

Maritime Economic Development Workshop

Employing Effective Supply Chain Logistics to Attract Customers

**Dr. J. Lee Hutchins, Jr.
AECOM**

San Diego, California

February 20-21, 2014



Leading our conversation

- Who is our customer
- What does our customer need
- Where is our customer
- How do we communicate



Integral part of the conversation for the freight moved along the supply chains crossing Oceans, Great Lakes and their Rivers

Transportation networks

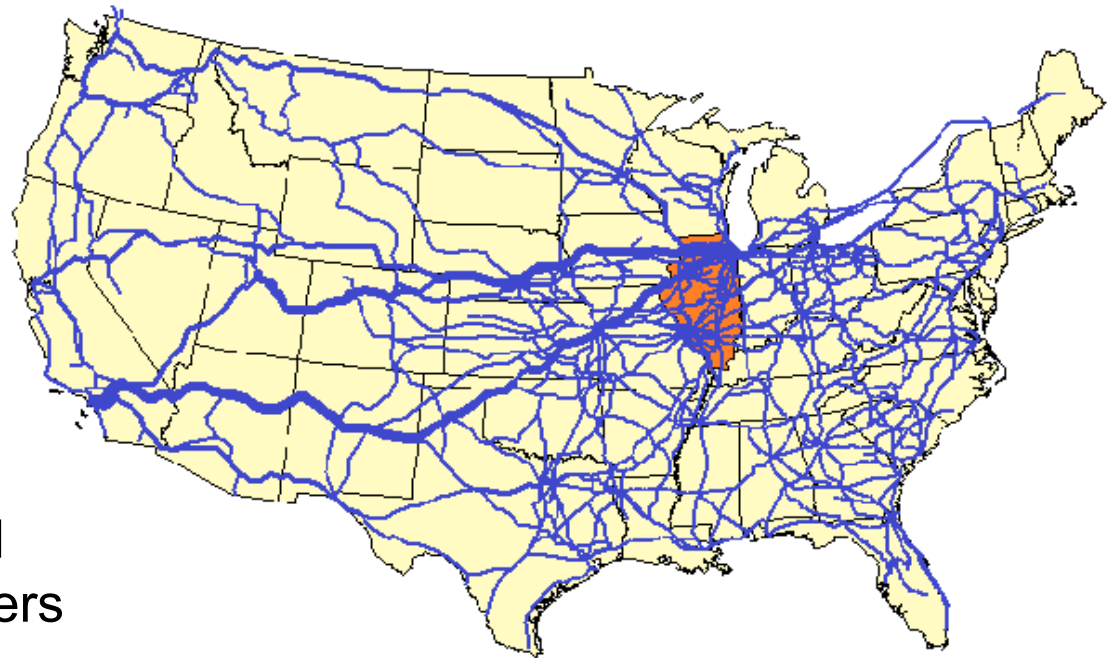
In addition to roadways, relatively easy to see and touch, we have

Inland Waterways



Less transparent,
multiple parts owned
and operated by others

Railroads



Maritime and Inland Ports

Economic centers and physical operations in the global marketplace, aligned with transportation infrastructure, to attract and sustain freight movement, continuously adapting to changing conditions



BNSF Logistics Park



Union Pacific Joliet Intermodal Terminal

Port Locations

- Ports – Started as a physical solution to getting freight on and off the water, adapting to the magnitude and technology of shipping
- Economies of scale for transportation and land use
- Ports make a critical contribution to employment, a sustained industrial presence and a diversified economy
- Inland Ports – Corridor crossings and end points, most often linked to Gateways

*The road and rail networks of the US, Canada and Mexico, together with the diverse functions of a “Port”, form a constellation of **Inland Ports***



Ports and terminals, here and across the globe

- CentrePort Winnipeg
- Rotterdam & Antwerp – Duisburg
- Port of Valencia



Expansion planned at the Port of Valencia



(Source: Oil Tanking Stolthaven Antwerp NV)

Local land use

Asset management and infrastructure investment connect, as well as sustain, the stakeholders and participants in the nearshore industrial setting



Oceans, Lakes & Rivers, Ports & Terminals

- Resources moving between production, processing and markets
- Sharing transportation networks, accommodating each type and purpose of travel

*Dynamic and responsive
mix of land use and
transportation*



Our customer

- Who is our customer
 - Freight Owner, beneficial user
 - Transportation provider
- What does our customer need
 - Material delivered on schedule, in the manner identified, at the agreed upon price
 - Often linked to multiple supply chains
- Where is our customer
 - Often remote
 - Challenge for timely and transparent information
- How do we communicate
 - Often through third parties
 - Most immediate mode



Public and Private Sectors

Asset management, infrastructure investment and employment

- Increase emphasis on freight velocity
 - Increase asset utilization
 - Maximum achievable return
- How
 - Revenue and the marketplace
 - Cost control
 - Market transactions provide insight



Public and Private Sectors

Port and railroad infrastructure investment

- Increase emphasis on freight velocity
 - FAST Freight
 - CN acquired the Elgin Joliet & Eastern
- Volume
 - San Pedro Bay Ports – Alameda Corridor
 - Pacific Harbor Line
- Connectivity
 - Coos Bay, OR
 - Port of Vancouver, BC



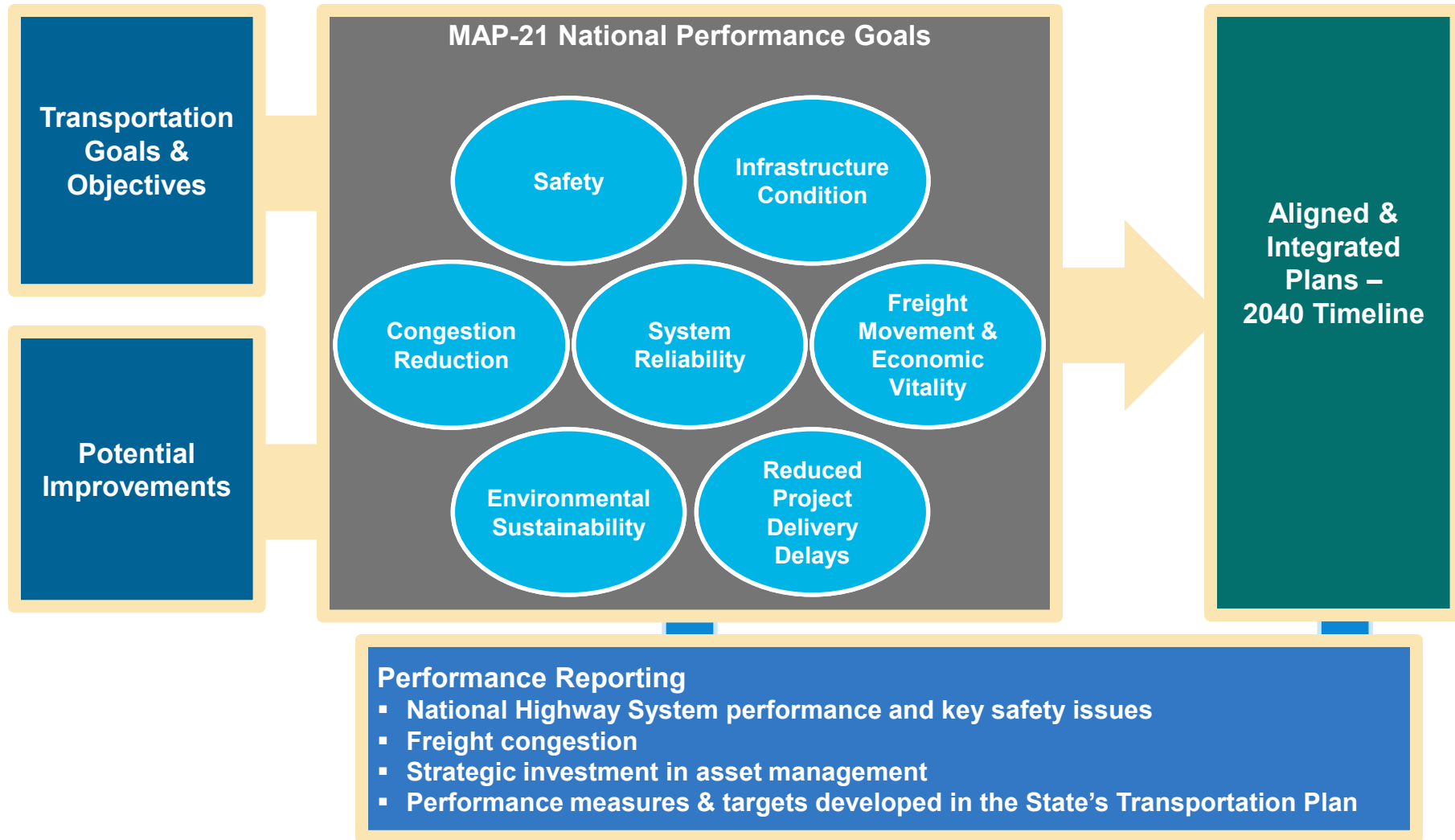
<http://www.acta.org/>



<http://www.railwayage.com/>



On the state level



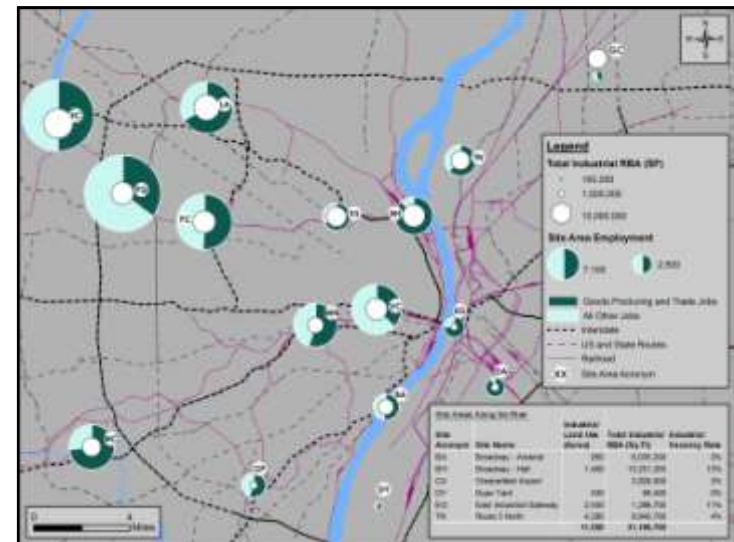
Performance Reporting

- National Highway System performance and key safety issues
- Freight congestion
- Strategic investment in asset management
- Performance measures & targets developed in the State's Transportation Plan

Supply Chains: Beginning and Ending

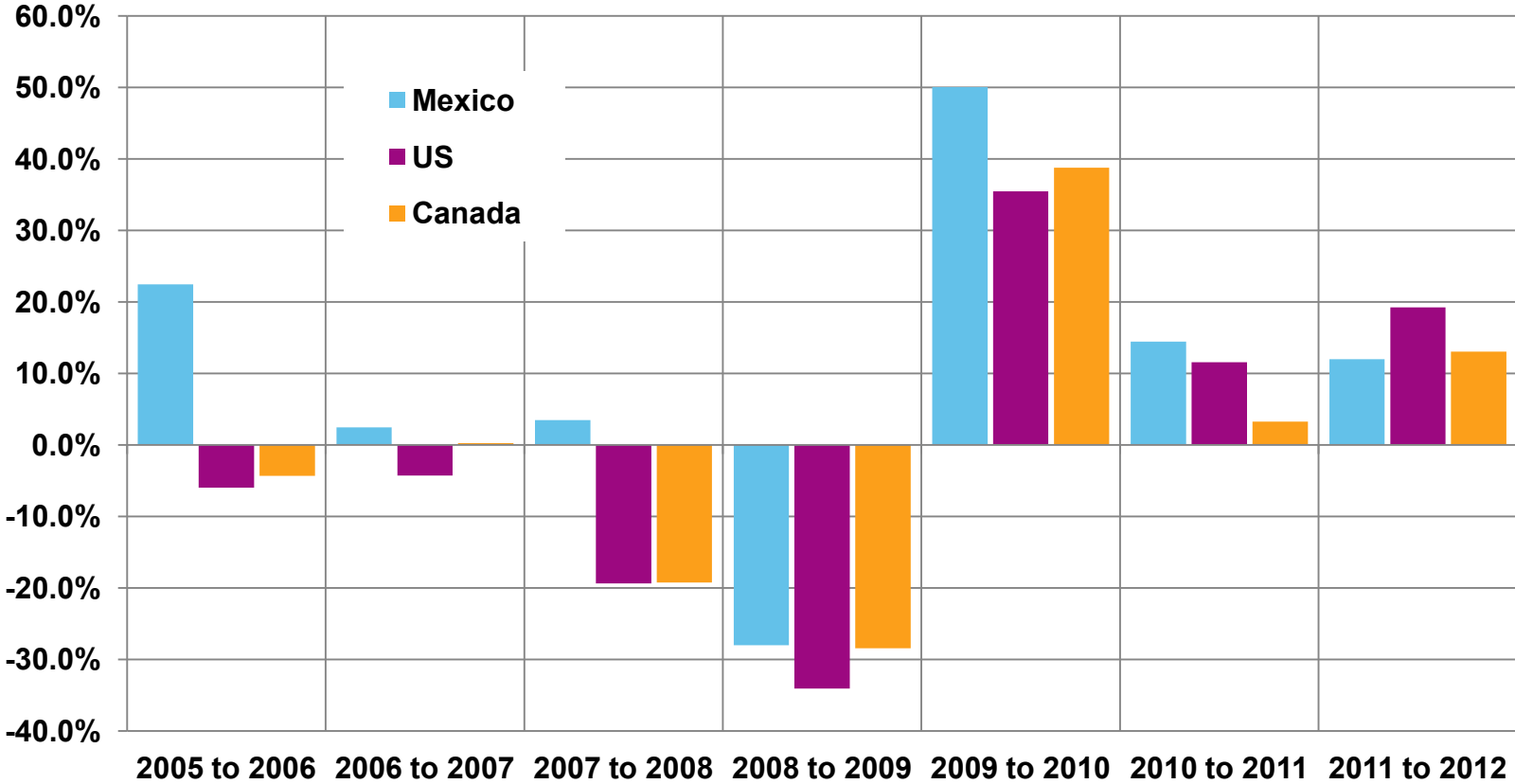
Public & private sector management

- Industrial, distribution and transportation land use
 - St. Louis example
 - <http://www.ewgateway.org/freight/freight.htm>
- Identifying levels of service
 - Local rail network operating rules
 - Maximum achievable return
- Timely market access
 - Shift in coal and agricultural chemicals
- Regional transportation networks
 - Freight velocity at transfer facilities



A Unique Moment in Time

% Change in Annual Vehicle Production



Source: International Organization of Motor Vehicle Manufacturers (OCIA)



Supply Chains: Beginning and Ending

Public & private sector management

- Industrial, distribution and transportation land use
 - Port of Pascagoula example
- Identifying levels of service
 - Increase asset utilization
 - Steel pipe bound for Canada
- Timely market access
 - Freight markets and industrial land use
 - Wood pellet exports from Bayou Casotte
- Regional transportation networks
 - Relocate downtown railroad interchange



Taken together

Asset management and infrastructure investment connect, as well as sustain, industry's supply chains for each of the stakeholders and participants in maritime commerce and marine ecology



Our overall conversation