

# INLAND WATERWAYS USERS BOARD MEETING #89

## St. Louis, Missouri

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*"The views, opinions and findings contained in this report are those of the authors(s) and should not be construed as an official Department of the Army position, policy or decision, unless so designated by other official documentation."*



US Army Corps  
of Engineers®





# CORPS NAVIGATION MISSION

Provide safe, reliable, efficient, effective and environmentally sustainable waterborne transportation systems for movement of commerce, national security needs, and recreation.





# USACE NAVIGATION ASSETS

## COASTAL NAVIGATION

- 1,067 Navigation projects
- 19 Lock chambers
- 13,000 Miles of channels
- 929 Navigation structures
- 844 Bridges

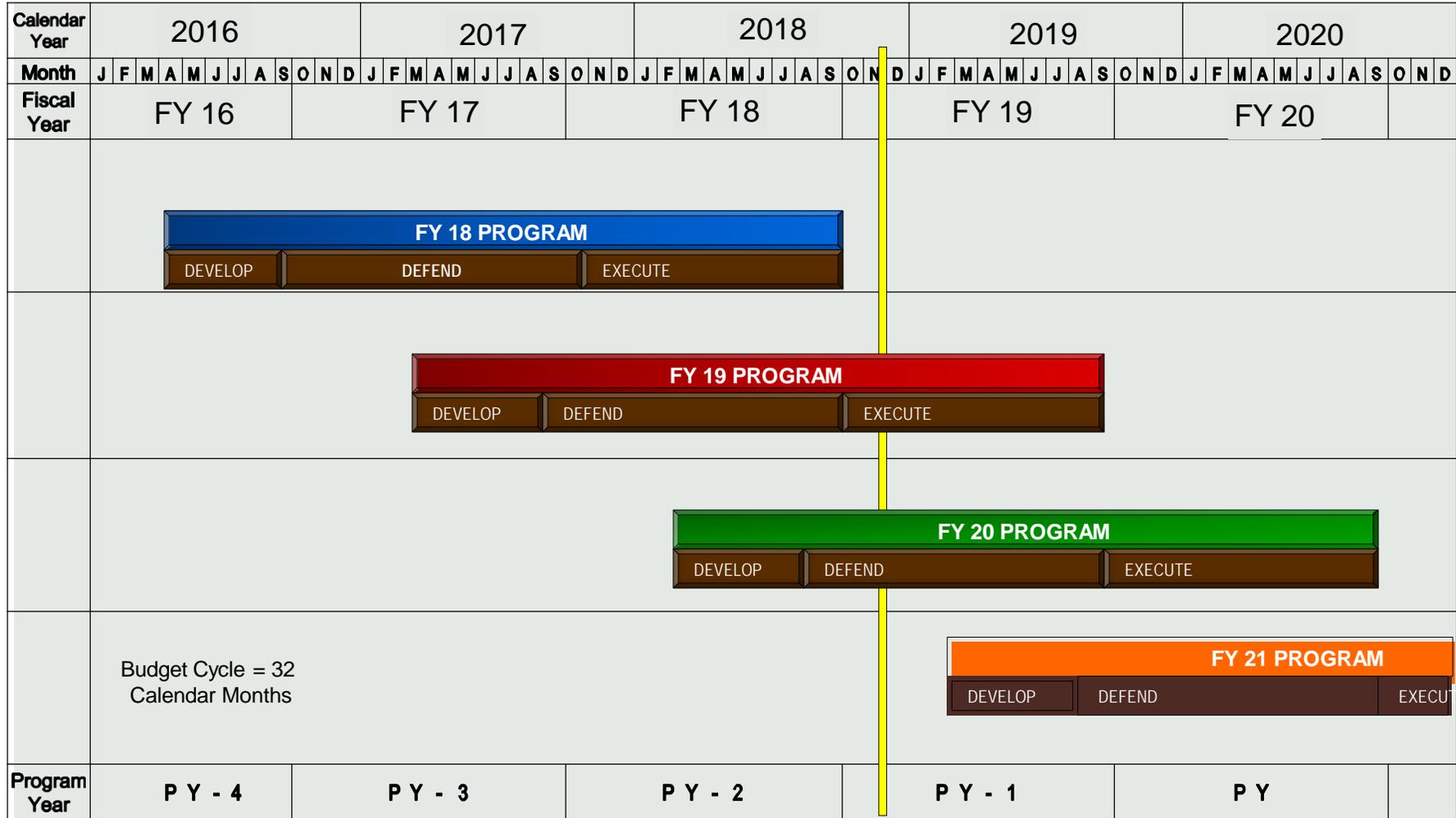
## INLAND NAVIGATION

- 27 Inland River Systems
- 241 Lock chambers @ 195 lock sites
- 12,000 Miles of inland river channels





# CW PROGRAM/BUDGET TIMELINE



PY = CFY + 2

NOW



# ***NATIONAL PRIORITIES FOR BUDGETING***



- Provide for National Defense
- Reduce the Deficit
- Create Jobs and Restore the Economy
- Improve Resiliency and Safety of Communities and Infrastructure
- Restore and Protect the Environment
- Maintain Global Competitiveness
- Increase Energy Independence and Renewable Energy
- Improve Quality of Life
- Support Research and Innovation that leads to American Jobs and Industries

Navigation has a key role in all of these!



# NAVIGATION PRIORITIES FOR BUDGETING



- Budget is performance based.
- Focuses on highest performing projects and programs with high economic (BCR  $\geq$  2.5 @ 7%), environmental, and public safety returns to the nation.
- Emphasizes operation and maintenance of infrastructure to address critical needs and provide a reliable and resilient system.
- Provides a fiscally prudent investment in Nation's water resources infrastructure making tough decisions to put the nation on a fiscally prudent path.
- Navigation focuses high risk to mission on high commercial use coastal harbors and channels with > 10 million tons of commerce; and inland and intracoastal waterways with > 3 billion ton-miles of commerce.
- 10 % of HMTF to emerging harbors and Great Lakes.



# PRESIDENT'S BUDGETS

(\$MILLIONS)

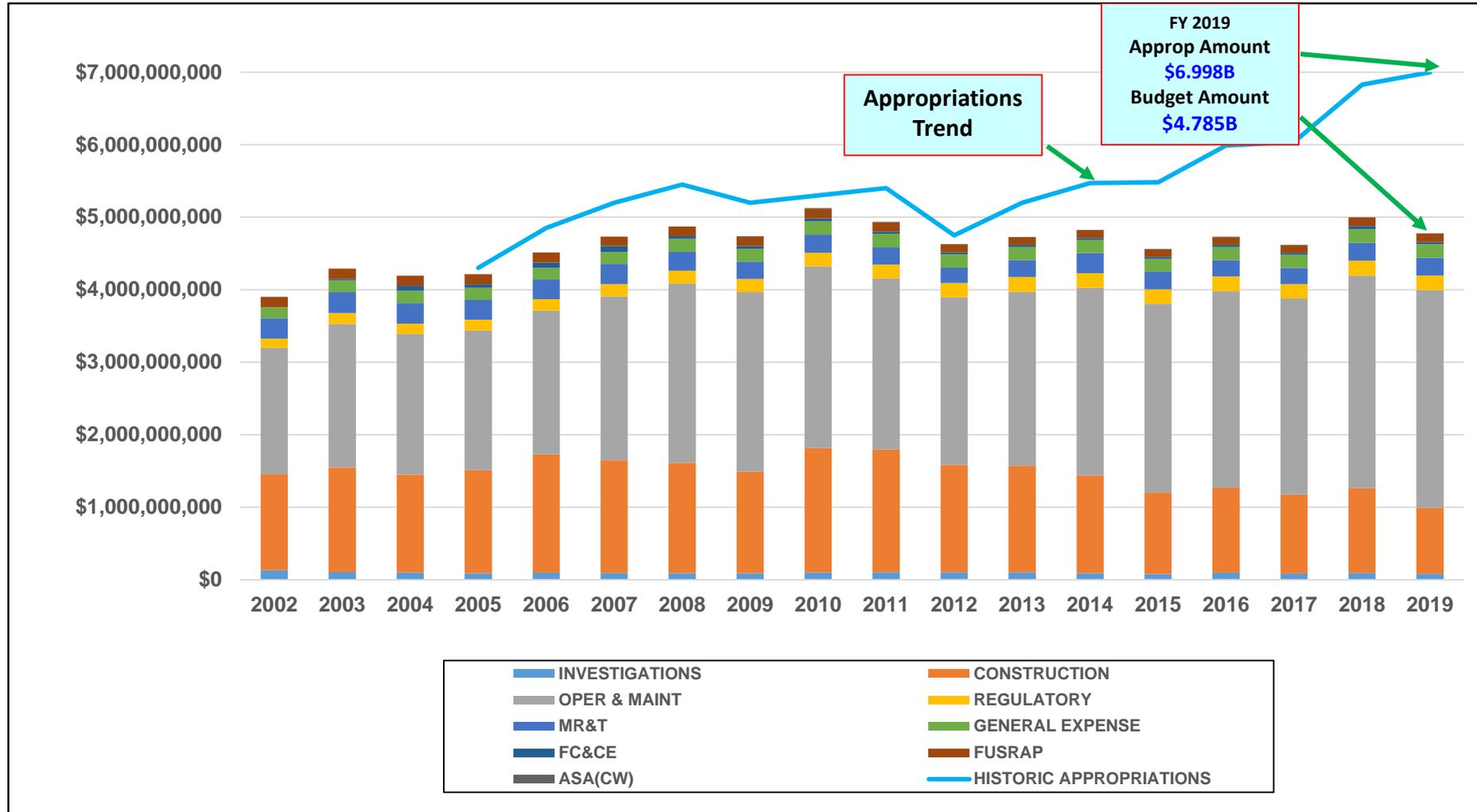


| <b>Fiscal Year</b> | <b>Coastal</b> | <b>Inland</b> | <b>Nav</b> | <b>CW total</b> | <b>% Nav</b> |
|--------------------|----------------|---------------|------------|-----------------|--------------|
| FY 19              | \$1,080        | \$850         | \$1,930    | \$4,785         | 40%          |
| FY 18              | \$1,079        | \$1,019       | \$2,098    | \$5,002         | 42%          |
| FY 17              | \$1,017        | \$917         | \$1,934    | \$4,620         | 42%          |
| FY 16              | \$973          | \$974         | \$1,947    | \$4,732         | 41%          |
| FY 15              | \$991          | \$834         | \$1,825    | \$4,561         | 40%          |
| FY 14              | \$980          | \$904         | \$1,884    | \$4,826         | 39%          |
| FY 13              | \$967          | \$780         | \$1,747    | \$4,731         | 37%          |
| FY 12              | \$832          | \$744         | \$1,575    | \$4,631         | 34%          |
| FY 11              | \$873          | \$779         | \$1,652    | \$4,939         | 33%          |



# CIVIL WORKS INVESTMENT TRENDS

(EXCLUDES SUPPLEMENTAL FUNDING)





# NAVIGATION BUDGET BY ACCOUNT

(\$MILLIONS)



| Fiscal Yr | Investigations | Construction | O&M     | MR&T | Total Nav |
|-----------|----------------|--------------|---------|------|-----------|
| FY 19     | \$14           | \$176        | \$1,712 | \$28 | \$1,930   |
| FY 18     | \$19           | \$310        | \$1,717 | \$52 | \$2,098   |
| FY 17     | \$22           | \$348        | \$1,527 | \$37 | \$1,934   |
| FY 16     | \$25           | \$321        | \$1,563 | \$38 | \$1,947   |
| FY 15     | \$22           | \$277        | \$1,487 | \$39 | \$1,825   |
| FY 14     | \$23           | \$345        | \$1,461 | \$55 | \$1,884   |
| FY 13     | \$25           | \$352        | \$1,326 | \$44 | \$1,747   |
| FY 12     | \$18           | \$283        | \$1,237 | \$37 | \$1,575   |
| FY 11     | \$19           | \$291        | \$1,297 | \$45 | \$1,653   |



# INLAND NAVIGATION BUDGET

(\$MILLIONS)



| <b>Pres Bud</b> | <b>Investigations</b> | <b>Construction</b> | <b>O&amp;M</b> | <b>MR&amp;T</b> | <b>Total Inland</b> |
|-----------------|-----------------------|---------------------|----------------|-----------------|---------------------|
| FY 19           | \$7                   | \$ 37               | \$778          | \$28            | \$850               |
| FY 18           | \$8                   | \$177               | \$784          | \$50            | \$1,019             |
| FY 17           | \$8                   | \$243               | \$631          | \$35            | \$917               |
| FY 16           | \$7                   | \$240               | \$691          | \$36            | \$974               |
| FY 15           | \$5                   | \$180               | \$612          | \$37            | \$834               |
| FY 14           | \$7                   | \$237               | \$608          | \$53            | \$904               |
| FY13            | \$8                   | \$201               | \$529          | \$42            | \$780               |
| FY12            | \$11                  | \$166               | \$531          | \$35            | \$743               |
| FY11            | \$10                  | \$176               | \$550          | \$43            | \$779               |



# COASTAL NAVIGATION BUDGET (\$MILLIONS)



| Pres Bud     | Investigations | Construction | O&M          | MR&T       | Total Coastal  |
|--------------|----------------|--------------|--------------|------------|----------------|
| <b>FY 19</b> | <b>\$7</b>     | <b>\$139</b> | <b>\$934</b> | <b>\$0</b> | <b>\$1,080</b> |
| <b>FY 18</b> | <b>\$11</b>    | <b>\$133</b> | <b>\$933</b> | <b>\$2</b> | <b>\$1,079</b> |
| <b>FY 17</b> | <b>\$14</b>    | <b>\$105</b> | <b>\$896</b> | <b>\$2</b> | <b>\$1,017</b> |
| <b>FY 16</b> | <b>\$18</b>    | <b>\$81</b>  | <b>\$872</b> | <b>\$2</b> | <b>\$973</b>   |
| <b>FY 15</b> | <b>\$17</b>    | <b>\$97</b>  | <b>\$875</b> | <b>\$2</b> | <b>\$991</b>   |
| <b>FY 14</b> | <b>\$16</b>    | <b>\$108</b> | <b>\$853</b> | <b>\$2</b> | <b>\$980</b>   |
| <b>FY13</b>  | <b>\$17</b>    | <b>\$151</b> | <b>\$797</b> | <b>\$2</b> | <b>\$967</b>   |
| <b>FY12</b>  | <b>\$7</b>     | <b>\$117</b> | <b>\$706</b> | <b>\$2</b> | <b>\$832</b>   |
| <b>FY11</b>  | <b>\$9</b>     | <b>\$115</b> | <b>\$747</b> | <b>\$2</b> | <b>\$873</b>   |



# FY 19 Appropriation for Navigation (\$millions)



| Description                                       | Funding Increase |
|---|------------------|
| Navigation O&M:                                   |                  |
| General   | \$ 24            |
| Deep Draft Harbors & Channels                     | \$ 475           |
| Inland Waterways                                  | \$ 40            |
| Small Remote & Subsistence                        | \$ 54            |
| Donor & Energy Transfer Ports                     | \$ 50            |
| Other Authorized Purposes*                        | \$ 50            |
| Navigation Investigations                         | \$ 25            |
| Navigation Construction                           | \$ 509           |
| From IWTF   | \$ 111           |
| Navigation MR&T:                                  |                  |
| Dredging  | \$ 5             |
| Other Authorized Purposes*                        | \$ 40            |
| Total Navigation Increases in<br>2019 Omnibus Act | \$1,293          |

\*Funding will be split between multiple Business Lines



# FY 19 Work Plan for Navigation (\$millions)



## Construction/IWTF

|                                 |                          |
|---------------------------------|--------------------------|
| Illinois Waterway LaGrange Lock | \$28.8M – (\$28.8M – TF) |
| Olmsted L&D (New Motor Vessel)  | \$12.8M – (\$2.3M – TF)  |
| Kentucky L&D                    | \$21.8M – (\$21.8M – TF) |
| Mon River 2,3 & 4               | \$44.5M – (\$44.5M – TF) |
| Chickamauga Lock                | \$76.2M – (\$13.5M – TF) |



# FY 19 Work Plan for Navigation (\$millions)



## **Inland Navigation (Major Components Funded)**

|   |        |
|---|--------|
| Illinois Waterway (Various)                 | \$11M  |
| Ohio River JT Myers (Electrical System)     | \$2.5M |
| Mississippi River (Work at Lock 2, 4 & 5)   | \$1.5M |
| McClellan-Kerr (Dam 16 Tainter Gate Rehab)  | \$5.1M |
| Allegheny River (L&D 2 Concrete Repair)     | \$1.6M |
| Ohio River (New Cumberland Aux Miter Gates) | \$6.6M |
| Tennessee River (KY Lock Stoplog Slots)     | \$1.7M |
| Gulf Intercoastal WW (Surveys and Dredging) | \$5.2M |
| Ohio River (Greenup & RC Byrd)              | \$2.5M |



# NAVIGATION CHALLENGES



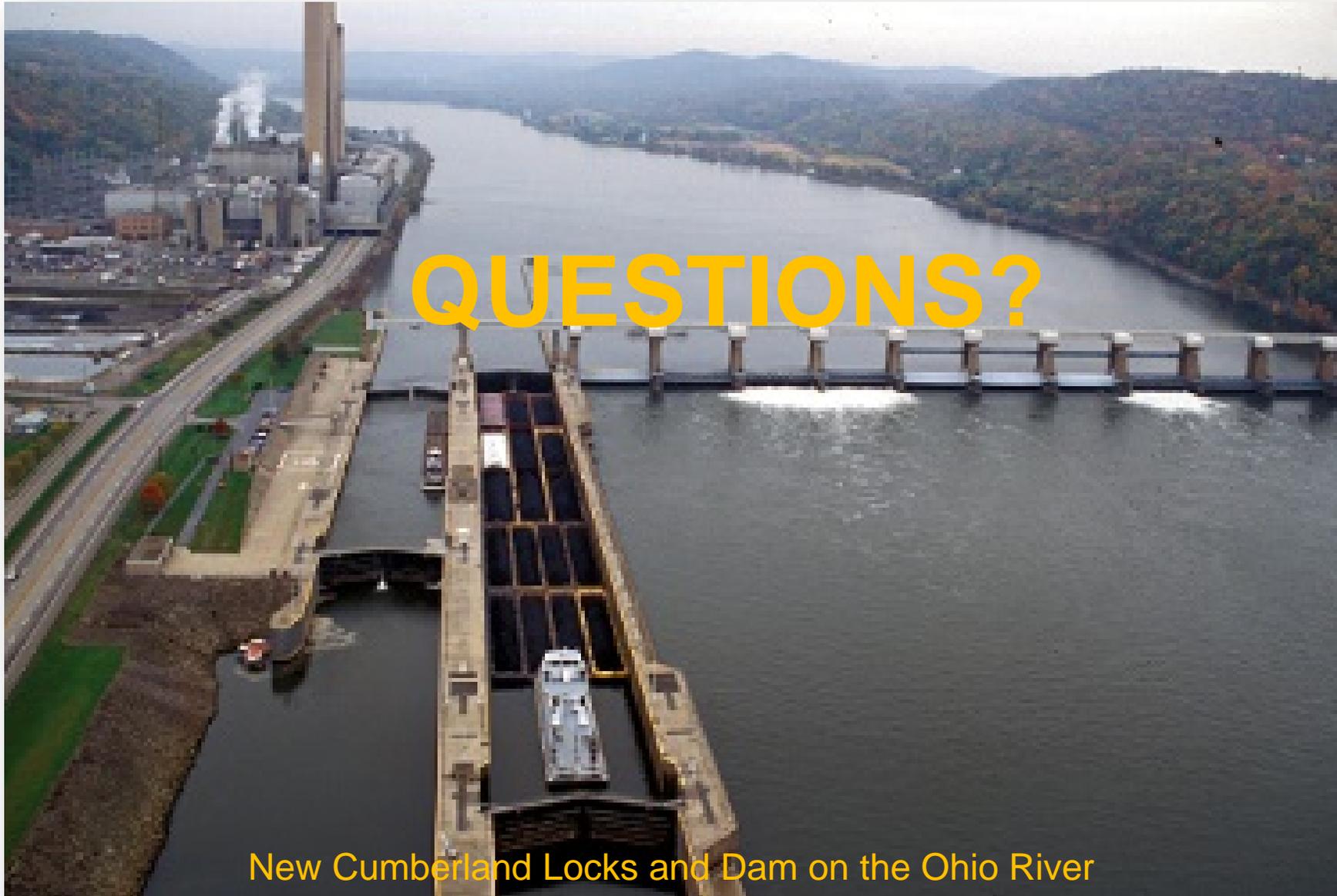
- Constrained funding - can't maintain authorized/constructed channel dimensions and challenges maintaining critical infrastructure
- Funding for low commercial use projects
- Increased cost of doing business
- Aging infrastructure
- Behind in channel depths
- Environmental Issues
  - Air and water quality requirements
  - Threatened, endangered, and invasive species
  - Dredging window
- Execution



# NAVIGATION MESSAGE



Navigation funding is essential for the Nation's global trade and maintaining competitiveness. America's Marine Transportation System infrastructure must become a National priority in order to get adequate funding. Need national commitment to shipping, global trade and navigation infrastructure. Navigation funding is key to Economy, Jobs, and Exports!



New Cumberland Locks and Dam on the Ohio River

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