US-Mexico Transborder Operations

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PRESENTED TO THE BUSINESS ADVISORY COMMITTEE
NORTHWESTERN UNIVERSITY TRANSPORTATION CENTER
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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
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

Deep trade to factories and consumers in Mexico

Maquiladora trade to the border

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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
Estimated Dollar Value of US-Mexico Modal Share

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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)