SMC3

2025 NMFC Class Changes: Optimizing LTL Transportation Spend to Get Ahead

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Major changes coming to the NMFC in 2025

In 2025, the National Motor Freight Transportation Association (NMFTA) will make major changes to the National Motor Freight Classification (NMFC). The updates will affect how LTL is priced, potentially impacting the cost of LTL transportation for thousands of commodities.

These sweeping updates have prompted many shippers and logistics service providers to ask what it will mean for them and their LTL transportation budgets. It's easy to assume that the changes will necessitate higher rates. But the reality is more complex. Under the proposed updates, some shippers will experience higher costs, while for others, costs will decrease. This white paper will explain the exact nature of the changes.

Almost certainly, the proposed changes will force every shipper to create a new baseline from which they can accurately cost their freight, comparing old rates to the new and adjusting their strategies and budgets accordingly. This process can often be lengthy and expensive in and of itself.

Shippers must adapt quickly — or risk being left behind

Shippers must proactively adapt and optimize their operations to maintain a competitive advantage in light of these NMFC changes. This includes focusing on enhancing their data management capabilities while seeking out smarter carrier collaboration opportunities.

This white paper will highlight how innovative software tools like BatchMark® XL can empower shippers to understand and rapidly adapt their operations for the 2025 NMFC changes, ensuring they remain competitive in this dynamic environment.

Decoding the 2025 NMFC changes

Why is the NMFTA making these changes?

The NMFTA's decision to implement changes to the NMFC system is driven by several key objectives:

Simplification

The current NMFC system can be complex and challenging to navigate, particularly for shippers with limited experience in LTL transportation. The 2025 updates aim to simplify the classification process, making it more user-friendly and accessible.

Accuracy

The existing system may not always accurately reflect the transportation characteristics of certain commodities. The 2025 changes seek to improve the accuracy of freight classification, ensuring that commodities are assigned classes that appropriately reflect cost to perform the service.

Efficiency

The updates are designed to promote greater efficiency in LTL operations by streamlining the classification process for shippers and leading to better trailer utilization for carriers. This enhanced efficiency can lead to cost savings for both shippers and carriers.

Key focus areas

The NMFTA is introducing key changes to the NMFC system, primarily focusing on simplifying the classification process and improving accuracy. These changes include:

1. **Expansion of the density scale:** The full density scale will be expanded from 11 to 13 classes, providing a more granular range for classifying commodities based on their density. These classes will accommodate commodities with densities that currently fall beyond existing class boundaries, further enhancing the accuracy of density-based classifications.

2. **Transition to full-density scale:** Several categories of commodities will be transitioned to the full density scale, including:
   - All existing full-density items.
   - Items with modified density breaks but no handling, stowability, or liability issues.
   - Single-class items with no handling, stowability, or liability issues.
   - Sub-provision items with no handling, stowability, or liability issues.

This chart shows the new full-density scale:

Density From	Density Up To	Original Class	New Class	
0	1	400	400	
1	2	300	300	
2	4	250	250	
4	6	175	175	
6	8	125	125	
8	10	100	100	
10	12	92.5	92.5	
12	15	85	85	
15	22.5	70	70	
22.5	30	65	65	
30	35	60	60	
35	50	60	55	**Class Changes**
50	50+	60	50	

When will the changes become effective?

The proposed docket 2025-1 changes was released for feedback on January 30, 2025. The new docket will take effect on July 19, 2025. The NMFTA may continue to adjust the scope of these changes, as well as their timing in advance of the effective date.

To keep up to date, please monitor the NMFTA website.

How NMFC changes will impact shippers

The impact of these classification changes will vary depending on the current classification methodology used for each commodity, as well as how efficiently each shipment is individually packaged. This is because density will determine the newly assigned class of your affected shipments.

But, broadly speaking, the 2025 NMFC changes will have far-reaching implications for shippers and their business operations. Some of the key impacts include:

Freight class reclassification: Many commodities will likely experience changes in their freight classification due to the revised density scale and the transition of various items to the full density scale. Shippers must proactively review their commodity classifications to understand how these changes will impact their shipping costs and adjust their budgets accordingly.

Rate volatility: The NMFC updates may lead to fluctuations in freight rates, with some commodities experiencing rate reductions while others face potential increases. Shippers need to carefully analyze the potential impact on their transportation spend and develop strategies to mitigate adverse effects.

Packaging optimization: The increased emphasis on density highlights the importance of efficient packaging practices. Shippers should evaluate their current packaging methods and explore opportunities to optimize package design and materials to minimize volume occupied by each handling unit.

Data management: Accurate data management will be crucial for navigating the NMFC changes. Shippers must ensure they have the necessary systems and processes in place to capture and analyze relevant data, such as handling unit dimensions, weight, and density.

SMC³ study estimates real-world impacts

To assess the potential impact, SMC³ conducted a study using a large sample of freight bills across various lanes, weights, and classes. The following are specific examples that help illustrate the factors at play.

Example 1: Commodities with densities of 35 pounds per cubic foot (pcf) or higher

The full-density scale expansion will result in **lower rates** for commodities with a density of 35 pcf or greater. The exact change in rates will differ by rate base, lane, and weight, but shipments between 35 and 50 pcf will move from class 60 to 55, which will result in about a 5% rate reduction. Shipments with a density of 50 pcf or greater will move from class 60 to 50—resulting in a 10% average rate reduction.

Example 2: Sub-provision items and those with modified density breaks

The transportation cost change for sub-provision items and items with modified density breaks will vary depending on the structure of the item in question as well as the density of the shipment.

Let's look at NMFC item# 28160 Boots as an example.

Currently, if the handling unit density is less than 6 pcf, then, class 200 will apply. But if greater than 6 pcf, it will be class 125. The shift to the full-density scale effectively removes an item-specific FAK—letting density instead be the determining factor.

The table below shows that shipments with densities between 6 and 8 pcf will not experience any cost changes, while those lower than 4 pcf will experience **higher rates**. Shipments with a density greater than 4 but less than 6 and those higher than 8 pcf will be assigned **lower shipping rates**. With a potential wide swing in costs, it is critically important for shippers of similarly classed commodities to pay very close attention to how efficiently they pack their freight.

Density From	Density Up To	Original Class	New Class	Estimated Cost Change
0	1	200	400	97%
1	2	200	300	49%
2	4	200	250	24%
4	6	200	175	-12%
6	8	125	125	0%
8	10	125	100	-19%
10	12	125	92.5	-24%
12	15	125	85	-29%
15	22.5	125	70	-38%
22.5	30	125	65	-42%
30	35	125	60	-45%
35	50	125	55	-47%
50	50+	125	50	-50%

Example 3: Items that currently have a single class but will shift to the full-density scale

These items could experience a similarly large change in LTL transportation costs. The new changes make it harder to misclassify a commodity with overly detailed or confusing descriptions. For example, if shipping alloys (NMFC 12700 – 13070), under the current rules the shipment could have 23 different classes depending on the type of alloy—and accurate description is critical to correct classification. Going forward, class will be based entirely on density. This simplicity makes classification much easier.

However, regular shippers usually know exactly what class LTL carriers consider their freight, and having this knowledge has made it easier to predict their freight spend. These changes will force these same shippers to weigh and measure every shipment to identify class, which will make it more difficult for shippers to accurately quote and audit their bills.

The current system of classification for single-class commodities was consistent and predictable, but it did not reflect the space that shipments took up on a trailer. The shift from single commodity to a full-density scale classification will compel shippers to be as efficient as possible when arranging and packaging freight. And carriers will be compensated for the amount of space a shipment takes up.

The proposed NMFC changes will have complex effects on shippers' transportation spend, and rates will go up and down depending on several factors. Although the new system adds complexity to determine that appropriate class of each individual shipment, there is an opportunity for shippers that can control packaging of their freight to reduce expenses.

Key capabilities for logistics leaders: Navigating the 2025 NMFC updates

Planning for the proposed NMFC changes will require having granular insight into the density of your shipments, as well as a basis of comparison for rates before and after the changes roll out.

Logistics companies will need to focus on several key capabilities to thrive amidst the 2025 NMFC changing market conditions. These include:

Data Management

Accurate and efficient data management is crucial for capturing and analyzing shipment dimensions, weight, and density.

Scenario Planning

The ability to model various scenarios and assess the financial impact of different freight classifications is critical.

Carrier Collaboration

Effective communication and collaboration with carriers are necessary to negotiate favorable rates and service agreements.

Technology Adoption

Embracing dimensioning technology solutions that streamline operations, capture dimensions in real-time, and provide data-driven insights is vital for success.

Realizing key outcomes with BatchMark® XL

BatchMark® XL empowers logistics companies to achieve several key outcomes in response to the NMFC changes:

Assess the impact of the changes:
BatchMark® XL enables shippers to simulate the impact of the NMFC changes on their transportation spend by re-rating historical shipments using the new classification system. This analysis can help shippers identify potential cost increases or decreases and adjust their budgets accordingly.

Optimize packaging and classification:
By analyzing the impact of density on freight rates, BatchMark® XL can guide shippers in optimizing their packaging practices and commodity classifications. This optimization can lead to significant cost savings by minimizing density-related charges.

Negotiate with carriers:
BatchMark® XL provides shippers with the data they need to effectively negotiate with LTL carriers. By understanding the impact of the NMFC changes on their transportation spend, shippers can negotiate fair rates and service agreements with their carriers.

Streamline operations:
BatchMark® XL's comprehensive LTL analysis capabilities can help shippers streamline their operations and improve efficiency. By automating various tasks, such as freight bill auditing and carrier performance analysis, shippers can free up valuable time and resources to focus on other strategic initiatives.

How else can shippers prepare?

In addition to using BatchMark® XL, here are some other steps that should be taken to get ready for the changes to NMFC:

Stay informed: It is crucial for shippers to stay informed about the latest developments and information related to the NMFC changes. Shippers should regularly consult the NMFTA website and other industry resources to keep abreast of any updates or clarifications regarding the new classification system.

Assess commodity classifications: Shippers should conduct a thorough review of their commodity classifications to understand how the NMFC changes will impact their freight classes and rates. This assessment will help shippers identify potential cost implications and adjust their shipping strategies accordingly.

Optimize packaging: Efficient packaging practices are essential for minimizing density-driven costs. Shippers should evaluate their current packaging methods and explore opportunities to optimize package design and materials to reduce the overall dimensions and weight of their shipments.

Collaborate with carriers: Open communication and collaboration with LTL carriers are crucial for navigating the NMFC changes. Shippers should engage in discussions with their carriers to understand their approach to the new classification system and explore potential mitigation strategies.

Getting ahead with SMC³'s BatchMark® XL

SMC³'s BatchMark® XL is uniquely suited to the evolving demands presented by the NMFC changes. The BatchMark® XL software tool allows shippers to analyze their freight spend in detail and generate powerful analysis. With it, historical shipments can be re-rated using the current and the future class of each shipment, allowing thousands of shipments to be batch rated in seconds to easily compare the previous cost with the new class cost.

BatchMark® XL works independently of a TMS or CMS system and facilitates a broad spectrum of LTL analysis—for RFP planning, post-bid evaluation, price negotiations, freight bill audit or potential service provider changes. With it, shippers can navigate NMFC changes and maintain a competitive edge. Its capabilities include:

Rapid batch rating

BatchMark® XL enables shippers to quickly re-rate large volumes of historical shipments using both current and future class classifications. This capability allows shippers to assess the financial impact of the NMFC changes on their transportation spend and make informed decisions about their shipping strategies.

Density-based pricing analysis

With its advanced density-based pricing capabilities, BatchMark® XL helps shippers analyze the impact of density on freight rates. This analysis can guide shippers in optimizing their packaging practices and commodity classifications to minimize density-related costs.

Comprehensive LTL analysis

BatchMark® XL supports a wide range of LTL analyses, including RFP planning, post-bid evaluation, freight bill auditing, and carrier performance analyses. These capabilities provide shippers with the data-driven insights they need to make informed decisions about their LTL operations.

Integration with CarrierConnect® XL

BatchMark® XL seamlessly integrates with SMC³'s CarrierConnect® XL service, providing shippers with access to a comprehensive database of LTL carrier transit times and rates. This integration allows shippers to optimize their carrier selection and routing decisions based on both cost and service considerations.

Watch a demo here

Now is the time to build a competitive advantage

The 2025 NMFC changes are here, introducing a new paradigm in the LTL shipping industry and raising concerns about rising transportation costs. Logistics companies that can rapidly adapt and optimize their operations will gain a significant competitive advantage.

Embracing technology solutions like BatchMark® XL is no longer a luxury but a necessity. By leveraging the power of BatchMark® XL, logistics companies can proactively address the challenges of the NMFC changes, unlock cost savings and efficiency gains, make data-driven decisions to optimize their LTL operations, and position themselves for continued success in the evolving LTL landscape.

The time to act is now. Concerned shippers should begin their research to understand the potential impact of these changes, assessing classification changes, and starting their planning now to confidently approach the July 19, 2025 effective date.

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