Intermodal Subcommittee

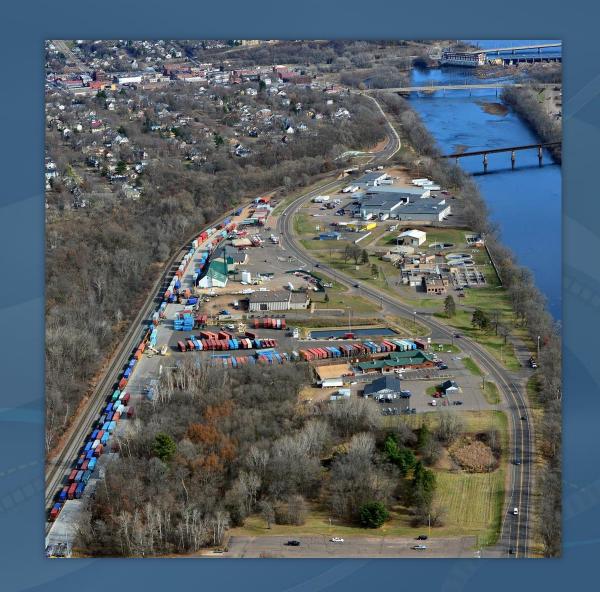
Lisa Stern
WisDOT Railroads and Harbors

Wisconsin Commercial Ports Association Superior, WI

August 17, 2018

Overview

- Background
- Subcommittee Goals
- Members
- Subcommittee
 Accomplishments
- Survey Content
- What We've Learned
- Next Steps



Background

- What is "intermodal?"
 - The Intermodal Association of North America (IANA) defines intermodal service as: "The movement of cargo in shipping containers or trailers by more than one mode of transportation."
 - Cargo is also transferred between modes in packages or in bulk and these are called *multi-modal* or *transloading* operations.
 - These terms should not be used interchangeably.



The key element: Standardized Containers

Background

Benefits of Intermodal

Economies of scale

- Ships transport thousands of containers at once
- Trains can transport over 200 containers at once

Interoperability

- One box design fits all surface transportation modes
- Transferring containers between modes can be done with simple equipment

Reusability

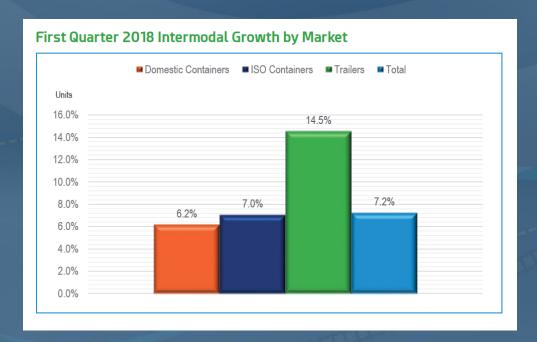
Boxes can be used for many years

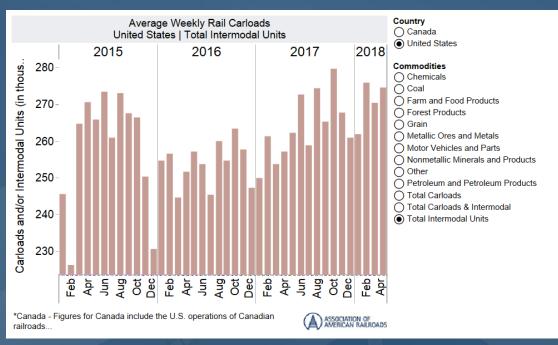


Standardized Containers = reduced shipping costs

Background

- Rail intermodal traffic has trended upward since a lull in 2016 (AAR)
 - Year-to-date through the first 19 weeks of 2018, U.S. carloads are up 1.1% annually at 4,879,984, and intermodal units are up 5.9% at 5,158,588.





- Growth in domestic container traffic for the first quarter of 2018 of 6.2 percent; international containers up 7 percent; trailers ("piggyback") up 14.5 percent (IANA)
- Three of five fastest-growing trade lanes have U.S. Midwest as origin or destination

Background - How We Got Here



- Spring 2017 Freight Advisory Committee
 - Intermodal Strategy: voted most beneficial *and* most conducive to joint public-private action among the nine new policies in Wisconsin's State Freight Plan
- Fall 2017 to Summer 2018 Subcommittee developed / in-progress
 - Six in-person meetings (monthly March-August 2018); one teleconference

Subcommittee Goals

- "Identify current and future opportunities and challenges to connect Wisconsin industries to world markets through the increased efficiency of containerized shipping"
- Intermodal Strategy Report to be created



Subcommittee Members

- Aim Transfer & Storage
- Canadian National
- Canadian Pacific
- The DeLong Company
- Hapag-Lloyd (America)
- JUSDA USA
- Krueger Lumber / Lake States Lumber Association
- League of Wisconsin Municipalities

- DATCP
- UW-Madison
- UW-Oshkosh
- UW-Superior
- WEDC
- WisDOT

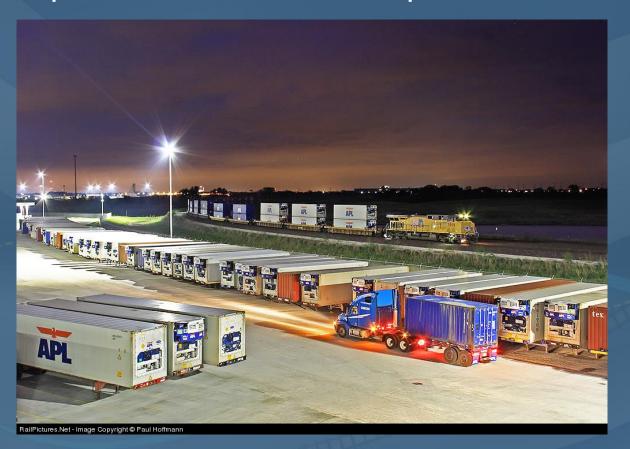
- Logistics Council of Milwaukee
- Menards
- Port of Green Bay / WCPA
- Port of Milwaukee
- Union Pacific
- Wisconsin & Southern Railroad
- Wisconsin Agri-Business Association
- Wisconsin Manufacturers & Commerce

- Outline for report complete and approved
- Content:
 - Executive Summary
 - Purpose of the Report
 - What "intermodal" means
 - History of intermodal terminals in Wisconsin since 1990
 - Current intermodal operations supporting Wisconsin



- Outline content, continued
 - Wisconsin importers and exporters who use / could use intermodal
 - Potential markets; metrics
 - Future developments that could impact intermodal viability in Wisconsin
 - Maritime
 - Rail
 - Trucking
 - Domestic intermodal opportunities
 - Improving Wisconsin's potential for intermodal development

 Members have committed to provide data for the Report





- Historic volumes
- Container shipping costs
- Steamship business models
- Drayage costs
- Transfer locations, volumes, and container contents



Survey Development

- Collaboratively created by Subcommittee
- Content / format reviewed and approved
- WMC will manage survey distribution, collection, tabulation, and archiving
- All sensitive / proprietary information to be removed from responses prior to the sharing of results with state agencies

Survey Content

- Directed to importers, exporters, and domestic users
- Quantifying current and potential use / interest
- Questions to identify similar content:

Overseas Imports:

- Coast of entry
- Wisconsin destination ZIP code
- Container sizes / numbers
- Enter Wisconsin in container?
- HAZMAT?
- Temperature Controlled?
- General contents

Overseas Exports:

- Wisconsin origin ZIP code
- Coast of export
- Container sizes / numbers
- Leave Wisconsin in container?
- HAZMAT?
- Temperature Controlled?
- General contents

Domestic / North America:

- Wisconsin ZIP Codes (origin or destination)
- Origin or destination North American region outside of Wisconsin
- Container sizes / numbers
- HAZMAT?
- Temperature Controlled?
- General contents

What We've Learned

Imports drive exports



 To have sufficient container quantities for exports, the state needs to attract inbound imports

•Wisconsin has enough product to fill export containers

Mostly grains and DDGs

Hardwoods



Steamship lines dictate the flow of international containers

- These lines own the vast majority of existing containers
- They want to reduce cycle time to maximize efficiency and reduce capital expenditures on additional containers



International intermodal and domestic intermodal are two different operations

 Export containers follow routes to and from coastal ports





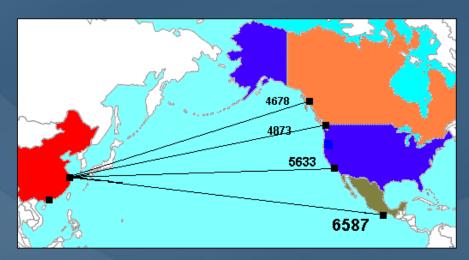
 Domestic intermodal containers can move anywhere in North America

Overseas intermodal is a probable precondition for North American intermodal in Wisconsin

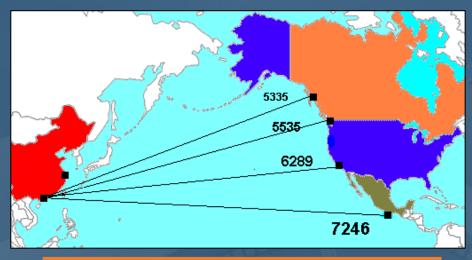
Subcommittee
 members state the
 focus should be on
 building the overseas
 import / export side
 first, then adding
 North American
 operations where
 warranted



Asian trade lanes determine potential railroad partners



Nautical miles from Shanghai



Nautical miles from Hong Kong

- Canadian lines serve Vancouver and / or Prince Rupert
- BNSF and UP serve Los Angeles / Long Beach
- CSX and NS only serve east and Gulf coast ports



International Trade Lanes Require Balance

Steamship lines seek"matchback" loads for efficiency





Challenge for Wisconsin exporters to Europe:
 Most of inbound containers to Wisconsin originate in Asia; they will be directed to return

Each Class I railroad has a different network and thus a different business model for intermodal

CP operates from the U.S. Midwest and north

EMP OutReach Program



UP and BNSF
have major lanes
between Chicago
and California /
Portland / Seattle



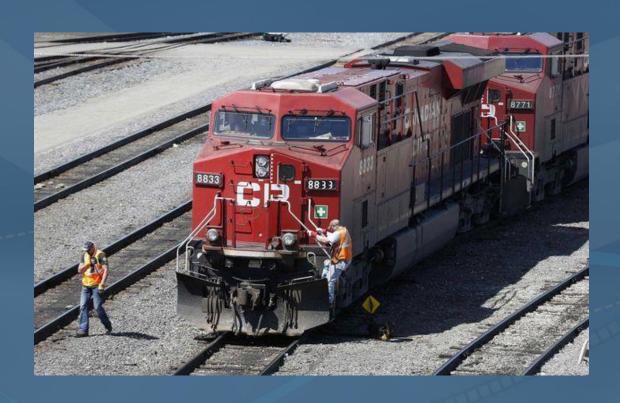
NS and CSX operate east and south of Chicago

CN extends
across British
Columbia, Gulf
of Mexico,
Maritimes

O CN Intermodal Terminals

Class I railroad networks adapt to market demands

 Crew change points add or reduce intermodal location viability





 Railroads collaborate on runthrough operations to extend the reach of their systems

Drayage rates have grown as one-day travel distances have shrunk

- For service to / from Chicago, cutoff line is north of Milwaukee and Madison
- Economic penalty for NE Wisconsin importers and shippers
- Driver shortages continue to grow
- Chassis condition, availability



Weight limits on roads connecting to intermodal yards can influence viability

 Allowing local movement of import or export containers adds capacity and efficiency for businesses



Demand drives investment

 Where sufficient, sustainable demand for freight shipping is demonstrated, intermodal service can be considered





"Anchor businesses" will be critical to the development of a new, sustainable intermodal facility



These larger
 businesses will
 have both the
 volume and
 permanence to
 merit investment
 from Class I
 railroads and
 others

"Wisconn Valley"

- "Wisconn Valley" is anticipated to generate interest in freight efficiency improvements that will include intermodal
 - Could support suppliers as well as other regional businesses



Look at Multiple Options

• Subcommittee members are interested in a report that presents more than one potential model for intermodal operations





 Consider a range of scales / sizes, partnerships, management, and other features

Limits of the Subcommittee Report

- The Subcommittee report can help find promising regions of the state that are most favorable to development of intermodal terminals
 - Actual site
 selection and
 development will
 be determined by
 the railroads and
 local partners



Funding

 There are federal grant programs with money available for intermodal





 WisDOT or local governments could sponsor grant applications

Next Steps

- Survey release
 - Released August 8th
 - Conducted through SurveyMonkey
 - WMC as main clearing house
 - Seeking other partners to distribute survey to their members
- August through late fall 2018
 - Monthly meetings
 - Data gathering / analysis
 - Drafting of report
- Fall FAC meeting November 15th
- Overall a great joint public-private effort!

