US-Mexico Transborder Operations

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APRIL 14, 2010
Pre-NAFTA

- Strong growth after Mexico joins GATT in 1986
- Mostly truck, with an interlining border process
- Managed by brokers and freight forwarders
- Border infrastructure inadequate
- Research focus: trade growth and trucks
U.S. – MEXICO ANNUAL TRADE

(Billions of U.S. Dollars)

- U.S. Exports to Mexico
- U.S. Imports from Mexico

Forecast

1978 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08

Decrease in world oil prices
Mexican Peso devaluations and 6 year recovery
Mexico joins the GATT/WTO
Mexico removes import permits and lowers tariffs as required by GATT/WTO
NAFTA Implemented Jan 1, 1994
Mexican Peso devaluations and 1 year recovery

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NAFTA - 1995

- DOTs start to invest in highways
- Federal Government improves border stations
- Low levels of technology
- Customs focus - NAFTA compliance, safety and drugs
- US fails to sanction cross-border trucking in 1995
- Research Focus: border process and infrastructure
Maquiladora Factories in Mexico Account for 1/4 to 1/2 of U.S.-Mexico Trade at Border Ports

Maquiladora trade to the border

Deep trade to factories and consumers in Mexico

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NAFTA 1995 - 2001

- Strong growth in truck traffic
- Federal programs to raise border security
- Little containerized trade – unlike maritime sector
- Drayage attracts attention
- Border processes attract scrutiny
- Maquiladora growth
- Border cities grow in population (jobs, housing, services)
- Research focus: trade corridors, state wide planning
Post 9/11

- China
- Truck volumes drop, value per truck rises
- New technologies enhance security
- Intermodal growth – Mexican seaports, KCS de Mexico
- No cross-border trucking
- Inland ports on trade corridors
- Research focus: security, state-wide planning
Imaging Inspection Systems

VACIS® system configurations

Mobile
Truck-mounted mobile system
Scans containers, trucks and other large objects

Portal
Permanent installation for gates or checkpoints
High throughput – minimal impact on traffic

Railroad
Scans railcars and containers as trains pass by

Relocatable
Track-mounted movable system
Entire system can be moved in 1–2 days

Pallet
Scans cargo on pallets
Rail Trade Increase since NAFTA Inception (1994)
93% of US-Mexico Rail Value through Texas Ports
Texas NAFTA Rail System – Railroad Carriers with Trackage Rights
NAFTA Trucks Future Year (2030)
Current and Future Research Opportunities

- Modeling freight systems under highway funding constraints
- Intermodal efficiencies – internalizing externalities
- Data opportunities from modes, shippers and DHS
- Logistics, DCs, and Inland Ports
- Impacts of paying for truck VMT more efficiently
- Freight systems and Mega-regions
Regional Plan Association Megaregions
Source: America 2050
Mega-Regions in Texas
NAFTA Gateway Rail Flows (2003 Tons)