



# Freight & Logistics

NCDOT is a part of your supply chain.

## Cost of Congestion & Key Freight Bottlenecks — October 2022 Recap

Delay and congestion cost commercial industry millions of dollars each year. This cost eventually becomes a burden on the sustainability of the freight transportation sector, and the cost of goods and services for the end-consumer. This can be as straightforward as friction between volume and capacity, but freight congestion can also represent the challenge of reconciling network functionality with economic behavior.

### NCDOT RAIL DIVISION FREIGHT & LOGISTICS PROGRAM

The key NCDOT resource for supply chain, freight, and logistics-related issues, analysis, subject-matter expertise, related projects, and relevant initiatives.

### MULTIMODAL FOCUS

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- Aviation
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- Bike/ Pedestrian
- Ferry
- Pipelines
- Information/ Data

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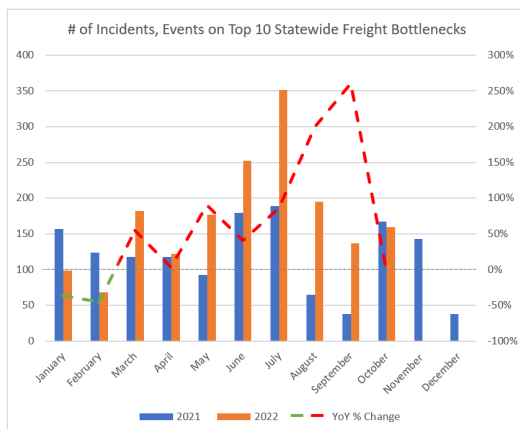
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Performance Measure	Sep-22	% CHANGE	Oct-22	% CHANGE
NCPFN System Total Commercial Cost of Delay	\$ 131,950,942	-1.7%	\$ 134,762,400	2.1%
NCPFN System Commercial Average Daily Cost per VMT	\$ 0.30	3.4%	\$ 0.30	0.0%
Commercial VMT on the NCPFN System	440,717,285	-4.8%	449,816,861	2.1%
NCPFN System Com. Vehicle-hours of Delay (#Hours)	1,313,076	-1.7%	1,341,053	2.1%
<i>NPMRDS Network Analysis</i>				
Top 10 Bottlenecks Total Cost of Delay	\$ 5,732,027	-2.2%	\$ 6,290,176	9.7%
Top 10 Bottlenecks % of Total Cost	4.34%	-0.5%	4.67%	7.4%
Top 10 Bottlenecks Average Daily Total Cost of Delay	\$ 191,068	1.0%	\$ 202,909	6.2%
Commercial VMT on Top 10 Bottlenecks NCPFN System	15,593,871	24.2%	16,475,764	5.7%
Top 10 Bottlenecks Cost per VMT	\$ 0.37	-21.3%	\$ 0.38	2.7%

Rank	Previous Rank	October 2022 Bottleneck Locations	Average Daily Delay*	Events or Incidents	Division
1	2	I-26 West at NC-146 Exit 37 south of Asheville	4 h 44 m	48	13
2	1	I-40 East at US-70, Exit 306 between Garner and Clayton	2 h 32 m	20	5
3	3	I-485 East at NC-16, Providence Road, Exit 57 in Charlotte	1 h 56 m	12	10
4	9	I-40 West at US-15/US-501 between Durham and Chapel Hill	2 h 26 m	10	5
5	5	I-85 North at NC-7, Exit 23 east of Gastonia	1 h 36 m	10	12
6	15	NC-27 West at US-74 in Charlotte	1 h 4 m	1	10
7	28	I-40 East at US-70, Exit 309 near New Bethel Church Road	57 m	28	5
8	53	I-77 North at Gilead Road, Exit 23 in Huntersville	4 h 38 m	10	10
9	17	I-85 South at NC-7 between Belmont and Mt. Holly	34 m	11	10
10	20	I-85 South at Exit 26 in Belmont	43 m	9	10

\* hours per day in which congestion was present

In October 2022, the Statewide Priority Highway Freight Network experienced an across-the-board increase in congestion with total commercial congestion costs increasing by 2.13% to \$134.76M, as well as a corresponding 2.06% increase in overall commercial vehicle miles traveled on the network during the month to just shy of 450M miles. October's increase in overall congestion costs, VMT on the network, and total vehicle hours of delay on both the full network and across October's top 10 bottlenecks represents the first time in 2022 congestion has swept the network across all categories. Incidents and events were an increasing factor for congestion in October experiencing a 14% increase in the number of incidents and events within the top 10 freight bottlenecks over September's figures while the October count is a 5% decline YOY from the same month in 2021. In general incidents and events have been a bigger factor in 2022 versus 2021 by more than 43% on average YOY.

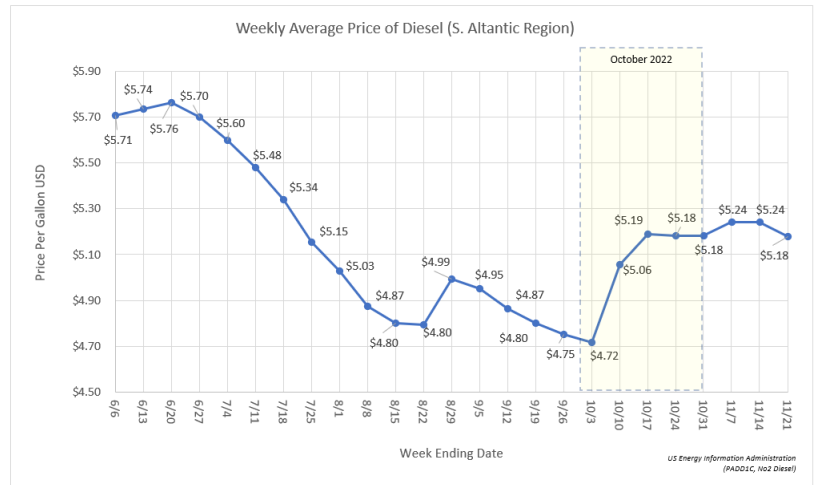


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## Cost of Congestion & Key Freight Bottlenecks, *continued*

The top 10 freight bottlenecks in October accounted for \$6.29M in congestion costs, a 9.7% increase over September with nearly all of the high ranking sites falling within urban or suburban environments where freight volumes are higher. Overall VMT on top 10 bottlenecks increased by 5.7% in October, the highest monthly total of the year and more than 145% of the YTD average. Despite this, October 2022 figures represent a 7% improvement in congestion costs over October 2021. With rising congestion costs and an upward trajectory on VMT on the network, freight costs were further compounded with the rising price of diesel fuel. October witnessed the most significant increase in diesel fuel prices since February although by mid-October, prices across the lower Atlantic region had stabilized around \$5.18 per gallon.



### NCDOT Statewide Freight Advisory Committee visits NCGTP:

In November, members and friends of the Statewide Freight Advisory Committee enjoyed a briefing and tour of the North Carolina Global Transport Park in Kinston. An overview was provided by NCGTP Executive Director Preston Hunter highlighting the numerous positive developments at this unique multimodal and aviation facility, followed by a guided tour of NCGTP and several site tenants including [Lenoir Community College's Aerospace & Advanced Manufacturing Center](#), [Fly Exclusive](#), [FRC East](#), and [Draken](#) where this group photo was taken.

## Key Supply Chain Issues Facing North Carolina

**Congress steps in to avert rail strike, labor lockout:** After three years of contentious negotiations, proactive intervention from a Presidential Emergency Board, and significantly increased public and political awareness about the possibility of a lockout or strike, it has taken Congressional action to bring the two sides to agreement and prevent a potentially-significant national supply chain disruption. Leveraging the authority of the Railway Labor Act of 1926, Congress passed legislation on December 1st approving a final contract between the freight railroads and labor unions representing more than 115,000 rail workers across the US. Previously, the agreement had been rejected by four of the 12 freight rail unions with those organizations in dissent representing a combined membership of nearly 60,000 workers. While the agreement provided a historic wage increase and protected health benefits, a key issue at the center of negotiations was paid sick leave for railroad workers. Earlier this week, on Wednesday, November 30, the House voted 290 to 137 to ratify the labor contract with bipartisan support, and also passed further legislation providing paid sick leave to rail workers albeit by a closer vote margin 221 to 207. On Thursday, December 1, the Senate took up both measures and voted 80-15 to approve the formal contract, yet rejected the proposal to amend the agreement to include paid sick leave for workers by a margin of 52-43. President Biden signed the law on Friday, November 2 and said the bill, "ends a difficult rail dispute and helps our nation avoid what without a doubt would have been an economic catastrophe at a very bad time in the calendar. Our nation's rail system is literally the backbone of our supply chain. So much of what we rely on is delivered on a rail, from clean water, to food, and gas and every other good. A rail shutdown would devastate our economy." With his signature, the threat of a legal strike is no longer valid and any stoppage of work or any workers' labor action or stoppage without union leadership authorization or approval would be considered a *wildcat strike*. This would be met by significant pressure from the federal government and freight railroads to return to work most likely including judicial injunctions, heavy fines to the unions, and possible termination for those workers participating. Some high profile examples of a wildcat strike include the 1981 federal air traffic controllers strike in which President Reagan fired more than 11,000 federal workers who went on strike; the largest wildcat strike in US history, the US Postal Strike of 1970 in which President Nixon eventually engaged the National Guard; or a more recent local example, the Freightliner strike in 2007 at a Rowan County, North Carolina manufacturing facility by United Auto Workers was opposed by UAW international.