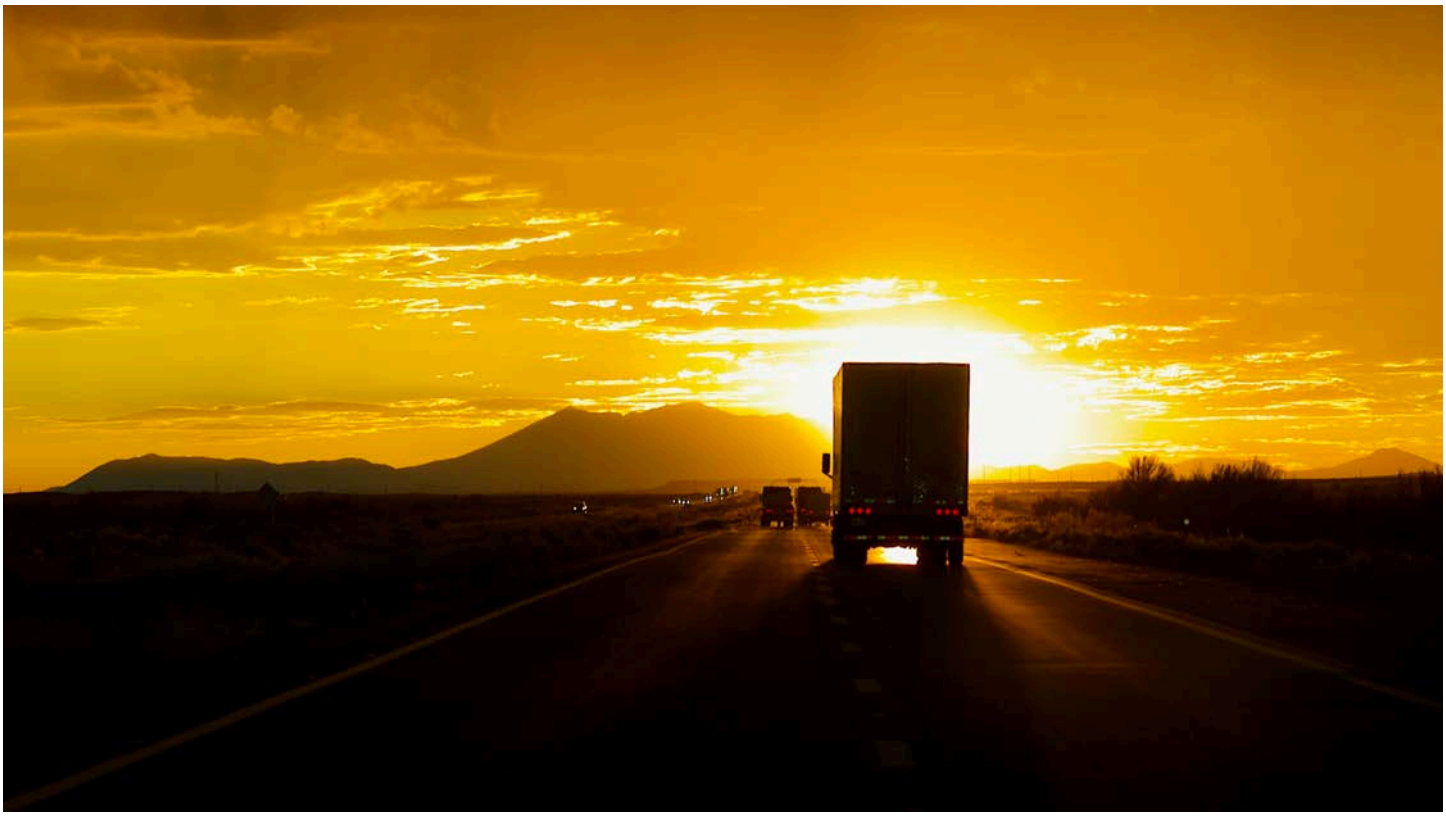
LTL FREIGHT SHIPPING EXPLAINED

What is LTL Freight Shipping?

Less Than Truckload (LTL) freight shipping is a complex process that involves combining the partial loads of separate shippers to create a full truckload of goods, delivered in multiple stops. When a shipper's freight can't fill a full trailer, but weighs anywhere from 150 to 10,000 pounds, LTL shipping can be an efficient, cost-saving freight transportation solution. That's because LTL shippers share trailer space with other shippers, paying only for the space that their freight occupies. Experienced LTL carriers specialize in optimizing these combined loads and planning the most efficient routes to ensure they get their customers' freight where it needs to go, when it needs to get there.



How Does LTL Shipping Work?

Depending on where you frequently ship your LTL freight and how often, you will first want to decide whether a regional or national LTL carrier is the best fit for your needs. Regional LTL carriers service a group of states within a specific area and provide more focused coverage throughout their defined network. National carriers, on the other hand, boast a larger footprint, helping shippers streamline their operation by eliminating the need for multiple carriers. This can be particularly helpful for shippers who frequently move freight throughout the U.S.*

Two of the most popular types of LTL shipping models are traditional hub and spoke distribution, and LTL consolidation. We'll explore how these different methods work in the sections below.

Hub and Spoke

When a carrier uses a traditional hub and spoke distribution model, shipments travel through a network of larger terminals, warehouses, or "hub" facilities where they are consolidated with other shipments. From there, the freight travels outward to the local terminals (or spokes) for final delivery. This model can be more efficient over shorter distances and often results in quicker pickup times.

As a national carrier with more than nine decades of regional expertise, Estes offers comprehensive LTL solutions for every need.

Learn more.



LTL Consolidation

Consolidated LTL shipping refers to a distribution model where freight is combined at a consolidation warehouse and stays on a single truck until it reaches its destination. This method can often simplify the shipping process because it usually results in less freight handling and fewer claims.

Many carriers specialize in one of these two distribution models, but some larger and more experienced carriers adopt a hybrid approach to LTL. Some national carriers with more complex LTL shipping capabilities are known to use a combination of hub and spoke, consolidation, long haul and even rail distribution to ensure that LTL freight is moved efficiently and expediently throughout their network.

How Much Does LTL Shipping Cost?

The cost to ship your LTL freight is determined by the National Motor Freight Classification (NMFC). The NMFC is a standard that compares commodities moving in interstate, intrastate, and foreign commerce, and groups them into 18 classes based on an evaluation of four transportation characteristics:

- **Density:** The weight per cubic foot of each piece of freight, or the space an item occupies in relation to its weight
- **Handling:** The unique handling or care specifications required to transport a particular commodity
- **Stowability:** The ease with which a commodity can be loaded and transported with other commodities
- **Liability:** The likelihood that a commodity will be stolen, damaged, or cause damage to nearby loads

Together, these characteristics establish a commodity's NMFC code. NMFC codes are important because they help LTL carriers understand a commodity's "transportability." The higher a commodity's NMFC code, the more challenging (and expensive) it will be to ship.

What are the benefits of LTL Shipping?

Not every company needs to ship full truckloads freight at a time, which is why LTL shipping can be a perfect transportation solution for small businesses! When you need to ship freight that can be palletized, but doesn't require the use of a full trailer, LTL shipping can offer these unique benefits:

- **Lower Cost:** When you ship LTL, you only pay for the portion of the trailer that your space occupies, allowing you to split the cost of the truck with other shippers
- **Increased Security:** LTL freight is often packaged in pallets, which can help keep goods secure and mitigate the risk of freight damage; pallets are also less likely to be stolen than parcel packages
- **Enhanced Tracking:** Many LTL carriers offer real-time shipment tracking to include Stops Away updates and an Estimated Time of Arrival, giving you complete line of sight to your LTL freight throughout its journey
- **Eco-Friendly Impact:** By sharing trailer space with other shippers whose freight is headed in the same general direction as yours, LTL shipping can help lower CO2 emissions by reducing the number of trucks on the road

Preparing Your LTL Shipments

LTL shipping is a complex process with a lot of moving parts, so it's crucial that you prepare your shipments carefully to avoid freight damage, delays, or extra fees. Before you make your first LTL shipment, you'll want to be sure to:

- Properly Package Your Freight: Palletize or crate your freight whenever possible to reduce the risk of damage and help your carrier maximize its LTL load. When stacking your freight, be sure to distribute the weight as evenly as possible, ensuring that the heaviest pieces are on the bottom.*
- Calculate Dimensions: It's important to calculate the dimensions of your freight as accurately as possible to avoid adjustment fees. Some carriers can help you facilitate this process by using dimensioners, or volume-measuring machines that scan three-dimensional objects such as pallets of freight or crated shipments.* These machines can easily and accurately determine the volume of your shipments and calculate shipping rates based on how much space your freight

will occupy. If your carrier does not use dimensioners, be sure to round up to the next inch when measuring the precise length, height, and weight of your shipment.

- Complete The Proper Documentation: When your carrier comes to pick up your freight, be sure to have your completed Bill of Lading (BOL) ready to give them when they arrive. The BOL should be completed as accurately as possible, as this document acts as a receipt for your shipment. It's a good practice to keep a copy of your completed BOL for your records, as well.*

- Label Your Shipment: Attach a copy of your BOL to your packaged freight, as well as any labels that would help your carrier know how best to handle the shipment, such as "Fragile," or "Do Not Stack." These labels are the best way to let drivers and dockworkers know how to handle your freight without damaging it, so be sure the labels are clear and visible.



Choosing the Right LTL Carrier For You

As the largest privately held freight carrier in North America, Estes delivers reliable LTL solutions throughout all 50 states, Canada, Mexico, and the Caribbean. A national LTL carrier with over 90 years of regional expertise, Estes offers:

- A hybrid LTL shipping model that provides the coverage and flexibility to get your freight where it needs to go, when it needs to get there

- Real-time pickup visibility and shipment tracking to give you line of sight to your LTL freight every step of the way

- A comprehensive suite of digital tools that make LTL shipping even easier, including online rate quotes, pickup requests, and BOL's

- Dimensioners in every terminal across our vast nationwide network for superior rate accuracy

Check out our Shipper's Guide for a helpful introduction to the LTL shipping basics, or contact us today to discover all the ways Estes can make LTL freight shipping even easier for you!

At Estes, going the extra mile isn't just what we do—it's who we are



The information comprised in this white paper was gathered from the following sources and industry experts:

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Dryjowicz, Alex, "What is LTL Freight Shipping?" FreightWaves Ratings.

Freight Quote by C.H. Robinson, "Consolidation vs. Hub and Spoke LTL," August, 2019.

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National Motor Freight Traffic Association, Inc., "The National Motor Freight Classification," 2022. h

Strickland, Zach, "What is LTL?," FreightWaves, January 2020.

Coyote Logistics, "The 7 Different Types of LTL Carriers (& When to Use Each)