Last Mile Logistics

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Last Mile is the term used in Supply Chain Management and Transportation Planning to describe the movement of freight from a Terminal HUB to the Final Destination.

Objectives

• Understand Equipment, Shipment Types and Terminology
• Learn the Importance of Terminals
• Differentiate Air, Ocean and Specialized Delivery
• Familiarize Yourself with Carriers
• Know the Importance of Logistics Technology
Domestic Equipment Types

Standard Dock Height 48”-52”

**Standard**

- Dry Van (Van)
  - 48’
  - 53’

- Refrigerated (Reefer)
  - 48’
  - 53’

- Swing Doors, Roll Top
- Box Trucks (Dry and Reefer)
- Hot-Shot Carriers
- Couriers

**Specialized**

- Flatbed
- Step Deck
- Double Drop
- RGN
- Heavy Haul
Standard International Equipment Types

Standard Dock Height 48”-52”

Dry Containers
• 20’
• 40’
• 40’ High Cube (HC)
• 45’ High Cube (HC)

Reefer Containers
• 20’
• 40’
• 40’ High Cube (HC)

Open Top
• 20’
• 40’
• 40’ High Cube (HC)

Containers can also be used for Intermodal Transportation
Specialized International Equipment Types

Flat Rack
- 20’
- 40’
- 40’ High Cube (HC)

*Some Flat Racks are collapsible*

20’ Tanker
Roll On/ Roll Off (RORO)
Bulk Freight
Shipment Types

Domestic – Full-Truckload (FTL), Less-than-Truckload (LTL), Partial Freight, Specialized
International – Full-Container (FCL), Less-than-Container (LCL), Specialized

Standard Delivery Types – Live or Drop Trailer / Palletized or Floor Loaded
Specialized Delivery Types – Over Head Crane (Rigger), Lift-Gate (LG)

Packaging – Crating, Palletizing, Drums, Boxes, Super Sacks, Slips
Terminology

Terminal (HUB) – Warehouse or area where the freight is broken down and stored
Trans-loading – Transferring a shipment from one mode of transportation to another
Purchase Order (PO) – Order number used to schedule the shipment
In Bond – Moving shipment from the Port to a Terminal before customs clearance
Bonded – A facility that can store freight prior to customs clearance
Commercial Invoice – A document for customs to declare the true value of the goods
Bill of Lading (BOL) – Detailed list of a shipment of goods
Shippers Letter of Instruction (SLI) – Details of the Export
Load / Shipment – General information about what is being moved
Commodity – Type of product being moved
Haz-Mat – Hazardous Materials
MSDS – Material Safety and Data Sheet
“How do all these different products get on the shelves?”
Ocean Imports

Over half of all imported goods in the United States arrive via Ocean. When a vessel arrives at the port, it is unloaded and the containers are separated based on their intermediate destination. They are then pulled outside the port on a chassis and taken to one of the following destinations –

- Ocean HUB
- Intermodal HUB
- Drayage HUB
Ocean Terminal (HUB)
- Storage and Trans-load Facility
- LCL Deconsolidation
- Warehouse for Regional Shipments

Intermodal Terminal (HUB)
- Storage and Container Transfer
- Containers are transferred to the rail and sent to a regional inland terminal
- Container Freight Station (CFS)

Drayage Terminal (HUB)
- Storage and Container Transfer
- LCL Deconsolidation
- Regional Delivery Radius
When freight arrives at an Ocean HUB, it is either broken down, trans-loaded or stored. Different modes of transportation will be used to haul the freight to different HUB located in another region.
Last Mile Ocean Freight

FCL and LCL cargo is taken from the Ocean HUB to an Intermediate HUB and then to a Regional HUB. This HUB to HUB process will continue until the cargo arrives at the closest Regional HUB to the delivery location.

*When picking up at an Ocean HUB, the carrier will need to have Transportation Worker Identification Credentials (TWIC)*
Last Mile Air Freight

When freight arrives from overseas via air, the cargo is unloaded and placed in a Airport HUB where it is trans-loaded and stored. Once customs has been cleared, a carrier will be dispatched to the Airport HUB for pick up.

*Each Airport HUB is different so it is important to choose a carrier who understands TSA and is familiar with that specific HUB’s procedures.*
Last Mile Specialized Freight

When specialized cargo arrives from overseas, it is trans-loaded onto a specialized piece of domestic equipment. The majority of trans-loading is done at the port and with specialized shipping, the cargo will typically stay on the same truck from the port throughout delivery.

*With specialized cargo, it is important to choose a carrier that has a TWIC and also understands TSA, State Requirements, Permitting and any additional services needed to haul the specific cargo.*
Last Mile Delivery

Once the cargo finally arrives at the Regional HUB, it is trans-loaded, stored and then sent out for delivery.

• Warehouse
• Consumer
• Customer
• Factory
• Jobsite
• Store
• Distribution Center (DC)
Carrier Vetting

Ocean Carrier
- Non-Vessel Operating Common Carrier (NVOCC)
- Direct Carrier Contract

Air Carrier
- Freight
- Passenger
- Courier

Ground Carrier
- FTL
- LTL
- Partial
- Specialized
- Drayage
Technology

Currently, the last mile of the supply chain is the least efficient and compromises up to 28% of the total freight cost. This is becoming known by many customers as the "last mile problem". This occurs because of inaccurate information and poor communication between carriers, terminals, shippers and consignees.

Transportation Management System (TMS)

- SKU Level Tracking
- Enhanced Inventory Control
- Supplier Accountability
- Carrier Accountability
- Greater Supply Chain Visibility
- Achieve More Agility
- Decrease Cycle Time
- Reduce Costs
Freight Forwarding

A freight forwarder acts as a carrier on behalf of the customer and oversees all facets of the transportation process from PO creation throughout final delivery. It is important to choose a freight forwarder who has a properly vetted database of carriers, has the appropriate technology, understands your needs and offers a wide variety of services.

Freight forwarding responsibilities include:

- Carrier Vetting
- Ocean Transportation
- Air Transportation
- Ground Transportation
- Insurance Services
  - Technology
- Supply Chain Management
- Tracking and Tracing
  - Warehousing
- Consolidation Services
- Trade Compliance
- Customs Clearance
- Customer Service
- White Glove Service
Thank You

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