



Chicago Harbor, IL

Project Features

- Located on Lake Michigan in the city of Chicago, Cook County, Illinois
- Authorization: The Rivers and Harbors Acts of 1870, 1880, 1912, 1919 and 1962
- Authorized depths are 29 feet in the Lake Michigan harbor approach, 28 feet in the outer harbor, and 21 feet to Rush Street.
- The Federal channel within the harbor is 2.20 miles and it connects to the deep draft Chicago River channel extending 4.02 miles to the North Avenue Turning Basin.
- 20,357 linear feet of timber crib, laid-up stone, and concrete caisson breakwater structures.
- Chicago Lock completes over 11,500 lockages annually, passing over 40,000 vessels.
- The harbor is a part of the Port of Chicago, and is the secondary link of the Great Lakes and the Inland Waterway System. In 2008, 1.35M tons were shipped on the Main and North Branch of the Chicago River; 48,000 tons were directly received through this harbor. The South Branch Chicago River connects to Chicago Sanitary & Ship Canal and IL River.
- The harbor hosts a USCG Station, Chicago Marine Police, and Illinois Conservation Police, Chicago Fire Dept.'s Fire Boat and City tug.

Project Requirements

- The Federal channel is at authorized depths. The channel has not been dredged in 26 years.
- The 5,321 LF northeastern breakwater is the harbor's primary shield. It is in very poor condition, a 100' segment has failed, and the loss of further sections is expected. ARRA funds completed work in FY10 to stabilize the most critical 850 LF segment. Substantial needs remain.
- Chicago Lock has a Dam Safety Action Classification System rating of II which means that several recommended repairs are Urgent, and that the project is considered Very High Risk. Stabilization of the North Pier Utility tunnel, and the addition of gate winches as a fail-safe measure are unfunded requirements.



Consequences of Not Maintaining the Project

- The Jardine Water Purification Plant is located in the harbor and serves nearly 5M consumers in 118 municipalities. It is the world's largest water treatment plant.
- The lock limits Lake Michigan water flow into the Illinois Waterway. It provides flood damage reduction to the downtown area from Chicago River, protecting \$1.4B in real estate.
- Navy Pier annually hosts 9M visitors and generates nearly \$138M in sales. Its operation employs 700 full-time and 2,000 part-time workers. Over 100 private businesses operate there, employing 750 workers.
- Tour and Charter Boat Operations – 20 companies operate 55 boats, and host approximately 370,000 passengers annually.
- Privately-owned marinas moor 1,450 recreational boats within the harbor.
- If the Port of Chicago was closed to commercial traffic, cargo would have to be transported by rail and truck. This would increase annual emission rates by over 27,261 tons of harmful particulate matter (PM-10), and increase external costs from railroad and trucking related accidents by \$7.5M due to higher traffic.

Transportation Importance

- Commodities handled are general cargo, petroleum, newsprint, salt, and cement.
- The harbor is a safe refuge on southern Lake Michigan for barges and vessels traveling north from or south to the Port of Chicago.
- Bulk commodities that pass through Port of Chicago generate \$820M annually in direct revenue, support 4,707 jobs, and generate \$216M per year in personal income.

**U.S. Army Corps of Engineers Fiscal Year (FY) 2011, 2012 and 2013
Chicago Harbor, IL - Project Requirements and President's Budget (\$1,000)**

Work Package	FY11 Requirement	FY11 Work Plan	FY12 Requirement	FY12 Appropriation	FY13 Requirement	FY13 President's Budget
Project Condition Surveys	93		96	95	100	95
Lock Operations	1,826	1,826	1,908	1,847	1,850	1,850
Routine Lock Maintenance	238	238	250	173	250	55
East and West Lock Gates Replacement & S&A	200					
Structural Repairs - Northeast Breakwater Crib Encapsulation of 100' failed segment by Contract	2,600		3,390		3,710	
Structural Repairs - Northeast Breakwater Crib Stabilization by Contract (800')			4,250		4,280	
Structural Repairs – Eastern Outer Breakwater Repairs by Gov't Floating Plant (500')			1,895		1,895	
Chicago Lock Asset Renewal						
Upgrade Lock Emergency Generator and Lockwall Lighting	450		450			
Concrete Resurfacing Chamber Walls, Guidewalls, walkways	7,100		7,170		7,170	
North Pier Tunnel Stabilization	10,250		10,320		10,320	
Lock Scour Hole Repairs	2,500		2,550			
Lock Facility Security Lighting, Fire, Intrusion Alarm	1,460		1,480		1,930	
Installation of Emergency Winches Lock Sector Gates	900		940		990	
To design a direct gas line to the Lock House to improve the efficiency.					137	
Investigate a geo-thermal cooling system for the Lock House to reduce energy consumption.					120	
TOTALS	27,617	2,064	34,699	2,115	32,752	2,000

Congressional Interests

- Representative Danny K. Davis, D-IL-7
- Senator Richard Durbin, D-IL
- Senator Mark Kirk, R-IL