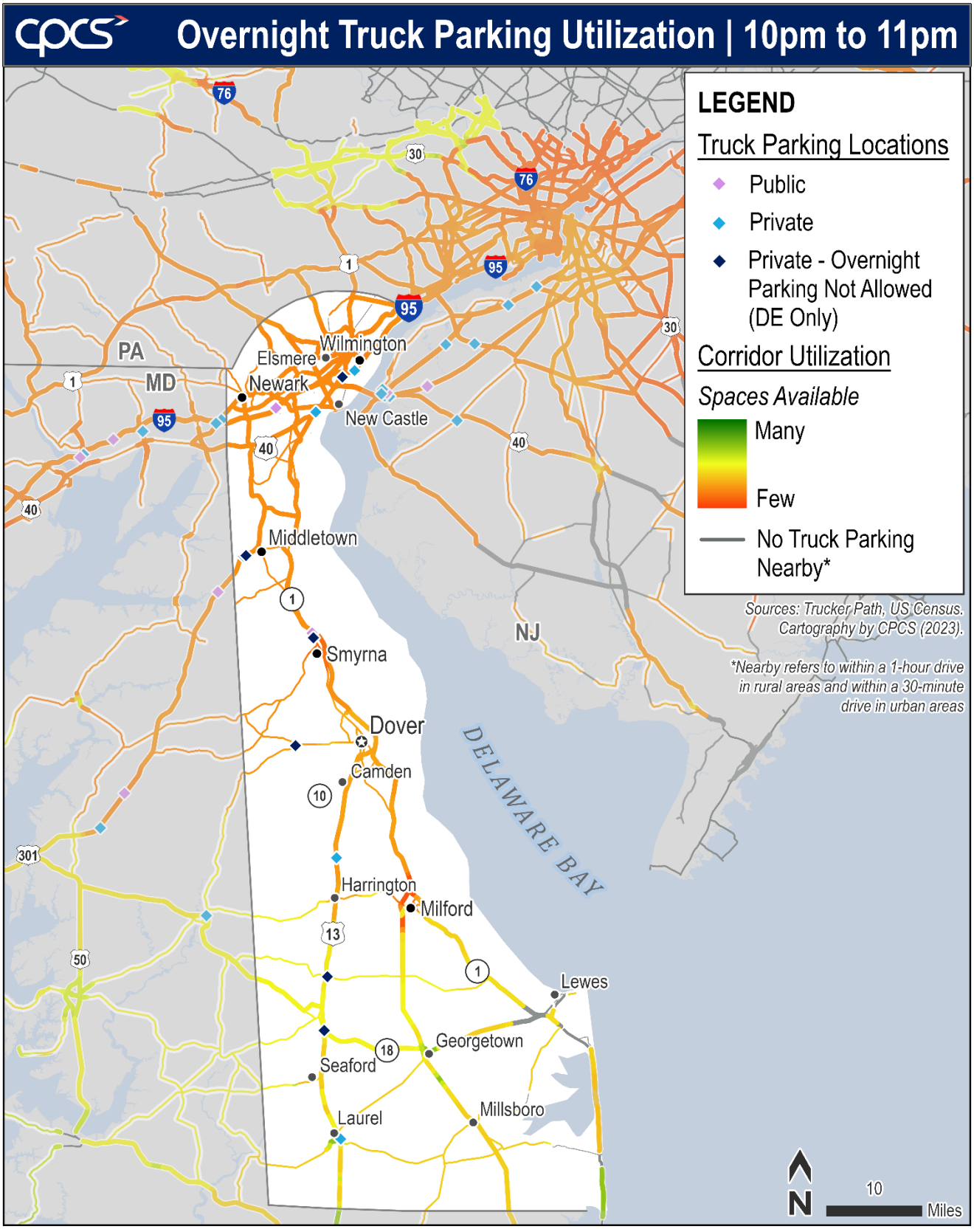


Figure 63: Truck Parking Utilization (2022) – 11 pm to 12 am