

# Freight Mobility and Intermodal Connectivity Discussion: Distinctions and Similarities between China and the US

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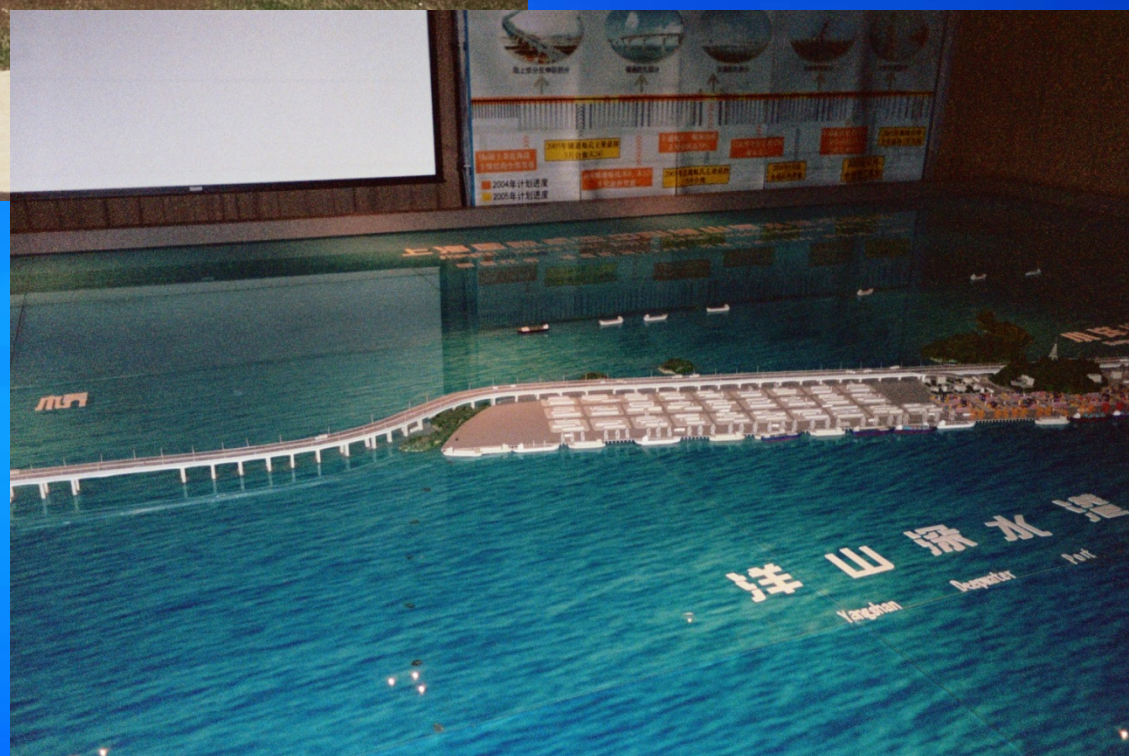
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# Freight Transportation- General

- **Inter-modal Container Transport is becoming the focus point of China Container transport development**
- **Container operation rate of port has jumped from 34% in 1990 to more than 70% in 2005, close to 80-90% in developed countries.**
- **Railway is equipping container handling equipment (lifts, tractors) at train stations; MOR is converting some trains to full container trains**
- **Freight volume and freight turnover volume increased 8.9% and 11.6% separately ;Road container grows sharply (~20% annually)**





# Logistics

- Ratio of logistics cost/GDP is a global used criteria to assess national logistics efficiency
- Developed countries around 10% (USA, Japan)
- Medium developed country (e.g.Korea) is 16%
- China's ratio is about 20—30%

# Logistics Efficiency

- **Transport cost of Electronics and food in China is 40—50% higher than U.S.A.**
- **Average # of handovers in supply chain is 27 times, causing low efficiency**

# Logistics Return

- US transport enterprises annual average return 8.3% (IRR) ; warehousing 7.1% ; general logistics 14.8%
- Majority of China's companies' IRR only 1%

# Why So Inefficient?

- **Slow system reform**
- **Backward equipment**
- **Service/function primitive**
- **Poor management**
- **Poor information management**

# Logistic Cost in Nominal GDP

- Inventory Carrying (US 33%, China 29%)
  - Lack of systems contribute to high warehouse and in-transit inventory
    - China average inventory days: 51
    - US average inventory days: 7

# Logistic Cost in Nominal GDP

- Administrative logistics (US 3.8%, China 14%)
  - Very high resources spent on tracing and ensuring delivery
  - Resources spent to integrate and extract information from multiple IT systems

# Logistic Cost Percent in Nominal GDP

- Transportation: (US: 63%, China 57%)
  - High cost at transport from infrastructure bottlenecks, provincialism, high road tolls (comprising of -20-30% of revenue)
  - Overall lower reliability of delivery drives costs up

# Problems in Logistics

- **Company-Society concept created by planning economy**
- **Repetitive logistics construction---excessive warehouse space, and empty return truck**
- **Lack in *Third Party Logistics enterprises* to provide total, modern, punctual, specialized and fast service**
  - Market share of 3PL in China is only 2%, while U.S. is 8%, Europe is 10%

# Problems in Freight Transportation in China

- Road development quickly with low starting point; Fee collection unstructured;
- Local custom procedures unstructured; Low efficiency leads to low utilization of trucks
- Total system efficiency very low;

# Problems in Freight Transportation in China

- **Lack of knowledge of modern trucking; Lack of training; transport management very weak**
- **Low availability of professional management and market development personnel**
- **Lack of information and understanding of modern logistics**

# Trend of Freight Transportation in China

- From point to point transport to full logistic operation
- From low load, mid-speed trucks to high load, high speed heavy truck
- From general cargo truck to container trucks
- From high percent of short distant transport (150Km or less), to high percent of long distant (300-500Km) and super long distant (over 500Km) transport