



Inland waterways update

Corn Belt Ports Annual Meeting | June 21, 2023

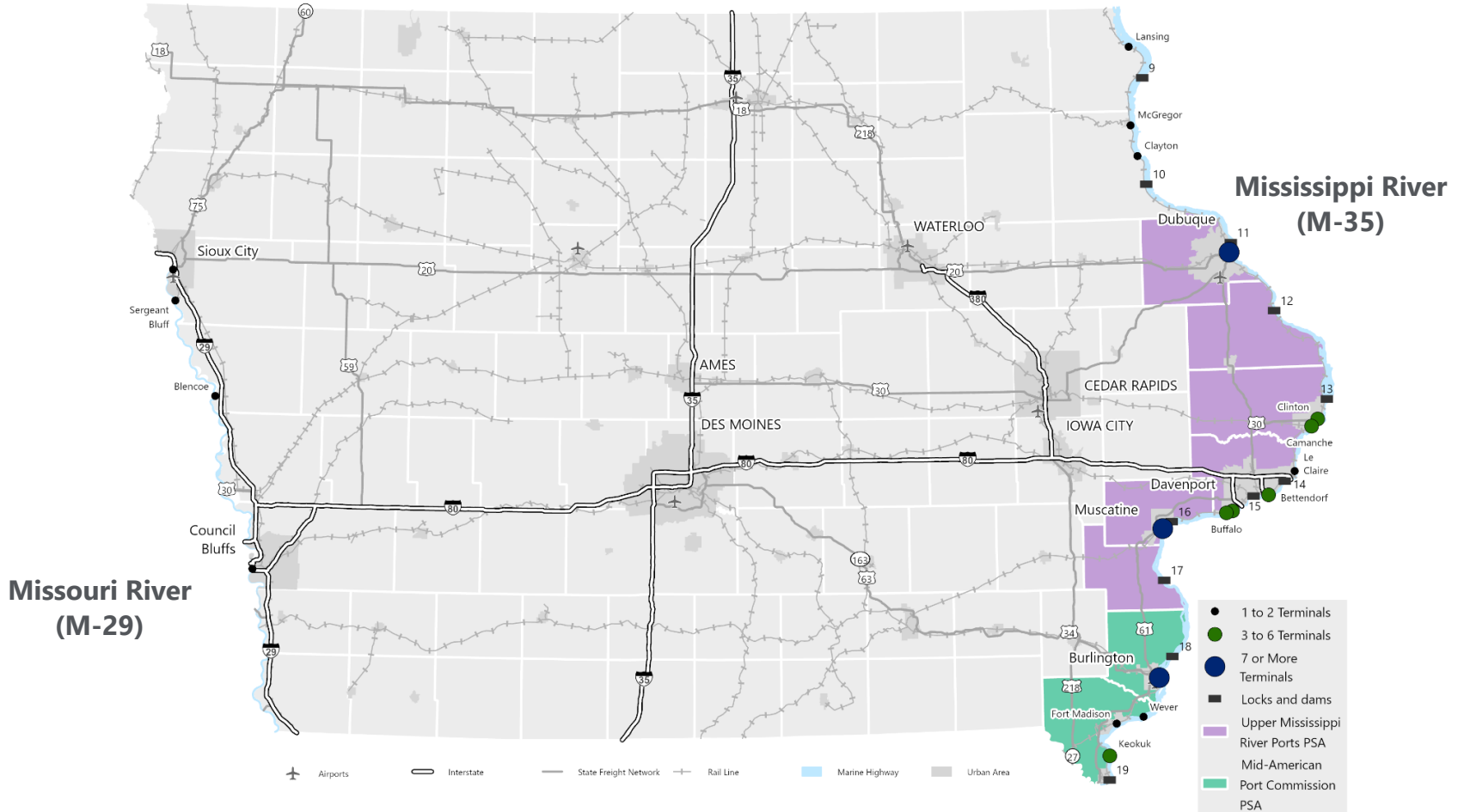


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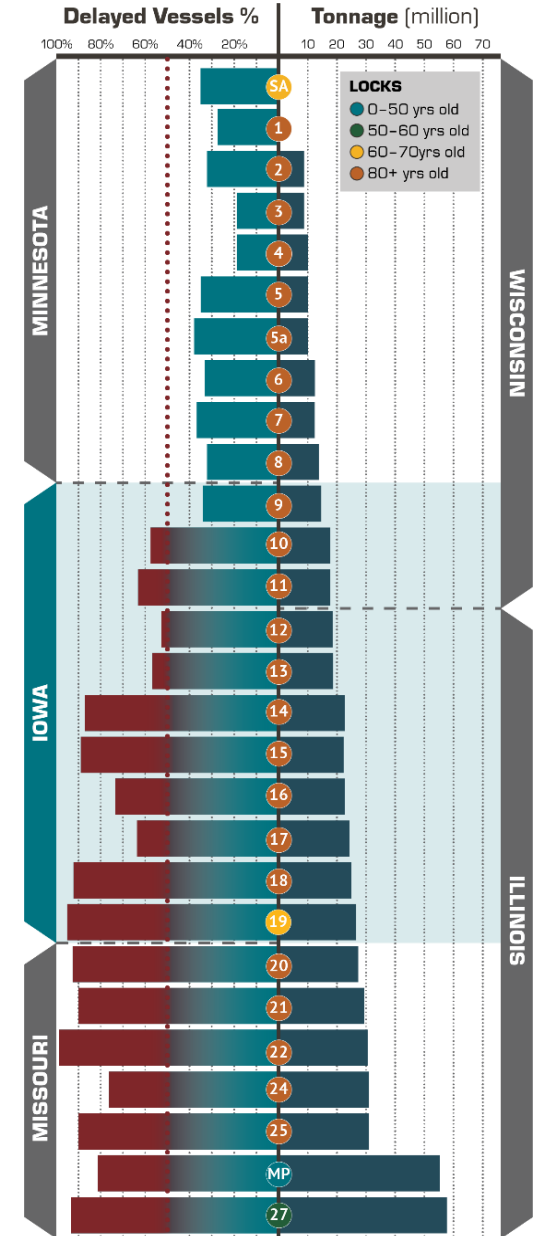
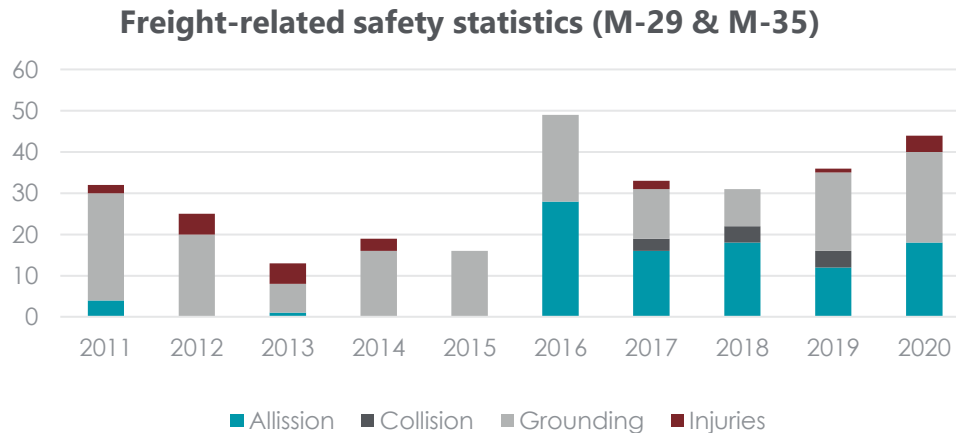


Inventory

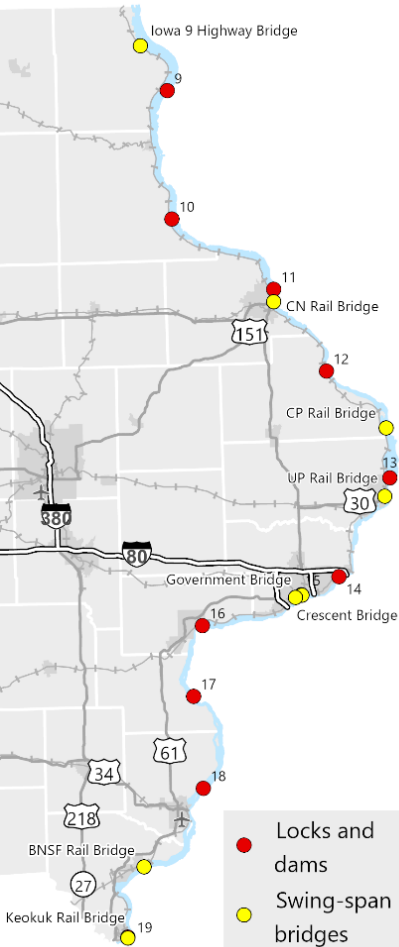


System performance

- Condition
- Utilization
- Safety
- Reliability (bottlenecks)



Bottleneck identification



Description	Location	Freight mobility issue
Iowa 9 highway bridge	Lansing	Curve of the river, dolphin protectors, and bridge piers cause barge delays.
Lock and Dam 9	Harpers Ferry	Age (1938), chamber size (600 ft.), delay (1.3 hours), annual closures (9)
Lock and Dam 10	Guttenberg	Age (1936), chamber size (600 ft.), delay (2.5 hours), annual closures (7)
Lock and Dam 11	Dubuque	Age (1937), chamber size (600 ft.), delay (2.5 hours), annual closures (19)
CN rail bridge*	Dubuque	Swing-span rail bridge must be opened to accommodate barge traffic.
Lock and Dam 12	Bellevue	Age (1939), chamber size (600 ft.), delay (2.1 hours), annual closures (3)
CP rail bridge*	Sabula	Swing-span rail bridge must be opened to accommodate barge traffic
Lock and Dam 13	Clinton	Age (1938), chamber size (600 ft.), delay (1 hour), annual closures (11)
UP rail bridge*	Clinton	Swing-span rail bridge must be opened to accommodate barge traffic.
Lock and Dam 14	Le Claire	Age (1922), chamber size (600 ft.), delay (1.7 hours), annual closures (15)
Government Bridge*	Davenport	Swing-span rail bridge must be opened to accommodate barge traffic.
Lock and Dam 15	Rock Island (IL)	Age (1934), chamber size (600 ft.), delay (2 hours), annual closures (29)
Crescent Bridge*	Davenport	Swing-span rail bridge must be opened to accommodate barge traffic.
Lock and Dam 16	Muscatine	Age (1937), chamber size (600 ft.), delay (2.6 hours), annual closures (11)
Lock and Dam 17	New Boston (IL)	Age (1939), chamber size (600 ft.), delay (1.8 hours), annual closures (17)
Lock and Dam 18	Gladstone (IL)	Age (1937), chamber size (600 ft.), delay (1.3 hours), annual closures (8)
BNSF rail bridge*	Fort Madison	Swing-span rail bridge must be opened to accommodate barge traffic.
Lock and Dam 19	Keokuk	Age (1957), delay (1.4 hours), annual closures (17)
KJRY rail bridge*	Keokuk	Swing-span rail bridge must be opened to accommodate barge traffic.

Improving performance and reliability

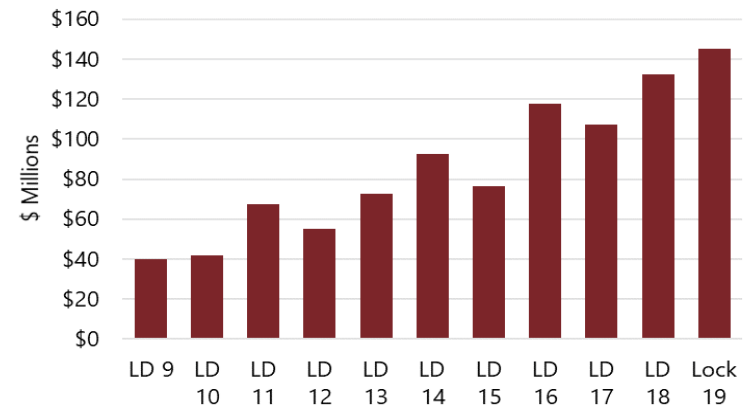
State Freight Plan

- Implementation strategies
- Improvements and investments
 - **National Highway Freight Program (NHFP)** flexible funds
 - **Missouri River (M-29):** Omaha District priority (Bank Stabilization and Navigation)
 - **Mississippi River (M-35):** St. Paul and Rock Island Districts priority projects

Priority inland waterway strategies according to the Iowa Freight Advisory Council

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- #1 Sustainable funding sources
 - #4 21st century Farm-to-Market System
 - #7 System resiliency
 - #9 New intermodal facilities
 - #10 Address mobility issues
 - #12 Improvement of the inland waterway system
 - #13 Availability and use of freight shipping containers
 - #15 Impacts of freight on environment and communities
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Deferred/backlog maintenance and major rehabilitation and repair costs for Iowa locks and dams



Improving performance and reliability

IA-9 Bridge (Lansing)

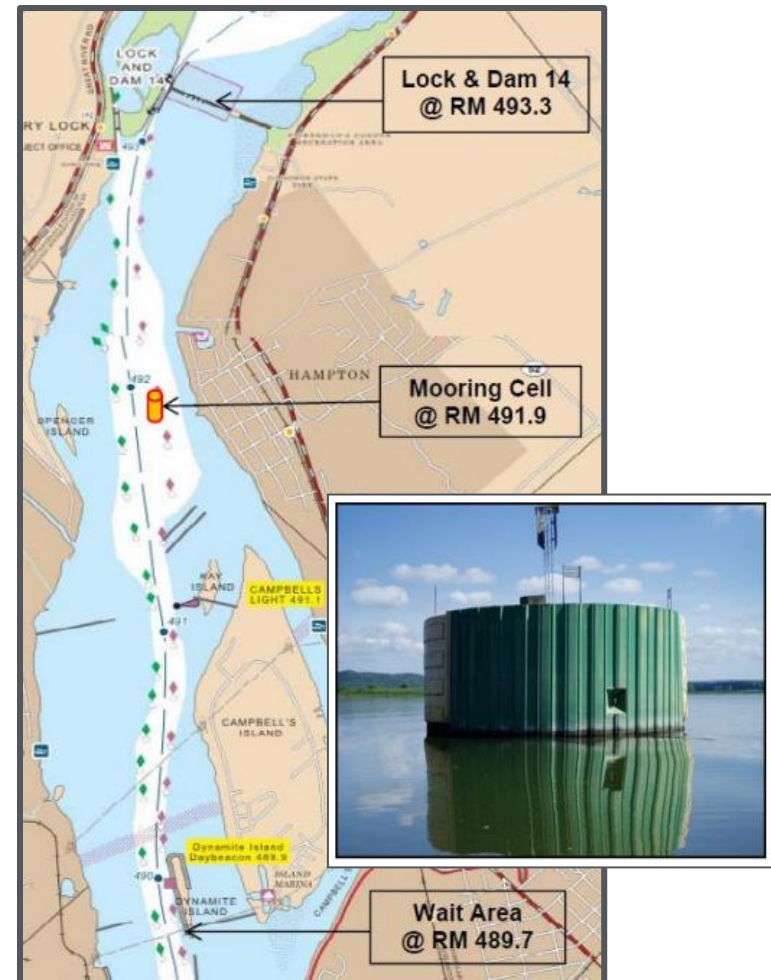
- Opened June 1931
- Environmental study initiated in 2015 by WisDOT and Iowa DOT
- Identified as a bottleneck for waterway freight in both the 2017 and 2022 Iowa State Freight Plan
- Iowa DOT has programmed \$40 M in FY2024
 - WisDOT will provide the additional 50 percent



Improving performance and reliability

Mooring cell pilot project

- Mooring cell construction at Lock 14 (LeClaire, IA)
- Contributed funds agreement between Iowa DOT and U.S. Army Corps of Engineers
- Benefits
 - Improved lock approach times
 - Reduced environmental impacts
 - Improved operational safety
 - Replicability (i.e., other state DOTs)



Improving performance and reliability

New barge terminal

- NEW Cooperative Port of Blencoe
- Location: Missouri River between Sioux City and Omaha
- Construction: Oct. 2020, Grand Opening: June 2021
- Commodities: Corn, soybeans, fertilizers, rock, others
- Revitalize Iowa's Sound Economy (RISE) program



In 2021, the port received 35 loaded barges upstream and shipped 28 loaded barges downstream.



Improving performance and reliability

Resiliency efforts

- Resiliency Working Group
- Promoting Resilient Operations for Transformative, Cost-saving Transportation (PROTECT) Program
 - Formula funds (Iowa: \$93.9 million over five years)
 - Competitive grant program
- Resiliency Improvement Plan (RIP)
 - Implementation strategies
 - PROTECT formula projects

WHAT WE STRIVE TO DO

The mission of the Resiliency Working Group is to properly prepare for and reduce the impact of future disruptions to Iowa's transportation system, which is consistent with the department's core focus of "making lives better through transportation."



WHY FOCUS ON RESILIENCY?



This Resiliency Working Group has been created to ensure that, in the face of uncertainty caused by natural or man-made disruptions, the department will be ready to meet its commitment of providing a safe, efficient, and convenient transportation system.

POTENTIAL DISRUPTIONS TO IOWA'S TRANSPORTATION SYSTEM

NATURAL, ENVIRONMENTAL, AND EXTREME WEATHER EVENTS

- ✓ Flooding
- ✓ Erosion
- ✓ High Wind
- ✓ Increased precipitation (e.g., rain, snow, ice)
- ✓ Landslide/ Rockfalls
- ✓ Tornadoes
- ✓ Snow/ Blizzard

HUMAN-INDUCED HAZARDS

- ✓ Averse actor physical threat
- ✓ Congestion
- ✓ Cyberattack
- ✓ Asset failure





THANK YOU FOR YOUR TIME AND ATTENTION



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