U. S. Army
Corps of Engineers

Navigation Business Segment

- Opening - Description
- Authorization
- Types of Navigation Systems Pieces and Ports
- Why Is It Vital to USA
- What Do We Manage?
- What are Key Considerations to Management
- What Infrastructures
- Key Infrastructure Issues
- Future of Navigation
- Closing

What Is Our Authorization?

Types of Navigation Systems

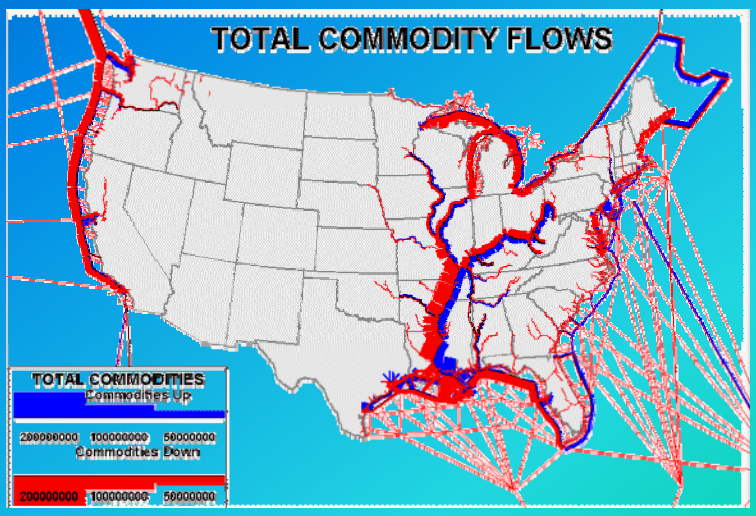
Pieces and Ports

Inland Navigation

Ports & Harbors

Locks & Dams

Why is it Vital to USA

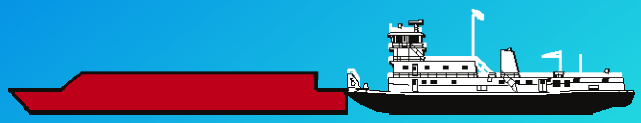


Compare

LARGE SEMI
26 Tons
910 Bushels
7,865 Gallons

JUMBO HOPPER CAR
100 Tons
3,500 Bushels
30,240 Gallons

BARGE
1500 Tons
52,500 Bushels
53,000 Gallons



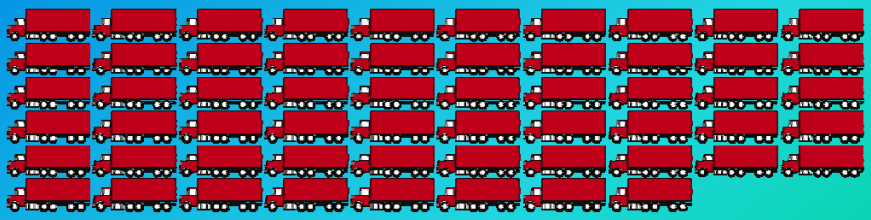
100-CAR TRAIN
10,000 Tons
350,000 Bushels
3,024,000 Gallons

15 BARGE TOW
22,500 Tons
787,500 Bushels
6,804,000 Gallons

Equivalent Unit

1 BARGE
Equals

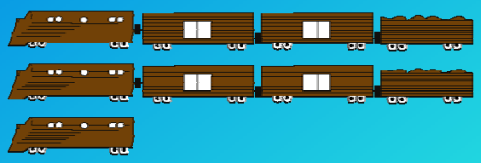
15 JUMBO HOPPERS
Equals



58 TRUCKS

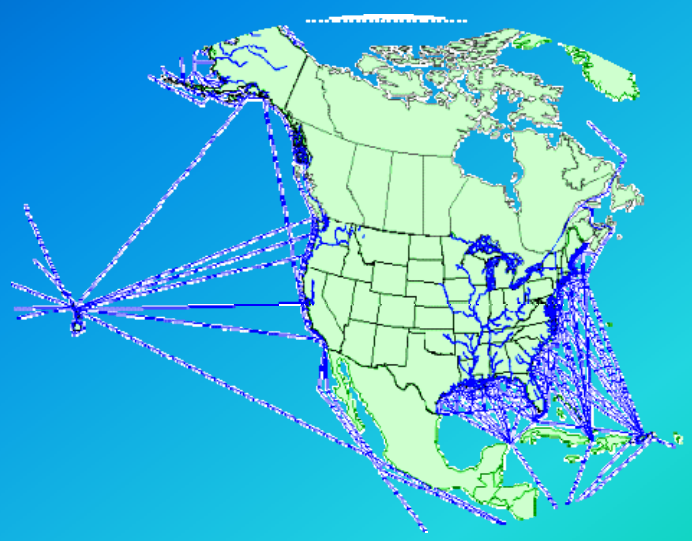
Equivalent Unit

15 BARGE TOW
Equals



2 1/4 100-CAR TRAINS
Equals

What do we manage?



4. Inland Waterways Navigation System

Key to Success

1. Reliability

1. Reliability

2. Environment

Beneficial Use of Dredge Material

1. Reliability
2. Environment

3. Operation and Maintenance Cost

1. Reliability
2. Environment
3. O & M Cost

4. Balancing Needs
Navigation / Hydropower / Recreation / Natural Resources / Environment

Key Infrastructure Issues

What do we have
and
How do we maintain

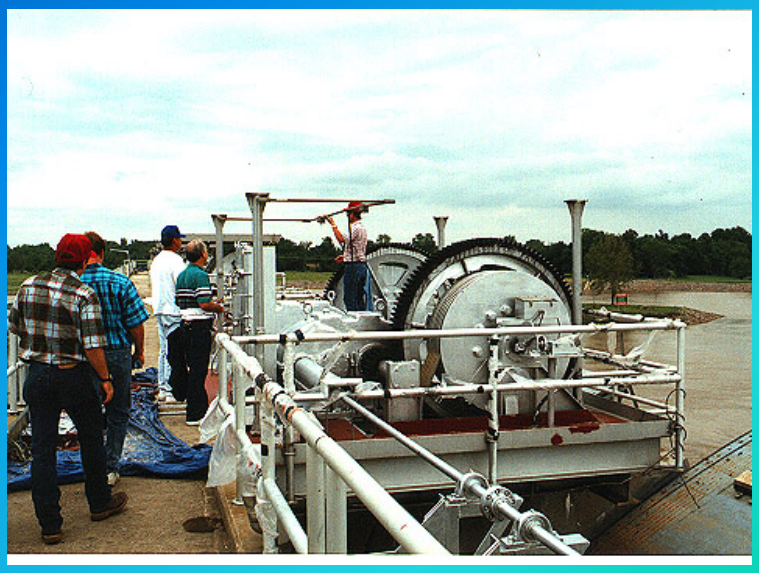
Infrastructure

Infrastructure

Dam

Infrastructure

Annual Inspections



Periodic Inspections

Ports

Channels & Canals

Dredging

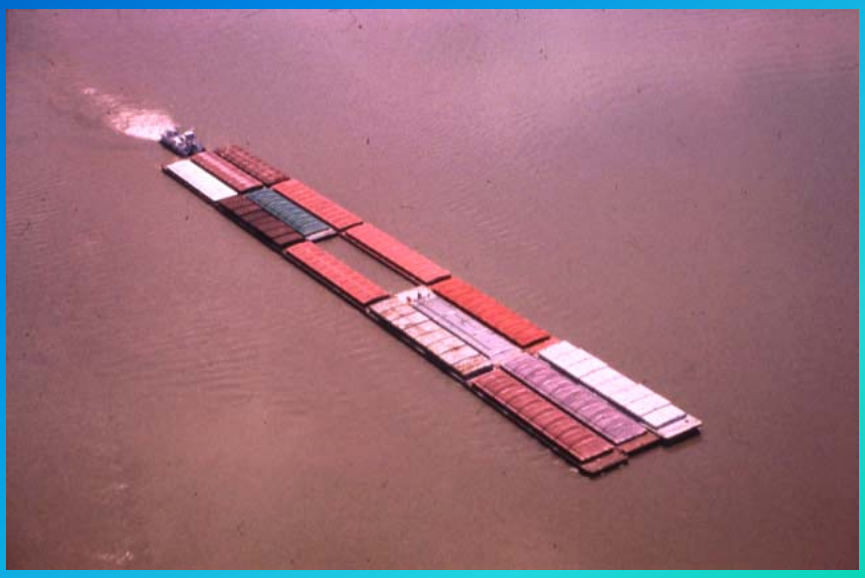
Dustpan

Cranes

Hopper

Dredges with Side Casting Booms

Why we do it!



Intermodal

Bulk Transport

In Closing, we make the difference!

Artist Rendering
Fall 03