

# Inland Marine Transportation System Capital Investment Strategy

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US Army Corps of Engineers  
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# Inland Marine Transportation System (IMTS) Capital Investment Strategy

- Why
- IMTS Capital Investment Strategy
- Process Improvements
- Benefits
- Report
- Next Steps



# Example IMTS Capital Investment Strategy Future Program with Current Revenues

## Current Program \$170M/YR - Projects completed with efficient schedule

Project	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038
OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY																													
EMSWORTH LOCKS AND DAM, OHIO RIVER, PA (Dam Safety)																													
MARKLAND LOCKS AND DAM, KY & IN (MAJOR REHAB)																													
<b>TOTAL Efficient Funding</b>	136	145	136	148	145	134	67	50	28	0.0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

## Current Program \$170M/YR - Projects completed with constrained schedule

LOCKS AND DAMS 2, 3 AND 4 - MONONGAHELA RIVER, PA																													
CHICKAMAUGA LOCK, TN																													
KENTUCKY LOCK ADDITION, TN RIVER, KY																													
INNER HARBOR NAVIGATION CANAL LOCK, LA																													
<b>TOTAL Constrained Funding</b>	8	25	33	21	24	34	102	118	140	166	170	167	169	136	142	147	112	145	95	110	170	170	170	170	170	170	170	170	170
<b>TOTAL Program</b>	144	170	169	169	169	168	169	168	168	166	170	167	169	136	142	147	112	145	95	110	170	170	170	170	170	170	170	170	170

**NO NEW STARTS!!**



# IMTS Capital Investment Strategy Program Development

- Collaborative Team – US Army Corps of Engineers and Waterways Industry (recommendations reflect those of the team, not necessarily those of the Inland Waterways Users Board, the U.S. Army Corps of Engineers or the Administration)
- Premise
  - ▶ Projects are funded efficiently
  - ▶ Emphasis on finishing projects
  - ▶ System evaluation
- Prioritized list used to establish program
- Total IMTS Capital Investment Program Target - \$380M/year
  - ▶ New construction - \$320M/year
  - ▶ Major rehab - \$60M/year
  - ▶ \$380M Program includes management reserve of \$30M
  - ▶ Additional out-year capacity available



# IMTS Capital Investment Strategy

## New Construction Program

PROPOSED NEW CONSTRUCTION PROGRAM																				
Project	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
OLMSTED LOCKS AND DAM, OHIO RIVER, IL & KY																				
LOCKS AND DAMS 2, 3 AND 4, MONONGAHELA RIVER, PA																				
CHICKAMAUGA LOCK, TN																				
KENTUCKY LOCK ADDITION, TN RIVER, KY																				
LD 25 UPPER MISSISSIPPI																				
GIWW, HIGH ISLAND TO BRAZOS RIVER, TX																				
LAGRANGE - ILLINOIS WATERWAY																				
INNER HARBOR NAVIGATION CANAL LOCK, LA																				
GREENUP LOCKS AND DAM, OHIO RIVER, KY & OH																				
LD 22 UPPER MISSISSIPPI																				
LD 24 UPPER MISSISSIPPI																				





Continuing construction

Construction new start



# IMTS Capital Investment Strategy Major Rehabilitation Program

PROPOSED MAJOR REHABILITATION PROGRAM																				
Project	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
EMSWORTH LOCKS AND DAM, OHIO RIVER, PA (Dam Safety)	Continuing construction	Continuing construction	Continuing construction																	
MARKLAND LOCKS AND DAM, KY & IN (MAJOR REHAB)	Continuing construction																			
LOCK AND DAM 25, MISSISSIPPI RIVER, IL & MO		Construction new start	Construction new start	Construction new start																
LAGRANGE LOCK & DAM, IL*																				
LOWER MONUMENTAL LOCK AND DAM, WA	Construction new start	Construction new start	Construction new start																	
ILL WW THOMAS O'BRIEN LOCK & DAM			Construction new start	Construction new start	Construction new start															
GREENUP DAM, OHIO RIVER, KY & OH			Construction new start	Construction new start	Construction new start	Construction new start	Construction new start													
JOHN T. MYERS DAM MAJOR REHAB				Construction new start	Construction new start	Construction new start														
GREENUP LOCKS, OHIO RIVER, KY & OH*																				
MELDAHL DAM, OHIO RIVER, OH & KY					Construction new start	Construction new start	Construction new start	Construction new start	Construction new start											
MONTGOMERY DAM SAFETY PROJECT (MAJOR REHAB)					Construction new start	Construction new start	Construction new start	Construction new start	Construction new start	Construction new start	Construction new start	Construction new start	Construction new start							
UM Mel Price													Construction new start	Construction new start						
UM LD25*																				
UM LD24*																				
NO. 2 LOCK, AR														Construction new start	Construction new start					
JOE HARDIN LOCK, AR														Construction new start						
WILLOW ISLAND LOCKS AND DAM, OHIO RIVER, OH & WV															Construction new start	Construction new start	Construction new start	Construction new start	Construction new start	
MARMET LOCKS AND DAM, KANAWHA RIVER, WV																Construction new start	Construction new start	Construction new start	Construction new start	
UM LD22																				Construction new start

 Continuing construction  
 Construction new start



# Cost Sharing and Revenue Plan

- Cost share recommendation
  - ▶ Lock New Construction and Major Rehab above \$100M: 50% Federal / 50% IWTF
  - ▶ Lock Major Rehab less than \$100M and Dams: 100% Federal
  - ▶ \$270M/Year Federal
  - ▶ \$110M/Year IWTF
    - Requires 30% – 45% increase in fuel tax (\$0.06 – \$0.09 per gal)
- Cost sharing cap
- Revenue Plan – increase in current industry funding mechanism



# IMTS Capital Investment Strategy

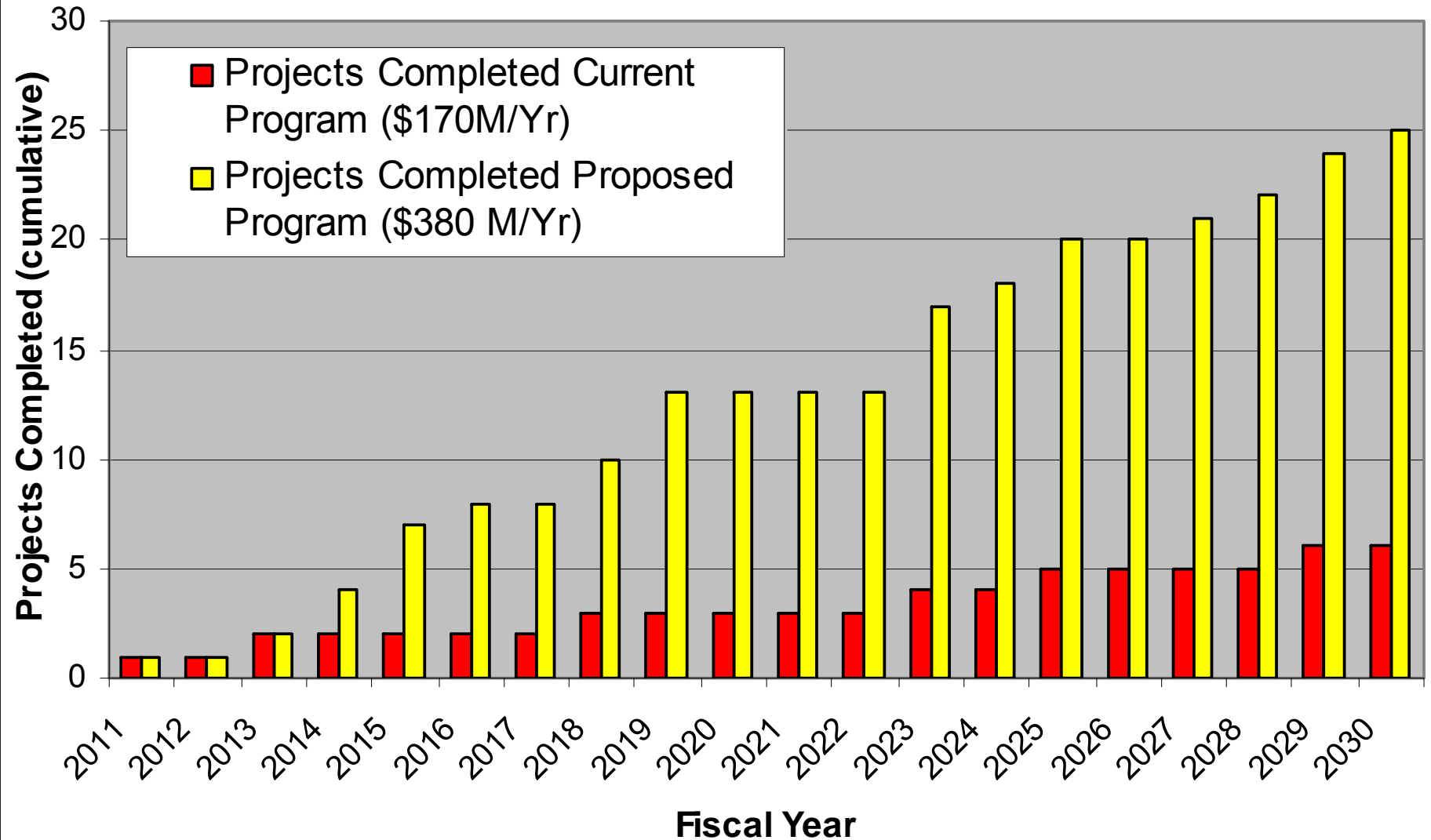
## Project Delivery Process Recommendations

- Implemented Recommendations
  - ▶ Risk-based cost estimates
  - ▶ Independent External Peer Reviews
  - ▶ Project Management Certification
- Proposed Improvements
  - ▶ IMTS Capital Investment Program Regulation
  - ▶ IWUB representative PDT members
  - ▶ Project Management Plan – IWUB Chairman and representative as signatories
  - ▶ Adopt applicable concepts of Milcon Model
  - ▶ Acquisition – Early Contractor Involvement
  - ▶ IWUB concurrence on new starts
  - ▶ IWUB status briefings
  - ▶ Measure and monitor results of recommended process improvements
- Recommendations forwarded for consideration
  - ▶ Design/Review Center(s) of Expertise
  - ▶ Standardized Designs
  - ▶ Continuing Contracts Clause
  - ▶ Emphasis on reduced O&M expenditures





# Comparison of Completed Projects



# Benefits of Proposed IMTS Capital Investment Program

- Cost efficiencies - \$0.5 - \$2.1B in avoided cost growth on navigation projects
- Avoiding more than \$2.8B additional benefits foregone
  - ▶ Looking only at projects that could be completed under the current scenario (reference slide 3)
  - ▶ Benefits foregone to date at Olmsted and Lower Mon alone are \$5.2B
- Improved reliability and efficiency of IMTS
  - ▶ 5 - DSAC 1 dams
  - ▶ 3 – DSAC 2 dams
  - ▶ 1 – lock rated as an F condition
  - ▶ 6 – locks rated as a D condition
- Additional benefits of achieving IMTS improvements over shorter timeframe
  - ▶ Environmental
  - ▶ Societal benefits
  - ▶ Safety
  - ▶ Energy



# IMTS Capital Projects Business Model Final Report

- Executive Summary
- Background
- Capital Project Business Model – Prior and Current
- Capital Project Business Model – Future
- Twenty-Year Capital Investment Strategy
- Cost Sharing Model and Revenue Plan
- Implementation Strategy
- Summary of Final Recommendations



# Next Steps

- ▶ Full implementation timeline dependent on Congressional action
  - WRDA legislation
  - Appropriations



