

PHYSICAL DISTRIBUTION



Learning goals:

- Be able to understand & apply the concept of physical distribution
- Be able to identify & apply advantages and disadvantages of the different modes of transportation.
- Be able to identify different ways of storing goods.

PHYSICAL DISTRIBUTION- The process of transporting, storing, and handling goods to make them available to customers.

TYPES OF CARRIERS

- **Common carriers :** provide shipping to any business for a fee
- **Contract carriers:** are for –hire carriers that provide equipment & drivers
- **Private carriers:** transport for an individual business
- **Exempt carriers:** are free from direct regulation of rates.

- Think of three companies that ship products.

TRANSPORTATION SERVICE COMPANIES

- U.S. Postal Service
- Express Delivery Service (UPS, FEDEX, under 150lbs)
- Bus Package Carriers (Greyhound, under 100lbs)
- Freight Forwarders (TNT , less than truck-load)

- Think of ways goods are transported?

MODES OF TRANSPORTATION



MOTOR (TRUCKING) - Most commonly used form of transportation used for lightweight shipments over moderate distances.


Advantages:

- **Convenient & efficient**
- **Reduces packaging costs**
- **Easy to make rapid deliveries**

Disadvantages:

- **Small load size**
- **Limited internationally and susceptible to delivery delays (traffic jams, breakdowns, accidents)**



 McDonald's

breaker breaker for breakfast



WATER (MARINE SHIPPING)- Using waterways to ship products.

Advantages:

- Cheapest form of freight transportation
- Accessibility to global continents
- Can carry large loads

Disadvantages:

- Slow
- Sites must have docking stations
- Usually need more than one transit source
- Needs to be well organized
- Weather



The background is a smooth blue gradient. On the left side, there is a bright, glowing area that resembles a sun or light source, with a vertical streak of light extending downwards, creating a shimmering effect on the surface below. The rest of the background is a deep, uniform blue.

Show clip

RAIL TRANSPORTATION - Using trains to transport products.

Advantages:

- **Can handle large quantities**
- **Efficient and effective**
- **Low costs**

Disadvantages:

- **Lack of flexibility**
- **May need additional transit source**
- **Limited internationally**



AIR CARGO TRANSPORTATION-

Using planes to transport products

Advantages:

- **Fast**
- **Accessibility to all continents**
- **Safe & reliable**

Disadvantages:

- **Expensive**
- **Delays due to weather**
- **May need additional transit source**



PIPELINE - Using pipelines to transport oil and natural gas. There are more than 175,000 miles of pipelines in the U.S.

Advantages:

- **Low cost**
- **Can transport large amounts**
- **Safe and reliable**

Disadvantages:

- **High initial costs**
- **Pipelines breaking or leaking**



STORAGE OF GOODS

- Private warehouses- facilities owned by a business for its own personal goods.
- Public warehouses- facilities available to any business that will pay for the use of space.
- Distribution centers- A warehouse designed to speed delivery of goods and to minimize storage costs.
- Bonded warehouses- store products that require the payment of federal tax



Heinz
1940
Gunco
DUNGHENRICH



The background of the slide is a vibrant blue, depicting a sun reflecting on the surface of a body of water. The sun is positioned on the left side, creating a bright, shimmering path of light that extends across the water towards the center. The sky above is a deep blue with wispy white clouds. The overall scene is serene and bright.

- **DAILY JEOPARDY**

RECAP:

- Five modes of transportation: Air, Motor, Rail, Water, Pipeline
- Need to analyze advantages and disadvantages to choose best modes of transportation and look at determining factors.
- Variety of options to warehouse products

*Learning goal assessment