



# **Paths to Prosperity: Michigan's International Corridors**

**Mid-America Freight Coalition  
Annual Meeting  
March 12, 2013**

**Larry Karnes**

**Michigan Department of Transportation**

# Today's Topics

- Michigan's Highway & Rail Systems
- Major Corridors
- Border Crossings
- U. S. / Canada Trade
- Michigan's Partnerships
- Major Projects on International Corridors



# Michigan's State Trunkline System

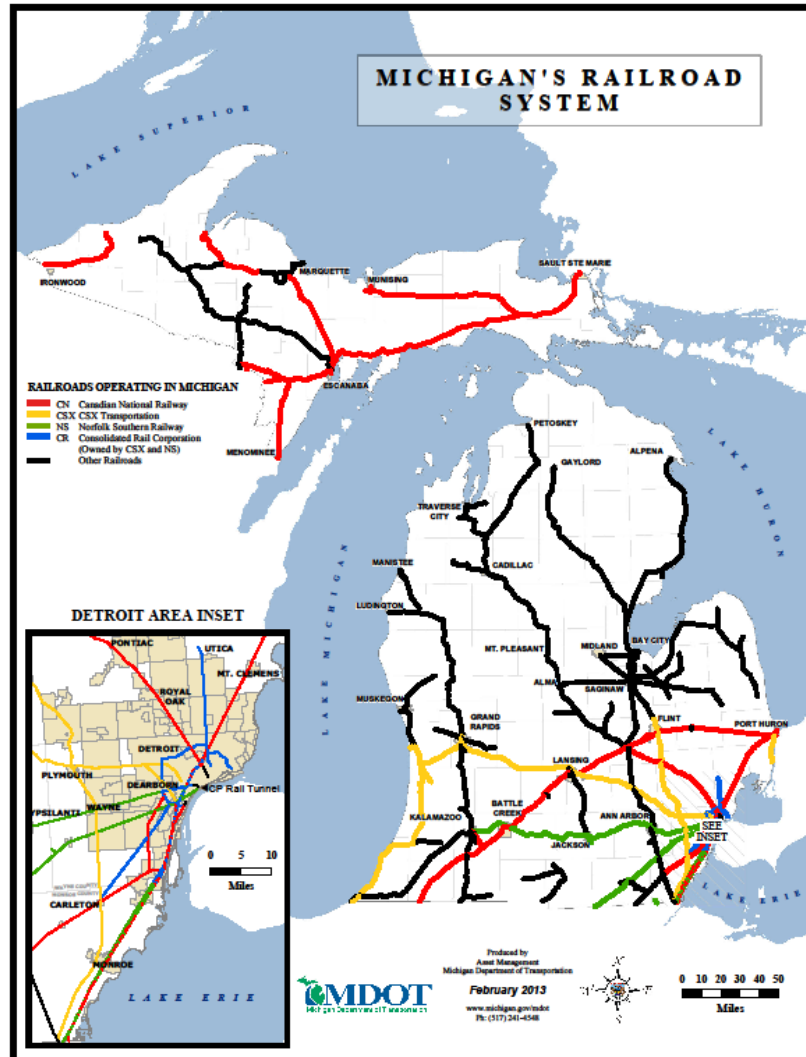


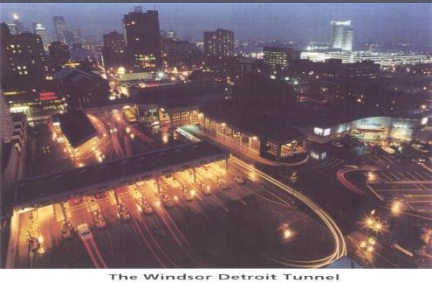


# Michigan's Corridors of Highest Significance



# Michigan's Rail System









The Windsor Detroit Tunnel

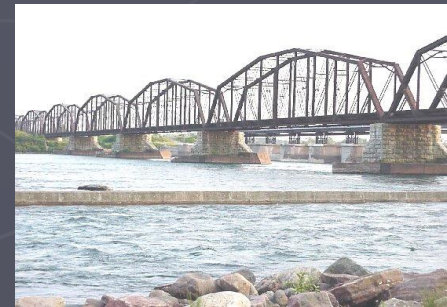


## State of Michigan International Border Crossings



**Map Legend**

-  Bridge Crossing
-  Railway Bridge Crossing
-  Ferry Crossing
-  Tunnel Crossing



# International Border Crossings

## Highway Crossings

- Detroit-Windsor (Ambassador Bridge)
- Detroit-Windsor (Detroit Windsor Tunnel)
- Port Huron-Sarnia (Blue Water Bridge)
- Sault Ste. Marie (International Bridge)

# International Border Crossings

## Rail Crossings

- Detroit-Windsor (Detroit River Tunnel)
- Port Huron-Sarnia (St. Clair Tunnel)
- Sault Ste. Marie (International Bridge)

## Ferry Crossings

- Detroit-Windsor (Truck Ferry)
- Algonac-Walpole Island (Auto Ferry)
- Marine City-Sombra (Blue Water Ferry)

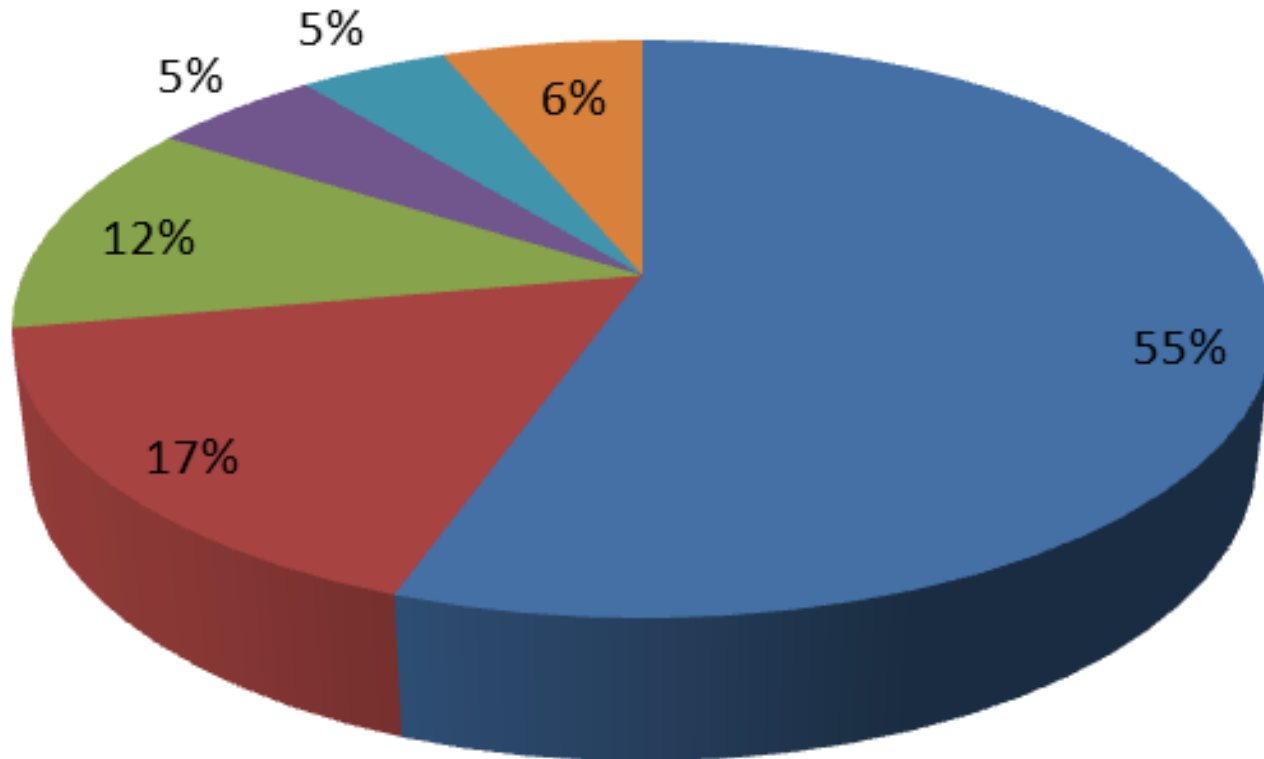


# U. S. / Canada Trade

- World's largest trading partnership
- Each country is the other's largest trading partner
- Trade enhanced by NAFTA (1994) and previous agreements
- \$616 Billion (2012)

# U. S. / Canada Trade Modal Split

Truck Rail Pipeline Marine Air Other\*



# U. S. / Canada Trade

- 35% of all U.S. / Canada trade passed through Michigan
  - 22% through Detroit
  - 13% through Port Huron
  - 0.5% through Sault Ste. Marie
- *Every* state moves some part of its trade with Canada through Michigan

# U. S. / Canada Trade

## ➤ Top states (2012, by value):

- |                       |                      |
|-----------------------|----------------------|
| 1. Michigan (\$65B)   | 7. Tennessee (\$9B)  |
| 2. California (\$18B) | 8. Kentucky (\$5B)   |
| 3. Ohio (\$17B)       | 9. Wisconsin (\$4B)  |
| 4. Texas (\$16B)      | 10. Minnesota (\$3B) |
| 5. Illinois (\$16B)   | 11. Missouri (\$2B)  |
| 6. Indiana (\$15B)    | 12. Iowa (\$2B)      |



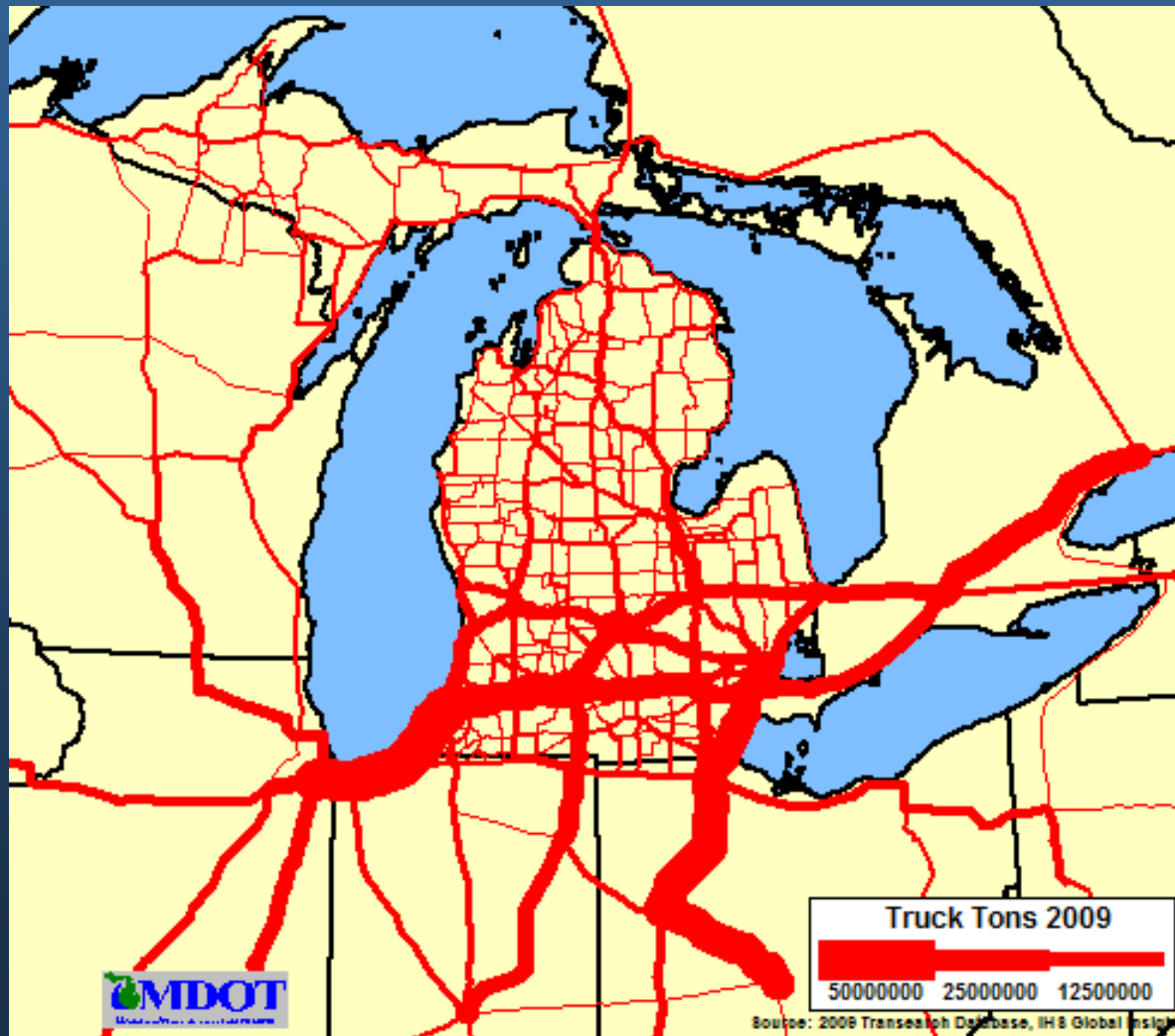
# U. S. / Canada Trade

- States with > 50% of its Canadian trade using Michigan's border crossings:  
Arkansas, Indiana, Kentucky, Michigan, Mississippi, Missouri, Tennessee, and Wisconsin
- Trade across Ambassador Bridge alone equals total U.S. – Japan trade

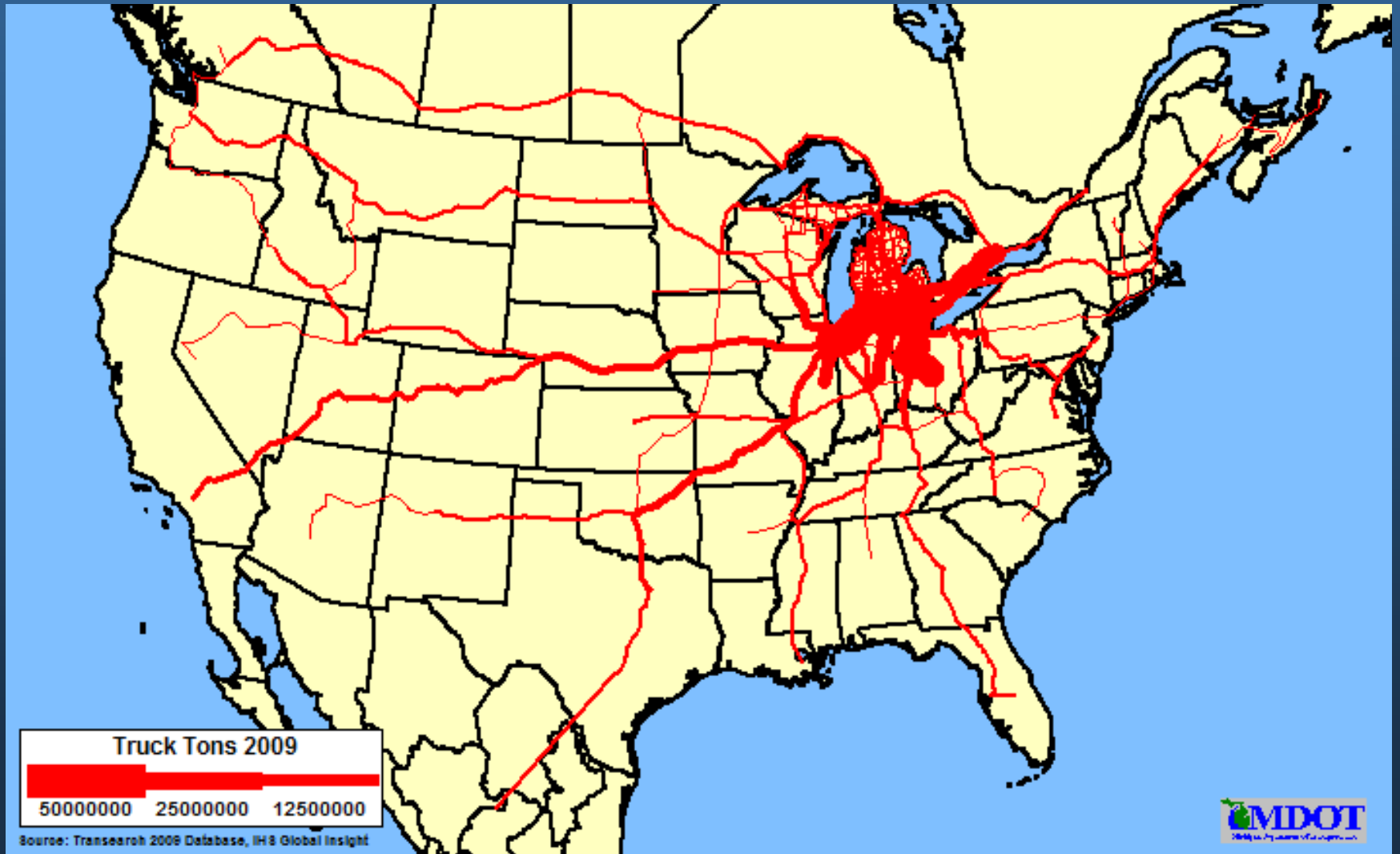
# Truck Volumes Crossing Border

Border Crossing	2006	2007	2008	2009	2010	2011	2012
Ambassador Bridge	3,498,127	3,398,745	2,885,047	2,294,441	2,683,047	2,614,988	2,506,660
Blue Water Bridge	1,636,520	1,613,997	1,574,428	1,344,182	1,429,965	1,448,957	1,477,021
Detroit-Windsor Tunnel	127,433	111,082	90,241	57,503	56,457	43,590	35,821
Sault Ste. Marie Bridge	122,804	111,335	115,435	96,377	99,551	95,900	96,545
Peace Bridge	1,301,350	1,310,197	1,283,829	1,117,312	1,221,197	1,253,058	1,265,351
Lewiston-Queenston Bridge	941,520	893,586	789,894	674,912	679,666	699,278	689,170

# Truck Flows – Regional

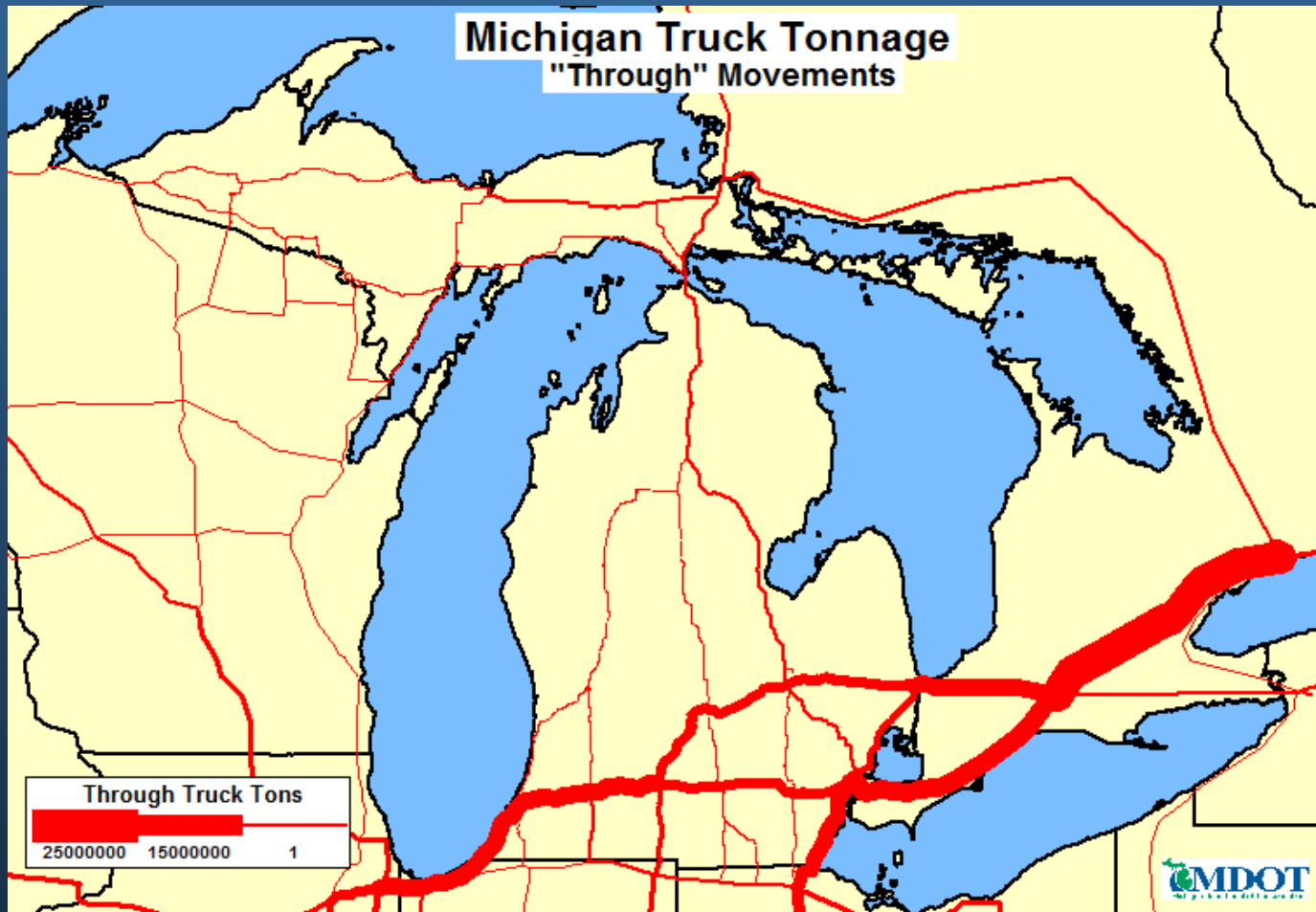


# Truck Flows – National

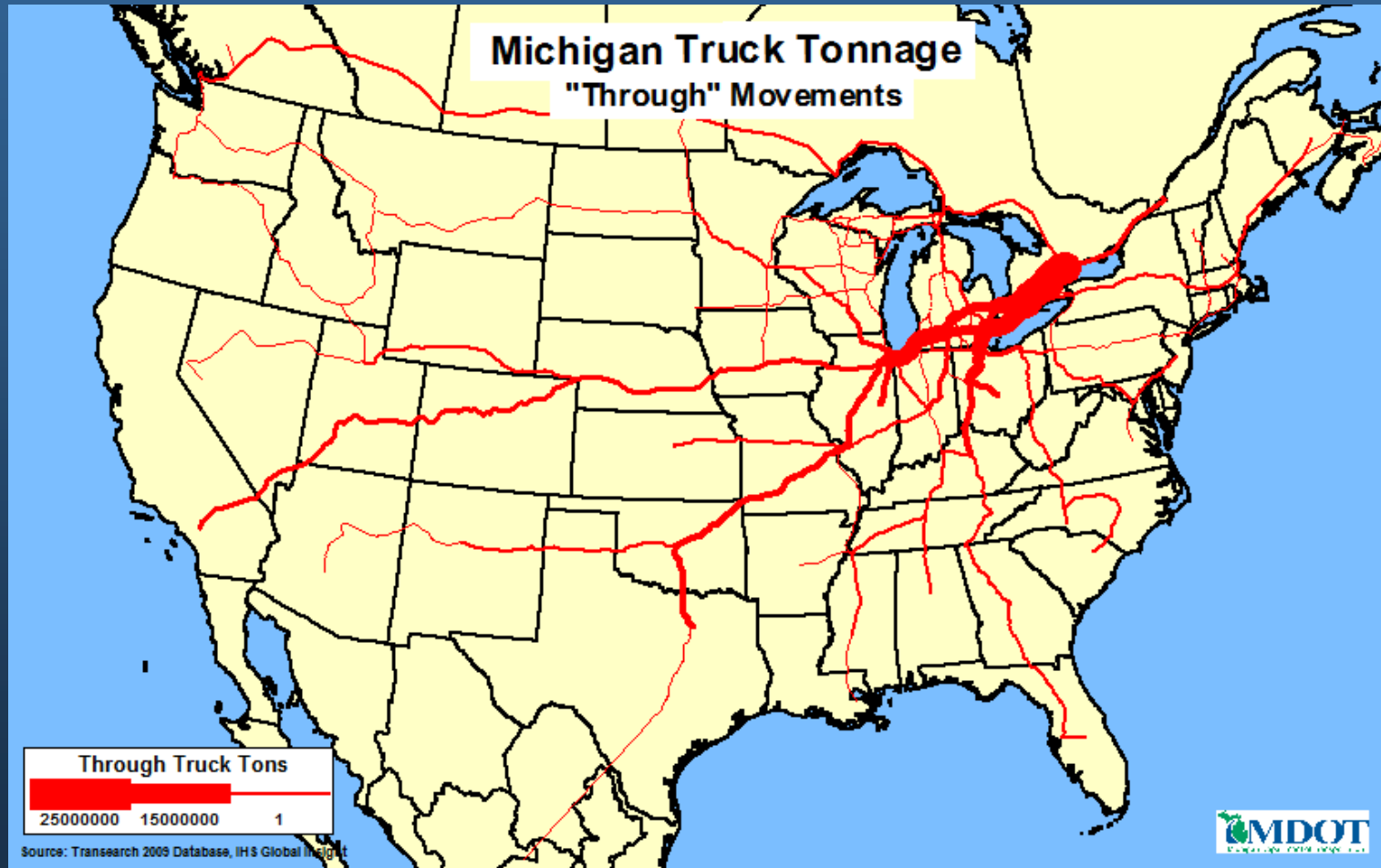




# Through Truck Flow – Regional

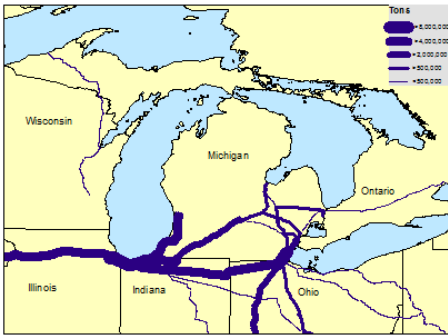


# Through Truck Flow – National

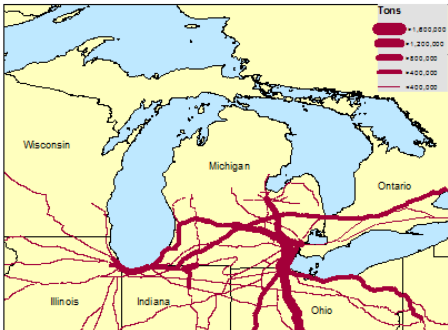


# Michigan 2010 Rail Movements

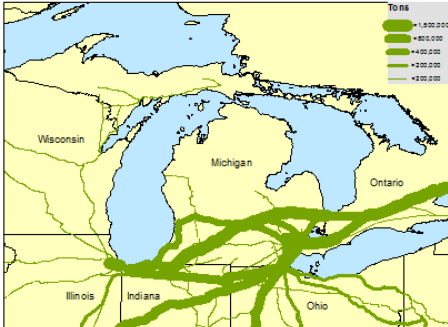
## COAL



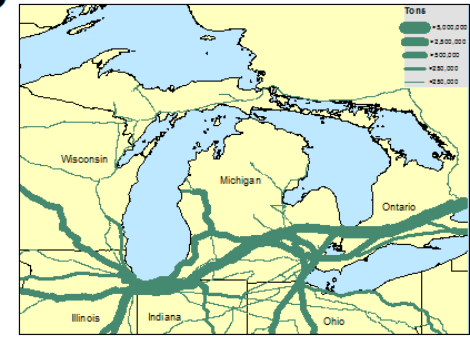
## AGRICULTURE



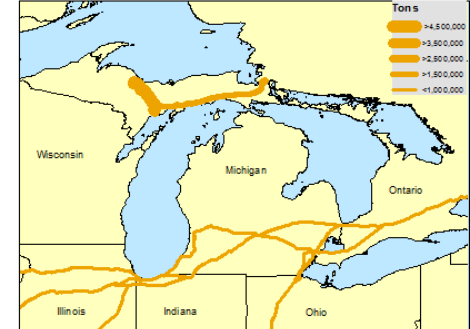
## TRANSPORTATION EQUIPMENT



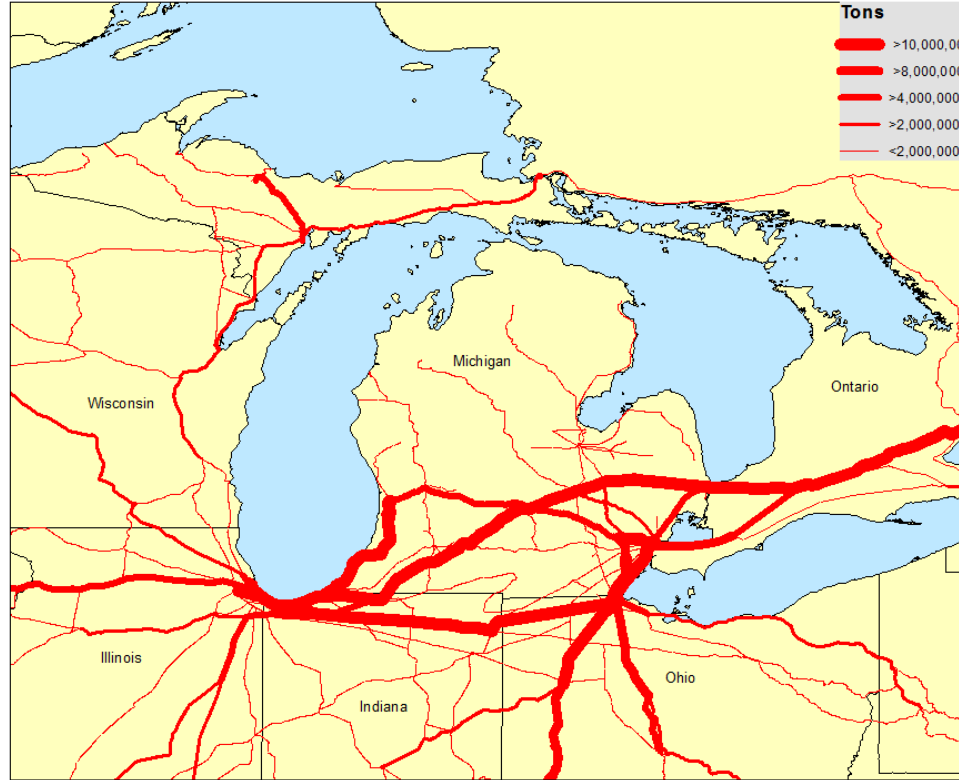
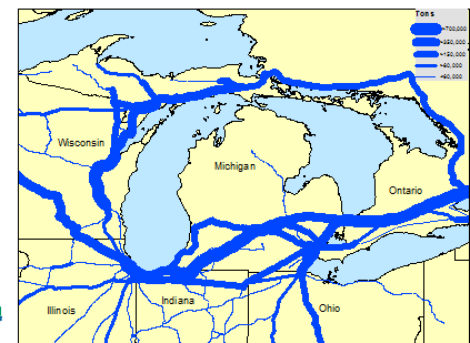
## CHEMICALS



## METALLIC ORES



## LOGS, LUMBER, and WOOD PRODUCTS



## Michigan Rail Tonnages

Inbound		Outbound	
Commodity	Total Tons	Commodity	Total Tons
Coal	21,168,609	Transportation Equipment	4,239,364
Primary Metal Products	1,932,981	Agriculture	3,043,227
Chemicals	1,925,793	Metallic Ores	1,551,696
Miscellaneous or Mixed Shipments	1,676,040	Waste or Scrap Material	1,543,320
Transportation Equipment	1,622,404	Primary Metal Products	1,287,012
Petroleum or Coal Products	1,405,128	Nonmetallic Minerals	1,257,496
Logs, Lumber, and Wood Products	973,400	Paper and Pulp Products	1,190,480
Clay, Cement, Glass or Stone Products	949,928	Chemicals	1,168,204
Food Products	588,788	Miscellaneous or Mixed Shipments	946,320
Paper and Pulp Products	494,200	Food Products	706,476



Source: 2010 STB Waybill; IHS Global Insight Transearch Routes

# MDOT's Partnerships

- Eastern Border Transportation Coalition
- Canada - U.S. Transportation Border Working Group
- Great Lakes Regional Transportation Operations Coalition
- I-69 International Trade Corridor
- I-94 Corridor Operations Partnership



# Major Projects on Michigan's International Corridors

- Border Crossing Projects:
  - Ambassador Bridge Gateway
  - New International Trade Crossing
  - International Bridge (plaza)
  - Blue Water Bridge (plaza)
  - St. Clair Rail Tunnel (completed)
  - New Detroit River Rail Tunnel

# Major Projects on Michigan's International Corridors

- Reconstruction of I-94 in Detroit
- Reconstruction of I-75 near Detroit
- Bridge / Interchange reconstruction on I-69, I-94, I-96
- Detroit Intermodal Freight Terminal
- Replacement Lock at Sault Ste. Marie

# Questions / Comments

Larry Karnes  
Freight Policy Specialist  
517-373-9058  
[karnesl@michigan.gov](mailto:karnesl@michigan.gov)