

Iowa Department of Transportation's Lock and Dam Modernization Handout



Appendix

All materials are available online at: www.iowadot.gov/TIGER14-river

SUPPLEMENTAL MATERIALS

- » Letters of Support
 - » USACE Priority Project List
 - » TIGER Planning Grant Application Cost-Benefit Economic Analysis
 - » Iowa Department of Transportation's "U.S. Inland Waterway Modernization Reconnaissance Study" April 2013
 - » **Iowa Department of Transportation's Lock and Dam Modernization Handout**
 - » Iowa Department of Transportation's UMRS Action Plan Workshop Summary
 - » M-35 Application for Marine Highway Corridor Designation
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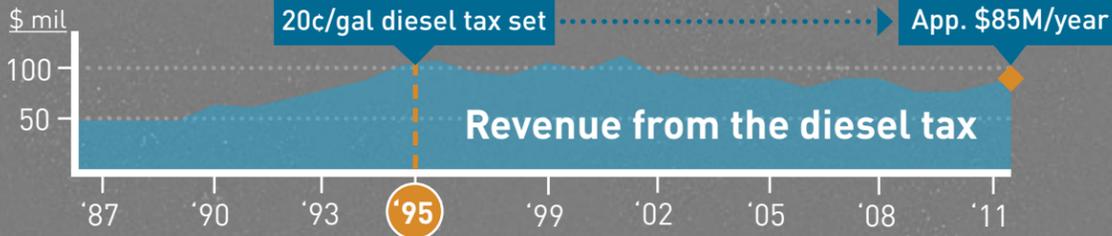
REVENUE STREAMS :: A CLOSER LOOK AT USER FEES

Diesel tax rate remains unchanged since 1995

If the diesel tax rate matched inflation, it would be \$0.30/gallon.

20¢/gallon = \$85M annual diesel tax revenue since 1995

20¢ in 1995 = 30¢ in 2012



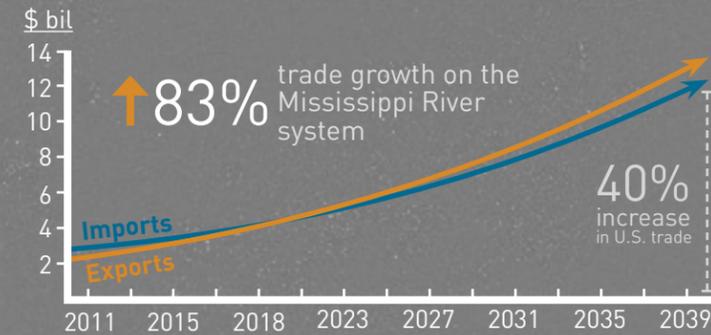
Inflation since 1995 has risen by 50%, and fuel prices have tripled.

Is raising the diesel tax

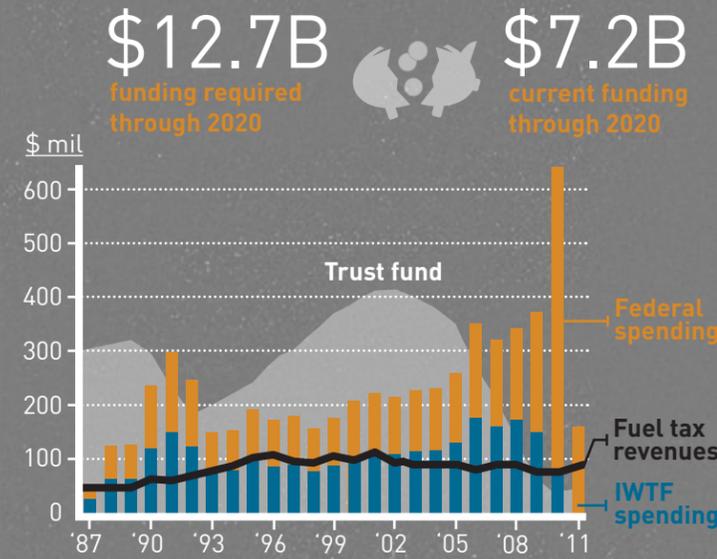
from 20¢ to 30¢ per gallon **Realistic?**

Costs to shippers would increase by 0.7%, potentially shifting tonnage to other freight modes. However our increasingly unreliable river system will also result in modal shifts without investment in its improvement.

TRENDING UP :: TRADE GROWTH



TRENDING DOWN :: FUNDING



TRENDING DOWN :: RELIABILITY

D- 72 years old

Grade earned by our aging inland waterway infrastructure (ASCE 2009)

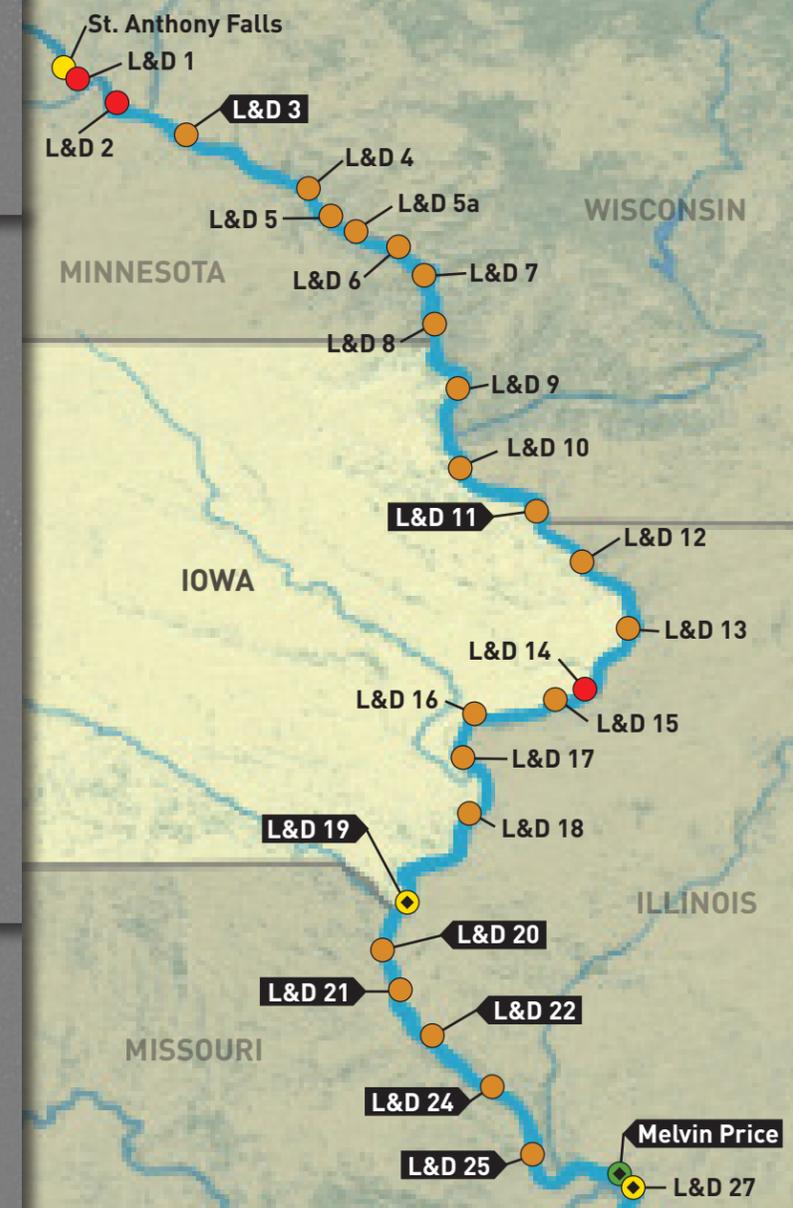
Average age of Upper Mississippi River locks

A RIVER RUN DRY

Transforming our aging Mississippi waterway system into a vital trade corridor

Upper Mississippi Locks & Dams

- 30+ yrs past design life
- 20-30 yrs past design life
- 10-20 yrs past design life
- Within 50 yr design life
- L&D USACE 'Priority Project'
- Length is sufficient for current tow configuration



FUND

or

FAIL?

WHY INVEST IN OUR INLAND WATERWAYS?

- Move **MORE** \$4.0B Annual economic benefits /year
- With **LESS** \$10.67 LESS vs. truck & rail costs /ton
- 52 LESS GHG emission vs. truck tons/million ton-mile
- 8 LESS GHG emission vs. rail tons/million ton-mile



WHAT HAPPENS IF WE ALLOW OUR INLAND WATERWAYS TO FAIL?

- 730,000 accumulated loss in jobs by 2020
- \$1.3T accumulated loss in sales by 2020
- \$700B accumulated loss to GDP by 2020
- \$270B accumulated loss in value of exports by 2020

All information and sources cited in this briefing can be examined in detail in the full report, "U.S. Inland Waterway Modernization: A Reconnaissance Study" (Feb. 2013).

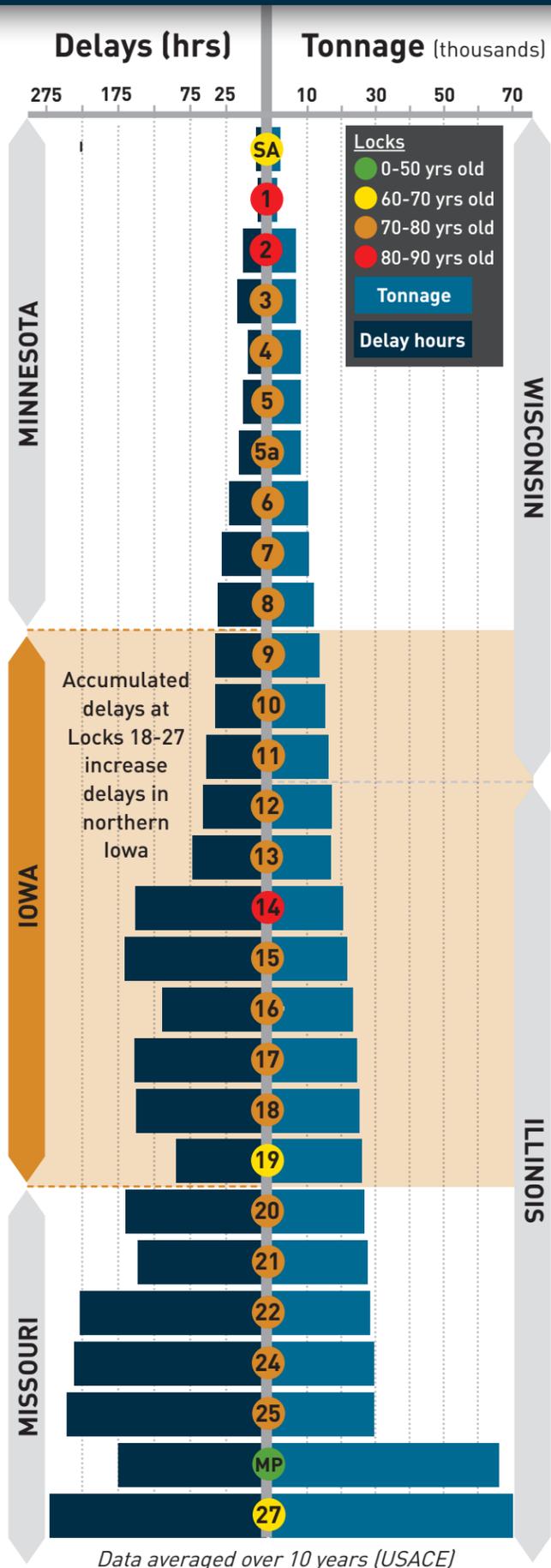
For more information, contact Iowa DOT at: Craig O'Riley | Craig.ORiley@dot.iowa.gov | 515.239.1520

Prepared by:



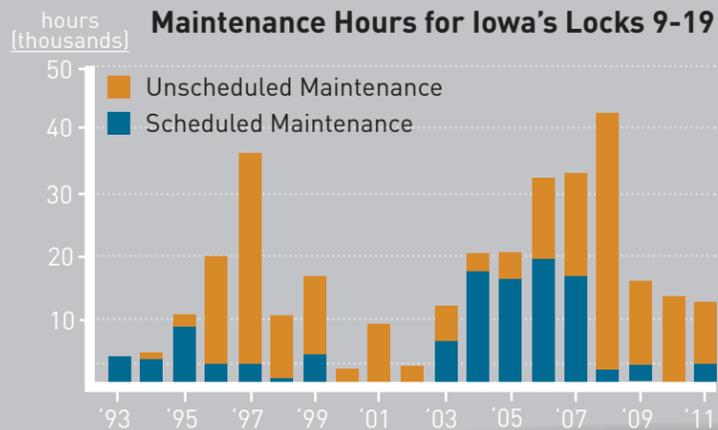
UPPER MISSISSIPPI LOCKS & DAMS

Annual volume of trade vs. delays



Data averaged over 10 years (USACE)

AGING FACILITIES = INCREASE IN COSTLY DELAYS



Lock delays force freight to shift to **more expensive** modes like rail & truck, costing barge owners, industry, and consumers alike. Infrastructure maintenance costs for rail and roadway also increases.

LEFT BEHIND :: U.S. LAGS IN WATERWAY INVESTMENT

Waterway projects completed since 2007:



722



94



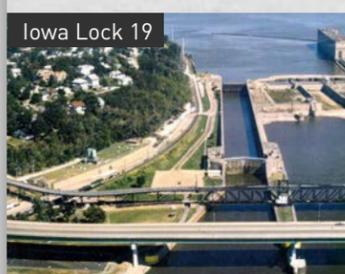
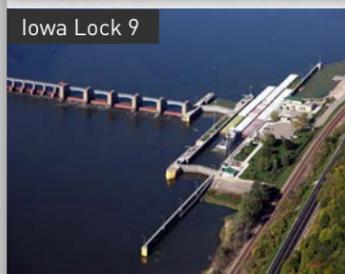
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A FUNDING GAP :: IOWA'S NEEDS FAR EXCEED FUNDING

\$620M needed to bring Locks 11-19 to operation standards ↓ \$27M allocated for Locks 11-19 in FY 2013

WHAT CONGRESS CAN DO :: SUPPORTING OUR WATERWAYS

CONGRESSIONAL SUPPORT :: NECESSARY STEPS TO A VIABLE FUTURE



The State of Iowa recommends the following congressional actions to support the future viability of the Mississippi inland waterway system:

National Recommendations for Congress

1. Ensure passage of the 2013 Water Resources Development Act.
2. Ensure opportunities for pilot programs that allow non-federal sponsors to rehabilitate, improve, maintain and operate federal projects.
3. Ensure opportunities for alternative project delivery and funding mechanisms (see table to right).
4. Ensure adequate funding for ongoing and pilot USACE Civil Works and Navigation programs.
5. Authorize USACE to study additional funding mechanisms to provide more adequate funding for the Inland Waterways Trust Fund (IWTF).

Specific Recommendations for Iowa

1. Iowa should explore a coalition of Upper Mississippi River States and inland waterway interest groups to drive legislative agenda in D.C. to address operational improvements, funding and legislative changes needed to modernize the Inland Waterway System.
2. Iowa should express interest to the Secretary of the Army and seek non-federal sponsorship for implementation of a pilot project (outlined in Title II, Section 2025 of the WRDA 2013 bill).

ALTERNATIVE SOLUTIONS: PUBLIC-PRIVATE PARTNERSHIPS (P3)

Partnership Type	Description
DBOM: Design-Build O&M	<ul style="list-style-type: none"> • A private consultant team is responsible for design, construction, and/or facility operations & maintenance (O&M). • Long-term incentives can reduce O&M costs. • Potentially reduces the life-cycle cost of the project.
PFP with DBOM: Private Financial Participation with DBOM	<ul style="list-style-type: none"> • Leverages private sector financing to supplement public funds. • Loan repayment: <ul style="list-style-type: none"> » <i>Design-Build-Finance:</i> Private entity repaid from public funds or financing at milestones or on a payment schedule. » <i>Availability Payments:</i> A public sponsor makes payments when a project is "available" to the public, either on project milestones or performance standards. » <i>Toll Concession:</i> A private partner gets maximum responsibility and risk in exchange for exclusive rights to revenue (user fees/tolls).
PDA: Project Development Agreements	<ul style="list-style-type: none"> • A private sector partner participates in the feasibility phase. • The private partner has first negotiation rights to develop and implement the project. • Other partnership model can be used during project implementation. • PDAs can achieve private sector innovation during project planning, project delivery acceleration. • Instituting tolls/fares requires policy action by the government.
Private O&M	<ul style="list-style-type: none"> • Outsource O&M to a private company. • Successful example of this exists in Flanders, Belgium.