

Public Works Capital Improvement Plan 2016-2020



Presented by:
Peter E. Kolb, P.E., Director
Heather L. Galan, P.E.
for
Public Works and
Transportation Committee

Purpose

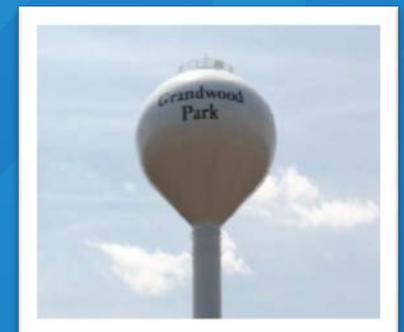


- Present the Department's 5-year plan for capital projects
- Solicit input from PW&T Committee
- Receive endorsement from PW&T Committee

Department Assets – Potable Water



Quantity	Item
35	Ground water wells
18	Water reservoirs
293	Watermain (miles)
3,762	Fire Hydrants
3,799	Valves
20,600	Water Meters



Department Assets – Wastewater



Quantity

3

5

81

387

8,370

Item

Water Reclamation Facilities

Regional Interceptor Sewer Systems

Pump Stations and Lift Stations

Sewer Main (miles)

Manholes



Department Assets – Other

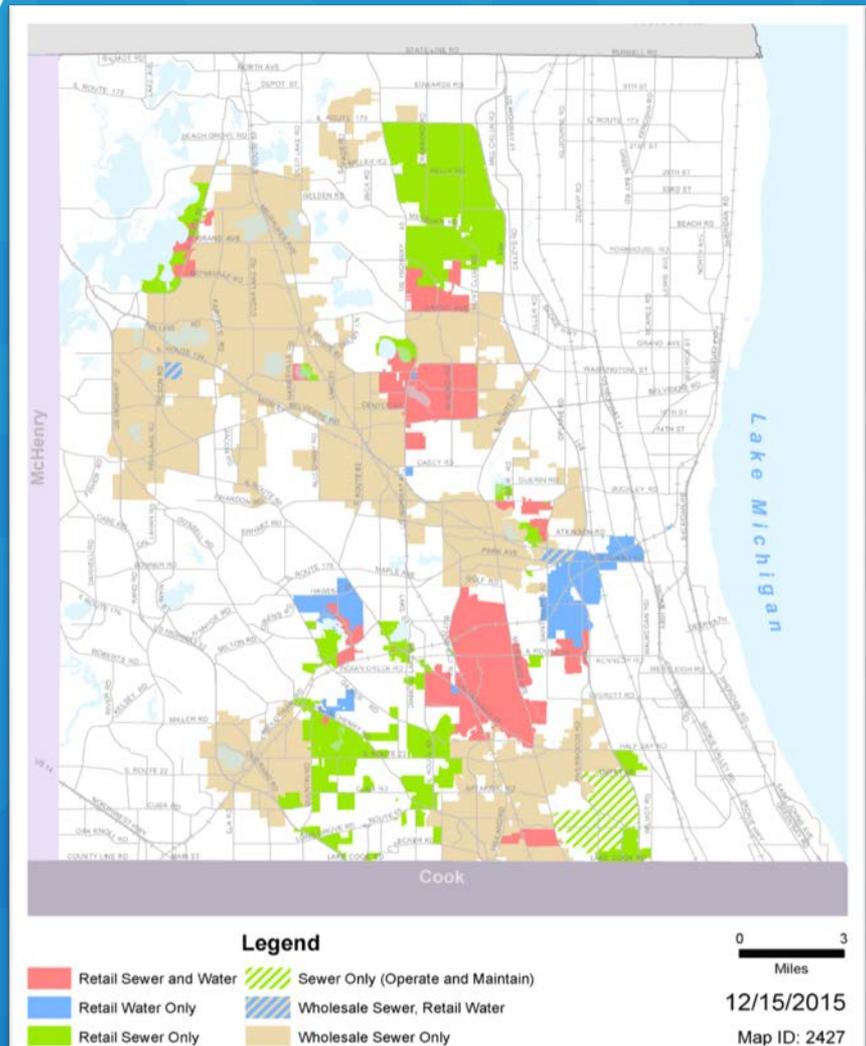


- Administration Building
- Maintenance Facility
- Environmental Laboratory
- North Libertyville Estates Levee



Service Areas

- County provides:
- Water service to 60,000 people
- Sewer service to 300,000 people



Capital Project Priorities



- System Preservation
- System Modernization and Regulatory Compliance
- System Expansion

System Preservation



- Current assets replacement value: \$1 billion
- Assets depreciate over time
- Continuous refurbishments and replacements are necessary to preserve system function and deliver uninterrupted service
- Projected 5-year cost: \$40,200,000
- Examples: Lining deteriorated sewer pipes, replacing water mains, refurbishing lift stations

System Modernization and Regulatory Compliance

- Address regulatory compliance from IEPA
- Use new technology
- Improve efficiency
- Projected 5-year cost: \$19,702,500
- Examples: SCADA, BNR

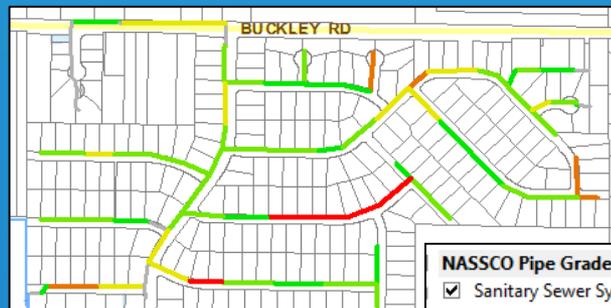
System Expansion



- Extends service to new areas
- Capacity expansion allows additional customers
- Projected 5-year cost: \$1,672,500
- Examples: Water main and sewer extensions to unserved areas, enlargement of pipe diameters and pumping stations to increase capacity

Capital Project Selection Process

- Annual condition assessments
 - Prioritize replacement/refurbishment
- New regulatory requirements



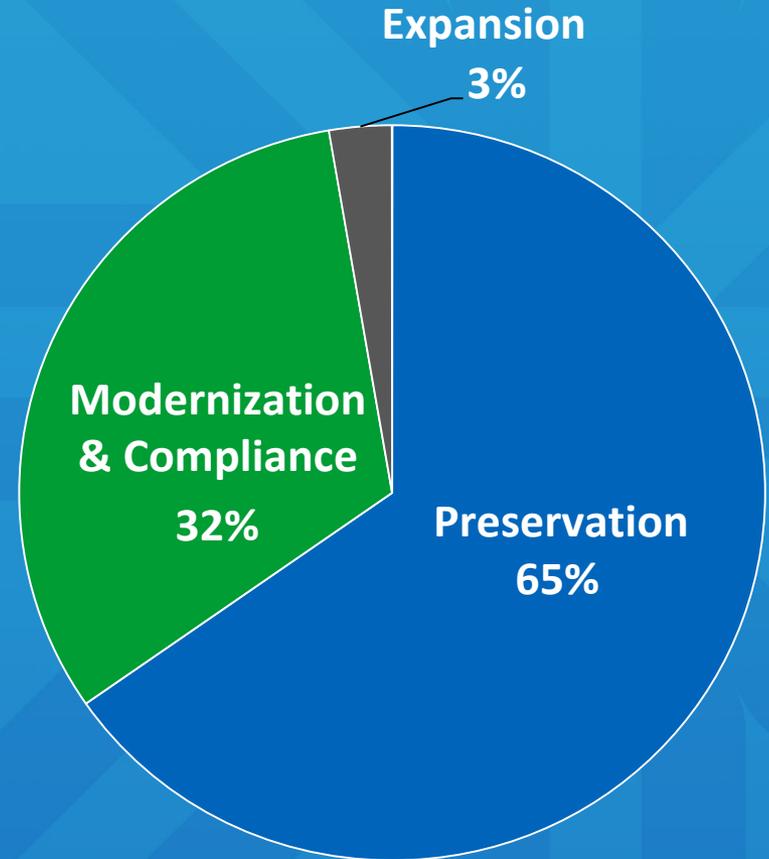
NASSCO Pipe Grade Map

- Sanitary Sewer Systems
- Sewer Structures
- Sanitary Mains
- NASSCO Pipe Grade of Gravity Mains
 - 0- Not Graded
 - 1- Acceptable structural condition
 - 2- Minimal collapse risk
 - 3- Collapse unlikely in near future
 - 4- Collapse likely in foreseeable future
 - 5- Collapsed or collapse imminent

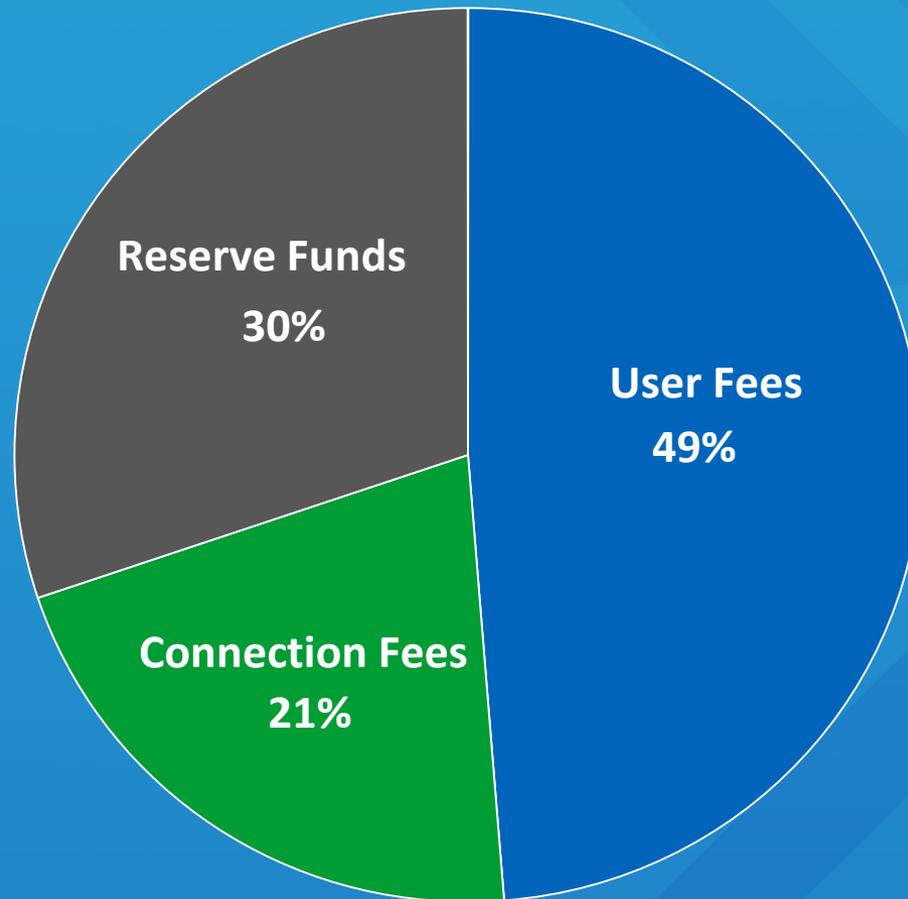


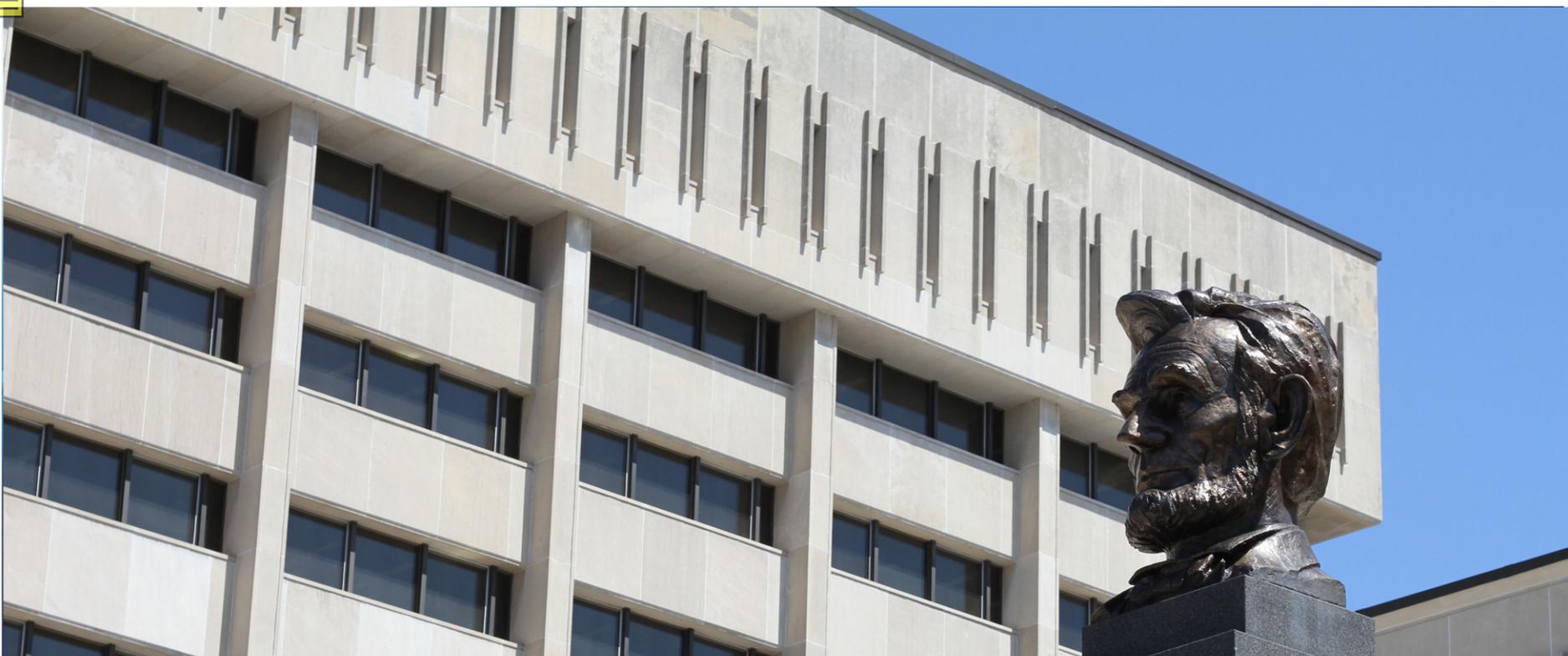
Capital Project Costs 2016–2020

Year	Preservation	Modernization and Compliance	Expansion	Total
2016	\$7,015,000	\$8,765,000	\$1,250,000	\$17,030,000
2017	\$2,350,000	\$5,955,000	\$35,000	\$8,340,000
2018	\$11,440,000	\$1,022,500	\$387,500	\$12,850,000
2019	\$10,545,000	\$3,560,000	\$ -	\$14,105,000
2020	\$8,850,000	\$400,000	\$ -	\$9,250,000
Total	\$40,200,000	\$19,702,500	\$1,672,500	\$61,575,000



Funding Sources 2016–2020





Thank you

OF THE GREATEST MEN
IN THE HISTORY OF ILLINOIS
ABRAHAM LINCOLN
ABRAHAM LINCOLN MADE HIS MARK IN HISTORY
AS ONE OF THE FINEST PRESIDENTS OF
STATES. IT IS FOR THIS REASON
THAT ALL