

# Changing Logistics in East Asia: From Shipper's Viewpoints

## Shipper's Needs, Transport Time Transport Cost, Transport Quality Implications for Infrastructure Management

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Session 3.2: Changing Logistics in East Asia: Experiments by JETRO's 'ASEAN Logistics Network Map'

Session 3: ISSUES AND CHALLENGES IN TRANSPORT AND LOGISTICS

CROSS-BORDER INFRASTRUCTURE MANAGEMENT:

Managing Regional Public Goods Seminar-Workshop

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# Shipper's Needs

## Price/Cost Competition

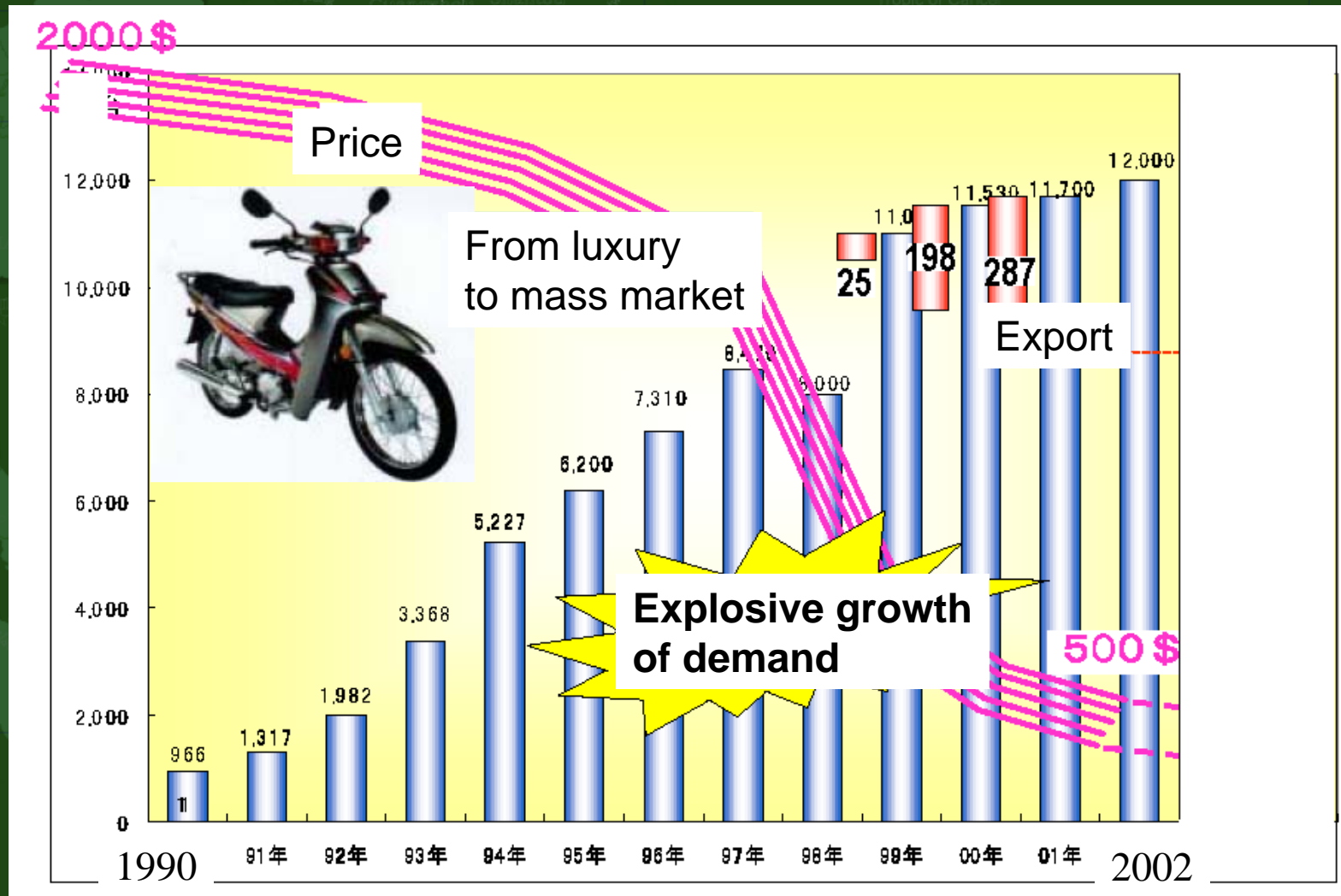
Under the global division of labor, the total logistics cost becomes the important factor for final consumer price.

## Quick Response to Demand

Under the sufficient economy, shortening door-to-door transport time is necessary requirements to respond to demand fluctuation and to decrease inventory cost.

# Price/Cost Competition

## Change of Motorcycle Market in China



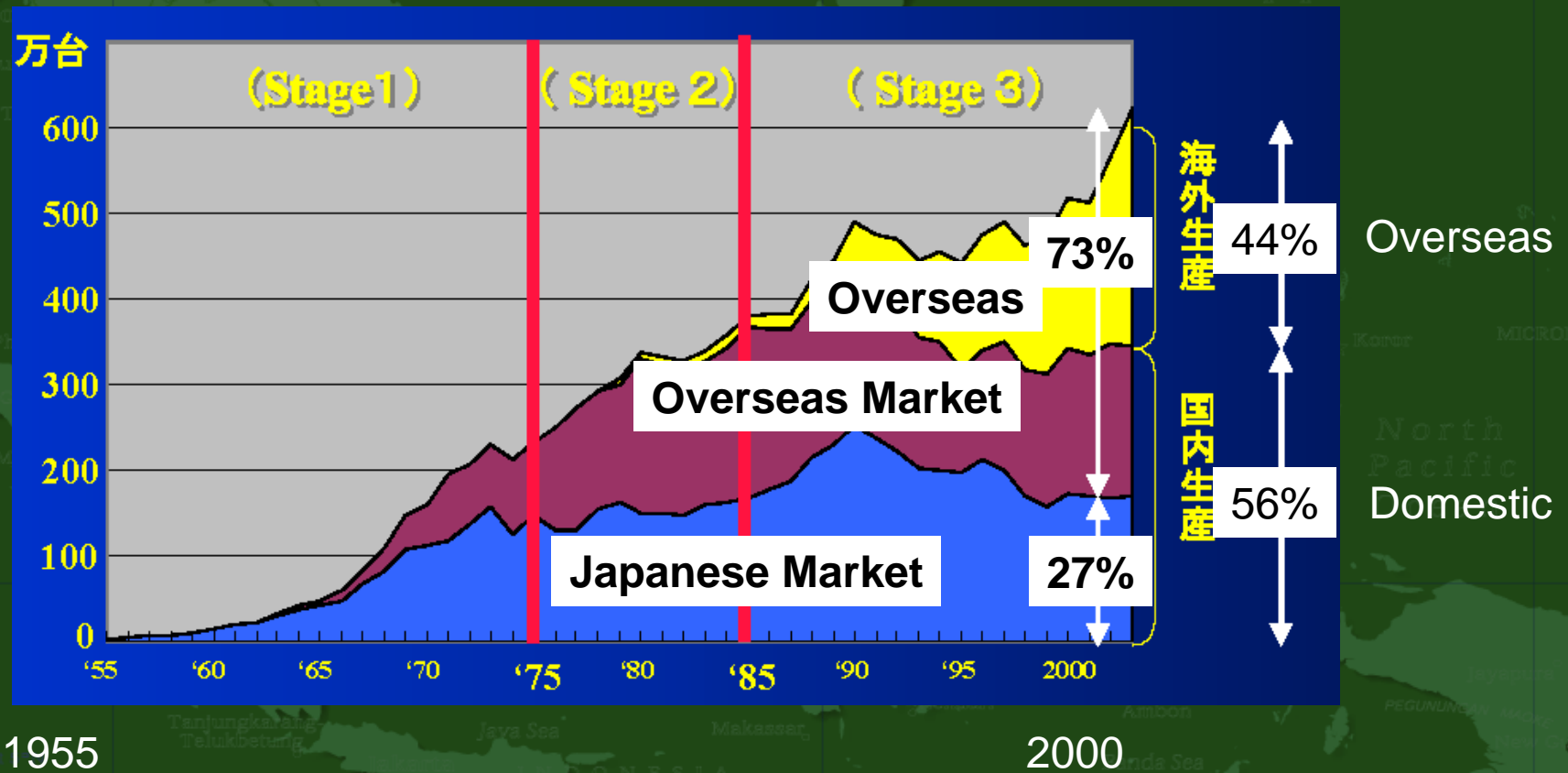
# Price/Cost Competition: Global Division of Labor

## Change of Global Market in Toyota Motor Company

(10,000 vehicles)

Share of Sales

Share of Production

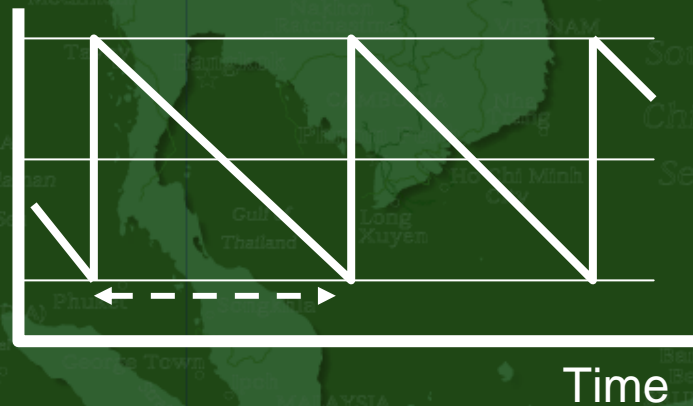


# Quick Response to Demand

## Transport Time is Key

From Push System

Cost : Inventory Level

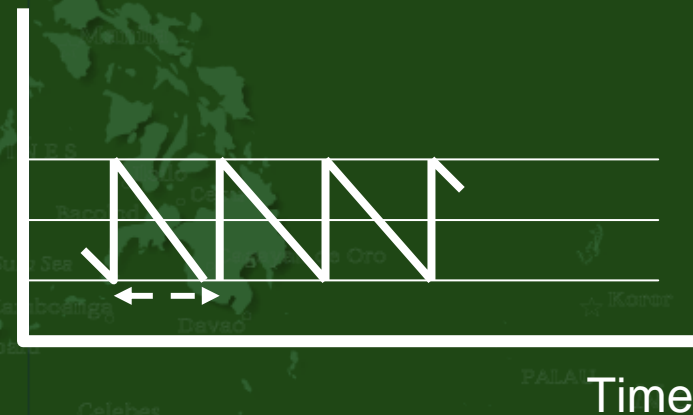


Inventory  
Cycle Time  
Order Size

100  
Weeks/Months  
Pallet/Truckload

To Pull System

Cost : Inventory Level



25  
Days/Hours  
Cases/Items

- Needs for
- \*Inventory Reduction
  - \*Space Reduction
  - \*High Frequent Transport
  - \*Cycle time Reduction
  - \*Small Shipment



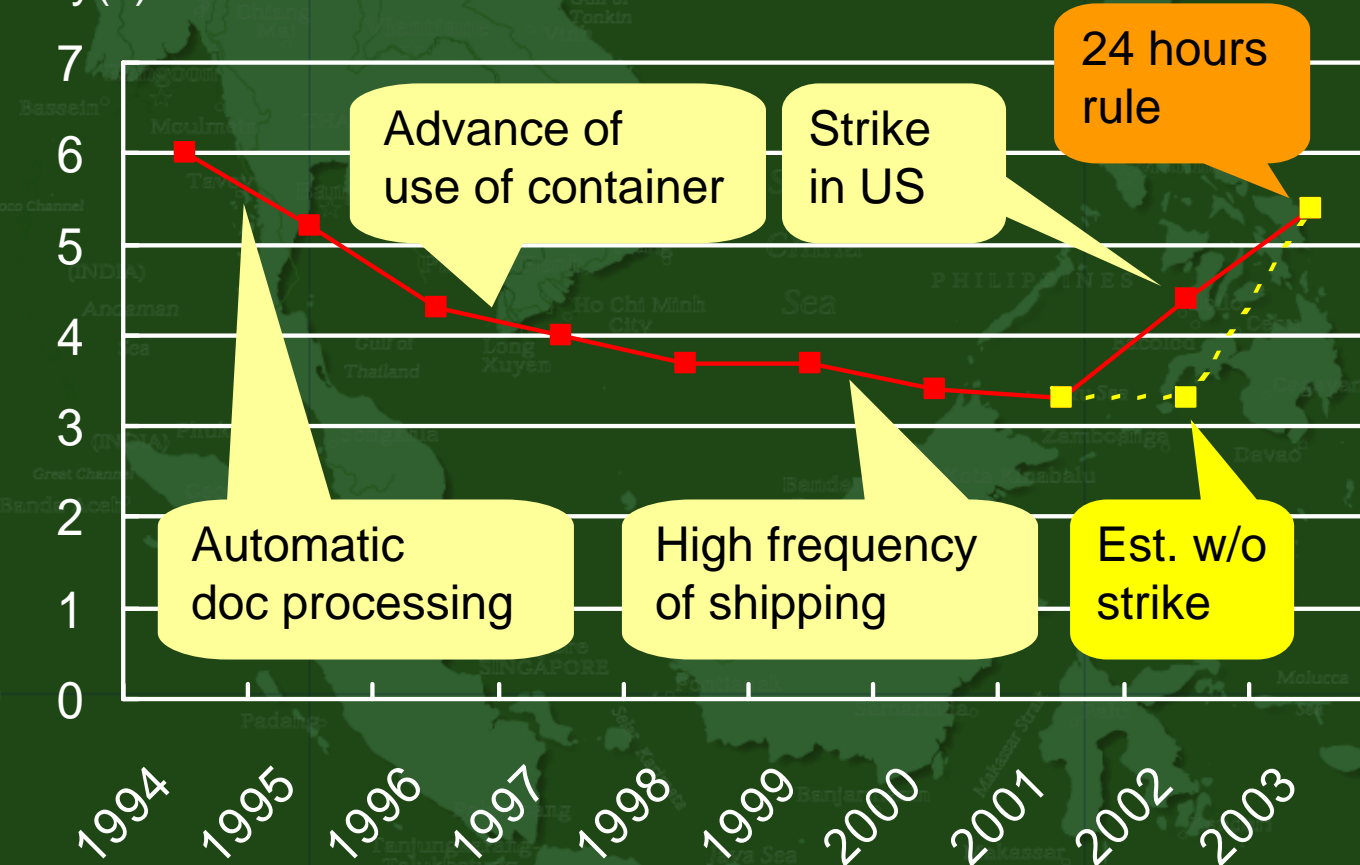
# Estimated Cost of US 24 hours Pre-notice Rule in Japan

	N-4 days	N-3 days	N-2 days	N-1 day	N day
Before	Packing / Preparing container			Submit doc to custom	To ship
After	Packing container	Submit doc to cutom	Making list	Submit to US	To ship

## Estimated Cost of US 24 hours Pre-notice Rule in Japan (continued)

### Time from shipping point to loading to ship

day(s)

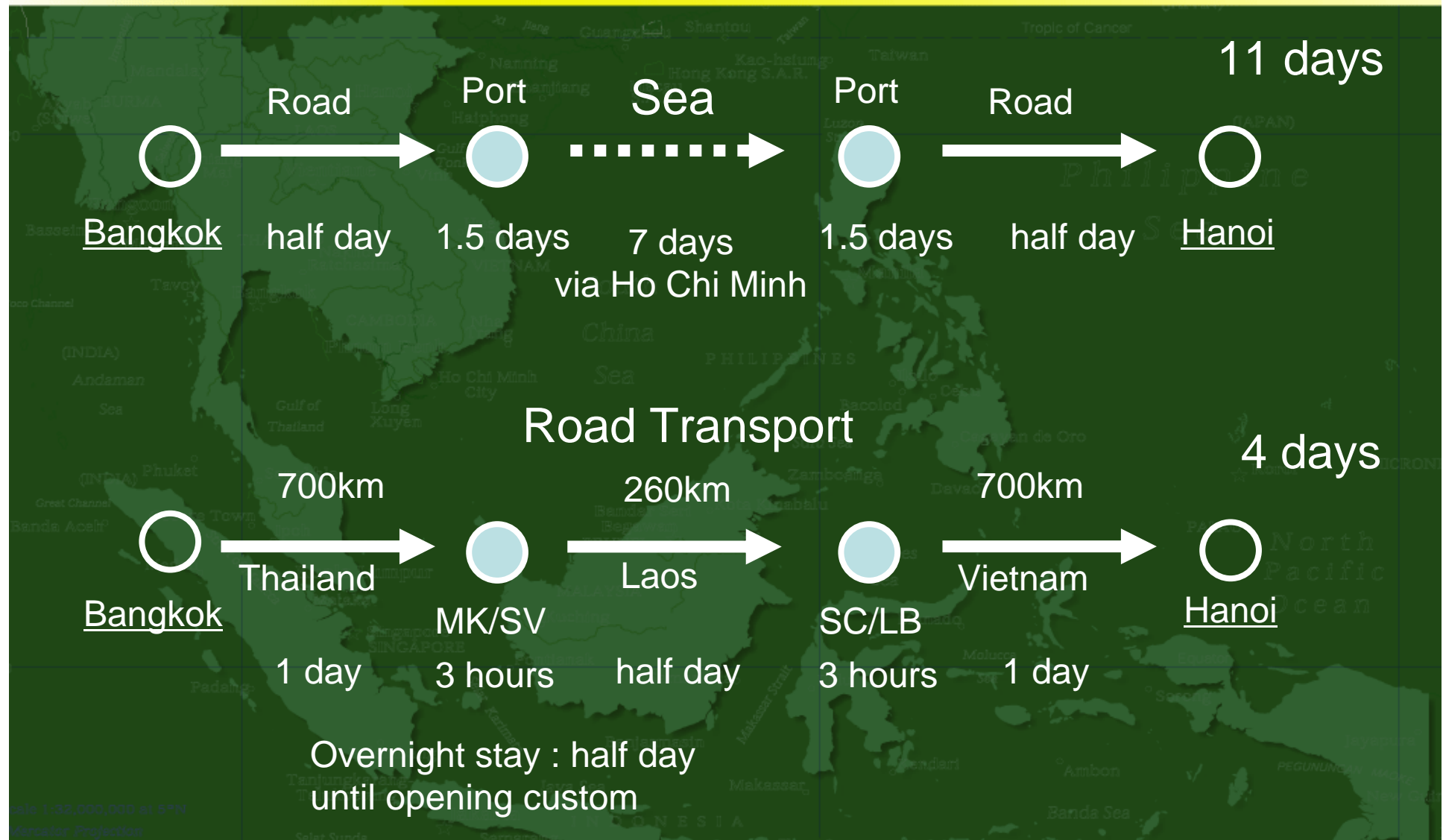


Estimated Cost on Japanese Automobile Industry

Interest :  
2 million US\$

Plus additional warehouse cost and transport cost :  
13 million US\$

# Sample of TIME Component





# Sample of COST Component

## In Case of Bangkok to Hanoi

Sea Transport 2,000 US\$

Major parts: Sea Freight Charge and  
Port related Charges (Container Handling Charge)

Document Fee

Road transport cost

Road Transport 5,000 US\$

Round trip charge for chartered truck

Cost for changing container to other trailer

## Estimated Cost of Change of Vehicle at the Border between US and Mexico

The unit cost of change of one vehicle :  
about 85 to 150 US\$

The time of change :  
about 2 to 3 hours

The trade volume between US and Mexico :  
about 343 billion US\$ per year

The economic effect of without change of vehicle :  
about 425 million US\$ savings per year

## Implications for Infrastructure Management from Shipper's Viewpoint

### Roles of Cross-border Transport

- Small and high frequent shipment needs for container transport
- Road transport as sort-cut route in peninsula area
- Not road transport only, alternative modal selection is important
- Inter-modal connectivity with port, airport and rail is important
- Modal competitiveness to improve its performance
- Possibility from development in international port and airport concentrated industrial sites to development in inland road side

# Issues on Cross-border Transport

## Transport Time

- Long waiting time for custom processing and timing
- Necessity of parallel processing such as in-advance notice
- Necessity of synchronizing trans-shipment time in cross border
- Necessity of synchronizing different transport modes

## Transport Cost

- Small freight volume
- Unbalanced trade balance
- Change of container
- Document processing

## Transport Quality

- Surface condition, fall of rock and flooded area; maintenance issues
- Safety
- Change of container
- Heavy vehicle regulation in urban area



# Infrastructure Management and Shipper's Needs

## Public Management

- Long term for infrastructure development
- Non market conditions; safety and environment
- National security and financing issues
- Resource sharing by common use

## Private Management

- Short term activity depending on market conditions and production factors
- Driving force is change of market
- Market oriented and competition
- Depending on micro specific conditions; time, place, the way of transport, type of goods
- Economic impact of infrastructure development on private activity depends on not only general conditions such as average time and speed but also time and place for specific activity
- Importance of information on institutional framework and the way of operation in planning, programming and budgeting



