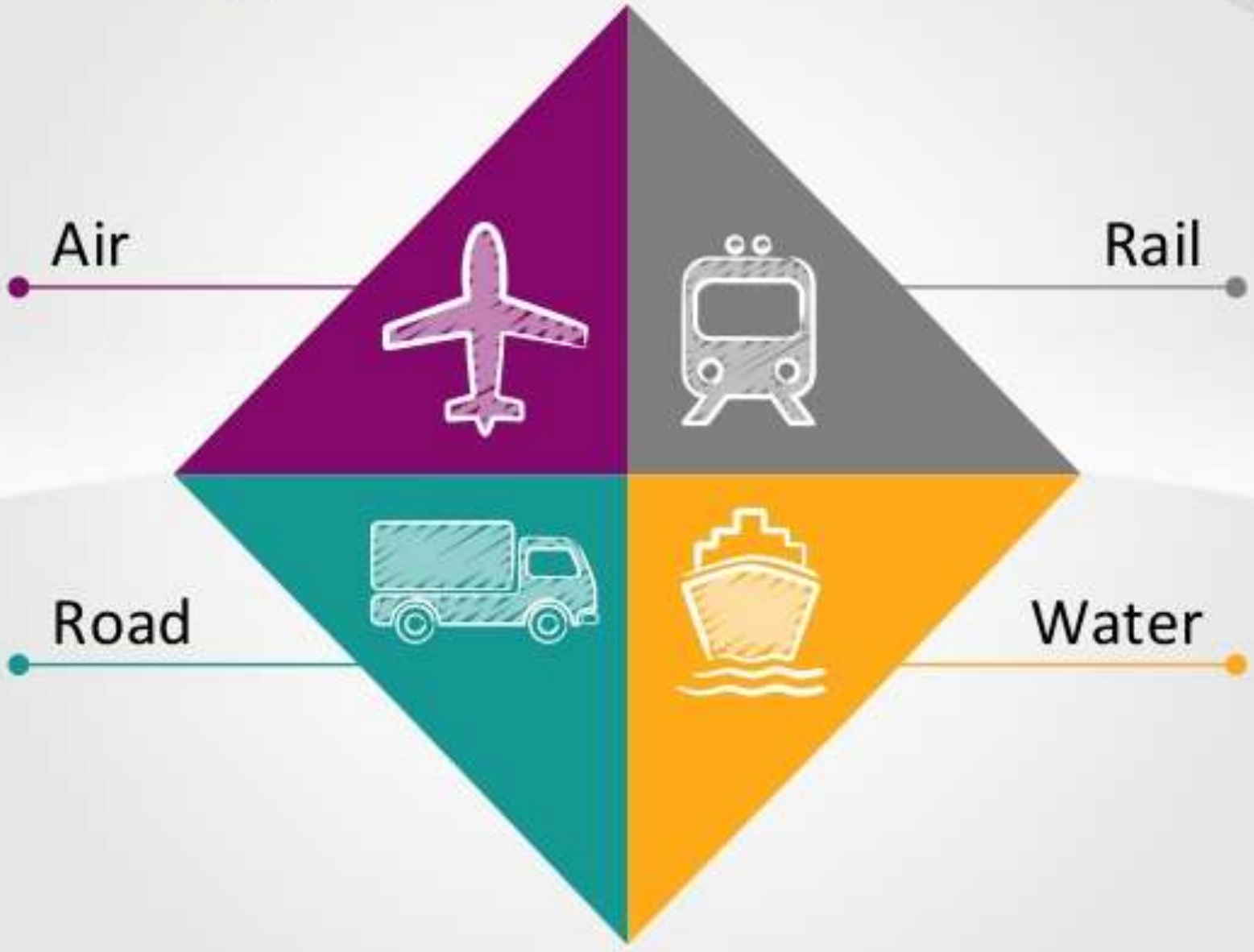




# Transport Logistics

- **Transport logistics and its tasks**
- **The choice of transport**
- **The choice of transportation routes**

# 1. Transport Types



# Major Transport Means

Usage  
example  
fully editable



# Global Transport Routes

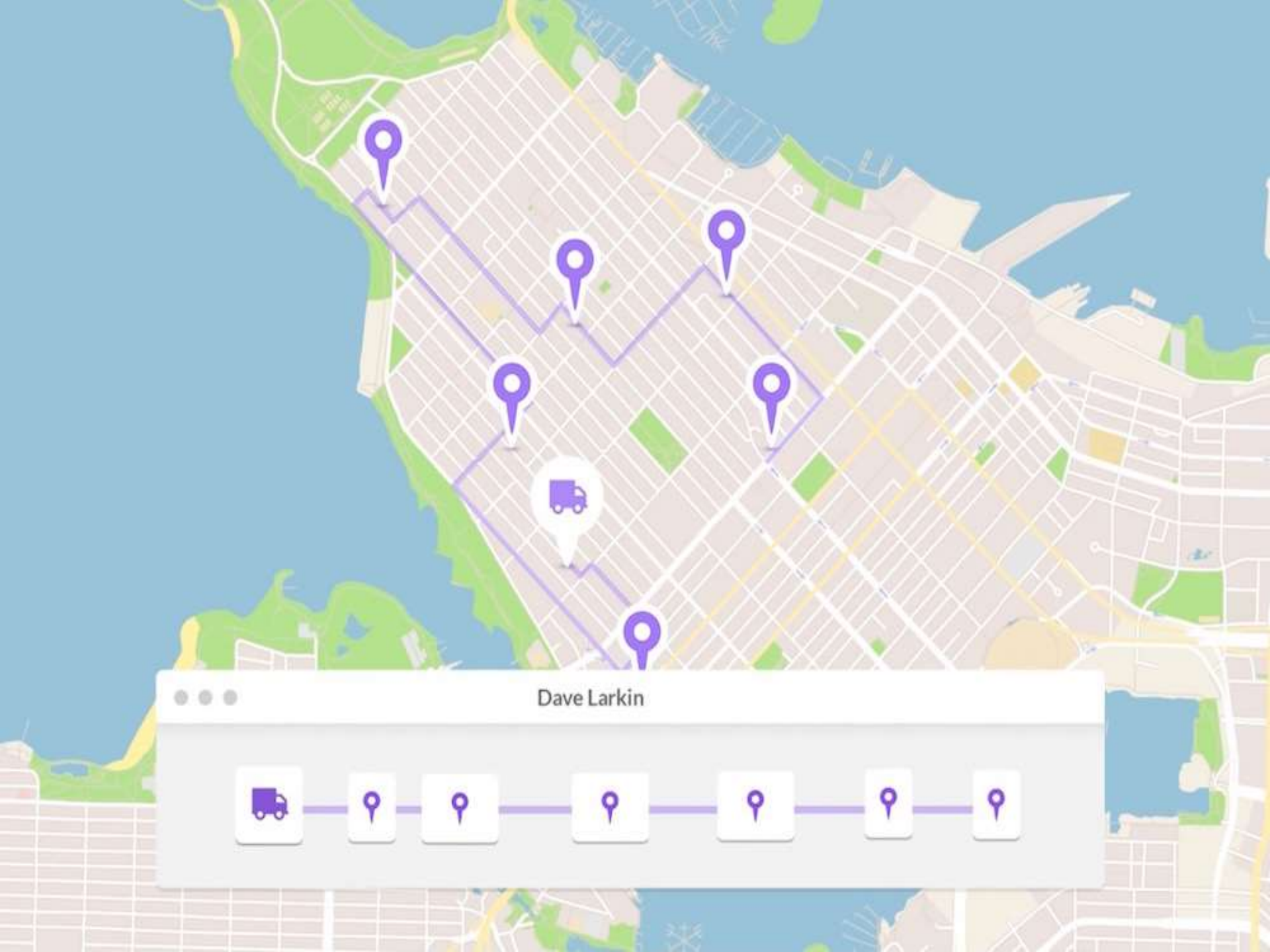
Usage  
example  
fully editable







- Modern **transport logistics mission** can be summarized as follows: "to deliver the **right product** on the **required quality** and **quantity** at a specified **time** and cost-effectively.
- **Transport logistics** - is a system of organizing delivery, and displacement of any material objects from one point to another on the **optimal route**.
- **The optimal route** – is route which may deliver a logistics facility/product in the shortest possible time with minimal cost and with minimal harm or risk.



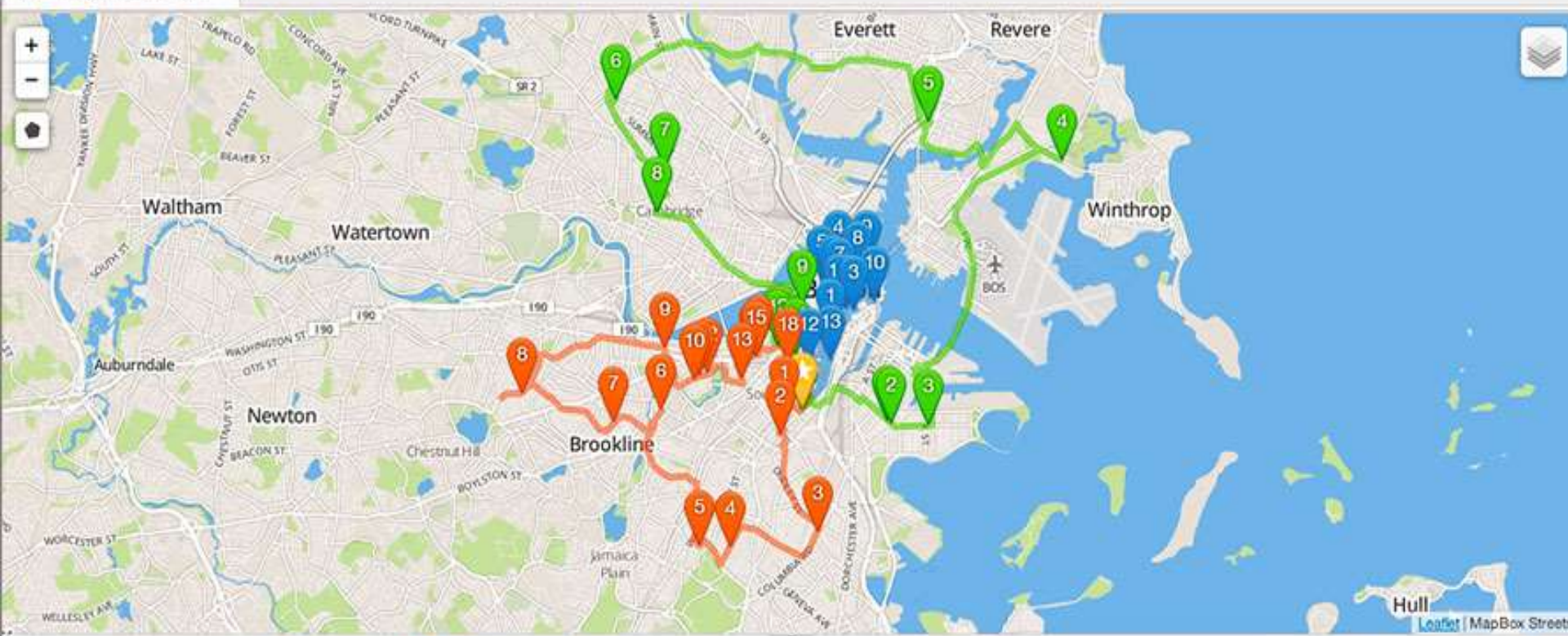
Three dots

Dave Larkin

A sequence of icons representing a route: a truck icon followed by six location pin icons connected by a purple line.







Select date: 12/18/2013 [Import Orders](#) [Plan Routes](#) [Share Routes](#)

[Refresh](#) [Home](#) [Location](#) [MapBox Street](#)

Orders Routes

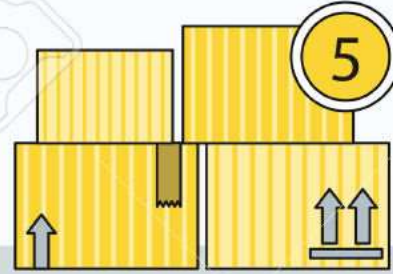
[Add order](#) [Edit orders](#) [Delete orders](#) [Unschedule orders](#)

<input type="checkbox"/>	Order Id	Location	Address	No boxes []	Duration	Time windows	Skills	Resource	Stop number	Scheduled at
<input type="checkbox"/>	IMP010	CVS/Pharmacy Chinat...	631 Washington St, Boston, ...	2	20	-	-	Greg - C7E U6I	1	8:03 AM
<input type="checkbox"/>	IMP034	CVS Pharmacy Downto...	333 Washington St, Boston, ...	2	20	-	-	Greg - C7E U6I	2	8:25 AM
<input type="checkbox"/>	IMP035	CVS Financial District	81 Milk St, Boston, MA 02109	1	20	-	-	Greg - C7E U6I	3	8:45 AM
<input type="checkbox"/>	IMP024	CVS Canal st	101 Canal St, Boston, MA 0...	1	20	-	-	Greg - C7E U6I	4	9:08 AM
<input type="checkbox"/>	IMP027	Cvs Cambridge st	191 Cambridge St, Boston, ...	1	20	-	-	Greg - C7E U6I	5	9:29 AM
<input type="checkbox"/>	IMP026	Rite Aid Downtown	100 Cambridge St, Boston, ...	1	20	-	-	Greg - C7E U6I	6	9:50 AM
<input type="checkbox"/>	IMP003	CVS Downtown	2 Center Plz, Boston, MA 02...	1	20	08:00AM-11:00AM	-	Greg - C7E U6I	7	10:10 AM
<input type="checkbox"/>	IMP030	CVS Pharmacy North End	218 Hanover St, Boston, MA...	1	20	12:00PM-04:00PM	-	Greg - C7E U6I	8	12:00 PM



## **Tasks of transport logistics**

- 1) selecting a mode of transportation;
- 2) choice of transport;
- 3) choice of carrier and logistics transportation partners;
- 4) The optimization of the parameters of the transport process (route, number of vehicles, the number of cargo).
- 5) joint planning of transport and storage processes.







- Thus, the logistics manager must solve three tasks: transportation, packaging, warehousing of cargo.

- **Example:**
- There is a load of 2 boxes, each measuring  $1\text{ m} \times 1\text{ m} \times 1\text{ m}$ , which is expected to be transported by road. Markings on the packaging indicates that the goods can be transported only when lie in the 1 row. This increases the cost of transportation twice.
- **Possible action by the logistics manager:**
- - To instruct the carrier to put the box on the box, and to take on the *risk of damage to the goods*;
- - To create a more solid packaging, which *leads to increased costs*;
- - Wait for other transport, packaging which will allow them to place on these two boxes, which leads *to an increase of transportation time, the cost of storage of goods at the terminal carrier, decrease the efficiency of transportation schedule.*



2.



Expert assessment of the significance of various factors showed that when choosing a transport primarily takes into account:

- the reliability of delivery schedule compliance;
- the delivery time;
- the cost of delivery.

# TRANSPORT



**HELICOPTER**

A helicopter is a powered aircraft that is able to take off and land vertically, hover, fly forwards, and backwards. It is a type of rotorcraft.



**FORKLIFT**

A forklift is a powered industrial truck used to move and transport loads and materials. It is a type of material handling equipment.



**TRAIN**

A train is a series of connected rail vehicles that travel along a set of parallel rails. It is a mode of mass transit.



**TRUCK**

A truck is a motor vehicle with a cargo-carrying capacity of at least 1,000 kilograms. It is a type of heavy-duty vehicle.



**SHIP**

A ship is a large watercraft that is designed to transport cargo or passengers. It is a mode of maritime transport.



**SUBMARINE**

A submarine is a watercraft capable of operating both above and below the surface of the water. It is a type of underwater vessel.

## **Road transport**

Traditionally uses for short-distance:

### ***1) advantages:***

- high maneuverability;
- delivery "from door to door" with the necessary degree of urgency;
- supply regularity,
- the ability to supply small batches;
- less rigid requirements to product packaging;

### ***2) disadvantages:***

- high cost of transport;
- urgency discharge;
- the possibility of theft of cargo and theft of vehicles;
- relatively small carrying capacity.

## **Rail transport:**

### ***1) advantages:***

- transport large quantities of goods in all weather conditions;
- relatively fast delivery of cargo over long distances;
- regularity of traffic;
- convenient organization of loading - unloading;
- relatively low cost of transportation of goods
- availability of discounts,

### ***2) disadvantages:***

- low speed of movement;
- limited number of carriers;
- theft and losses;
- small possibility of delivery to the point of consumption (in some cases must be supplemented by road).

## **Sea transport:**

### ***1) Advantages:***

- Low cargo rates;
- high capacity.

### ***2) disadvantages:***

- Low speed;
- limited possibility of delivery to points of consumption;
- rigid requirements to packaging of goods;
- low frequency of shipments;
- dependence on weather and navigation conditions.

## **Air transport:**

### ***1) advantages:***

- The highest speed of delivery,
- possibility of delivery in remote areas;
- high safety of goods

### ***2) disadvantages:***

- High cargo tariffs;
- limited batch size;
- dependence on weather conditions.

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**Pipeline transport: 1) advantages:** low cost, high bandwidth;

**2) disadvantages:** A narrow range of goods to be transported (liquids, gases, emulsions).?.