



Freight & Logistics

NCDOT is a part of your supply chain.

Cost of Congestion & Key Freight Bottlenecks — February 2023 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.

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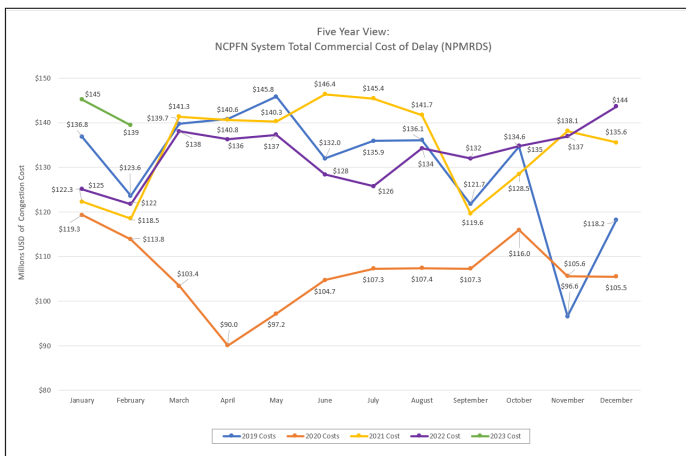
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Performance Measure	Jan-23	% CHANGE (MoM)	% CHANGE (YoY)	Feb-23	% CHANGE (MoM)	% CHANGE (YoY)
NCPFN System Total Commercial Cost of Delay	\$ 145,167,319	1.1%	16.0%	\$ 139,465,854	-3.9%	14.5%
NCPFN System Commercial Average Daily Cost per VMT	\$ 0.28	-6.7%	3.7%	\$ 0.29	3.6%	3.6%
Commercial VMT on the NCPFN System	520,455,961	9.7%	10.7%	480,322,473	-7.7%	9.0%
NCPFN System Com. Vehicle-hours of Delay (#Hours)	1,444,595	1.1%	16.0%	1,387,858	-3.9%	14.5%

Rank	Previous Rank†	Top Freight Bottleneck Locations - October 1, 2022 - March 31, 2023	Average Daily Delay*	Division
1	1	I-40 East at US-70, Exit 306 between Garner and Clayton	2 h 23 m	5
2	2	I-77 South at Nations Ford Road, Exit 4 in south Charlotte	1 h 35 m	10
3	3	I-40 West at US-276, Exit 20 between Clyde & Waterville Lake	3 h 41 m	13
4	38	I-77 South at Remount Rd, Exit 8 in Charlotte	3 h 30 m	10
5	4	I-26 West at NC-146 Exit 37 south of Asheville	2 h 27 m	10
6	5	I-85 South at NC-273, Exit 27 between Charlotte and Belmont	1 h 8 m	10
7	6	I-485 East at NC-16, Providence Road, Exit 57 in Charlotte	1 h 33 m	10
8	8	I-77 North at Woodlawn Road, Exit 6 in Charlotte	54 m	10
9	7	NC-150 East at I-77 west of Mooresville	1 h 16 m	10
10	12	NC-27 West East Independence Blvd at US-74 in Charlotte	1 h	10

* hours per day in which congestion was present
 † Previous rank based on rolling six-month analysis



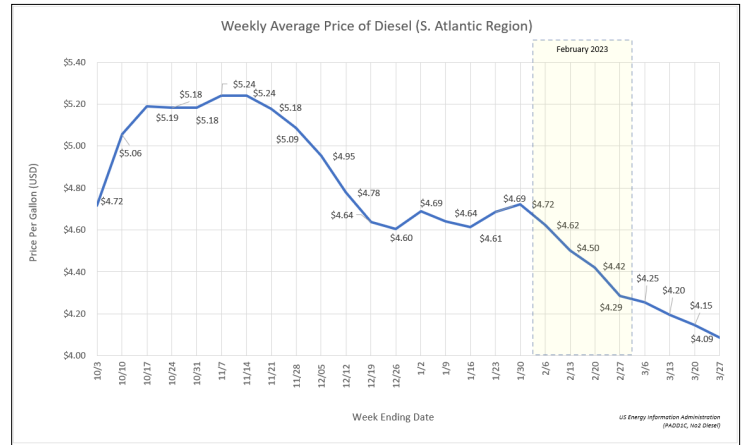
Congestion costs in February 2023 exceeded \$139.4M, but this was a month-over-month decline in overall congestion costs on the Statewide Priority Highway Freight Network. Despite a 3.9% decrease from January 2023, for the third month in a row February's congestion costs outpaced the same month last year, this time by nearly \$17.7M, an uptick of 14.5%. Although February represented a month over-month-decline, the first two months of this year's congestion costs have debuted higher than any of the previous five years, still \$15.4M more than the next highest value from 2019. Overall VMT on the network declined by 40.1M miles

or 7.7% to 480.3M miles travelled, yet this figure was 9% higher than February last year. February's Top Freight Network Bottleneck Top 10 analysis, based on a six-month rolling capture, continues to be dominated by urban congestion zones, however four of the top 10 bottlenecks moved down the ranking as I-77 South at Remount Road, Exit 8 in Charlotte made a big jump from 38th in the last six... *...continued on next page*



Cost of Congestion & Key Freight Bottlenecks, *continued*

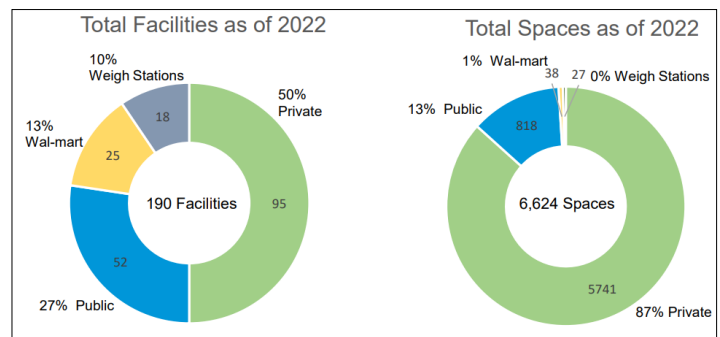
month period to 4th overall. However, the change in actual delay (hours/ minutes of average daily delay) for the four positive movers was minimal versus the previous period. The top 3 bottlenecks maintained their position, led by the high-volume Garner work zone. Overall, the Charlotte metropolitan area continues to experience the highest congestion delays on the state freight network while I-40 West at US-276 remains the only ranked rural bottleneck. Despite congestion and bottlenecks, positive movement in fuel prices helped to offset the impact for the trucking sector. For the third month in a row, diesel fuel prices in the region declined, reaching \$4.09 in the last week of March, their lowest point since last February's \$3.99/gallon. This trend continues an overall decrease in fuel costs since November 2022.



Key Supply Chain Issues Facing North Carolina

US West Coast maritime labor negotiations stall, raising concerns: Tensions between West Coast port labor and industry have increased as ongoing contract negotiations have stalled. Negotiations on a multiyear contract between the Pacific Maritime Association (PMA), the organization representing container lines and industry, and the International Longshore and Warehouse Union (ILWU) began in May 2022, yet no agreement has been reached. Workers continue working without a contract since the last industry/labor agreement expired in July 2022. The PMA represents nearly 30 ports from Washington to California and the ILWU represents more than 22,000 workers across a wide spectrum of maritime jobs. In recent developments, industry employers have accused labor of slowing handling of cargo at the Ports of Los Angeles and Long Beach (LA/LB) where previous high profile backlogs garnered national attention during the import surge of the late COVID-19 pandemic. Prior to these accusations, there had been no significant public posturing by either labor or industry. The recent issues involve lunch breaks which have stalled operations at ports for an hour each day. In the previous contract, employers were able to stagger lunch schedules to ensure uninterrupted cargo flow and limit delays. Without a contract and prior congestion, many import shippers began to divert freight to US East Coast and Gulf Coast ports. January's import volumes at LA/LB dropped to their lowest level since March 2020, a nearly 40% decrease YoY. The Biden administration has expressed concern over the maritime negotiations, having hoped for a resolution in fall of 2022. Beyond maritime, unionized labor is flexing its leverage and increased popular support. In the logistics space, ongoing negotiations between freight integrator and last-mile powerhouse UPS and the Teamster-unionized package delivery drivers and warehouse workers have gained national attention with much of the recent, heated discussion happening in the public arena. The outcome of negotiations between UPS and the Teamsters could impact more than 340,000 UPS workers—and millions of consumers—nationwide. The President recently appointed Teamsters general president Sean O'Brien to the White House's Advisory Committee for Trade Policy and Negotiations. In rail, following the late 2022 congressional action to facilitate a railroad labor agreement, the rail industry is facing sharp scrutiny since the East Palestine, Ohio derailment, and has by and large acquiesced to the sick leave demands of labor, an issue at the center of late 2022 negotiations.

Truck parking bill seeks to expand parking capacity, safety for truck driving sector: The issue of truck parking has been an industry top concern for more than a decade. In 2022, the American Transportation Research Institute ranked truck parking as its third highest of its "Critical Issues in the Trucking Industry" report. Recently, federal policymakers have targeted the significant challenge of limited or unsafe truck parking in bipartisan legislation, the *Truck Parking Safety Improvement Act*, introduced in March. Sponsored by Representatives Mike Bost (R-IL) and Angie Craig (D-MN), the bill creates federal funding of up to \$755M through competitive grants to expand truck parking capacity, and improve current parking areas. Senate leaders supporting the bill include Senators Cynthia Lummis (R-WY), Mark Kelly (D-AZ), and Jon Tester (D-MT). The proposed legislation has received the support of the American Trucking Association, as well as the Owner-Operator Independent Driver Association. Key elements of the bill aim to strengthen availability of parking facilities through development of new sites and improvements to existing sites. In North Carolina, demand for truck parking far exceeds current capacity. A 2022 analysis of truck parking during the update of the North Carolina State Freight Plan determined that 94% of the state's facilities were full on a nightly basis.



NC Truck Parking Facilities by Type 2022; NCDOT