

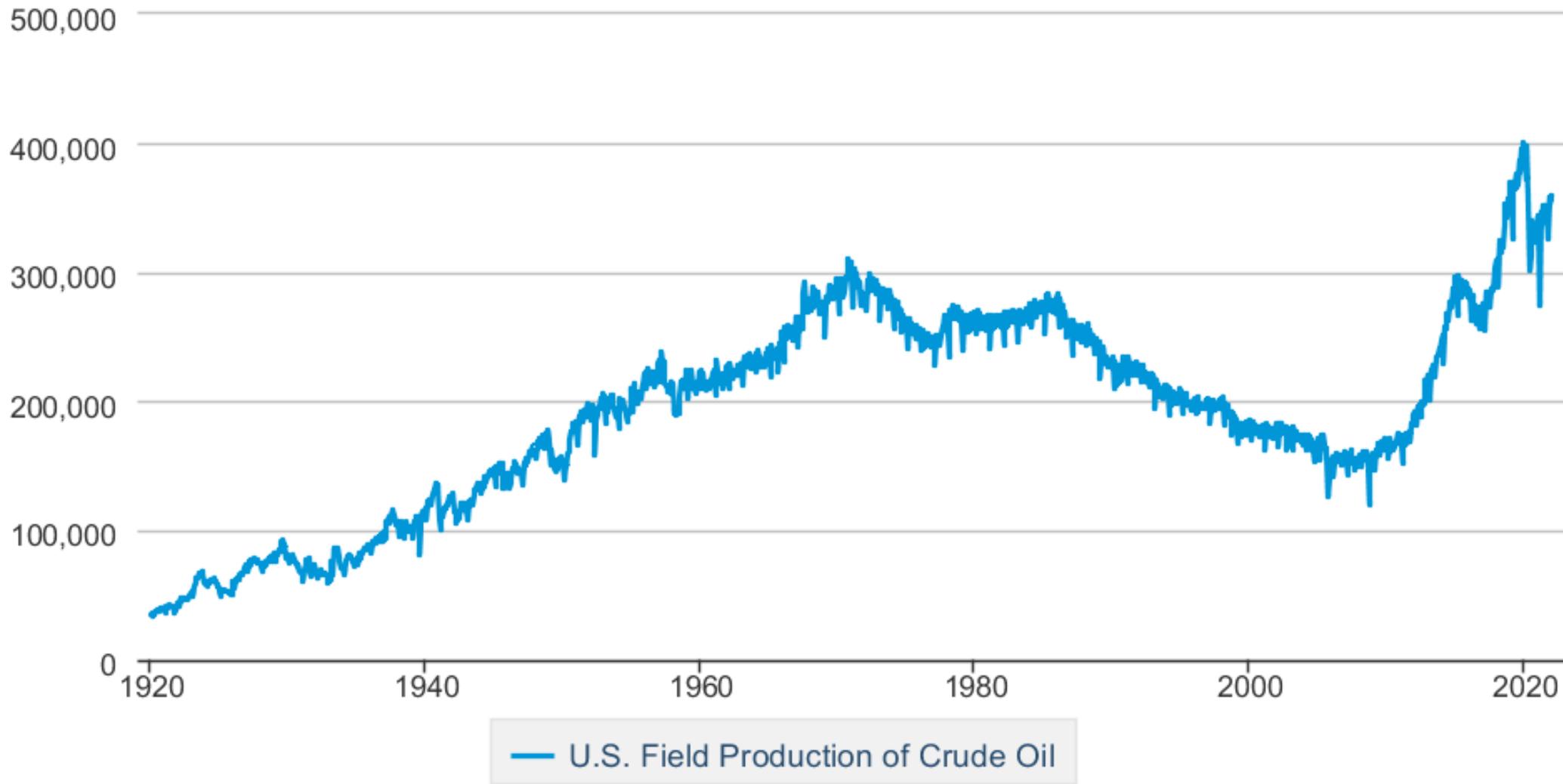
# **Great Lakes Crude Oil Transport Team: Past, Present, and Future**

Kelsey Prihoda

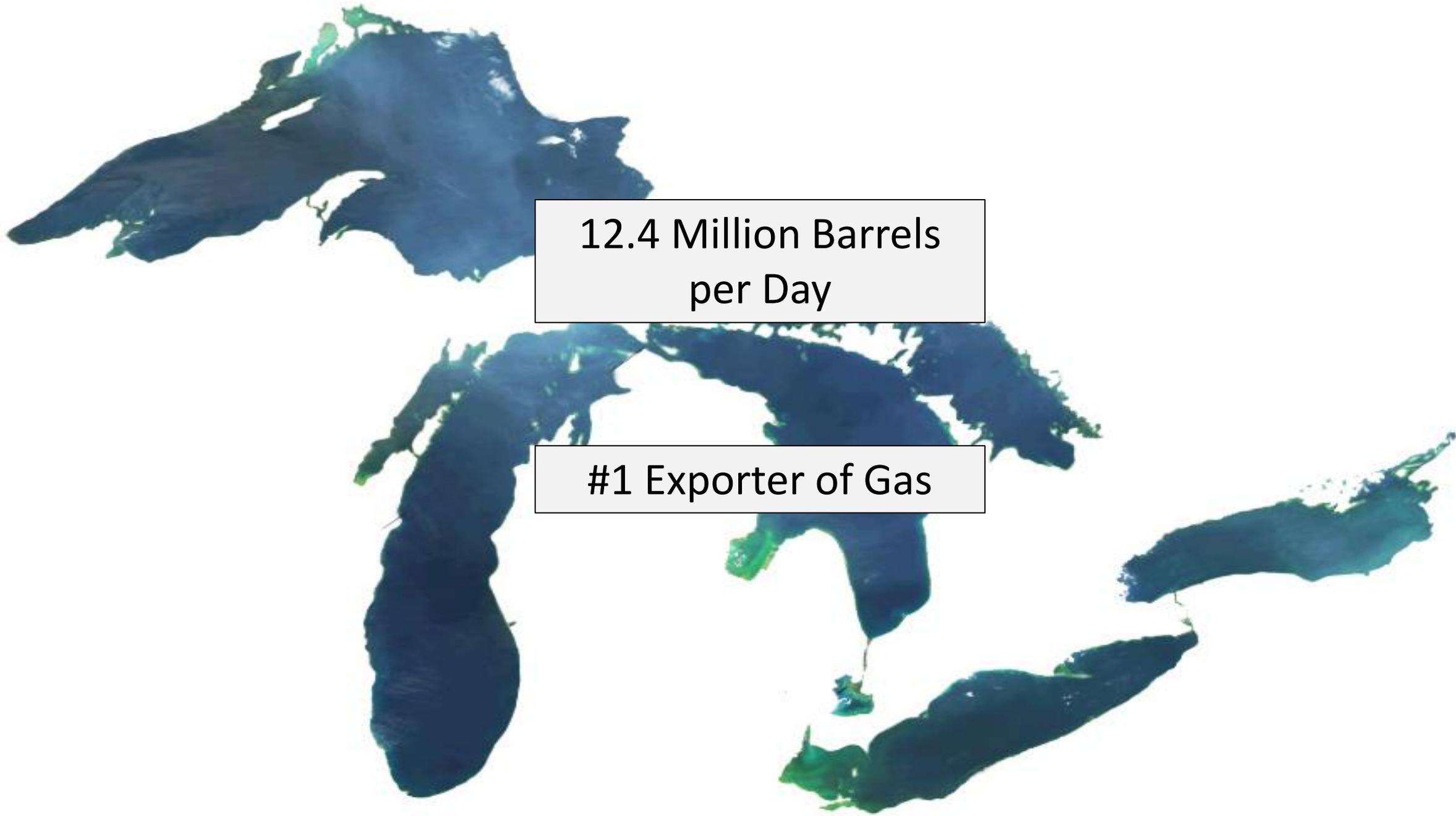
Great Lakes Transportation Extension Educator  
University of Minnesota Sea Grant College Program  
Harbor Technical Advisory Committee - 2022 Spring Meeting

# U.S. Field Production of Crude Oil

Thousand Barrels

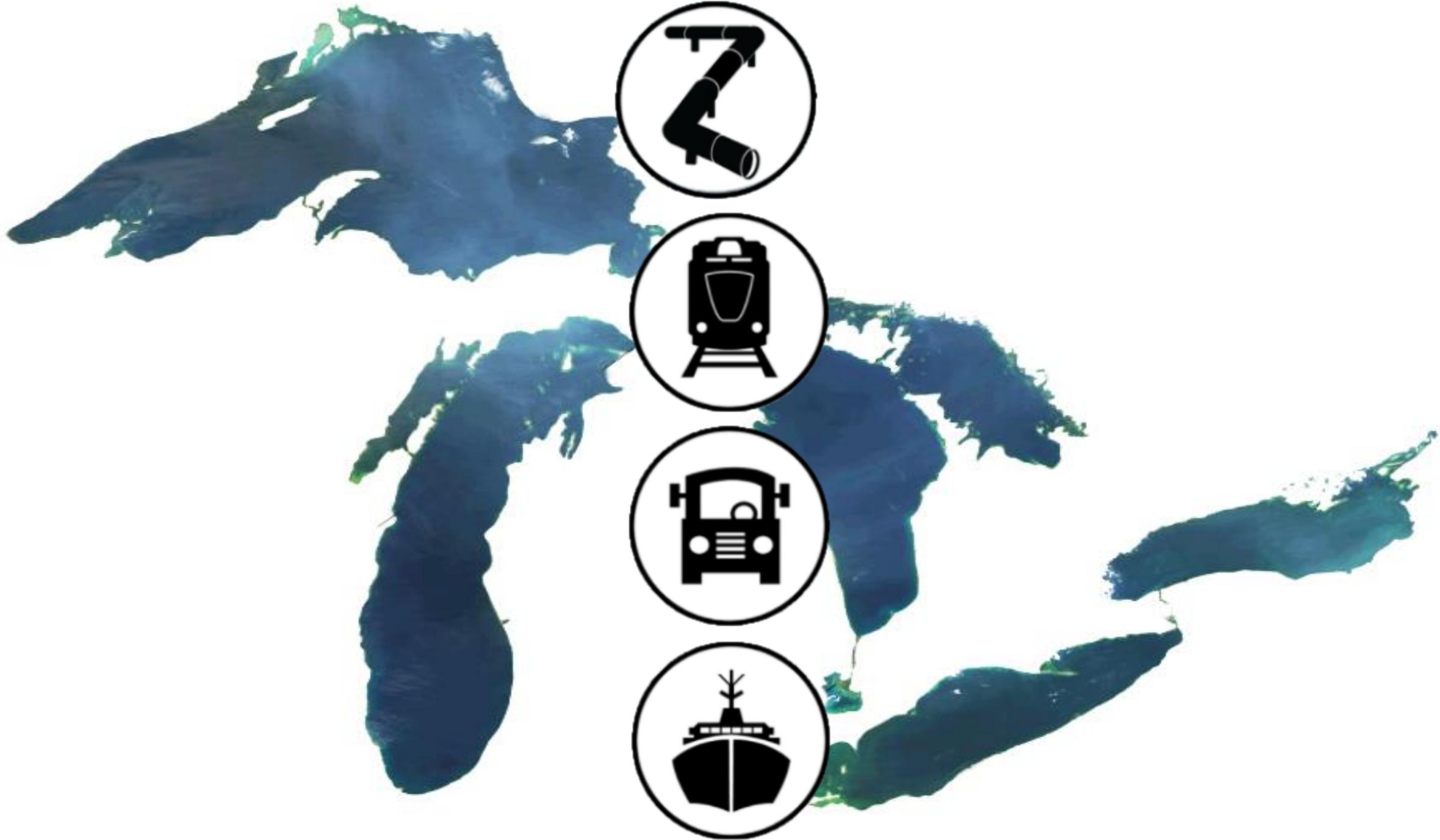


Source: U.S. Energy Information Administration



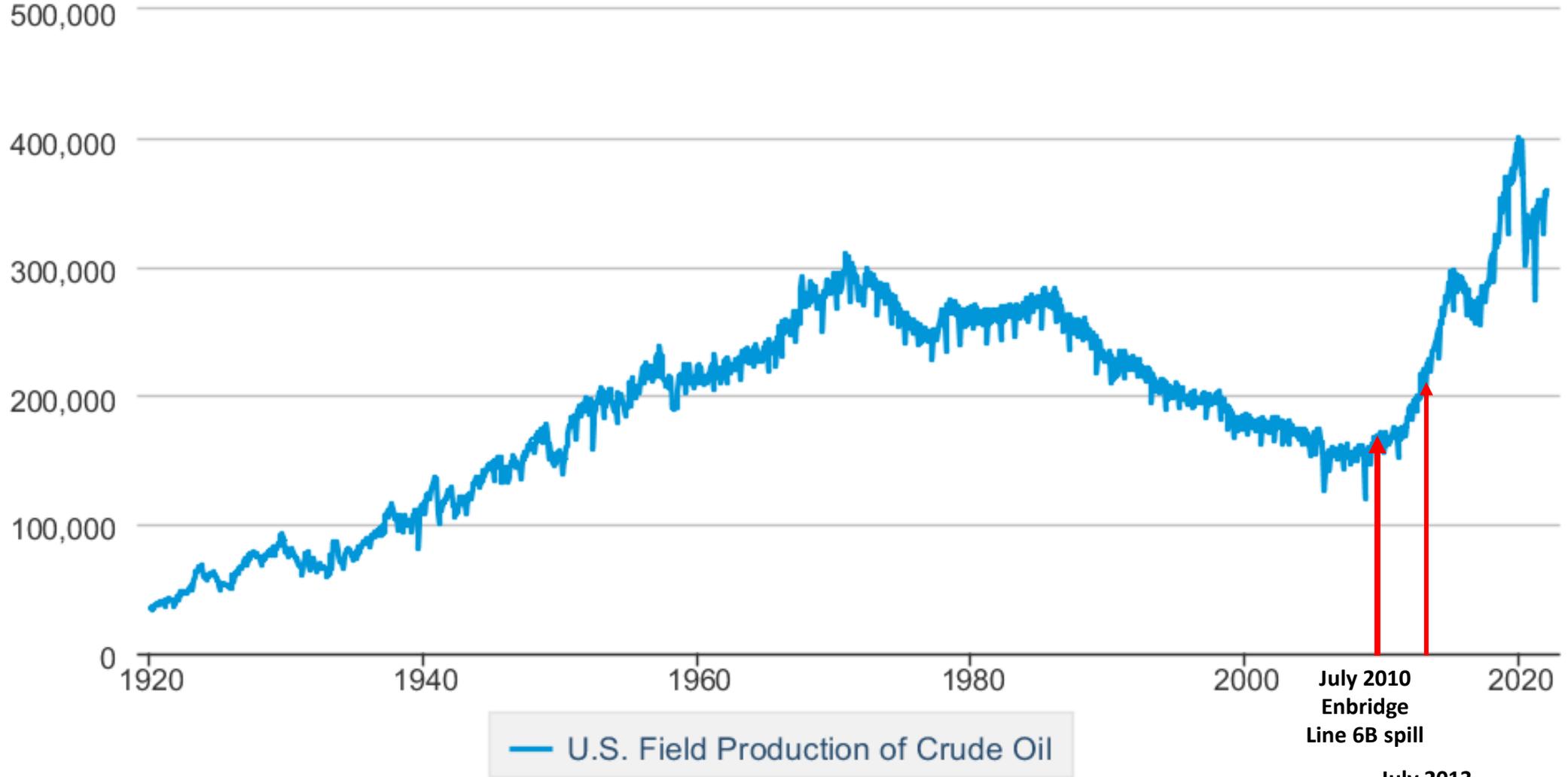
12.4 Million Barrels  
per Day

#1 Exporter of Gas



# U.S. Field Production of Crude Oil

Thousand Barrels



July 2010  
Enbridge  
Line 6B spill

July 2013  
Lac-Mégantic  
Rail Explosion



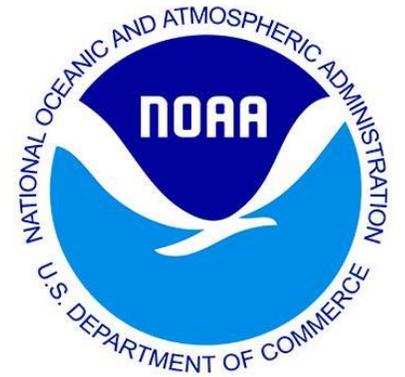
Source: U.S. Energy Information Administration







uOttawa



The Great Lakes Crude Oil Transport Team is a collaborative of shipping, science, and outreach specialists from the Great Lakes, Lake Champlain, and St. Lawrence River regions focused on reducing risks associated with multiple modes of oil and other hazardous materials transportation.

The collaborative is committed to the dissemination of accurate, neutral, and data-driven information through education, outreach, and relationship building in order to improve public safety, the region's economy, and environmental stewardship of our water resources.



**University at Buffalo**  
*The State University of New York*

PAST

**2010 – 2013:**

- Pipeline rupture leads to contamination of Kalamazoo River
- Increased domestic production of crude oil leads to increased rail transport
- Proposed oil loading dock in Port of Duluth-Superior

**2015:**

- Workshop 1 – *Exploring and Visualizing the Issues Involved in Crude Oil Movement in the Great Lakes*
- Workshop 2 – *Great Lakes Basin Crude Oil Movement: Building a Multidisciplinary Framework*

**2014:**

- GLSGN and Council of the Great Lakes Region submit scoping paper to Sea Grant National Office - *Sea Grant's Role in Examining how Crude Oil Moves through the Great Lakes Basin*

**2016:**

- Summer webinar series begins



**2017:**

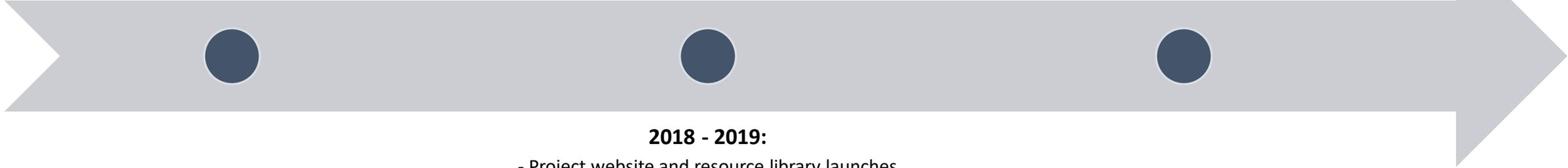
- Workshop 3 – *Oil Transportation, Infrastructure, Economics, Risk, Hazards, and Lessons Learned*

**2020:**

- Summer webinar series continues
- Planning begins for a multi-criteria decision support tool

**2018 - 2019:**

- Project website and resource library launches
- Summer webinar series continues



PRESENT

## Since September 2021...

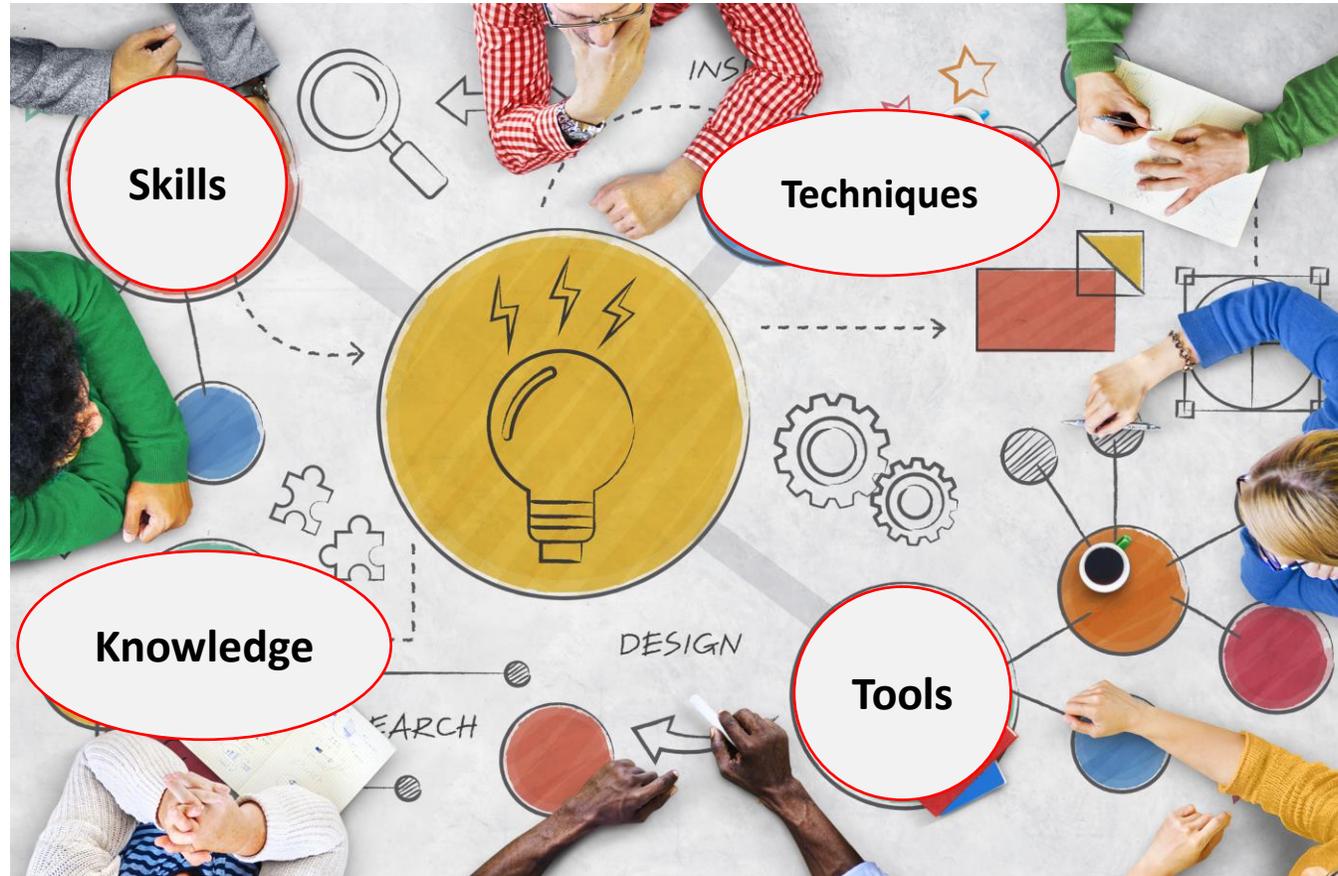
- Recruited new members to the group
- Regular monthly meetings
- Providing resources to stay current with literature and events
- Formed strategic planning committee
- Increasing awareness of the group
- Renaming/rebranding
- Increasing engagement efforts
- Seeking funding

# What do your stakeholders need to meet their goals now and in the future?

Ecological Impacts

Spill Preparedness & Emergency Response

Infrastructure



Regulations & Policy

Economic Impacts

Social Impacts

Geospatial Vulnerability

A close-up photograph of a green calendar page. The page is slightly curved, and the numbers 11 through 28 are visible in a grid pattern. A white rectangular box with a thin black border is centered horizontally across the middle of the page, containing the word "FUTURE" in a bold, black, sans-serif font. The numbers 15, 22, and 28 are printed in a teal color, while the others are black. The lighting is soft, creating a slight shadow at the top edge of the page.

**FUTURE**

## 2023 and Beyond...

- Begin implementation of strategic plan
- Formation of an advisory board
- Increased engagement of stakeholders
- Website content development
- Continue working toward creating partnerships

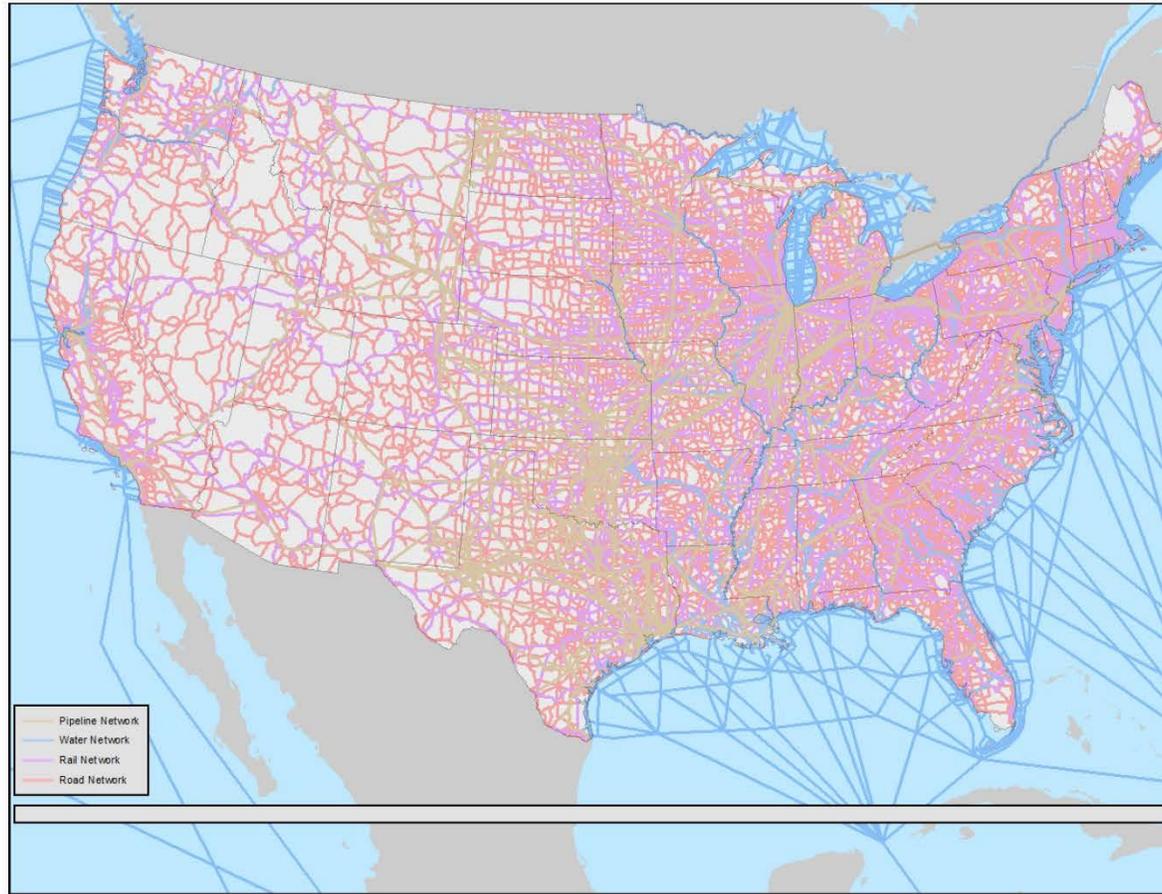
# Potential Future Project

## **Risk-Based Decision Analysis Tool for Hazardous Material Movements**

### **Why?**

- Hazardous material movements pose risks
- No publicly-available tool to assess risk of different mode choices
- Current models focus on concrete metrics
- Safety and other societal and environmental concerns are complex

# FTOT Multimodal Network

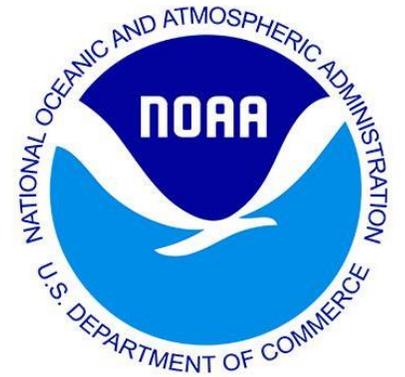


## Network components

- Freight Analysis Framework 4 (road)
- FRA Rail Network
- USACE waterways
- EIA pipeline data, adjusted to stations
- Pipeline tariff data
- Multimodal facilities



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# Resources

## Websites

- Crude Oil Transport Team:  
<https://glslcrudeoiltransport.org/>
- 2016, 2019, and 2020 webinars:  
<https://glslcrudeoiltransport.org/webinars/>
- Workshop 3 (2017) proceedings:  
<https://glslcrudeoiltransport.org/symposium/>

## Stay Connected

- To subscribe to email listserv, send email to:  
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- priho011@d.umn.edu