

KC WATER SERVICES ROLLOUT | FEBRUARY 17, 2015

Capital Improvement Program Fiscal Year 2015-2016





**“We are building a world-class city for the future.”
- Mayor Sly James**

Troy Schulte, City Manager



**“You are ultimately establishing
the quality of life for future
generations.”**

- Troy Schulte, City Manager





TERRY LEEDS, DIRECTOR OF WATER SERVICES

Kansas City Water Services

Kansas City Water Services



1 Water Treatment Plant
18 Pump Stations
2,800 Miles of Water Main
35,000 Valves
23,000 Fire Hydrants



6 Wastewater Treatment Plants
46 Pump Stations
2,800 Miles of Sewer Main
67,000 Manholes



630 Miles of Storm Sewer
53,000 Storm Inlets
15 Stormwater Pump Stations
13.5 Miles of Levee

Serving Our Customers

FY14-FY15 Budget	\$346 million
Water	\$157 million
Wastewater	\$171 million
Stormwater	\$18 million

Average Monthly Residential Bill

Water	\$44.54
Wastewater	\$46.60
Stormwater	\$2.50
TOTAL	\$93.64





ANDY SHIVELY, P.E.

ENGINEERING OFFICER, KANSAS CITY WATER SERVICES

Capital Improvement Program FY 2016-2020

Agenda

- Highlights: FY 2014-15 Capital Improvements
- Challenges & Opportunities
- Overview: Kansas City's Capital Improvement Program
- CIP Focus Areas
- Getting to Work: Kansas City's FY 2016-2020 Project Schedule
- Fiscal Year 2016
- Project Recognition



Highlights: FY 2014-15 Capital Improvements

FY 2014-15 Citywide Programs

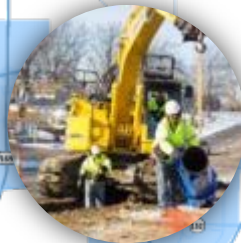
**Sewer
Rehabilitation
Program**



**Catch Basin
Replacement
Program**



**Water Main Replacement
Program**



**Flood Protection
Program**



**Kansas City's Overflow
Control Program**

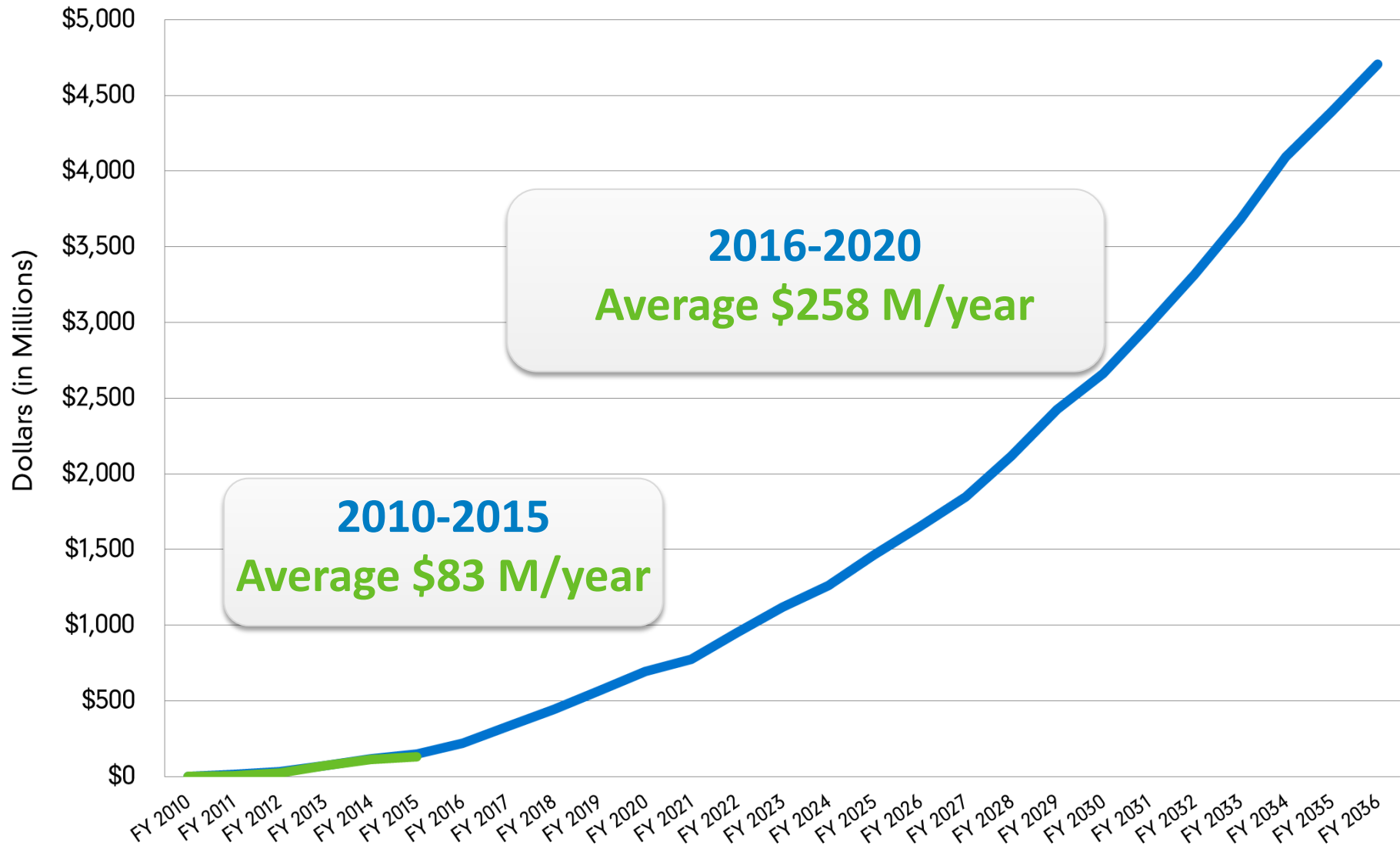


Capital Project Delivery: FY 2015

\$116 Million Investment, 85+ Projects

MONTH	# WATER PROJECTS	# SEWER PROJECTS	# STORMWATER PROJECTS	TOTAL CONTRACTS	TOTAL AMOUNT
MAY	8	3	5	16	\$13,740,000
JUNE	2	1	1	4	\$15,820,000
JULY	5	4	1	10	\$14,140,000
AUGUST	2	3	1	6	\$7,680,000
SEPTEMBER	9	4	2	15	\$15,060,000
OCTOBER	10	5	0	15	\$15,110,000
NOVEMBER	5	1	1	7	\$9,300,000
DECEMBER	5	3	0	8	\$22,780,000
JANUARY	3	1	1	5	\$3,101,000
TOTAL Y-T-D	46	24	11	86	\$116,730,000

Program Investment: 2010-2035





KANSAS CITY:

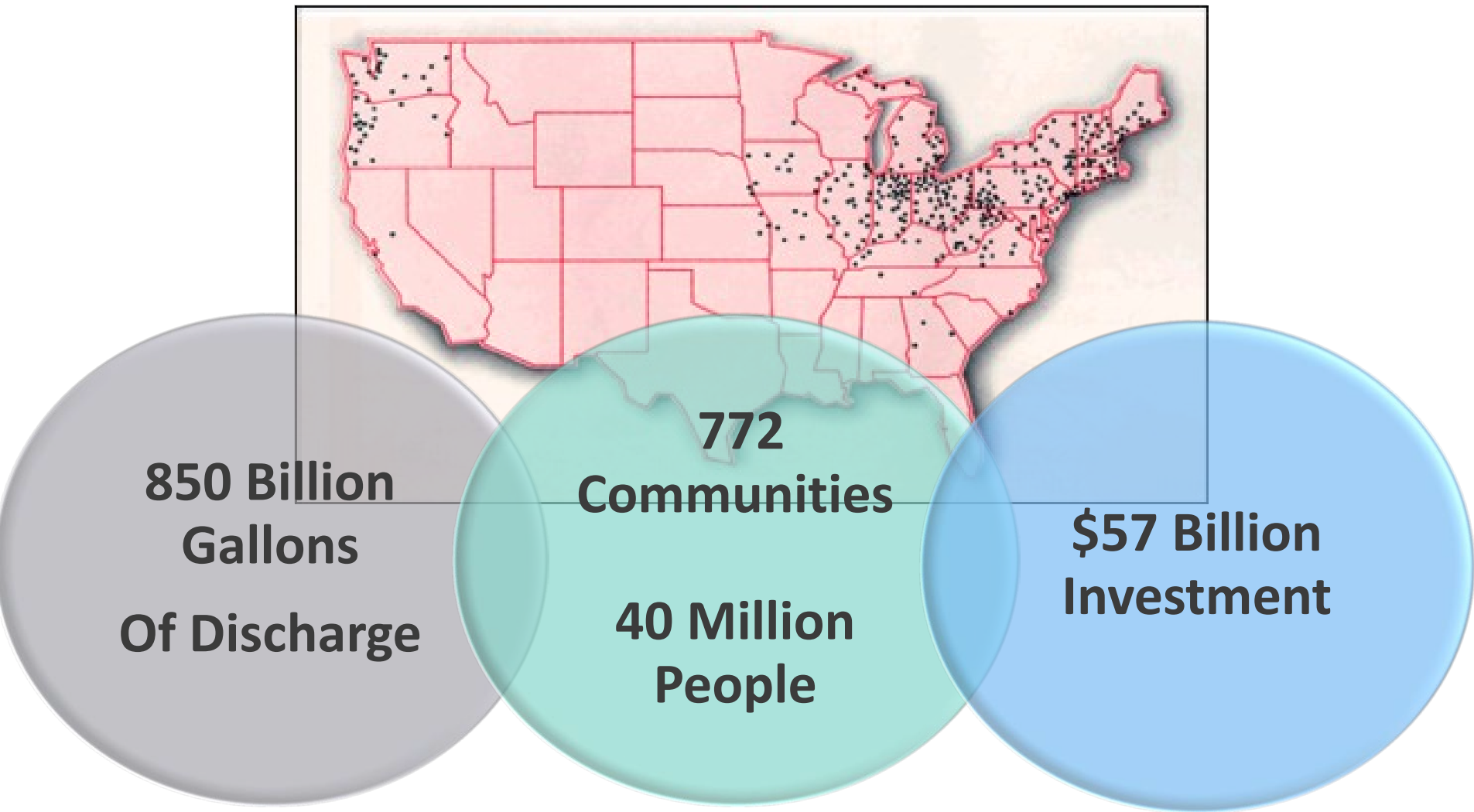
Challenges & Opportunities

The National Water Infrastructure Crisis

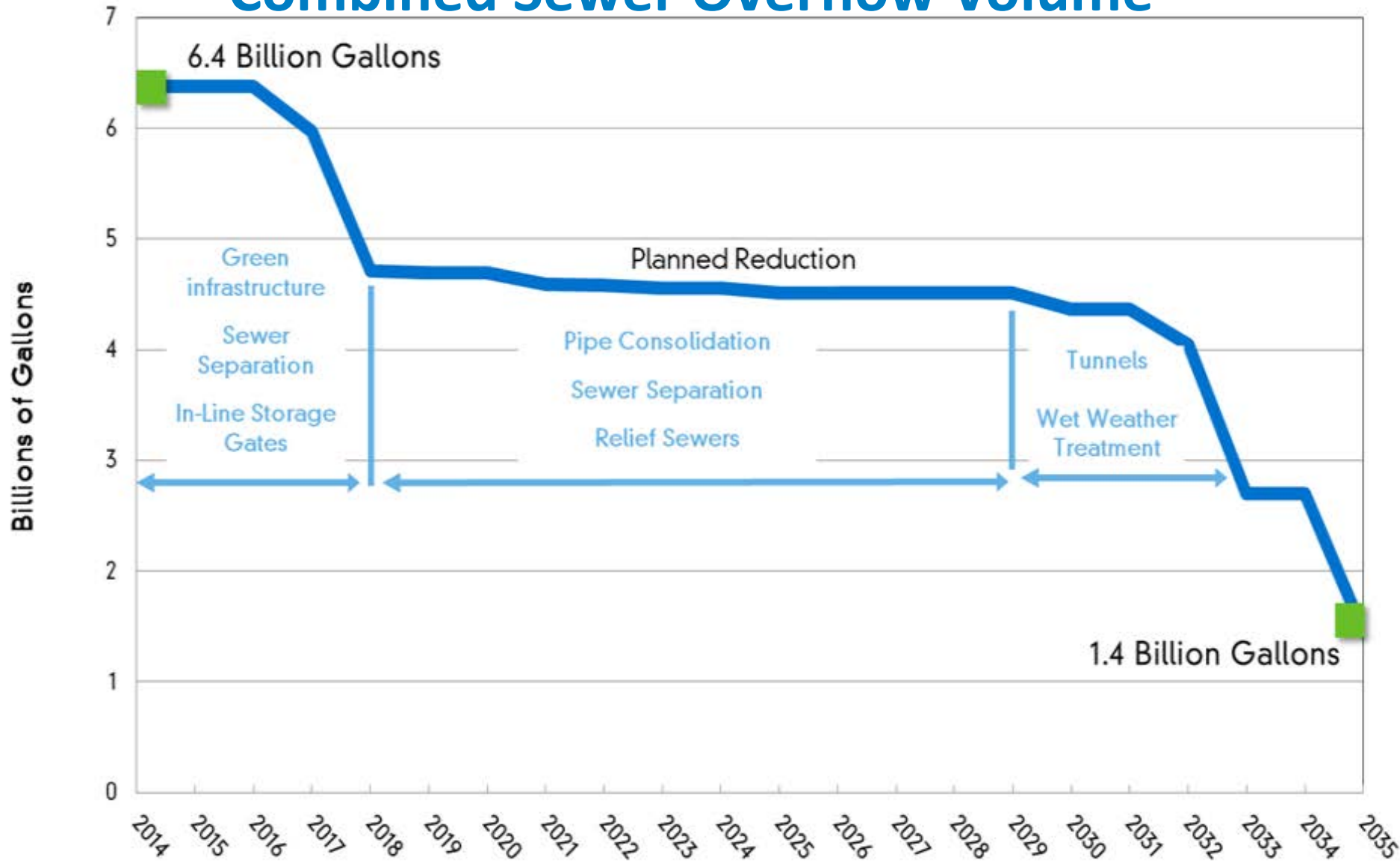
\$1,000,000,000,000

**\$1 Trillion nationwide infrastructure investment need
over the next 25 years.***

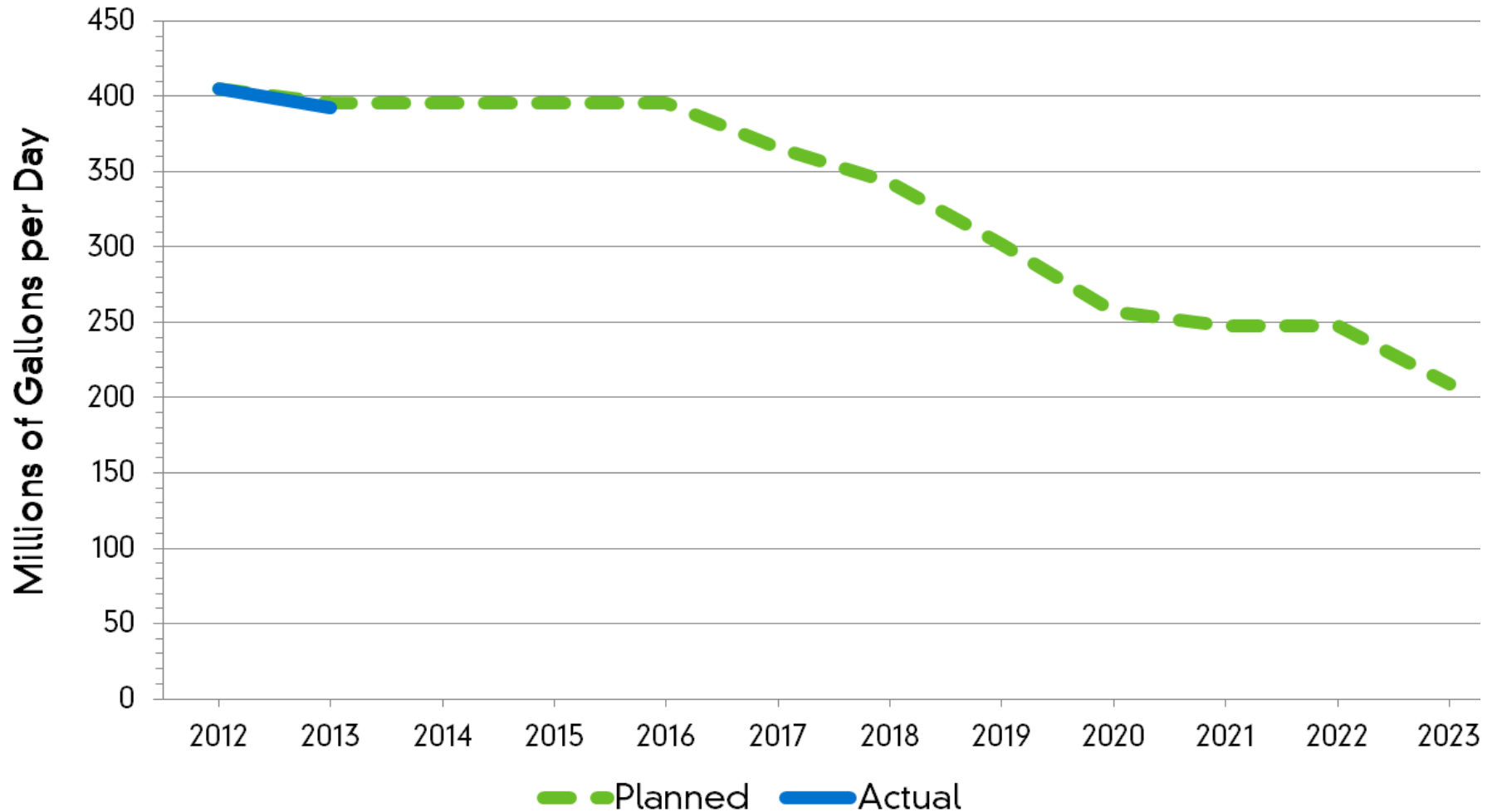
National Data: Combined Sewer Overflows



Kansas City's Annual Combined Sewer Overflow Volume



Separate Sewer System Inflow/Infiltration Reduction





OVERVIEW: KANSAS CITY'S

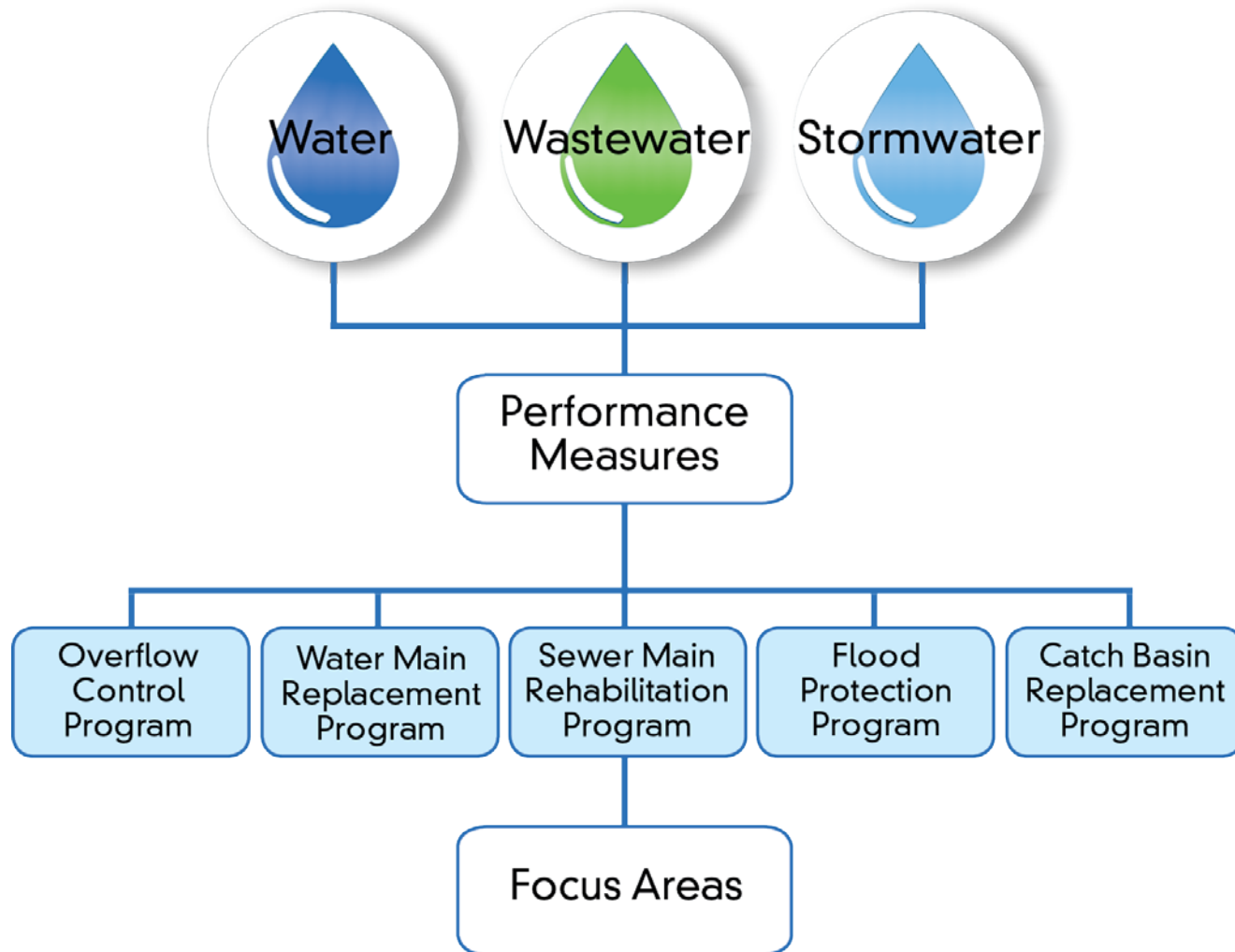
Capital Improvement Program

Water Services Capital Improvement Program

Investing in the future of our team and our community so we may continue a legacy of providing quality services for generations to come.

- **\$1.2 billion** investment over 5 years
- Over **18,000** direct and indirect **jobs created**
- Projects designed to:
 - Improve water quality and protect public health
 - Improve customer utility services
 - Meet regulatory requirements
 - Promote economic development
 - Build and maintain utility infrastructure

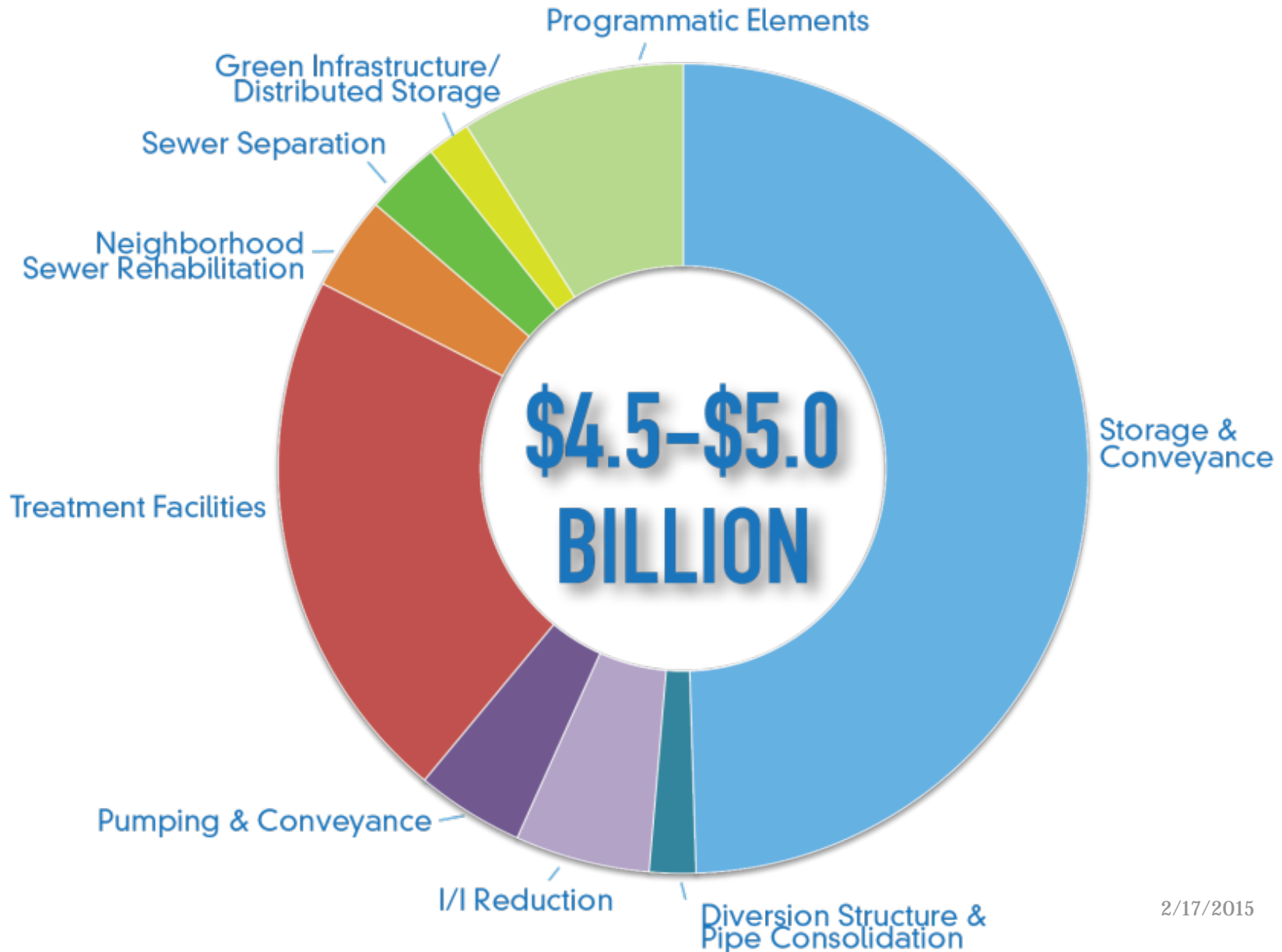
Capital Improvement Program



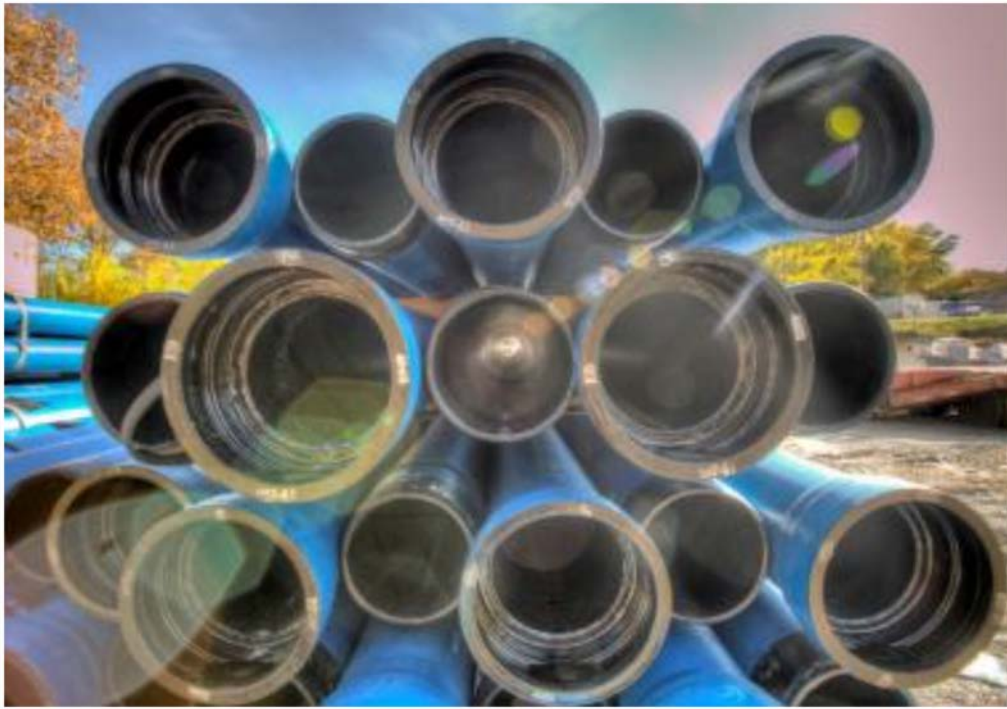
Performance Goals

Program	Goal
Overflow Control Program	Consent Degree Requirements Overflow Reduction Envision Application
Water Main Replacement Program	28 miles of Water Main
Sewer Main Rehabilitation Program	28 miles of Sewer Main
Flood Protection Program	\$20 million in flood risk reduction Leverage City investments between 50-80%
Catch Basin Replacement Program	100 catch basins/year

Kansas City's Overflow Control Program



Water Main Replacement Program



- 100 Year Plan
- Strategic & Data Driven
- Improves System Reliability
- 28 Miles/Year

Sewer Main Rehabilitation Program



- 100 Year Plan
- Strategic & Data Driven
- Improves System Reliability
- 28 Miles/Year

Flood Protection Program



- Flood Risk Management
- Environmental Features
- Economic Development
- Recreational Corridors

Catch Basin Replacement Program



- \$500,000 per year
- Replace about 100/year
- Goal is to replace 1% annually
- More than 44,000 catch basins city-wide



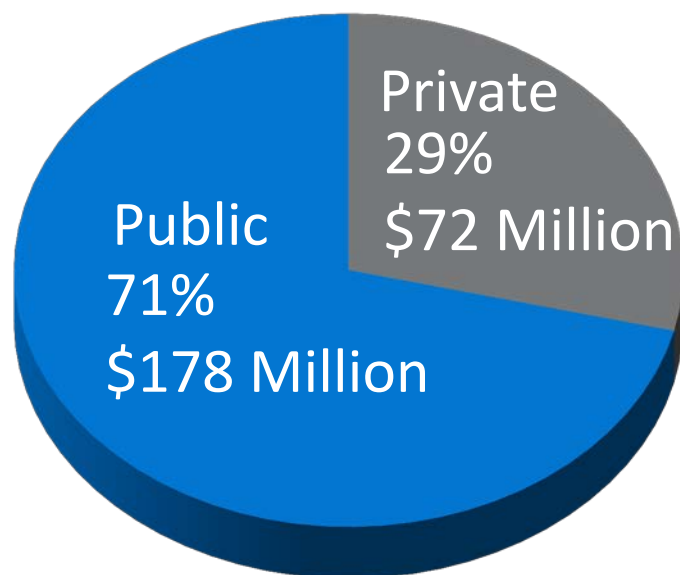
CIP Focus Areas

FY16 Focus Areas

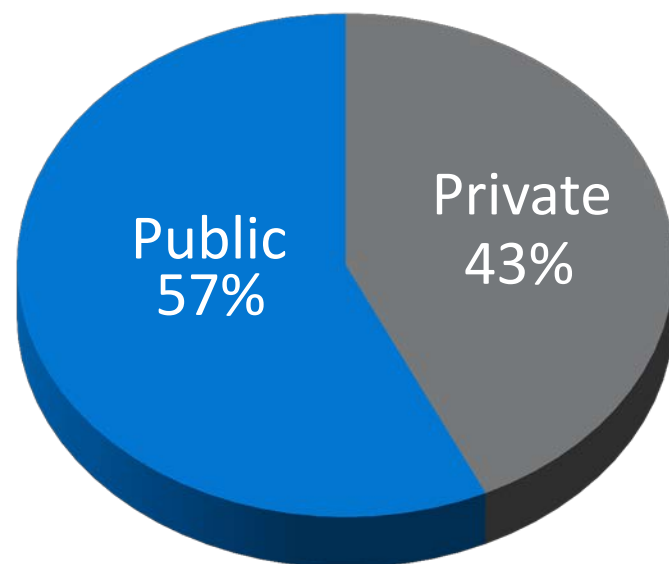


Inflow/Infiltration Program

Cost Allocation



Inflow/Infiltration Percent Reduction



\$250 Million Investment

Technology & Efficiency: Alternate Delivery & Construction Management



Workforce Development Programs

OCP University



Project Managers



Construction
Contractors



Future Generation
of Utility Staff

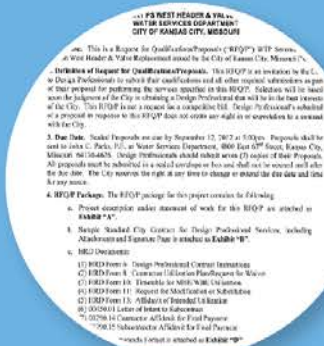


Water Industry
Education

Sustainability: Envision



CITY POLICY



SOLICITATION RFQ/P



PROJECT REQUIREMENTS



CERTIFICATION OF MEASURED RESULTS

SUSTAINABILITY



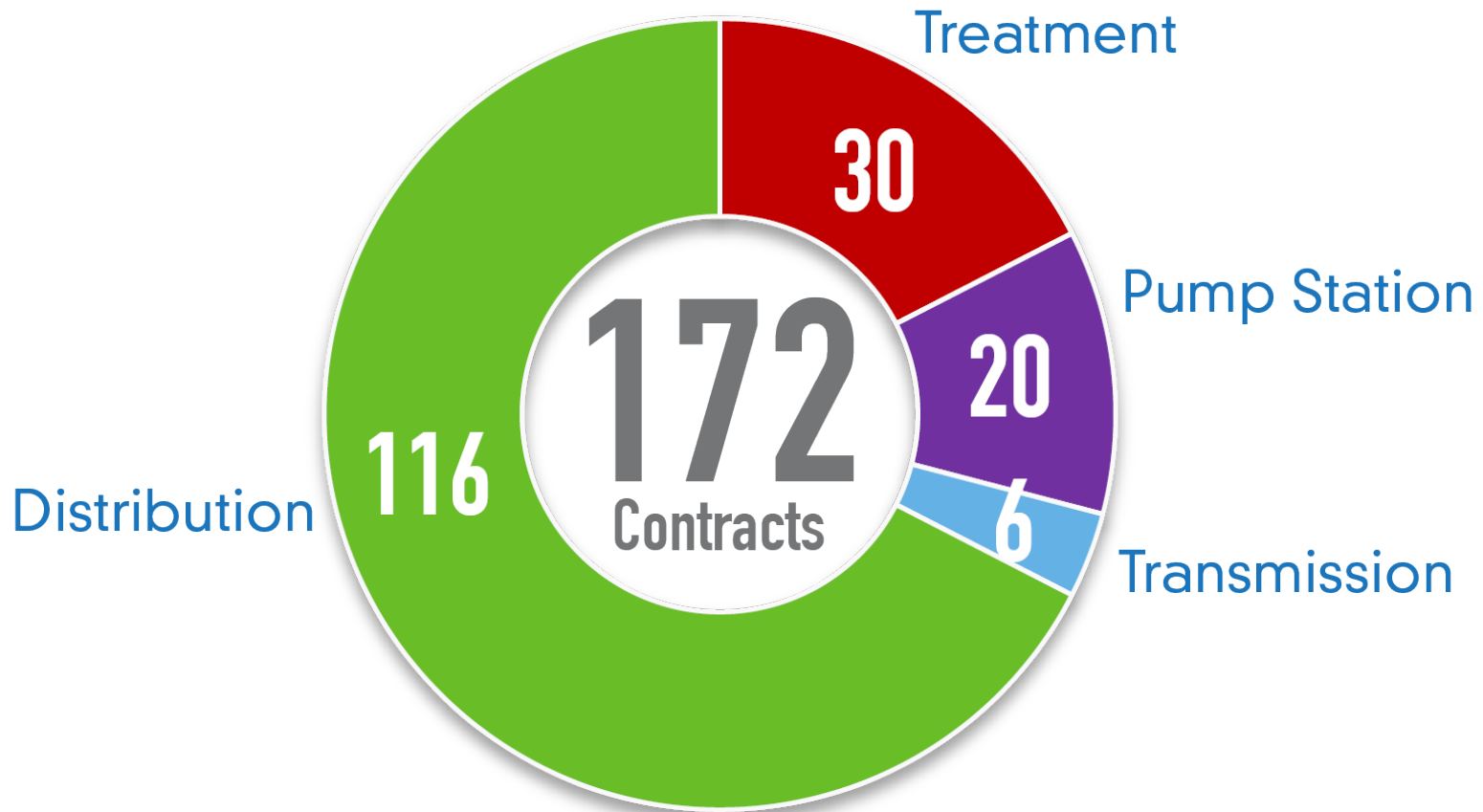


FY 2016-2020

Capital Improvement Program

Water CIP: FY16-FY20

Number of Contracts by Project Type



Water CIP: FY16-FY20

Budget Amounts by Project Type

Project Type	FY16	FY17	FY18	FY19	FY20
Treatment	\$10,500,000	\$22,000,000	\$23,500,000	\$15,500,000	\$27,000,000
Pump Station	\$11,090,000	\$25,915,000	\$5,300,000	\$17,000,000	\$0
Transmission	\$7,850,000	\$0	\$6,000,000	\$1,820,000	\$900,000
Distribution	\$49,255,000	\$56,940,000	\$46,000,000	\$46,000,000	\$51,000,000
Total	\$78,695,000	\$104,855,000	\$80,800,000	\$80,320,000	\$78,900,000

**Total Water 5-Year CIP
\$423,570,000**

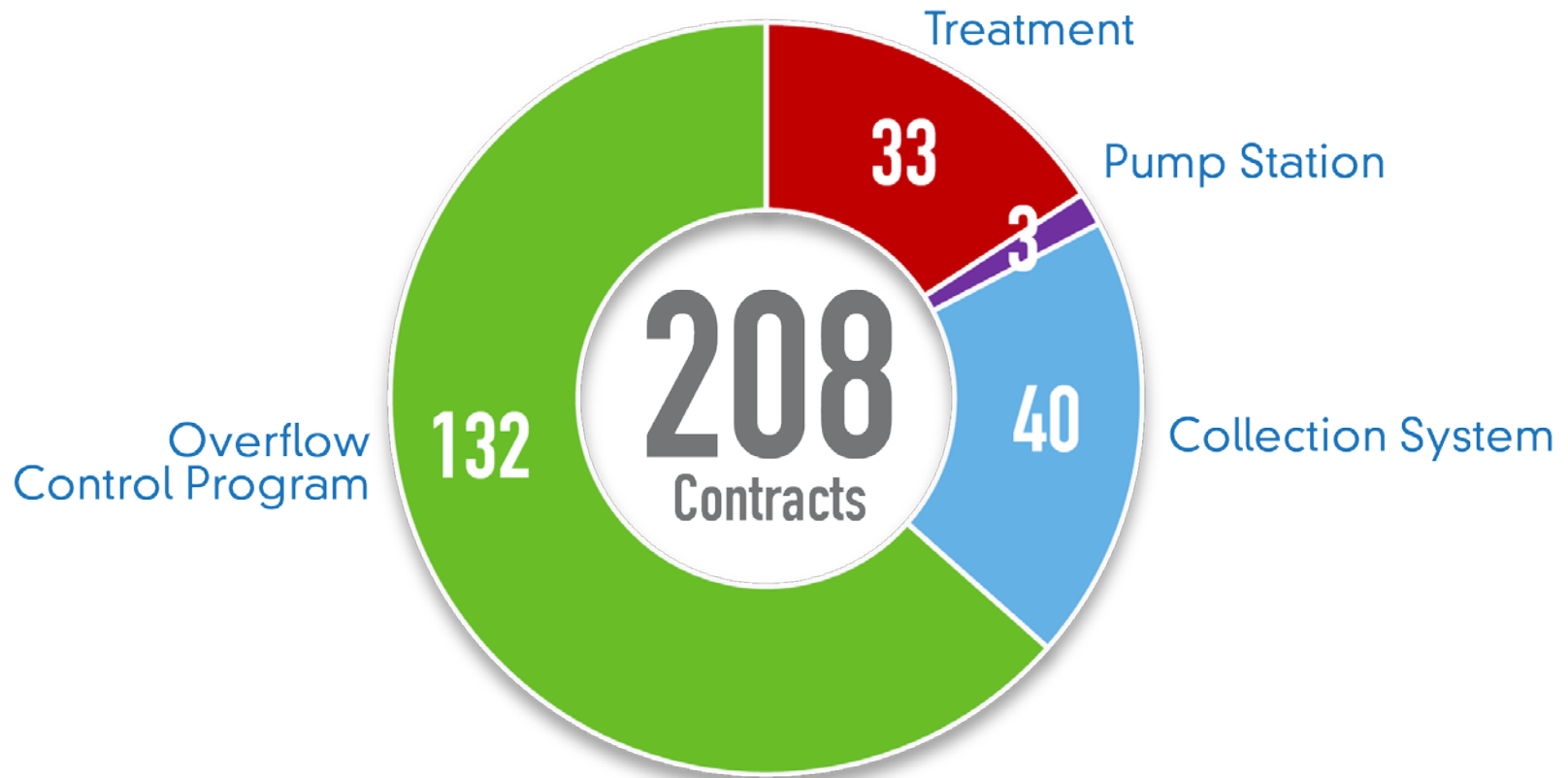
Water FY16-FY20:

Maintenance Program

Project Type	FY16	FY17	FY18	FY19	FY20
Valve Exercising	\$1,100,000	\$0	\$0	\$0	\$0
Supplemental Workforce	\$2,500,000	\$2,500,000	\$2,650,000	\$2,650,000	\$2,650,000
Air Release Valves	\$0	\$150,000	\$0	\$0	\$0
Curb Stops	\$2,000,000	\$500,000	\$500,000	\$500,000	\$500,000
Service Line Kill	\$400,000	\$0	\$0	\$0	\$0
Hydrant Repair	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Valve Exercising Maintenance	\$0	\$850,000	\$850,000	\$850,000	\$850,000
Valve Replacement	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000
Total	\$9,000,000	\$7,000,000	\$7,000,000	\$7,000,000	\$7,000,000

Wastewater CIP: FY16-FY20

Number of Contracts by Project Type



Wastewater CIP: FY16-FY20

Budget Amounts by Project Type

Project Type	FY16	FY17	FY18	FY19	FY20
Wastewater Treatment	\$13,550,000	\$31,970,000	\$39,170,000	\$3,000,000	\$36,000,000
Pump Stations	\$10,000,000	\$7,250,000	\$0	\$0	\$0
Collection System	\$27,760,000	\$15,060,000	\$15,060,000	\$15,060,000	\$15,060,000
Overflow Control Program	\$137,420,000	\$183,470,000	\$88,190,000	\$153,590,000	\$30,560,000
Total	\$188,730,000	\$237,750,000	\$142,420,000	\$171,650,000	\$81,620,000

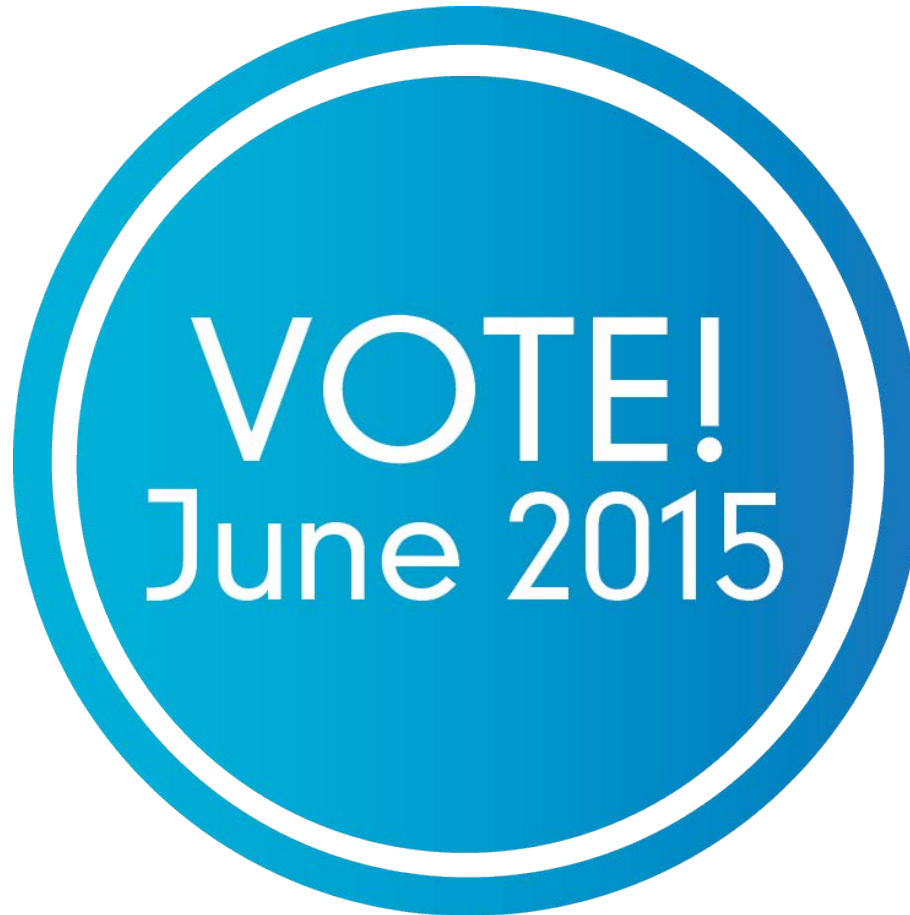
Total Wastewater 5-Year CIP
\$822,170,000

Wastewater FY16-FY20:

Maintenance Program

	FY16	FY17	FY18	FY19	FY20
Private Line Repair	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
Supplemental Workforce	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000
CCTV	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Line Cleaning	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000	\$1,000,000
Fly-Over	\$60,000	\$60,000	\$60,000	\$60,000	\$60,000
Total	\$8,060,000	\$8,060,000	\$8,060,000	\$8,060,000	\$8,060,000

Stormwater CIP: FY16-FY20



Stormwater & Waterways FY16-FY20:

Maintenance Program

	FY16	FY17	FY18	FY19	FY20
Levee & Channel Maintenance	\$790,000	\$790,000	\$440,000	\$300,000	\$350,000
Storm Monitoring System	\$343,000	\$343,000	\$360,000	\$378,000	\$394,000
MS4 Monitoring & Support	\$342,000	\$352,000	\$322,000	\$322,000	\$322,000
Catch Basin Replacement	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000
Total	\$1,975,000	\$1,985,000	\$1,622,000	\$1,500,000	\$1,566,000

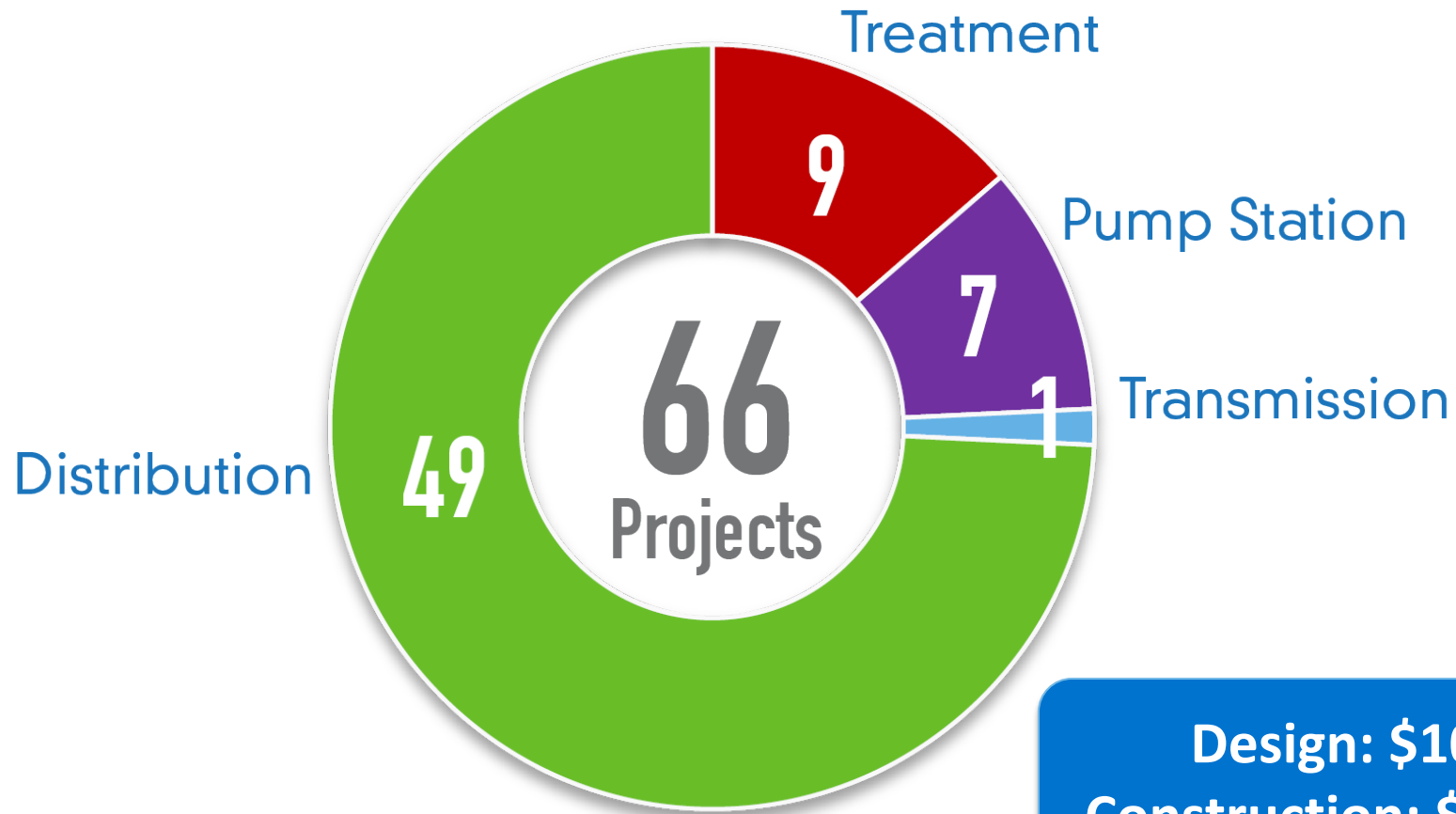


WATER SERVICES'

FY 2016 Capital Improvement Program

Water CIP: FY16

Number of Projects by Project Type



Design: \$10.7 M
Construction: \$49 M

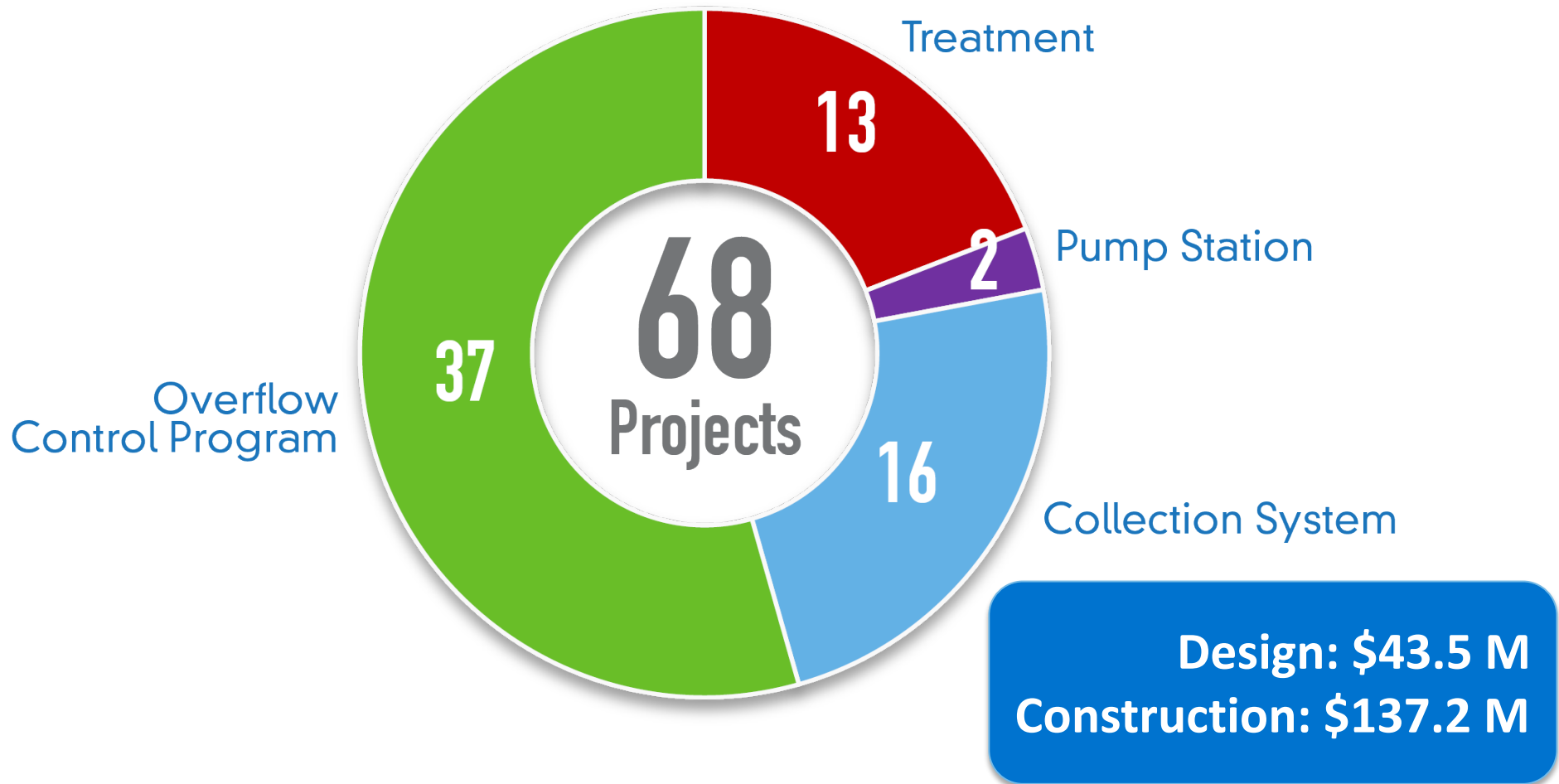
Water CIP: FY16

Budget Amounts by Project Type

Project Type	FY16
Treatment	\$10,500,000
Pump Station	\$11,090,000
Transmission	\$7,850,000
Distribution	\$49,260,000
Total	\$78,700,000

Wastewater CIP: FY16

Number of Projects by Project Type

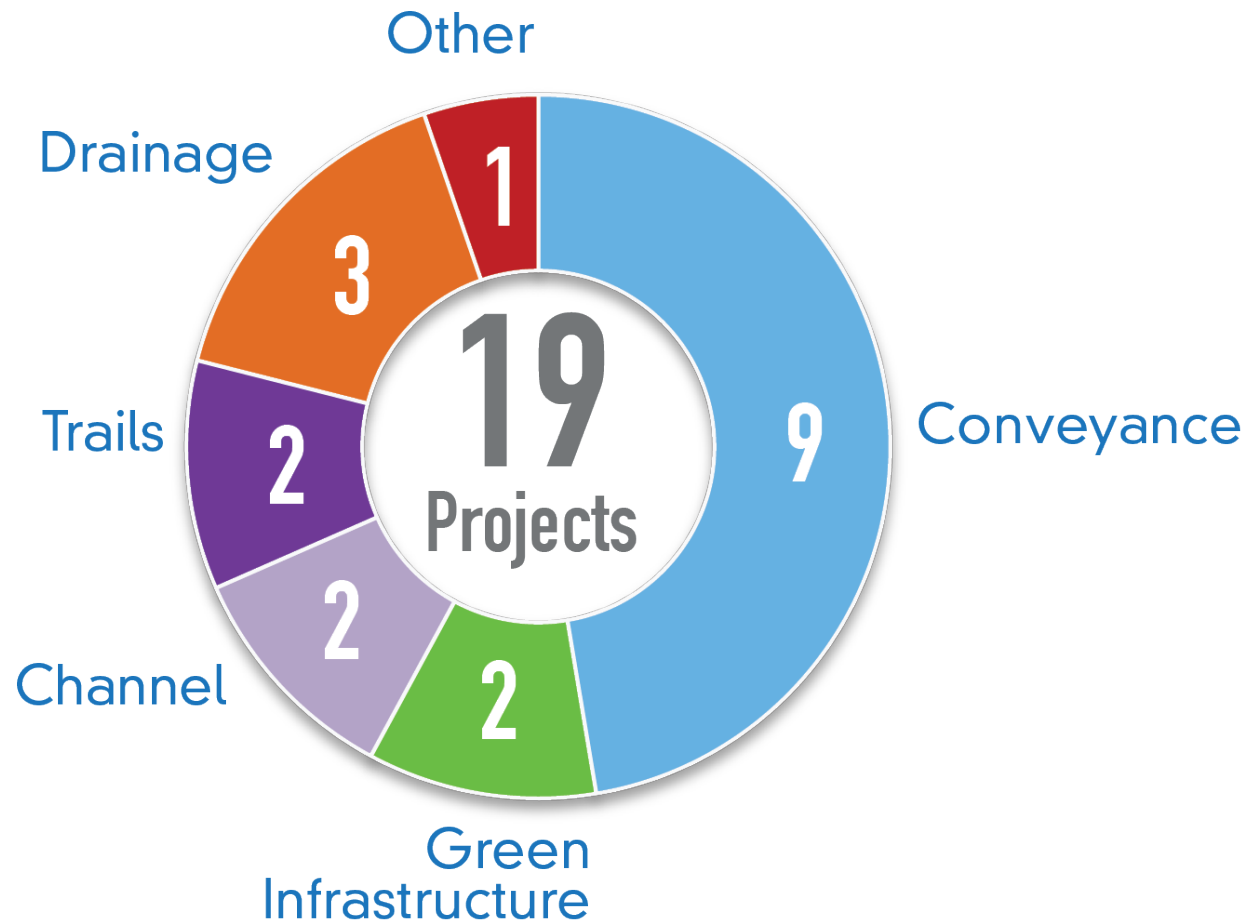


Wastewater CIP: FY16

Budget Amounts by Project Type

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Wastewater Treatment	\$13,550,000
Pump Stations	\$10,000,000
Collection System	\$27,760,000
Overflow Control Program	\$137,420,000
Total	\$188,730,000

Stormwater & Waterways CIP: FY16



Stormwater & Waterways CIP: FY16

Budget Amounts by Project Type

Project Type	FY16
Conveyance	\$1,585,500
Green Infrastructure	\$860,000
Channel Improvements	\$115,000
Trails	\$4,000,000
Drainage Improvements	\$140,000
Other	\$140,000
Total	\$6,840,500

Building a Legacy & Serving our Citizens



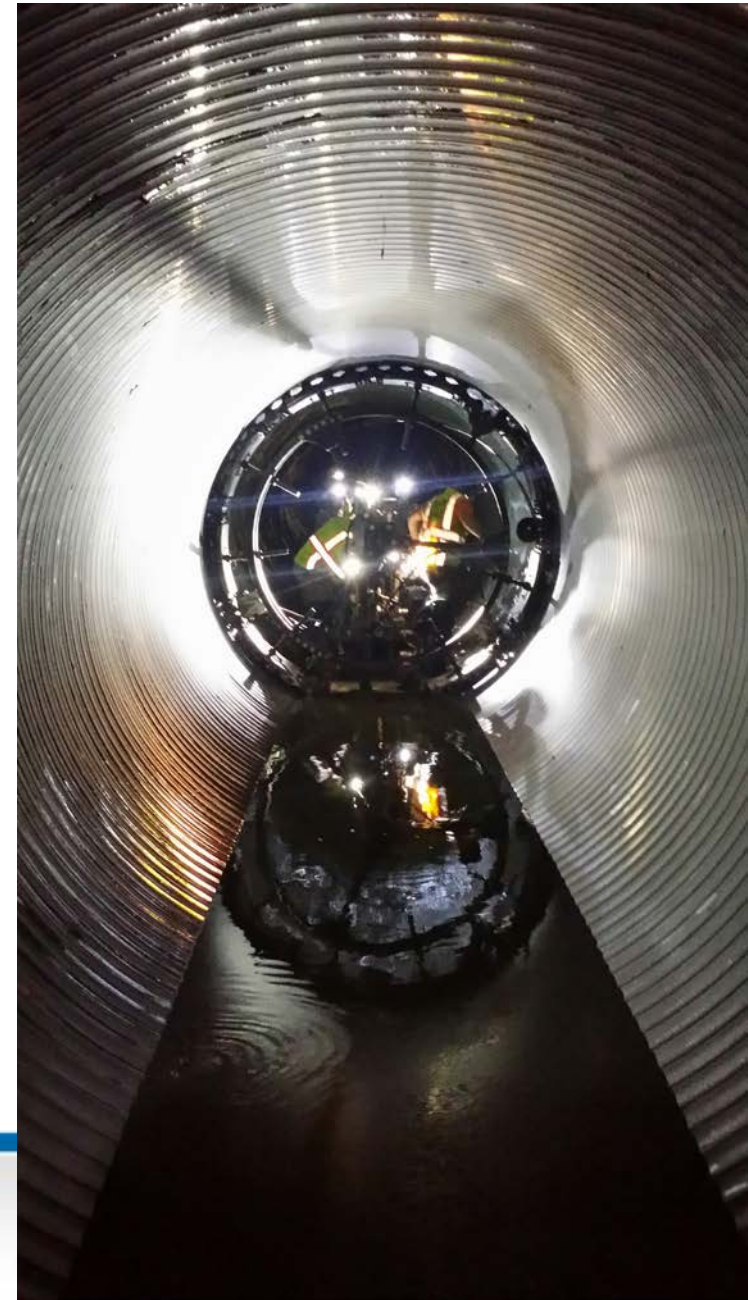


Project Recognition

Downtown Streetcar



Sewer Tunnel Rehabilitation: 22nd & Paseo



First and Second Creek Interceptor: Pump Stations and Force Mains





Tell us how we did!
Survey coming your way....

Save the
Date!
02/16/16

Water Services
CIP Rollout
FY 2017



Taliaferro & Browne, Inc.
Engineering - Landscape Architecture - Surveying

Thank You

