

# Container Diversion and Economic Impact Study

**Effects of Higher Drayage Costs at San Pedro Bay Ports**

***September 4<sup>th</sup>-5<sup>th</sup>, 2007***

***Presented by:***



*AND*

**BST Associates**  
Market Research & Strategic Planning

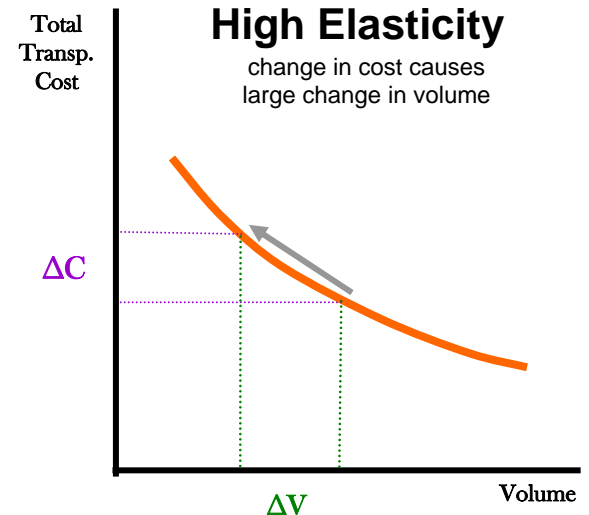
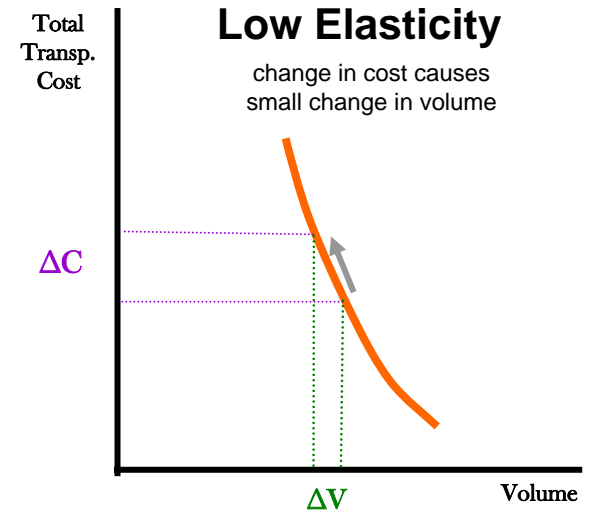
# Scope

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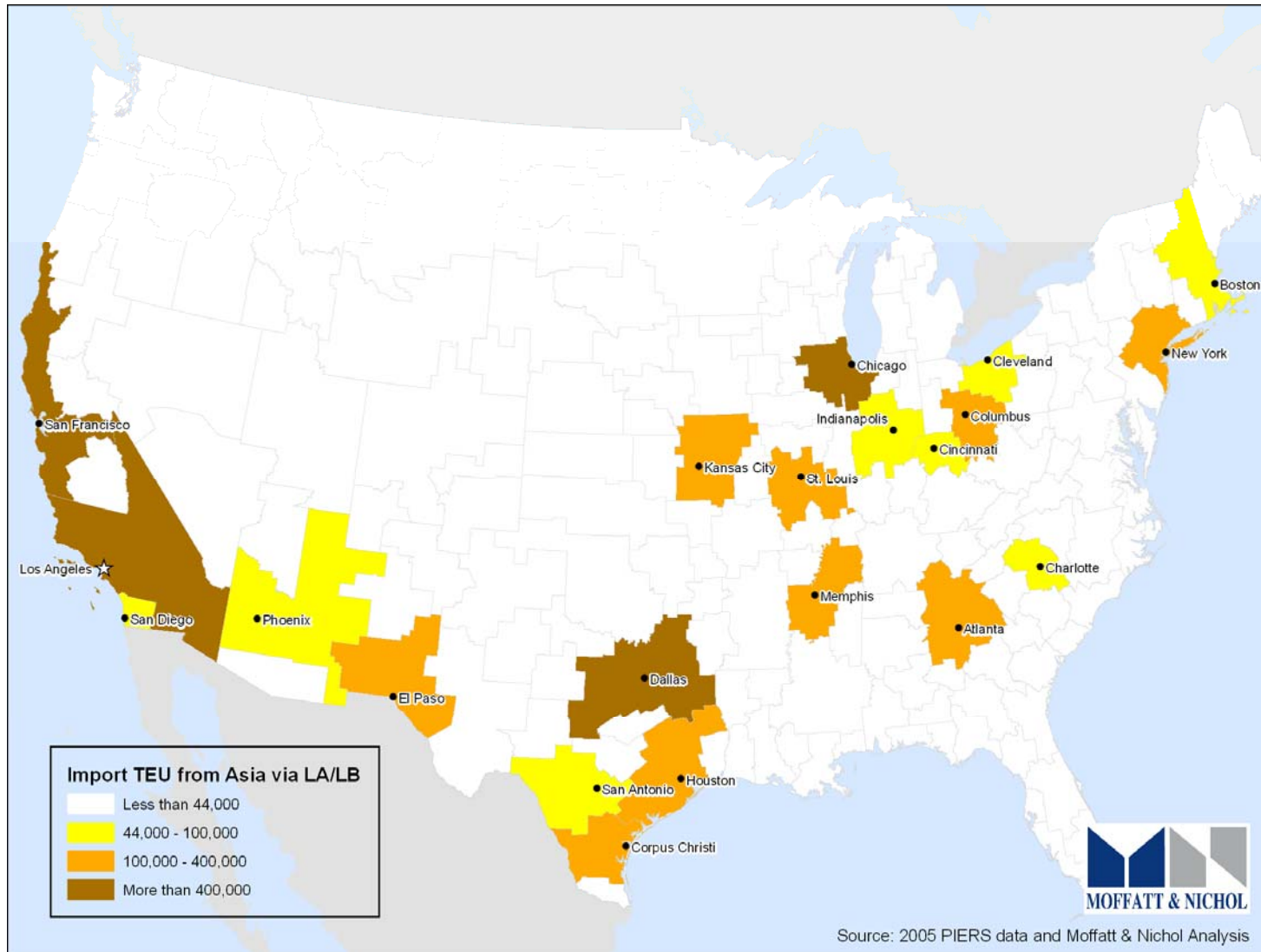
- ◆ Clean trucks initiatives are estimated to raise drayage costs significantly (J. Husing)
  - Concession (not employees) by \_\_\_%
  - Employees with light benefits will raise drayage costs by \_\_\_%
  - Employees with robust benefits by \_\_\_%
  
- ◆ What is impact?
  - Container diversion (M&N)
  - Regional economic impacts (BST)
  
- ◆ M&N Experience with Diversion
  - Impact of ACTA fees on LA/LB Ports
  - Impact of proposed new ports on LA/LB
  
- ◆ BST Experience with Economic Impact
  - Trade Impact Analysis for LA, LB, and ACTA

# Approach

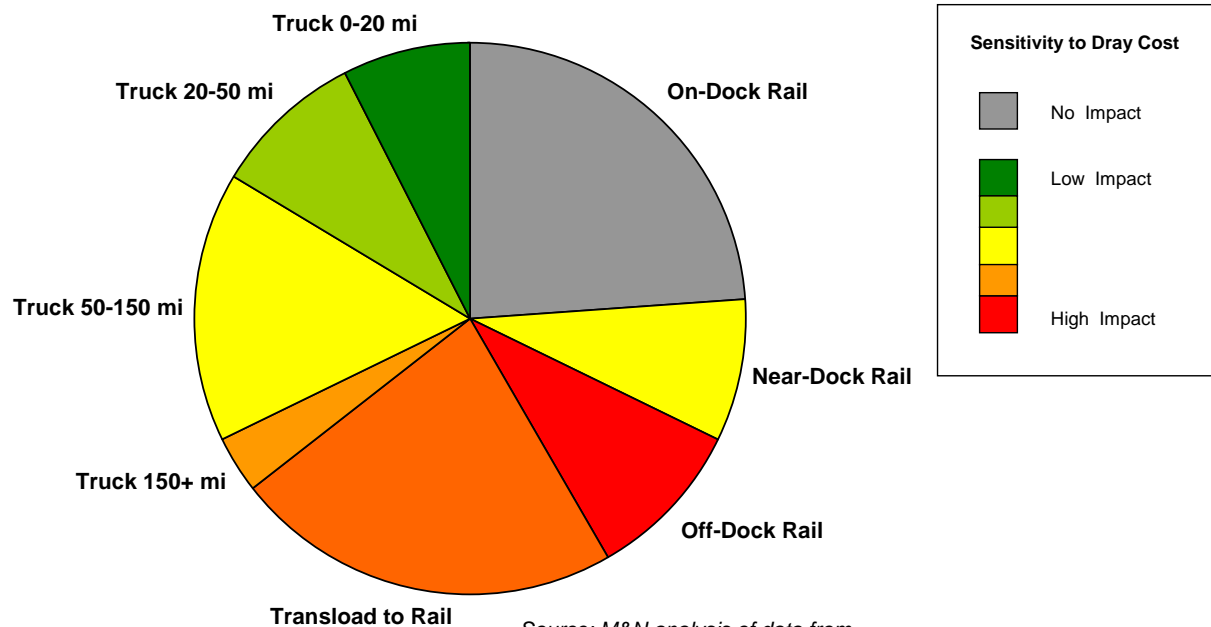
- ◆ Classify movements at port by mode and distance
- ◆ Estimate elasticities using
  - $C$  = total transportation cost
  - $V$  = hinterland market share
- ◆ For each type of movement
  - Estimate total volume at port
  - Model total transportation costs
  - Predict diversion impacts based on estimated elasticity



# Hinterland Market Areas



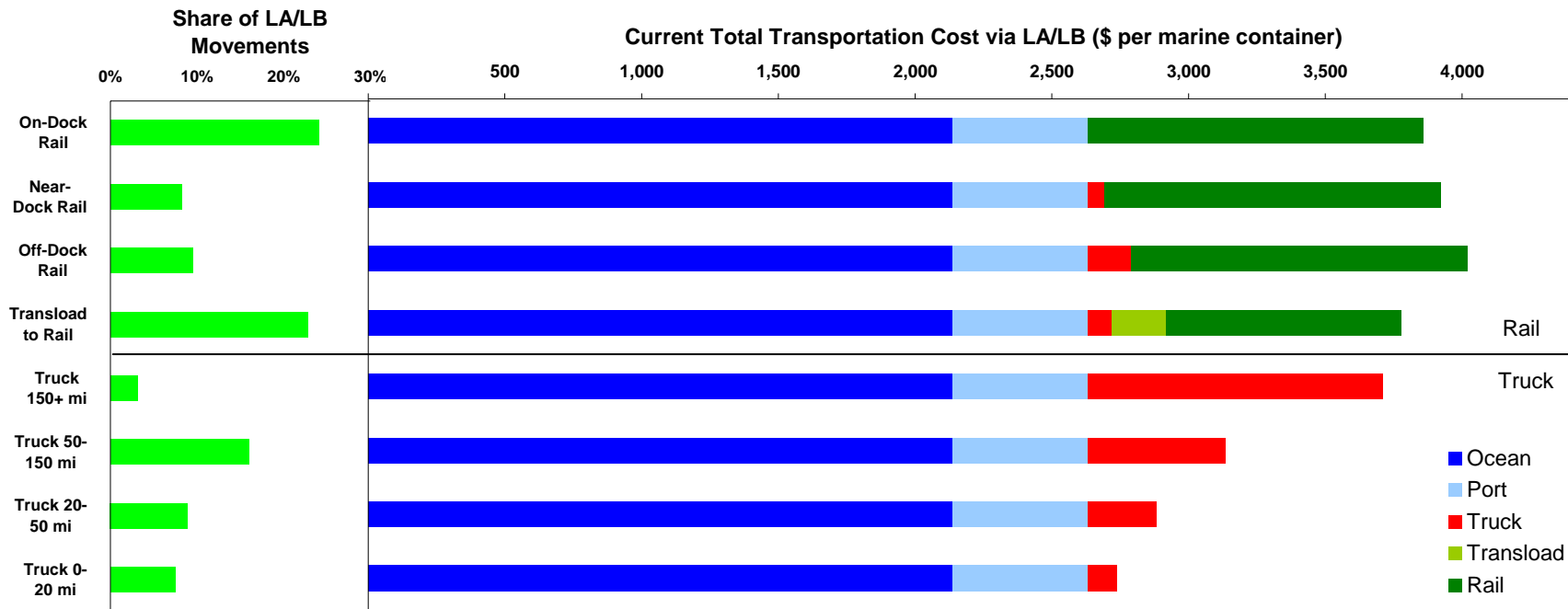
# Movements at San Pedro Bay Ports (2006)



Source: M&N analysis of data from ACTA, August, 2007 and Meyer Mohaddes Associates, April 2004

- ◆ On-dock rail is unaffected by clean truck policies
- ◆ Near-dock ICTF & future SCIG – little impact
- ◆ Local movements are less sensitive to changes in trucking costs – limited alternatives
- ◆ Long-haul & off-dock could divert to other ports

# Import Transportation Cost



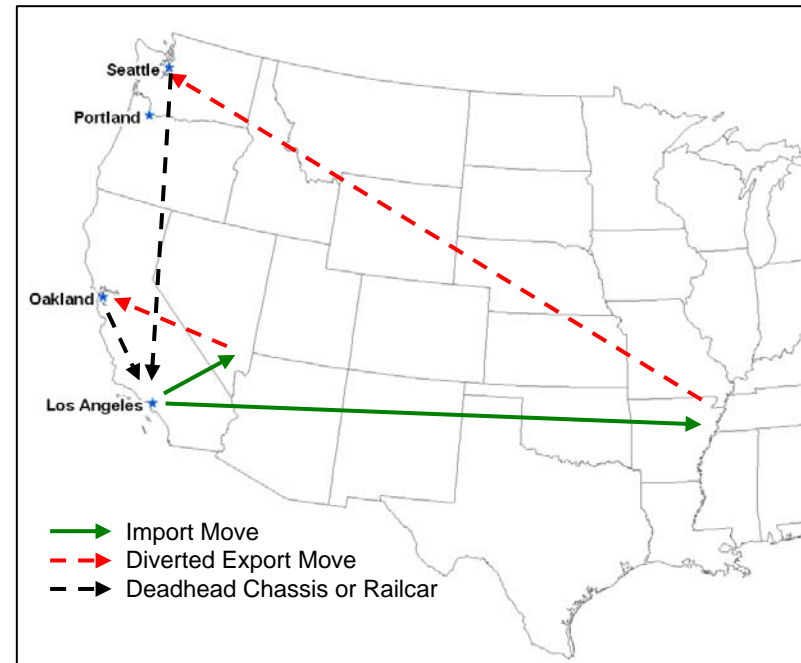
- ◆ For most movements, trucking cost is small
  - Relative to total transportation cost
  - Relative to avg. value of cargo, \$70,000 per container <sup>1</sup>
  
- ◆ Imports bear cost of returning container to Asia

1. US customs declared value

# Export / Empty Diversion

- ◆ Exports bear incremental cost vs. empty return
  - Lower avg. value per TEU than imports
- ◆ Some export/empty diversion from San Pedro Bay occurred in 2006
$$3 \text{ Import} = 1 \text{ Export} + 1.8 \text{ Empty} + 0.2 \text{ Diverted}$$
- ◆ Diversion of exports/empties will be tied to imports
  - Chassis must be returned with clean trucks

## Empty and Export Diversion



## S. California Exports

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- ◆ Estimate increase in cost for local exporters
- ◆ Estimate export TEU that are most sensitive to trucking costs
  - Low-value products
  - Waste products
- ◆ Estimate reduction of local exports through LA/LB ports

# Industry Groups

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- ◆ Port industry
  - Longshore, drayage, crossdock, etc.
  
- ◆ Port Users
  - Imports
    - Wholesale, retail, distribution, transportation, etc.
  - Exports
    - Production, transportation, etc.

# Economic Impact Process

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- ◆ Diversion estimates from M&N
- ◆ Direct impacts
  - Jobs
  - Income
- ◆ Total economic impacts
  - Implan Model
    - 5 county region (Los Angeles, Orange, San Bernardino, Riverside, Ventura)
    - State of California

## Next Milestones:

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- ◆ Report completion: before Sept. 17<sup>th</sup>
- ◆ Presentation of final results: Sept. 17<sup>th</sup> - 21<sup>st</sup>