



US-Mexico Transborder Operations

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PRESENTED TO THE BUSINESS ADVISORY COMMITTEE
NORTHWESTERN UNIVERSITY TRANSPORTATION CENTER
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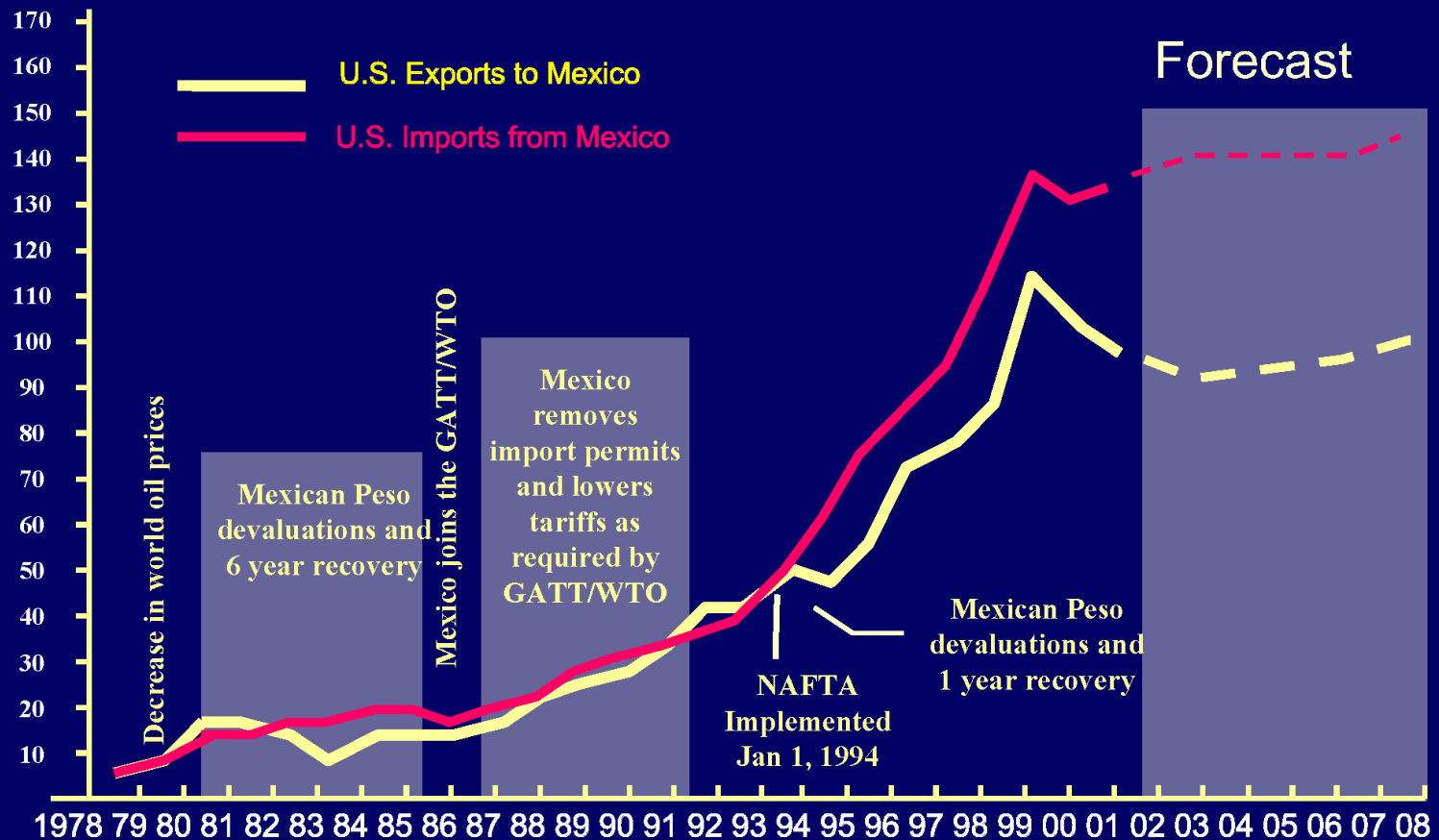
Pre-NAFTA

- 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



U.S. – MEXICO ANNUAL TRADE

(Billions of U.S. Dollars)



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

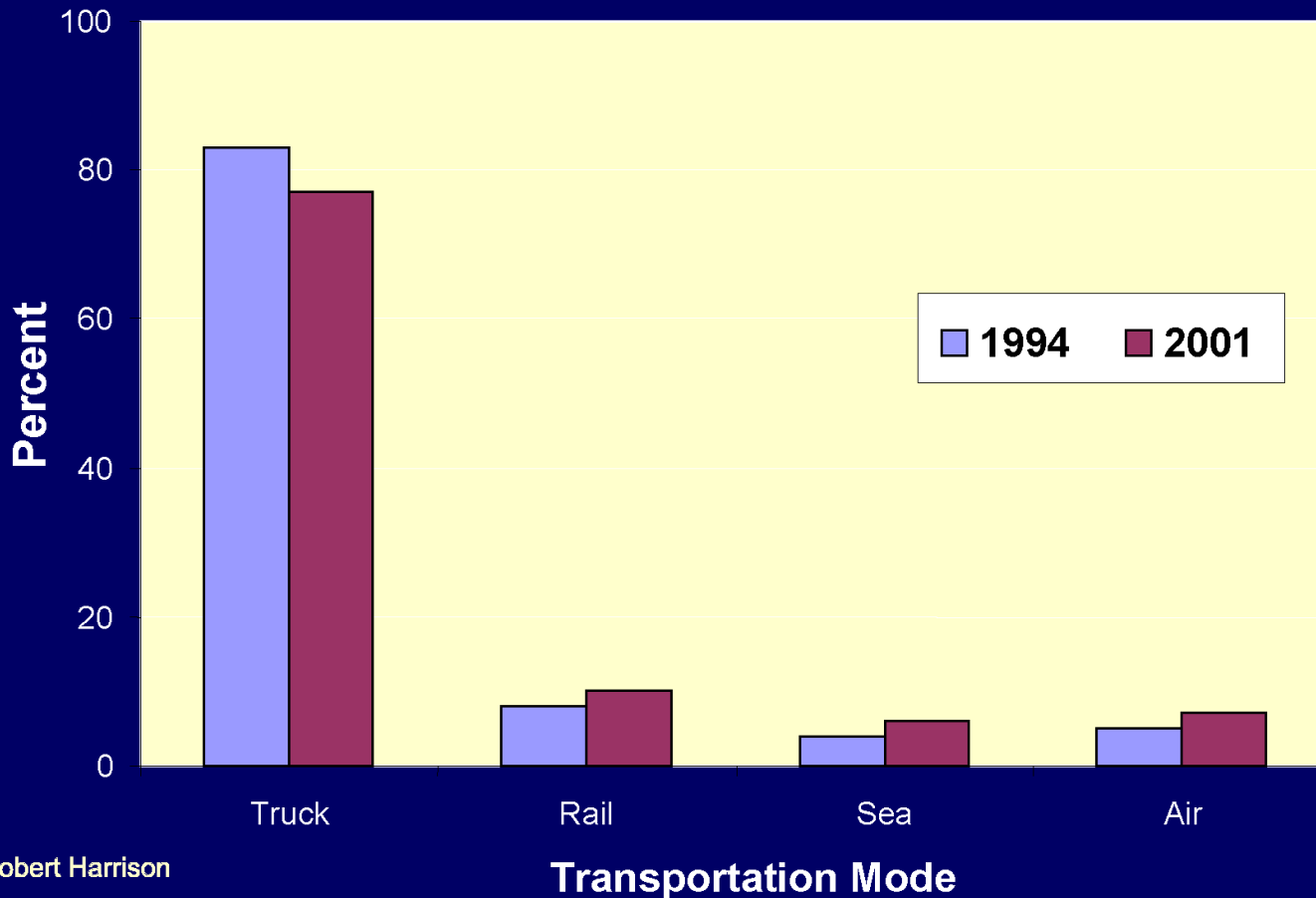


NAFTA 1995 - 2001

- 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





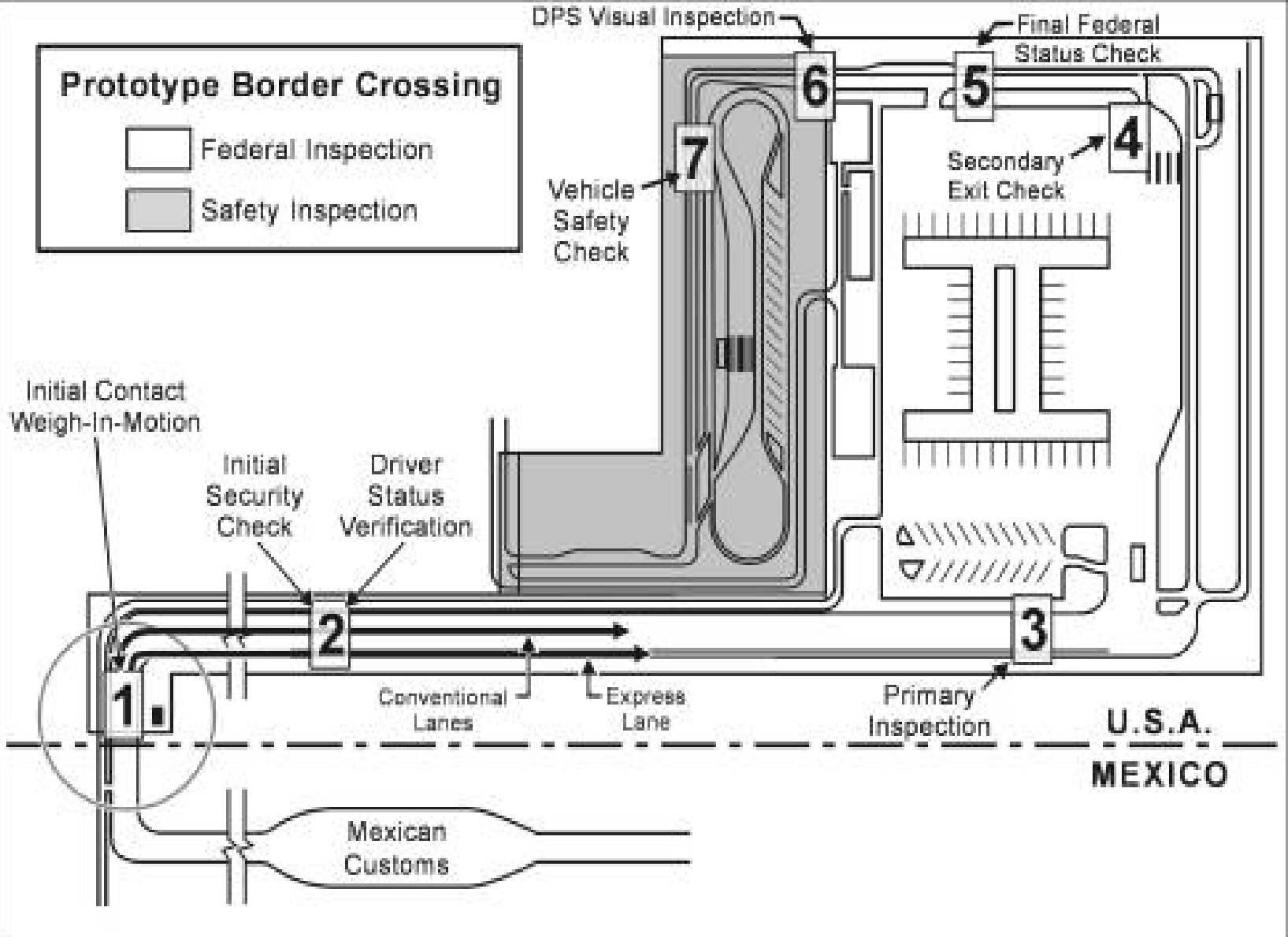
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Prototype Border Crossing

-  Federal Inspection
-  Safety Inspection



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



NE

Heading: 036 Alt: 0346 m

3630.1

XX:XXam

Vehicle Count: 766



Imaging Inspection Systems

VACIS® system configurations



Portal

Permanent installation for gates or checkpoints

High throughput – minimal impact on traffic



Relocatable

Track-mounted movable system

Entire system can be moved in 1–2 days

Mobile

Truck-mounted mobile system

Scans containers, trucks and other large objects



Railroad

Scans railcars and containers as trains pass by

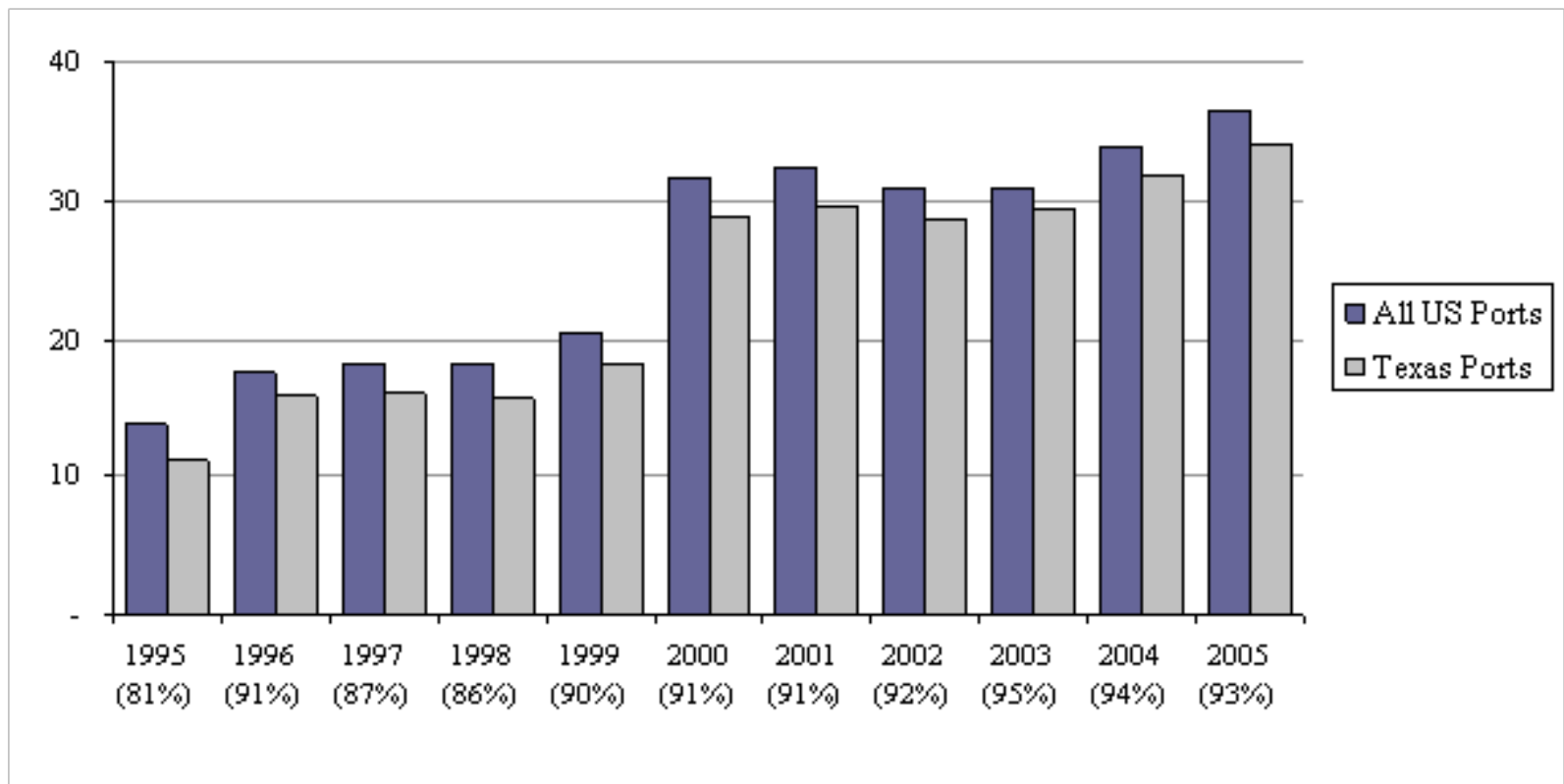


Pallet

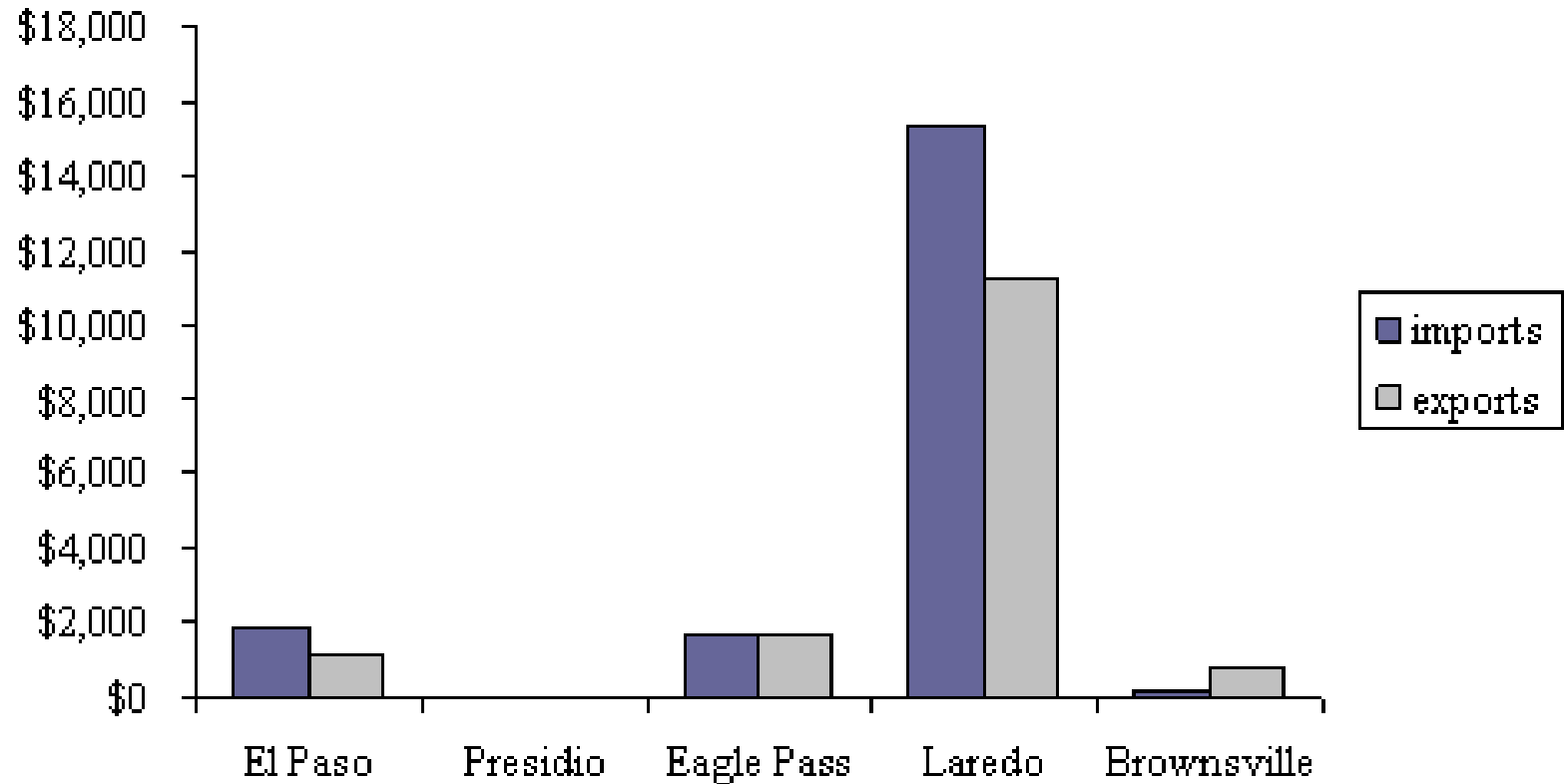
Scans cargo on pallets



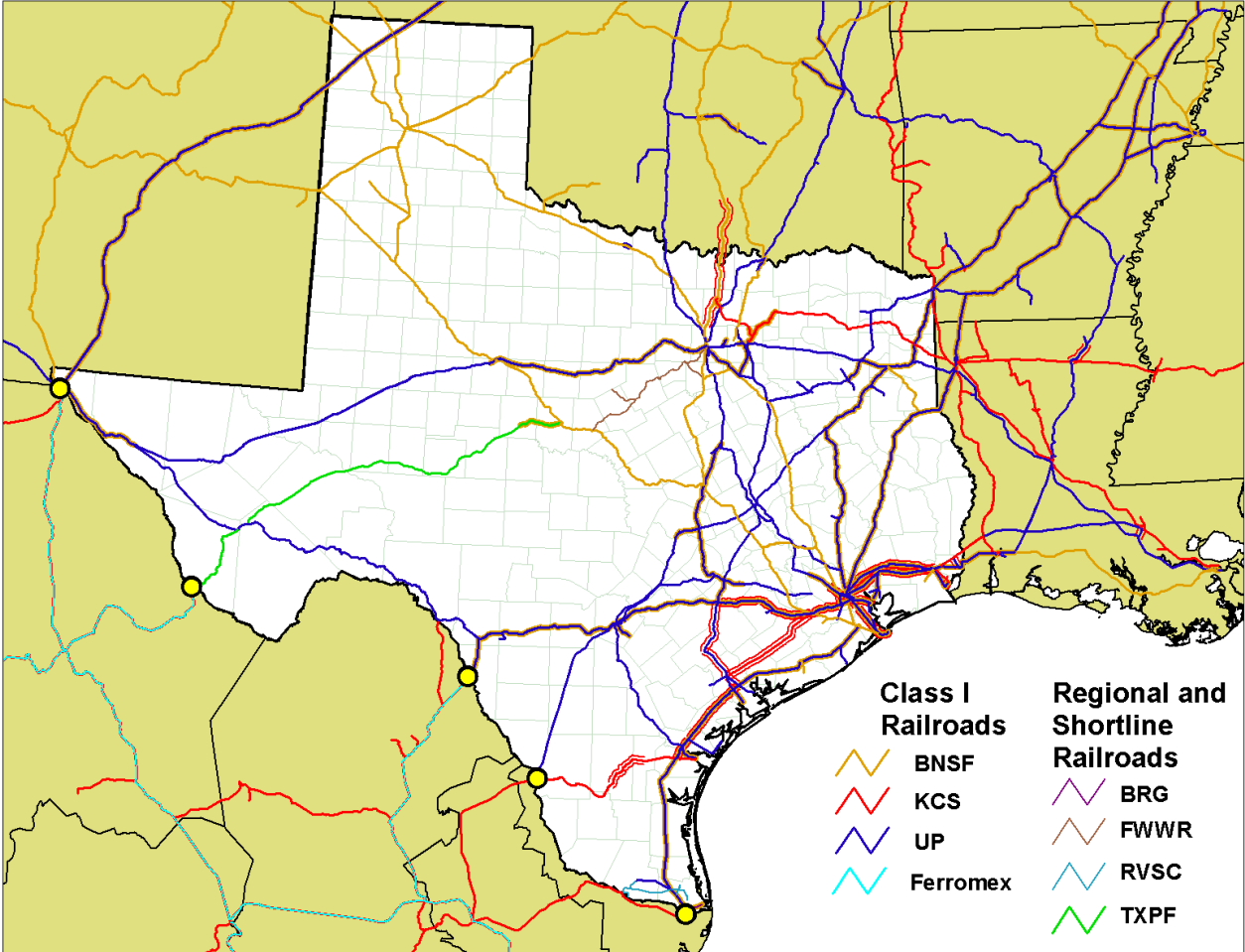
Rail Trade Increase since NAFTA Inception (1994)



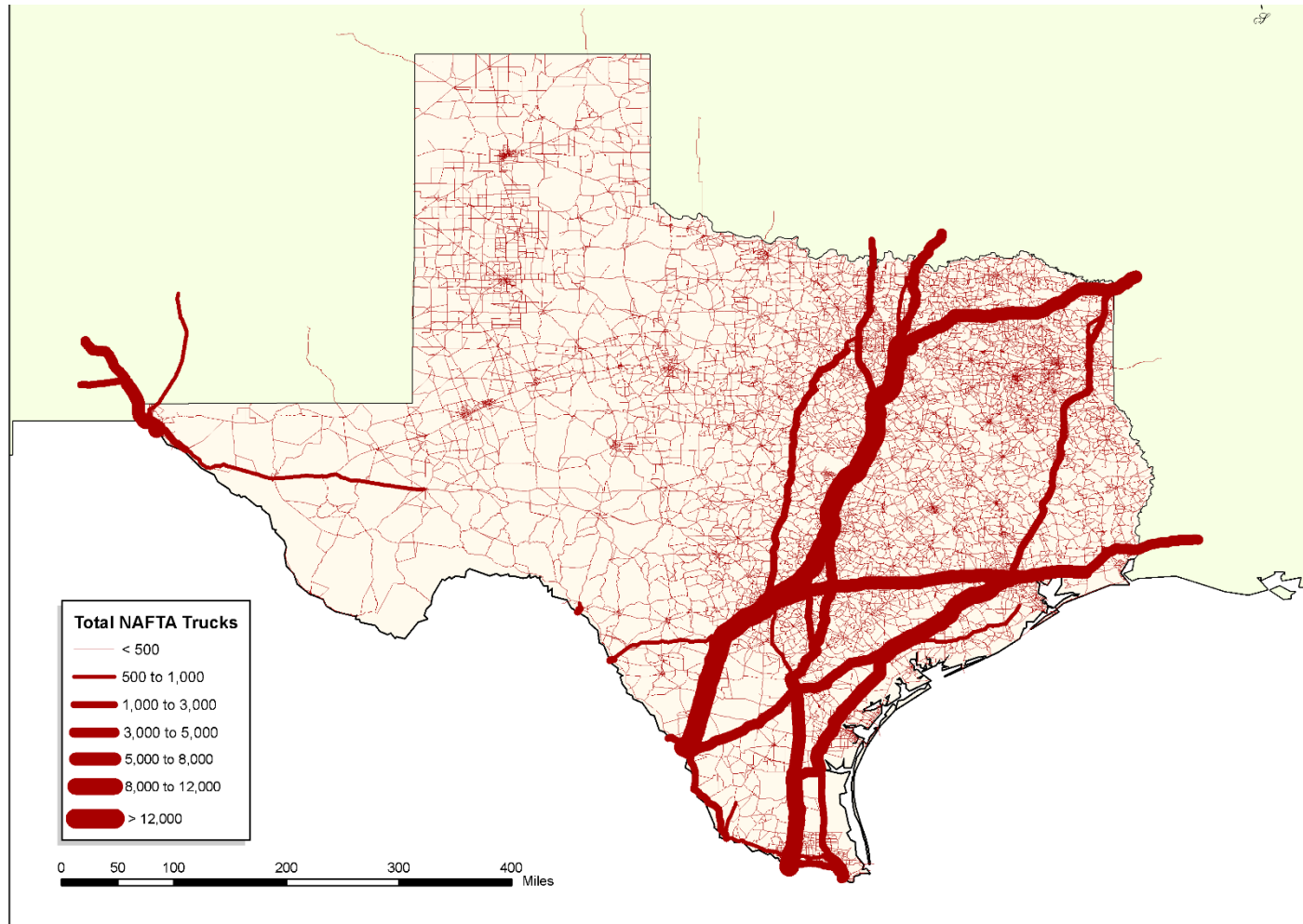
93% of US-Mexico Rail Value through Texas Ports



Texas NAFTA Rail System – Railroad Carriers with Trackage Rights



NAFTA Trucks Future Year (2030)



Estimated Trucks Carrying U.S. Mexico Trade on U.S. Highway Corridors

Annual Number of Trucks by Highway Segment



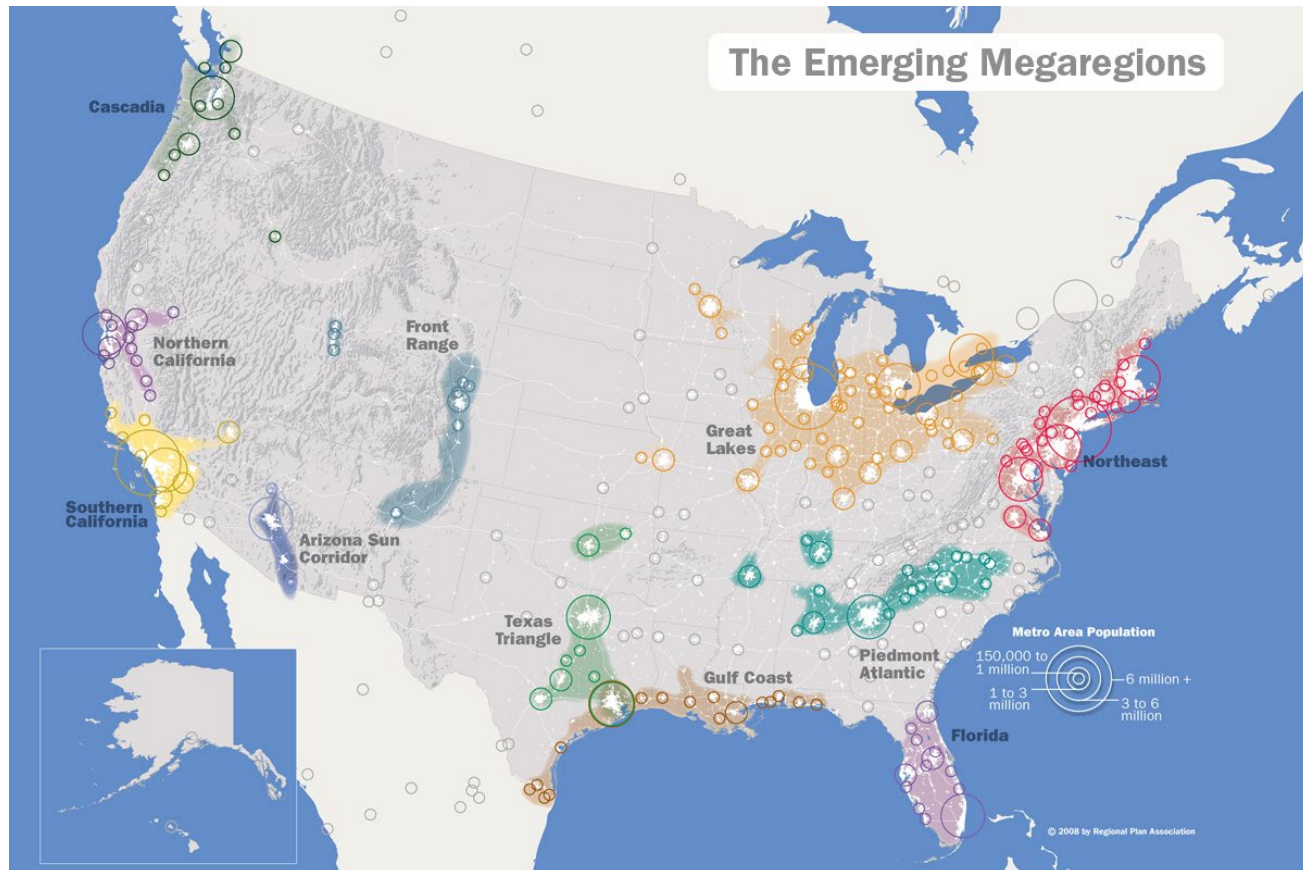
Current and Future Research Opportunities

- 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

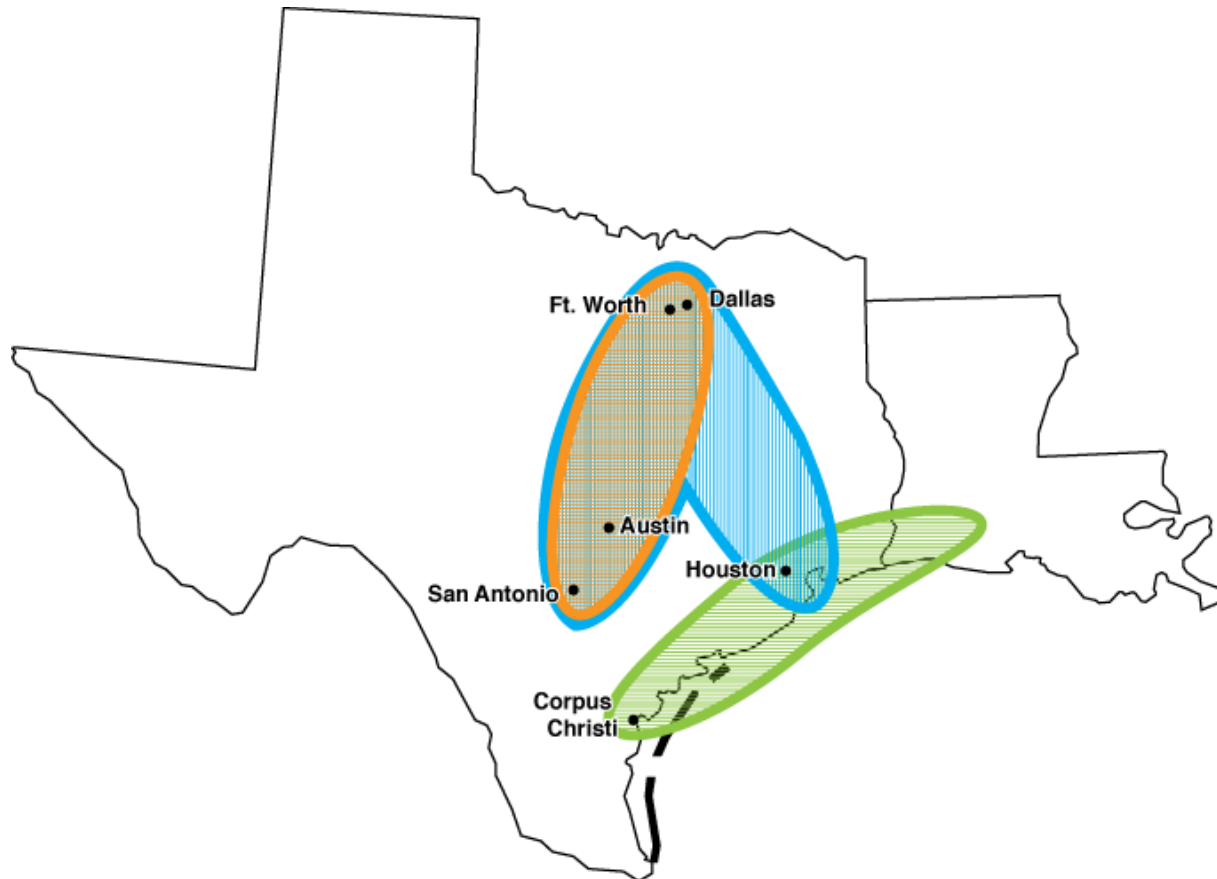
Source: *America 2050*





Center for Transportation Research
The University of Texas at Austin
<http://www.utexas.edu/research/ctr>

Mega-Regions in Texas



NAFTA Gateway Rail Flows (2003 Tons)

