



THE 2026 GUIDE TO LTL FREIGHT & FREIGHT CLASSIFICATION

Density • NMFC • Accessorials • Documentation • Pricing Accuracy

2026 EDITION

Prepared by NR Swanks Freight Brokerage LLC

PRACTICAL • CURRENT • BUILT FOR TODAY'S LTL MARKET



Introduction

Less-than-truckload (LTL) freight remains an important and potentially profitable area of transportation for freight brokers, shippers, carriers, and logistics professionals. LTL allows multiple customers' shipments to share trailer capacity when a single shipment does not require an entire truck.

In 2026, successful LTL management depends on much more than finding a carrier and requesting a rate. Accurate **weight, dimensions, density, commodity description, NMFC item number, freight class, packaging, accessororial requirements, pickup information, and delivery information** can all affect how a shipment is rated, handled, and ultimately billed.

The National Motor Freight Traffic Association (NMFTA) implemented major National Motor Freight Classification (NMFC) changes on **July 19, 2025**. Those changes remain highly relevant in 2026 and moved many commodities toward a standardized density-based approach while preserving special classification treatment when handling, stowability, or liability issues are present.

THE 2026 LTL MINDSET

Don't guess. Measure the freight, verify the commodity and current NMFC item, identify every required service, then quote.

What Is LTL Freight?

LTL freight is generally used for shipments that occupy only a portion of a trailer. Shipments may be palletized, crated, boxed, or otherwise packaged, and they may move through one or more carrier terminals before final delivery.

Because an LTL carrier may unload, sort, transfer, and reload freight as it moves through a network, packaging and shipment data matter. Every handling unit competes for trailer space, dock time, and equipment.

- Palletized consumer and retail products
- Machinery and manufacturing components
- Automotive parts
- Construction and industrial materials
- Electronics and medical equipment
- Furniture and packaged goods
- Food products and other properly packaged commodities

Why LTL Can Be Profitable

LTL can create strong opportunities for freight professionals because many shippers need help understanding classification, accessorials, transit options, carrier rules, and final billing. The opportunity comes with responsibility:

an inaccurate quote can quickly erase margin.

Potential post-shipment charges can include:

- Reclassification or inspection adjustments
- Reweigh or dimension corrections
- Residential or limited-access service
- Liftgate service
- Inside pickup or delivery
- Appointment or notification service
- Detention, storage, or redelivery
- Oversize or special-handling charges

What Is Freight Class?

Freight class is the common language used to describe the transportation characteristics of LTL commodities.

NMFTA states that freight classes range from **50 to 500** and are based on four key characteristics: **density, handling, stowability, and liability**.

Lower classes generally apply to freight that is denser, easier to handle, easier to stow, and lower risk. Higher classes may apply to freight that is less dense, fragile, bulky, hazardous, unusually difficult to handle, or more likely to create liability concerns.

IMPORTANT DISTINCTION

The overall NMFC freight-class range is 50-500. The current standard 13-step density scale used for applicable density-based items runs from Class 50 through Class 400. Class 500 still exists in the broader NMFC system.

The Major 2025-2026 Classification Change

The July 19, 2025 NMFC update changed how many commodities are classified. NMFTA standardized density ranges for many items, modernized commodity listings, and created clearer treatment for commodities that have special handling, stowability, or liability concerns.

Density is now the primary factor for many commodities, but it does **not** mean every shipment can be classified by density alone. The correct current NMFC item number must still be identified because some items are not full-density items or have special classification provisions.

Current 2026 NMFC Standard Density Class Chart

Density (lb./cu. ft.)	Standard Class
Less than 1	400
1 but less than 2	300
2 but less than 4	250
4 but less than 6	175
6 but less than 8	125
8 but less than 10	100
10 but less than 12	92.5
12 but less than 15	85
15 but less than 22.5	70
22.5 but less than 30	65
30 but less than 35	60
35 but less than 50	55
50 or greater	50

Use this chart only when the applicable NMFC item uses the standard density scale. Confirm the commodity's current NMFC item and any special handling, stowability, or liability provisions before assigning a class.

Why Density Matters

Density measures how much a shipment weighs compared with the space it occupies. Two shipments can weigh the same but consume very different amounts of trailer space. In a density-based classification, the larger low-density shipment may receive a higher class.

NMFTA warns that inaccurate dimensions can lead to reclassification, back charges, and delays. Measurements should include the complete packaged handling unit, including the pallet, crate, packaging, and any overhang or protrusions.

How to Calculate LTL Density

- 1 Measure the complete shipment.** Record length, width, and height in inches. Include the pallet and packaging.
- 2 Calculate cubic inches.** Length x Width x Height.
- 3 Convert to cubic feet.** Divide cubic inches by 1,728.
- 4 Calculate density.** Divide the total shipment weight in pounds by cubic feet.

EXAMPLE

48 in. x 40 in. x 48 in. = 92,160 cubic inches. $92,160 / 1,728 = 53.33$ cubic feet. If the shipment weighs 800 lb., $800 / 53.33 =$ approximately 15 PCF. For an applicable standard density item, 15 PCF falls in the Class 70 range.

Factors That Determine Freight Class

NMFTA identifies four primary transportation characteristics that determine freight classification. The original NR Swanks guide also centered its classification explanation on these same four factors.

1. DENSITY

Density is the weight of freight relative to the amount of space it occupies. For many commodities in the updated NMFC, density is the primary classification factor. Higher-density freight generally receives a lower class when the standard density scale applies.

- Use actual weight, not an estimate.
- Measure the complete packaged handling unit.
- Include pallet height and overhang.
- Recheck stored dimensions when packaging changes.

2. HANDLING

Handling describes how easy or difficult the freight is to move across a dock and into or out of a trailer. Size, weight, configuration, hazardous nature, fragility, or special equipment requirements can create additional handling difficulty.

- Extremely heavy or awkward pieces
- Fragile or unstable freight
- Irregular shapes
- Freight requiring special lifting or loading procedures
- Hazardous materials requiring special care

3. STOWABILITY

Stowability describes how efficiently a shipment can share trailer space with other freight. Freight that is square, stable, stackable, and easy to secure generally stows better than freight that creates loading restrictions or unusable space.

- Excessive length or width
- Protrusions
- Non-stackable surfaces
- Government or carrier loading restrictions
- Inability to place freight beside or on top of the item

4. LIABILITY

Liability considers the shipment's exposure to damage or its potential to damage other freight. NMFTA specifically includes susceptibility to damage, propensity to damage adjacent freight, perishability, and hazardous nature as liability considerations.

- Fragility and damage risk
- Theft exposure or high value
- Perishability
- Hazardous characteristics
- Potential to damage surrounding freight

Freight Class vs. NMFC Item Number

FREIGHT CLASS	NMFC ITEM NUMBER
A numerical class such as 50, 70, 92.5, 125, 250, or 500.	Identifies the specific commodity or commodity group within the NMFC.
Represents the transportation characteristics used for rating.	Tells you which classification rule or density provisions apply.

A stronger LTL question is not simply "What class is it?" Ask: **What is the commodity, current NMFC item number, actual density, applicable freight class, and required accessorial service?**

How to Determine the Correct Class in 2026

NMFTA identifies **ClassIT+** as its official classification tool for locating NMFC item numbers, calculating density, and confirming freight class. Current classification data should be checked instead of relying on old charts or saved assumptions.

- 1 Identify the exact commodity.
- 2 Obtain the actual packaged shipment weight.
- 3 Measure complete dimensions for every handling unit.
- 4 Calculate density.
- 5 Locate the current NMFC item number.
- 6 Determine whether the item uses the standard density scale.
- 7 Review handling, stowability, liability, and packaging provisions.
- 8 Confirm the applicable freight class.
- 9 Record the correct NMFC item and class on shipping documents.
- 10 Retain supporting shipment data for billing review.

Information to Obtain Before Quoting LTL

- Pickup and delivery ZIP codes
- Commercial, residential, or limited-access location type
- Exact commodity description
- Current NMFC item number
- Applicable freight class
- Number of pallets or handling units
- Actual total weight
- Exact length, width, and height
- Stackable or non-stackable status
- Hazardous-material status when applicable
- Liftgate requirements
- Inside service requirements
- Pickup or delivery appointment requirements
- Special handling or notification requirements

Accessorial Charges Can Change the Entire Rate

LIFTGATE SERVICE

May apply when a location cannot load or unload from a standard dock with suitable equipment.

RESIDENTIAL SERVICE

May apply when pickup or delivery is to a residence rather than a standard commercial facility.

LIMITED ACCESS

Carrier-specific rules may apply to schools, churches, farms, construction sites, storage facilities, government locations, and other restricted locations.

INSIDE PICKUP/DELIVERY

May apply when freight must be moved beyond the normal loading or receiving area.

APPOINTMENT/NOTIFICATION

Some receivers require advance contact or a scheduled delivery window.

REDELIVERY

May apply when a shipment cannot be delivered on the first attempt.

DETENTION

May apply when a driver is held beyond the carrier's allowed free time.

Documentation & Bill of Lading Accuracy

The bill of lading and electronic shipment record should accurately describe the freight and the required services. Incorrect documentation can lead to reclassification, billing disputes, delays, claims problems, or correction fees.

- Shipper and consignee information
- Number and type of handling units
- Commodity description
- NMFC item number
- Freight class
- Actual weight
- Hazardous-material information when applicable
- Special instructions and required services

Reclassification, Reweigh & Dimension Corrections

LTL carriers may inspect freight. If the actual shipment does not match the information tendered, the carrier may correct the weight, dimensions, NMFC item, freight class, or services and issue an adjusted freight bill.

PROTECT THE QUOTE

Verify classification before pickup. A profitable LTL quote can become an immediate loss when the shipment is reclassified or accessorials services were omitted.

LTL Packaging Matters

LTL freight may move through several terminals, which means packaging should be able to withstand normal dock and trailer handling. Packaging also affects transportability and can influence density, handling, stowability, and liability.

- Use a sound pallet or crate.
- Secure freight to the handling unit.
- Protect corners and fragile surfaces.
- Avoid unnecessary overhang.
- Clearly label handling units.

- Use appropriate stretch wrap, banding, or crating.
- Make non-stackable freight clearly identifiable when required.

The 2026 LTL Rule to Remember

DON'T GUESS. MEASURE. VERIFY. THEN QUOTE.

Commodity + NMFC item + weight + dimensions + density + freight class + accessorials + pickup requirements + delivery requirements = a stronger LTL quote.

Quick LTL Quote Checklist

- Commodity identified correctly
- Current NMFC item confirmed
- Actual weight obtained
- All dimensions measured
- Density calculated
- Freight class confirmed
- Packaging and stackability reviewed
- Pickup/delivery location type confirmed
- Liftgate and appointment needs confirmed
- Limited-access or inside service checked
- Hazmat requirements identified when applicable
- Carrier-specific rules reviewed

The Bottom Line

LTL freight can be a strong area of opportunity, but profitability begins with accurate shipment information. In 2026, density is the primary classification factor for many NMFC items, while handling, stowability, and liability remain essential when a commodity has special transportation characteristics.

Successful LTL professionals understand that **every inch, every pound, every pallet, every NMFC item, and every requested service can affect the final transportation cost.**

KNOW THE FREIGHT. MEASURE THE FREIGHT. CLASSIFY THE FREIGHT. VERIFY THE REQUIREMENTS. THEN QUOTE THE SHIPMENT.

References & Source Notes

Original NR Swanks Source Material

NR Swanks Freight Brokerage LLC. *A Logistics Guide to Understanding LTL Freight Class*. Original e-book supplied by the user. The original guide introduced freight class, methods for locating class, and the four factors of density, stowability, handling, and liability.

Current 2025-2026 Industry Sources

1. National Motor Freight Traffic Association (NMFTA). *NMFC - What Is Freight Class?* Describes freight classes 50-500 and the four transportation characteristics: density, handling, stowability, and liability.
2. NMFTA. *Decoding Density: The Freight Factor You Can't Afford to Overlook*. Published June 19, 2025. Provides the 13-subprovision standard density scale used in this guide.
3. NMFTA. *Shippers: 2025 NMFC Changes*. Confirms that major classification changes took effect July 19, 2025 and addresses updated classifications, BOL/TMS data, and real-time classification tools.
4. NMFTA Help Center. *NMFC Changes FAQ: How do you define no handling, stowability, and liability issues?* Updated March 16, 2026. Defines current handling, stowability, and liability considerations.
5. NMFTA Help Center. *NMFC Classification FAQs*. Updated 2026. Explains density as the primary factor for many items while emphasizing that correct NMFC item numbers remain necessary for commodities with special characteristics.

Web Addresses

nmfta.org/standards/classification/nmfc/

nmfta.org/news/decoding-density-the-freight-factor-you-cant-afford-to-overlook/

info.nmfta.org/2025-nmfc-changes/shippers

help.nmfta.org/

Reference date: August 17, 2026. NMFC classifications can change through ongoing dockets and updates. For a specific shipment, verify the current NMFC item and classification using official NMFTA resources and applicable carrier tariffs.

Educational Notice: This e-book is provided for general educational and training purposes. It is not a substitute for the current NMFC, carrier tariff, contract, legal advice, or shipment-specific classification guidance.