

Delaware Freight Purpose



The **overall purpose** of the Delaware Freight Plan is to compile goals, strategies, and planning-related action items that will help to maximize the efficiency and reliability of Delaware's current and projected freight transportation network to optimize safety, connectivity, and economic competitiveness.

The latest plan update is scheduled for completion in late 2022 and builds upon prior iterations of statewide freight planning completed by the Delaware Department of Transportation (DelDOT) and their metropolitan planning organization (MPO) partners in 2015 and 2017. Updates will include compliance with federal freight planning requirements per 29 U.S.C. §70202 of the 2017 *Fixing America's Surface Transportation Act* (FAST Act) and/or subsequent revisions that may be introduced by the pending 2021 *Infrastructure Investment and Jobs Act*.

Delaware Freight Goals

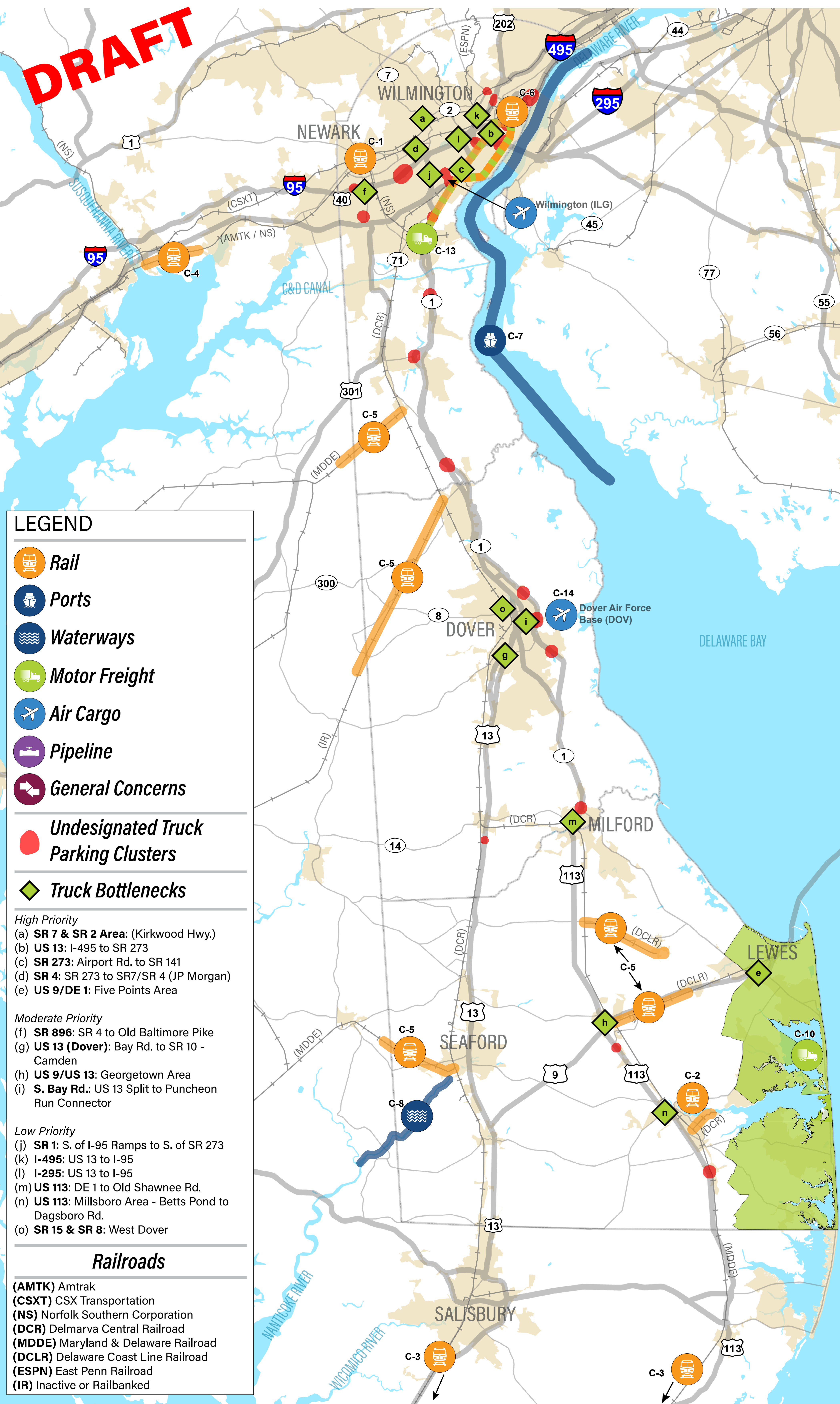
Overarching **freight goals** for the State of Delaware (referenced in the tables on the following pages) currently include the following:

Icon	Goal	Table Abbreviation
	Safety and Security	S&S
	Economic Vitality	Econ
	Freight Connectivity, Mobility, and Accessibility	CMA
	System Management, Operations, and Maintenance	O&M
	Resilience, Sustainability, and Environmental Stewardship	RSE

Summary Freight Needs

Potential **freight needs** in Delaware are summarized on the following pages (and corresponding maps) in terms of **areas of concern** and **areas of opportunity**, with each issue tagged to its potential influence on the overarching freight goals listed above, including both primary (P) and secondary (*) influences.

DELAWARE FREIGHT Areas of Concern



LEGEND

Rail

Ports

Waterways

Motor Freight

Air Cargo

Pipeline

General Concerns

Undesignated Truck Parking Clusters

Truck Bottlenecks

- High Priority
- (a) SR 7 & SR 2 Area: (Kirkwood Hwy.)
- (b) US 13: I-495 to SR 273
- (c) SR 273: Airport Rd. to SR 141
- (d) SR 4: SR 273 to SR7/SR 4 (JP Morgan)
- (e) US 9/DE 1: Five Points Area
- Moderate Priority
- (f) SR 896: SR 4 to Old Baltimore Pike
- (g) US 13 (Dover): Bay Rd. to SR 10 - Camden
- (h) US 9/US 13: Georgetown Area
- (i) S. Bay Rd.: US 13 Split to Puncheon Run Connector
- Low Priority
- (j) SR 1: S. of I-95 Ramps to S. of SR 273
- (k) I-495: US 13 to I-95
- (l) I-295: US 13 to I-95
- (m) US 113: DE 1 to Old Shawnee Rd.
- (n) US 113: Millsboro Area - Betts Pond to Dagsboro Rd.
- (o) SR 15 & SR 8: West Dover

Railroads

(AMTK) Amtrak

(CSXT) CSX Transportation

(NS) Norfolk Southern Corporation

(DCR) Delmarva Central Railroad

(MDDE) Maryland & Delaware Railroad

(DCLR) Delaware Coast Line Railroad

(ESPN) East Penn Railroad

(IR) Inactive or Railbanked

Rail

C-1 - Rail Crossing Safety

C-2 - Short Line Markets (Indian River)

C-3 - Short Line Markets (South)

C-4 - Class I Rail Access

C-5 - Short Line Rail Preservation

C-6 - Rail System Resilience

Ports and Waterways

C-7 - Port Traffic Impacts

C-8 - Dredging Program Management

Motor Freight

C-9 - Truck Parking (see legend)

C-10 - Seasonal Congestion

C-11 - Truck Bottlenecks (see legend)

C-12 - Truck Routing (not mapped)

C-13 - Highway System Resilience

Air Cargo

C-14 - Air Cargo Access

General Concerns (not mapped)

C-15 - Cybersecurity

C-16 - Fuel and Shipping Costs











C-17 - Warehousing and Distribution Trends















C-18 - Land Use Planning

Freight Areas of Concern

See Areas of Concern Map for Index Locations C-1 through C-18

Freight **areas of concern** reflect mode-specific issues, needs, or uncertainties surrounding freight movements or freight hubs, specific components of the freight transportation infrastructure, or freight related trends or policies.

Rail		 S&S	 Econ	 CMA	 O&M	 RSE
C-1	Rail Crossing Safety Vehicle and pedestrian conflicts at rail crossing locations (e.g., through the City of Newark)	P			*	*
C-2	Short Line Rail Markets (Indian River) Indian River Secondary operations and the direct impact of potential coal freight reductions		P	*	*	*
C-3	Short Line Rail Markets (South) Preservation of rail markets south of Delaware, especially with the ending of operations for Bay Coast Railroad (BCR) and a loss of system connectivity with closure of the Cape Charles Rail Car Float		*	P	*	*
C-4	Class I Rail Access NEC freight delays and access constraints to the Delmarva Peninsula. Chesapeake Connector project emphasis and potential benefits	*	*	P	*	*
C-5	Short Line Rail Preservation Preservation of short line rail assets and service	*	*	*	P	*
C-6	Rail System Resilience Impacts of sea-level rise on existing rail lines, especially in/around the City of Wilmington	*		*	*	P
Ports and Waterways		 S&S	 Econ	 CMA	 O&M	 RSE
C-7	Port Traffic Impacts Effect of Post-Panamax traffic and Delaware River Main Channel Deepening on freight volumes. Additional container traffic with future port expansion (e.g. at Edgemoor, DE or around Philadelphia, PA)		P	*	*	
C-8	Dredging Program Management Dredging for continued river access (e.g. the Nanticoke) and identification of suitable sites for excess dredge materials		*	*	P	*

Motor Freight		 S&S	 Econ	 CMA	 O&M	 RSE
C-9	Truck Parking Overnight truck parking in undesignated areas, as detailed in the 2021 <i>Statewide Truck Parking Study</i>	P	*		P	*
C-10	Seasonal Congestion Seasonal or tourist-based congestion and related conflicts with (or impacts to) freight traffic, particularly with population growth in Southern Delaware	*	*		P	*
C-11	Truck Bottlenecks Congestion and delays that significantly affect freight mobility and reliability, including findings from the 2018 and 2020 <i>Truck Bottlenecks Identification</i> efforts	*	*		P	*
C-12	Truck Routing Areawide truck routing/information needs/issues, both physical and digital	*		*	P	
C-13	Highway System Resilience Impacts of sea-level rise on the existing roadway system, especially along several final-mile delivery segments near the coastline and in/around the City of Wilmington	*		*	*	P
Air Cargo		 S&S	 Econ	 CMA	 O&M	 RSE
C-14	Air Cargo Access Truck impacts to local roads serving Garrison Oak and the Central Delaware Aviation Complex (CDAC)	*	*	P		
General Concerns		 S&S	 Econ	 CMA	 O&M	 RSE
C-15	Cybersecurity Cybersecurity within the supply chain and potential ripple effects on various transportation modes (e.g. as influenced by recent examples of cyber-attacks), particularly with expansion of future freight technologies	P	*		*	
C-16	Fuel and Shipping Costs With 75% of goods moving in Delaware via trucks, rising fuel prices cause increased shipping costs resulting in higher costs for goods		P		*	
C-17	Warehousing and Distribution Trends Impacts of e-commerce expansion and related demands on the road network, final-mile network, and in the area of new distribution facilities (e.g. Amazon in Seaford, DE)		P	*	P	*
C-18	Land Use Planning Enhance efforts to identify and reduce or manage the potential impacts of freight facility expansion (and any related negative public perceptions) beginning in the earliest phases of land use planning		P	*	*	P

DELAWARE FREIGHT Areas of Opportunity



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Rail

O-1 - Short Line Rail Markets

O-2 - Rail Accessible Property

Ports and Waterways

O-3 - Port Expansion

O-4 - Port Specialty Freight

Motor Freight

O-5 - Truck Parking Expansion

O-6 - CAV Technology (not mapped)

O-7 - East/West Connectivity

O-8 - Port Access Improvements

O-9 - Real-Time Information Systems (not mapped)

Air Cargo

O-10 - UAV Technology (not mapped)

O-11 - Air Cargo Operations

Pipeline

O-12 - Oil/Shale Markets

General Concerns

O-13 - Warehouse and Distribution Expansion
















O-14 - Specialty Industry Sectors





















O-15 - Connectivity for Freight Intensive Sectors (not mapped)

Freight Areas of Opportunity (O)

See Areas of Opportunity Map for Index Locations O-1 through O-15

Freight **areas of opportunity** reflect business and industry issues or other economic development trends. Opportunities also capture places where improvements to the transportation network can foster this growth while balancing other needs or concerns.

Rail		 S&S	 Econ	 CMA	 O&M	 RSE
O-1	Short Line Rail Markets Facilitate continued growth in businesses using rail along the Delmarva Secondary, with potential benefits including reduced truck volumes, less congestion, lower road maintenance costs, and system redundancy		P	*	*	*
O-2	Rail Accessible Property Leverage the 2018 <i>Rail Freight Zoning Study</i> and its inventory of properties with zoning suitable for future commercial, manufacturing, or industrial sites that could promote/support economic growth		P	*		
Ports and Waterways		 S&S	 Econ	 CMA	 O&M	 RSE
O-3	Port Expansion Leverage expansion of the Port of Wilmington in Edgemoor (first phase of operation planned for 2023)		P	*	*	*
O-4	Port Specialty Freight Consider use of Big Stone Anchorage to support offshore wind development component staging, assembly, and float-out capabilities		*	P	*	*
Motor Freight		 S&S	 Econ	 CMA	 O&M	 RSE
O-5	Truck Parking Expansion Advance truck parking facilities recommended in the 2021 <i>Delaware Statewide Truck Parking Study</i>	P	*	P	*	*
O-6	CAV Technology Plan for connected and automated vehicle (CAV) technology, including infrastructure development to facilitate Level 4 autonomy (i.e., trucks operating without a human driver under limited conditions)	P			P	
O-7	East/West Connectivity Leverage ongoing studies to improve east/west connections between Kent County, DE, and US 301 in Maryland (e.g. Routes 300, 8, 44, 11, 42, and/or 14)	*	*	P	*	*
O-8	Port Access Improvements Advance recommendations from the <i>Truck Access Improvements in the Port of Wilmington Area</i> study		*	P	*	*

Motor Freight (Continued)		 S&S	 Econ	 CMA	 O&M	 RSE
O-9	Real-Time Information Systems Continue planning and application of DelDOT's Truck Parking Information and Work Zone & Incident Communications Systems to provide drivers information in a safe and non-intrusive manner	*			P	
Air Cargo		 S&S	 Econ	 CMA	 O&M	 RSE
O-10	UAV Technology Prepare for emergence of unmanned aerial vehicles (UAVs or drones), including collaboration with logistic companies and key Delaware industries (e.g. pharmaceuticals) to move low-weight/high-value deliveries	*	*	P	*	*
O-11	Air Cargo Operations Leverage recommendations, truck connections, and opportunities from the <i>Dover Air Cargo Freight Access Study</i> to support growth at Garrison Oak and the Central Delaware Aviation Complex (CDAC)	*	*	P	*	*
Pipeline		 S&S	 Econ	 CMA	 O&M	 RSE
O-12	Oil/Shale Markets Leverage the potential for export of oil/shale products domestically or internationally via expanded regional refinery and pipeline operations		P	*		
General Opportunities		 S&S	 Econ	 CMA	 O&M	 RSE
O-13	Warehouse and Distribution Expansion Leverage potential regional hubs for warehouse/distribution expansion, such as Seaford, DE		P	*	*	*
O-14	Specialty Industry Sectors Leverage opportunities related to specialty industry sectors such as space/aerospace and related technology influences linked with NASA Wallops Flight Facility		P	*	*	
O-15	Connectivity for Freight Intensive Sectors Emphasize freight connectivity for areas/industries in Freight Intensive Sectors (FIS) (40% of all employment in Delaware) that are highly dependent on goods movement for marketplace competitiveness		*	P	*	