



NETS Symposium 2006
Salt Lake City, Utah

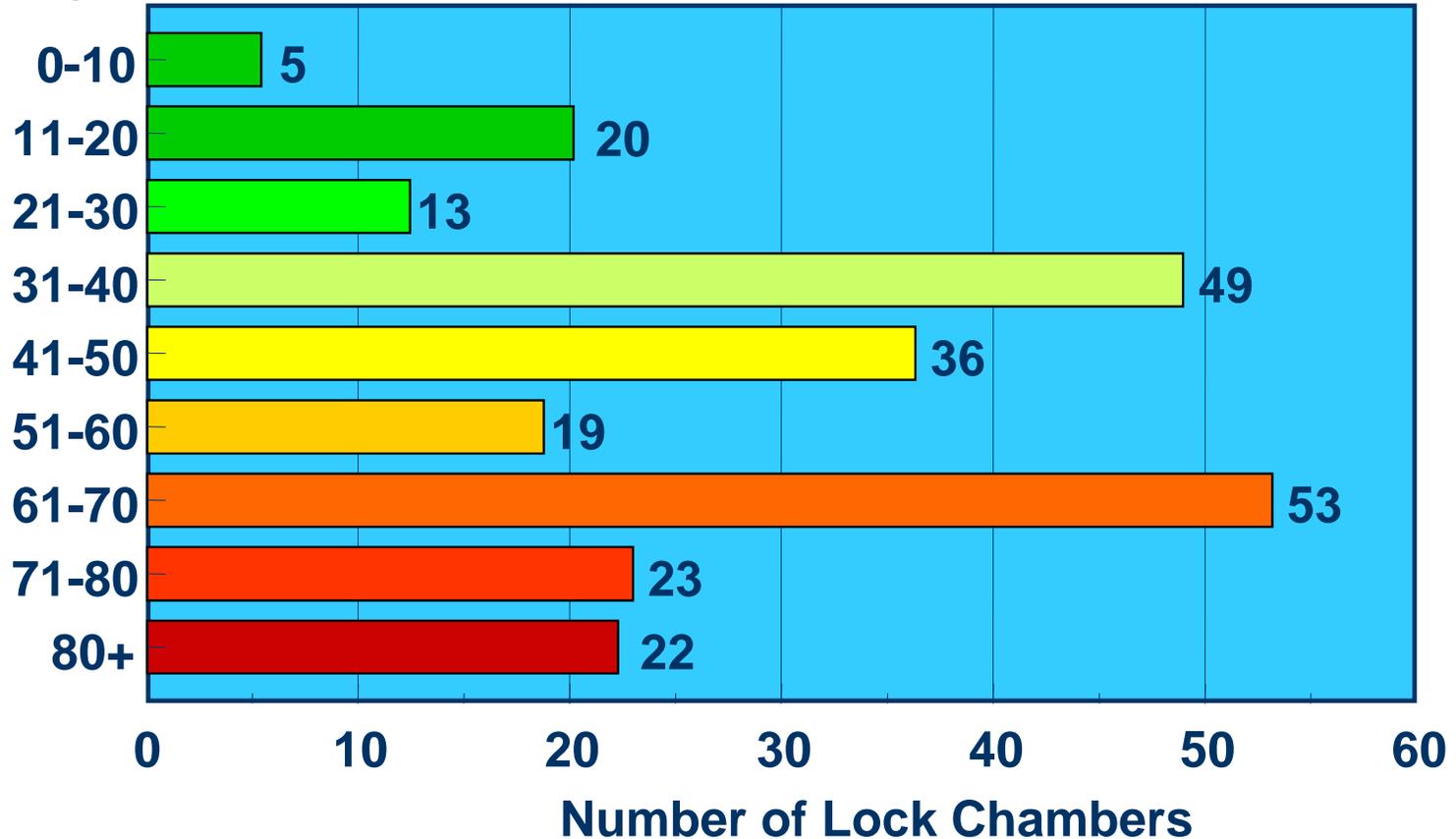


**Inland Waterway Closure Event Studies -
Introduction**

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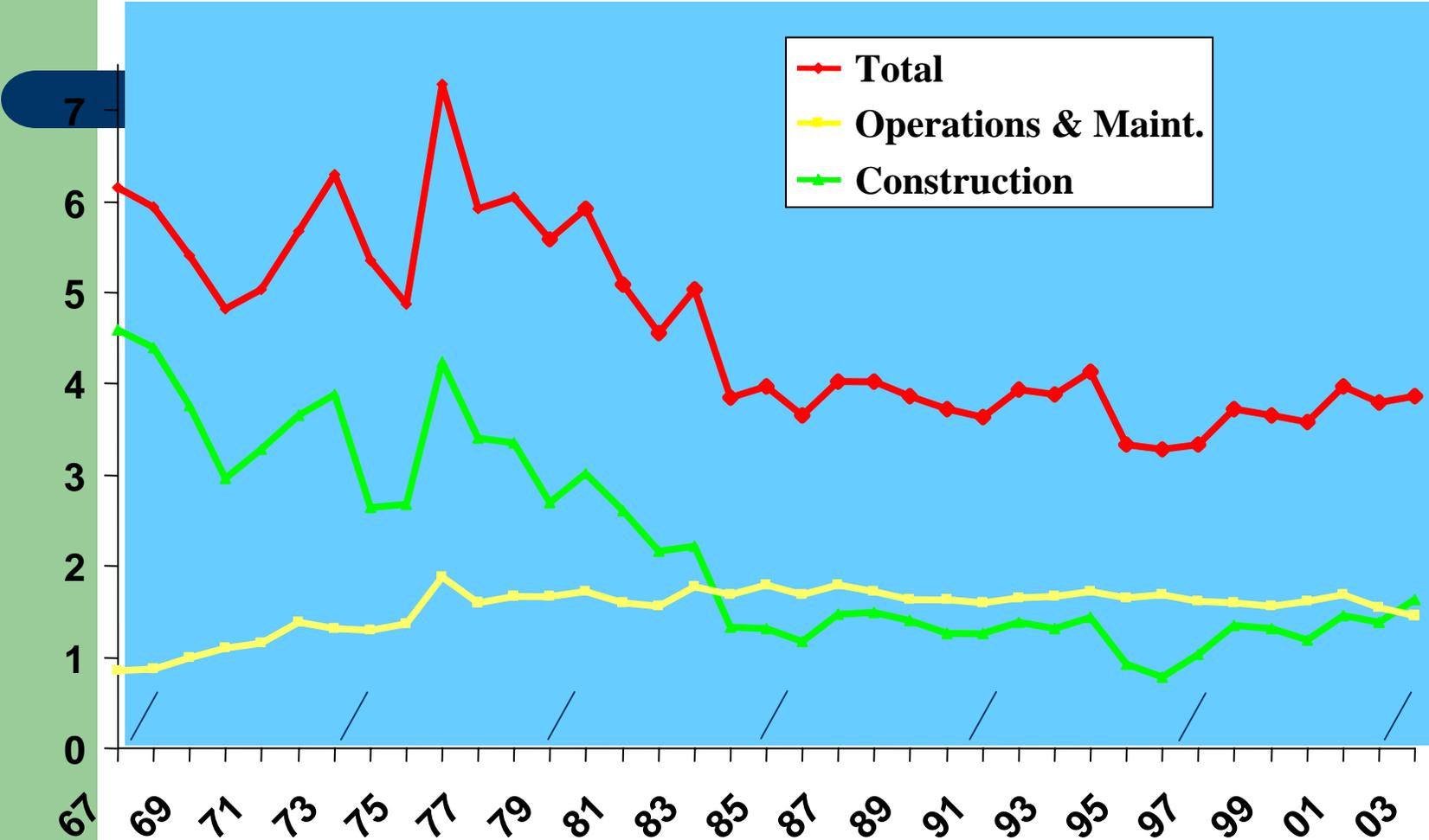
Challenge: Aging Lock Inventory

Age in 2004 (Years)

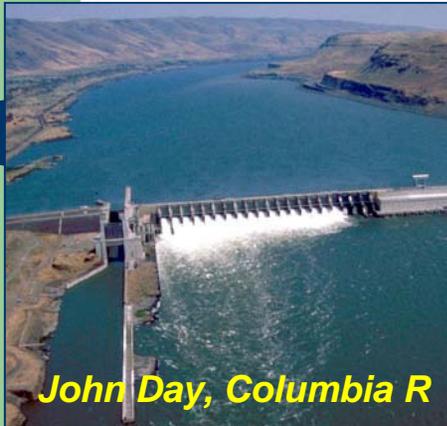


Civil Works Appropriations

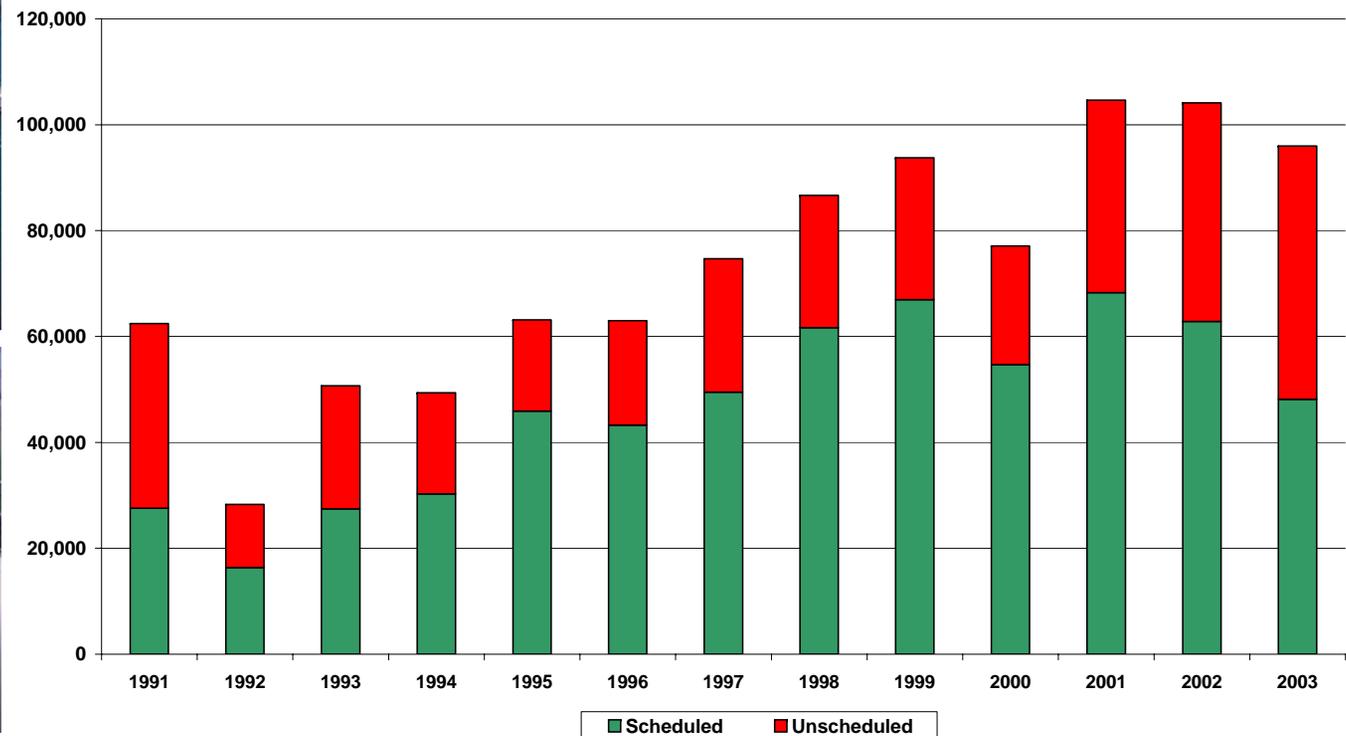
Constant (FY 95) \$ Billions



Challenge: Aging Infrastructure + O&M Backlog = Increasing “Downtime” at Locks



Navigation Lock Unavailability
Total Hours Scheduled vs. Unscheduled without Ice



- *John Day L&D, gate failure in 2002, delays*
- *Greenup L&D, gate deterioration extended lock closure by weeks in 2003, major delays*
- *Such incidents may become more common on an aging system with inadequate maintenance.*

This erodes the effective capacity of the navigation system over time...

Event studies -- purpose

- What does it cost to close a main chamber?
 - Public costs
 - Private costs
- What might be done to minimize these costs? How do shippers and carriers react to main chamber closures? Identify important factors.
 - Scheduled (amount of notice) or unscheduled
 - the shipper
 - time of year

Three event studies

- Greenup L&D, Ohio River
 - Dale Kelz, Huntington District, WV
 - Large main, smaller auxiliary chamber
 - Scheduled turned unscheduled
- LD27, Mississippi River
 - Jack Carr, Rock Island District, IL
 - Large main, smaller auxiliary chamber
 - Unscheduled - scheduled
- McAlpine L&D, Ohio River
 - Mark Lisney, IWR in Louisville, KY
 - Single chamber
 - Unscheduled-scheduled