



Pittsburgh
Water & Sewer
Authority

**COLLABORATION DAY
CAPITAL IMPROVEMENT PROGRAM
REVIEW**

November 18, 2015
8:30 – 9:45

AGENDA



- Program Overview
- Plant/Pumping Station Related Projects
- Distribution/Collection System Projects
- Green Infrastructure Projects

PWSA INFRASTRUCTURE



- Water Treatment Plants: 2
- Pumping Stations: 12
- Miles of Water Lines: 930
- Miles of Sewer Lines: 1,227
- Valves: More than 25,000
- Hydrants: More than 7,300
- Storage Facilities: 5 Reservoirs and 11 Tanks
- Sewage Pump Stations: 4
- Catch Basins: More than 30,000
- Manholes: 29,000

CHALLENGES



- Like all cities across the country, PWSA faces a number of challenges:
 - Aging Infrastructure
 - Increasing Regulations
 - Decreased Population
 - Decreased Revenue
- The cost for recommended capital improvements to the PWSA system over the next 40-year planning period is estimated to be: **\$2.6 billion dollars.**

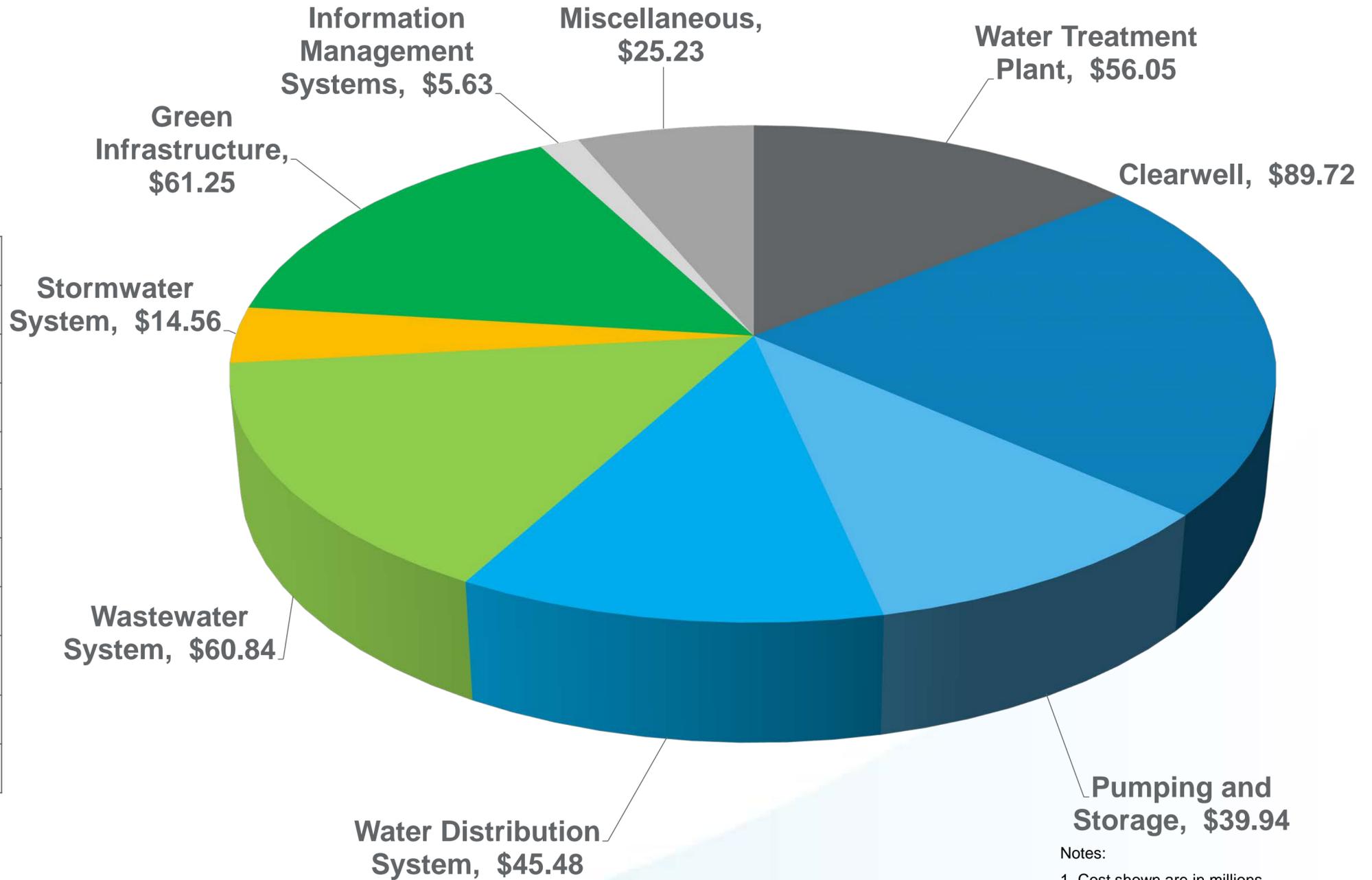
CIP Drivers and Considerations



- Customer Service
- Rate Structure
- Overcoming Challenges
- Nomination Process
- Need for Information
- Clearwell
- CO/CD Requirements
- CSO
- Green Infrastructure

SUMMARY

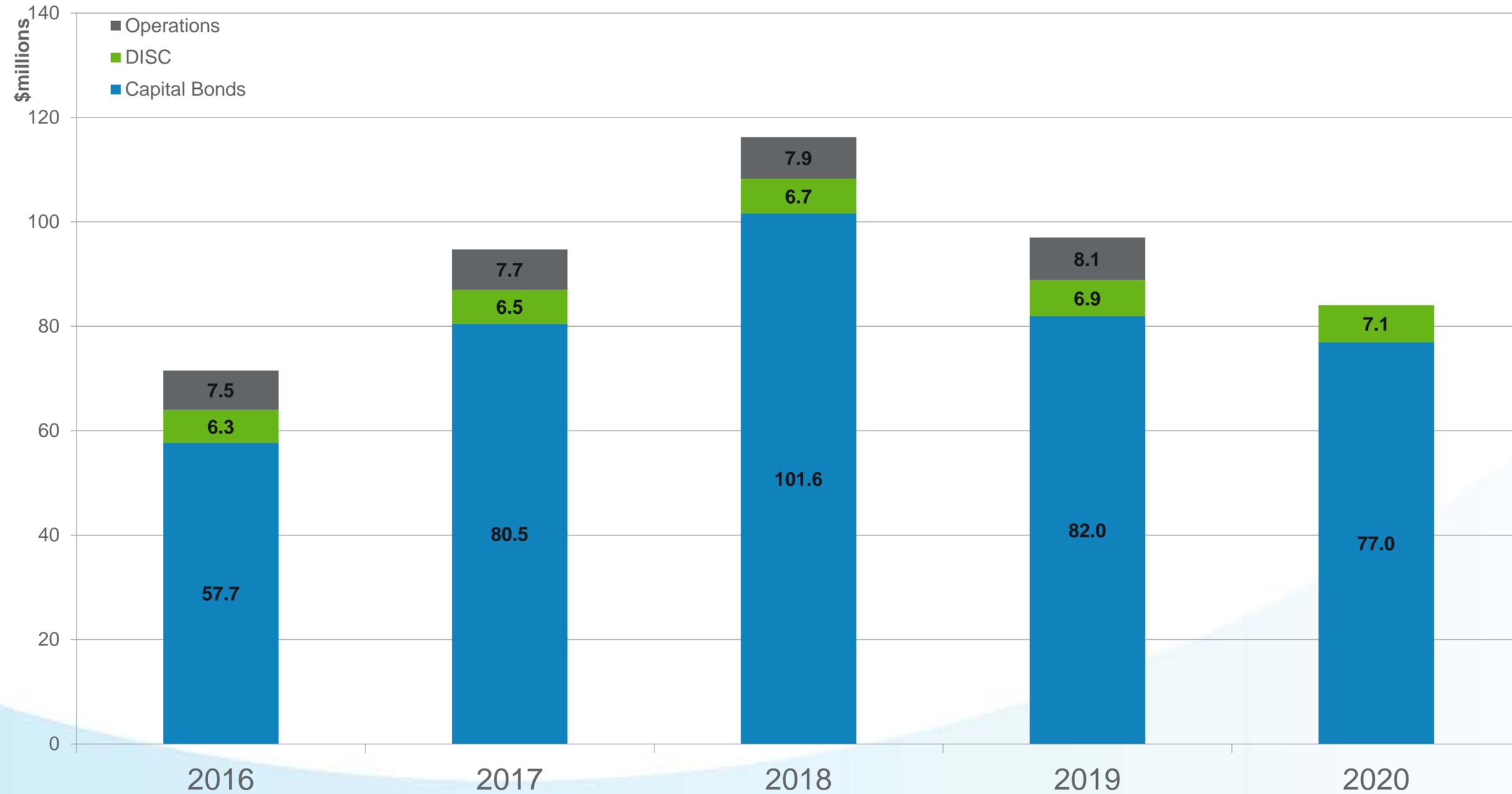
Category	2016	2017	2018	2019	2020	Total
Water Treatment Plant	\$3.63	\$16.27	\$16.15	\$10.00	\$10.00	\$ 56.05
Clearwell	\$3.95	\$8.90	\$30.41	\$26.27	\$20.18	\$ 89.72
Pumping and Storage	\$2.13	\$9.09	\$9.92	\$9.26	\$9.55	\$ 39.94
Water Distribution System	\$10.98	\$8.25	\$8.50	\$8.75	\$9.01	\$ 45.48
Wastewater System	\$11.10	\$14.77	\$11.68	\$11.47	\$11.81	\$ 60.84
Stormwater System	\$1.91	\$2.56	\$5.84	\$2.09	\$2.16	\$ 14.56
Green Infrastructure	\$13.75	\$13.75	\$13.75	\$10.00	\$10.00	\$ 61.25
Information Management Systems	\$3.73	\$1.20	\$0.50	\$0.10	\$0.10	\$ 5.63
Miscellaneous	\$6.49	\$5.70	\$4.86	\$ 4.03	\$4.15	\$ 25.23
Total	\$57.68	\$80.49	\$101.60	\$ 81.96	\$ 76.96	\$ 398.69



Notes:
 1. Cost shown are in millions.
 2. Costs shown are FY2016 through 2020.

CIP SPEND

Capital Improvement Program



IMS Project Descriptions

Project Name	Description
Computerized Maintenance Management System (CMMS)	Acquire, install, develop, and implement a Computerized Maintenance Management System , including training staff to assist with capital investment prioritization.
Geographic Information System (GIS) Needs Assessment	Review and analyze PWSA's existing GIS system to determine feasible options for providing secure and convenient access to the GIS for both internal staff and external stakeholders and to identify data deficiencies.
Water Distribution and Water Quality Model Enhancements	Upgrade existing water distribution modelling software to WaterGEMS , which will include model development, demand projection, calibration, verification, and in-house staff training.
Sewer Hydrologic and Hydraulic Model Extensions	Extend, verify, and calibrate the current regional XP SWMM hydrologic and hydraulic models as necessary to determine the location, and frequency of basement backups, to size and design sewer system improvements and to assess the effectiveness of various flow reduction alternatives (gray and green) to abate CSO's and improve regional stream water quality.

Information Management System Projects

Project Name	Pre 2016	2016	2017	2018	2019	2020	Post 2020	Total
Computerized Maintenance Management System (CMMS)	\$0.00	\$2.75	\$0.50	\$0.25	\$0.00	\$0.00	\$0.00	\$3.50
Geographic Information System (GIS) Needs Assessment	\$0.00	\$0.08	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.08
Water Distribution and Water Quality Model Enhancements	\$0.00	\$0.40	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.60
Sewer Hydrologic and Hydraulic Model Extensions	\$0.00	\$0.50	\$0.50	\$0.25	\$0.10	\$0.10	\$0.10	\$1.55
Total	\$0.00	\$3.73	\$1.20	\$0.50	\$0.10	\$0.10	\$0.10	\$5.73



To Ensure that Qualified Firms are Retained Through a Transparent and Equitable Selection Process

Criteria	Max Points
Understanding & Approach	35
Specialized Experience of Provider	15
Proposed Work Plan & Project Timing	15
Project Team	15
Location	5
MBE/WBE	5
Cost	10
Total	100

Where other, additional factors are considered, the points assigned to each factor shall be apportioned in a similar manner.

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Collaboration Day

PWSA Wants Your Feedback! Join us as we explore ways to streamline and improve processes for working with PWSA on new project developments.

[Check out the invitation for more info.](#)

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WHAT'S HAPPENING

- PWSA AWARDS \$250,000 IN GRANTS FOR GREEN INFRASTRUCTURE PROJECTS**
8/12/15 @ 11:02am
- PWSA WILL REPAIR A SEWER ON CAREY WAY IN THE SOUTH SIDE**
8/11 & 8/12, 7am-5pm
8/11/15 @ 11:27am
- PWSA PAVING SCHEDULE**
August 10th - August 14th, 2015
8/11/15 @ 11:27am
- PWSA WILL REPLACE A FIRE HYDRANT AND VALVE ON SHADY AVENUE IN SQUIRREL HILL**
8/11/15 @ 11:27am
- PWSA WILL COMPLETE SURFACE RESTORATION PAVING ON 7th AVENUE IN**

PROJECT INFO

- Fair Oaks St & Wilkins Ave Update, 11/3**
Please open the PDF linked here to view the latest Project Update Sheet for the 2015 Sewer Improvement Project for Fair Oaks Street and Wilkins Avenue.
11/05/15 @ 12:05 pm
- Upper Lawrenceville Update, 11/3**
Please open the PDF linked here to view the latest bi-weekly update for the for the Upper Lawrenceville Waterline Replacement Project - Phase 1.
11/05/15 @ 11:01 am
- Upper Lawrenceville Community Update, 10/16**
Please open the PDF linked here to view the latest bi-weekly update for the for the Upper Lawrenceville Waterline Replacement Project - Phase 1.

TWITTER/OUTAGES

- PGH Water & Sewer** @pgh2o
Good Morning, #Pittsburgh!
When reporting an issue please be as specific as possible with the location. And don't hesitate to DM me :)
Expand
- PGH Water & Sewer** @pgh2o
My best RTs this week came from @PGH_BUS_INFO @BreakingNewsman @ben_in_public #thankSA! Who were yours?



Sometime this Morning, Please see the PWSA Team Regarding an e-Builder License and Training!

