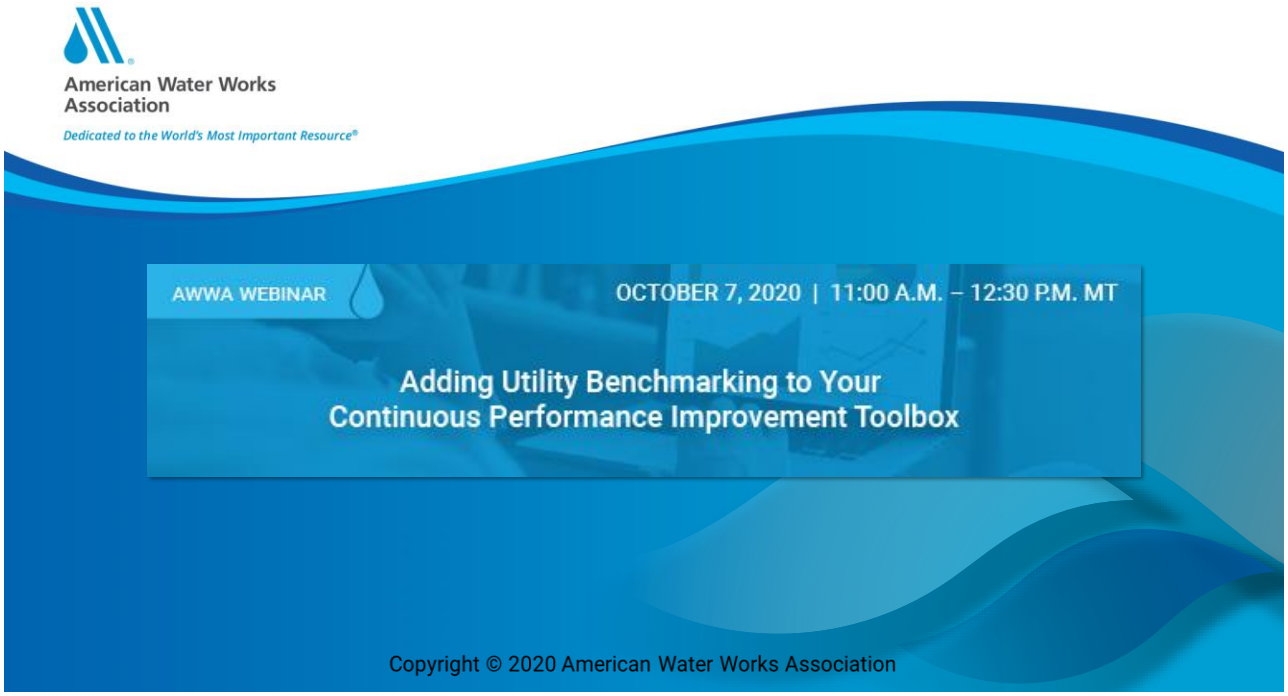
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Dedicated to the World's Most Important Resource®
AWWA WEBINAR
OCTOBER 7, 2020 | 11:00 A.M. – 12:30 P.M. MT
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WEBINAR MODERATOR

Stephanie Passarelli

Benchmarking Program Manager

American Water Works Association

Stephanie Passarelli is the Benchmarking Program Manager with the American Water Works Association. She is the staff liaison to the Management and Leadership Division and associated management committees. She is a Registered Civil Engineer in the State of Colorado with 22 years of experience in the industry including AWWA, environmental consulting, wastewater treatment facility, and the Water Research Foundation.

3

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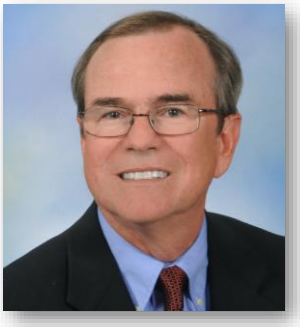
PANEL OF EXPERTS



Michael Sweeney, PhD
Deputy Executive Director
Toho Water Authority

Igor Lugonja
Special Projects Manager, Water Resources Department
City of St. Petersburg

Jhoanna Murray
Business Analyst
City of Tulsa

Debbie Cosgrove
Financial Manager
Chesterfield County Department of Utilities

7

7

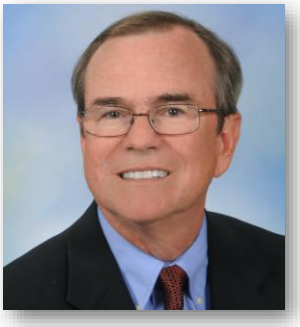
AGENDA

I.	Introduction and Getting Started with AWWA Benchmarking	Michael Sweeney, PhD
II.	Building Continuous Improvement Culture Through Utility Benchmarking and StPeteStat Initiative	Igor Jugonja
III.	City of Tulsa – The Financial Discoveries Through Benchmarking	Jhoanna Murray
IV.	Chesterfield County's Experience with AWWA Benchmarking	Debbie Cosgrove

8

8

ASK THE EXPERTS



Michael Sweeney, PhD
Toho Water Authority

Igor Lugonja
City of St. Petersburg

Jhoanna Murray
City of Tulsa

Debbie Cosgrove
Chesterfield County
Department of Utilities

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Toho Water Authority

INTRODUCTION AND GETTING STARTED WITH AWWA BENCHMARKING

Michael Sweeney, Ph.D.
Deputy Executive Director
Toho Water Authority
Kissimmee, Florida

10

10

PURPOSE OR LEARNING OBJECTIVES

- What to expect from benchmarking
- How to approach benchmarking
- What are some challenges to prepare for
- What are some tips for the road

11

11

WHAT IS BENCHMARKING?

- A benchmark is a measurement of performance of note that becomes a goal with which to strive to attain
- Involves gathering information about best practices used by world-class organizations
- More recently been used by many organizations as part of an overall performance improvement process.
- Both metric and process benchmarking used to gauge how well an organization is working
- Grew in importance in the 1990's to defend or support utility privatization

12

12

BENCHMARKING HELPS ANSWER THESE QUESTIONS…

- How well are we doing?
- How do we compare with similar organizations?
- Are we getting value for our money?
- How do we start a continuous improvement program?

13

13

CHALLENGES TO USING BENCHMARKING

- It is easy to get “wrapped around the axle” deriving or interpreting numerical results
- Numbers resulting from an “inexact science”
- “Tail wagging the dog”
  - Efficiency vs. effectiveness
- “Apples to oranges” comparisons
  - Size, location, complexity, definition differences

14

14

GOING A STEP FURTHER

FLORIDA BENCHMARKING CONSORTIUM

- Florida utilities have joined with a benchmarking consortium (FBC)
- Uses an effective, very collaborative, and interactive approach
- Created an additional set of PIs that reflect Florida's water interests
- Conduct a seminar once or twice per year
- Established and/or strengthened contacts between utilities to generate and share data and practices

15

15

FBC SERVICE AREAS

- Animal Services (AS)
- Building Development (BD)
- Code Enforcement (CE)
- Environmental Management (EM)
- Fire Rescue (FR)
- Fleet Management (FM)
- Human Resources (HR)
- Information Technology (IT)
- Parks and Recreation (PR)
- Police Services (PO)
- Purchasing (PU)
- Risk Management (RM)
- Road Repair (RR)
- Stormwater Drainage Maintenance (SD)
- Solid Waste (Collection) (SC)
- Solid Waste (Disposal)
- Traffic Engineering (TE)
- Water and Wastewater (WW)

16

16

TIPS AND ADVICE

- Divide and conquer data gathering
- Collaborate with regional peers
- Resist regarding it as a competition
- It's not just about the metrics… benchmarking is a essential conversation starter
- Sharing best practices drives sustained improvement
- Periodically revisit your goals derived from benchmarking

17

17

BENCHMARKING IS REALLY WORTH THE EFFORT AND IS AN ESSENTIAL TOOL

- Today you need every viable tool and approach to succeed
- The challenges faced today are far more complex than anything our predecessors faced
- Benchmarking serves as your compass and altimeter
- Advantages overcome and disadvantages

18

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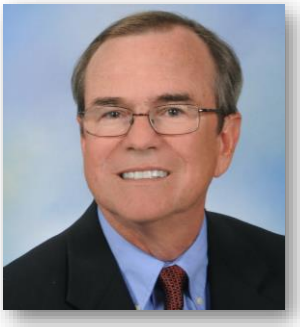
ASK THE EXPERTS



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Debbie Cosgrove
Chesterfield County
Department of Utilities

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st.petersburg water resources

BUILDING CONTINUOUS IMPROVEMENT CULTURE THROUGH UTILITY BENCHMARKING AND STPETESTAT INITIATIVE

Igor Lugonja
Special Projects Manager
City of St. Petersburg
Water Resources Department

20

20

CITY OF ST. PETERSBURG
WATER RESOURCES DEPARTMENT

- 364 employee department under Public Works Administration
- Service population 367,000 and service area of 88 square miles
- 94,000 Water, 83,000 Sewer, 11,000 Reclaimed Water
- 3 Water Reclamation Facilities 56 MGD, 1 Water Treatment Plant 68 MGD
- 1,500 miles of water mains, 282 miles reclaimed mains, 949 miles of gravity and forcemains

21

21

BUILDING CONTINUOUS IMPROVEMENT TOOLBOX

American Public Works Association Accreditation

- Self-assessment – Continuous Improvement Exercise

Strategic Planning

- APWA requirement
- Well-run Utility must have
- Department's first ever plan
- Adding to our C.I. toolbox

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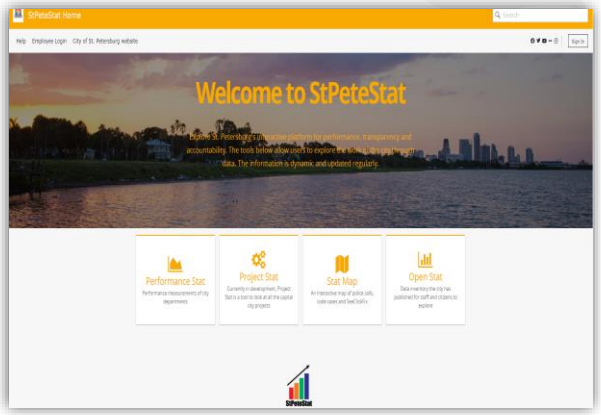
22

ST. PETE STAT INITIATIVE

- Data driven decision making
- Transparent – failures and successes
- Accountable
- Results driven
- Internal performance measurement dashboards



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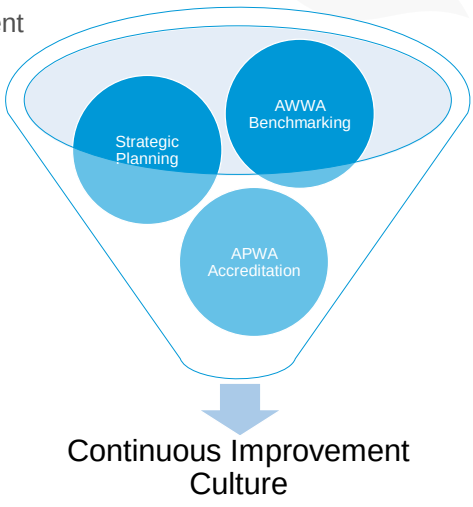
23

AWWA BENCHMARKING

- From performance measurement to performance management
- Benchmark performance to peers
  - third continuous improvement tool
- Set targets and goals for performance and improvement
- Identify continuous improvement opportunities and projects
  - Preventive Vs. Corrective %
  - Abandoned Call Ratio
  - Capacity and Non-capacity overflows



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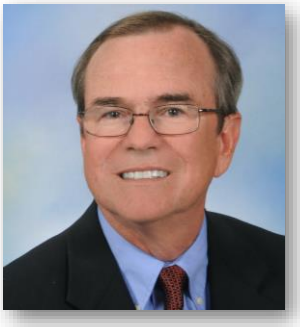
ASK THE EXPERTS



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Chesterfield County
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CITY OF Tulsa
A New Kind of Energy.

CITY OF TULSA – THE FINANCIAL DISCOVERIES THROUGH BENCHMARKING

Jhoanna Murray
Business Analyst
City of Tulsa

26

26

HOW THE BENCHMARKING CHANGED OUR CIP

Comparing the Cash of days on hand to our peer utilities led to a review of CIP program

Led to delay borrowing

You don't need to focus on the entire survey to see the benefits

Survey showed us something that we might have missed

27

27

FIRST OF IT'S KIND

Even thought the Arkansas River runs through the city of Tulsa, both of Tulsa's main water sources are located more than 35 miles away.

In 1922, work began on construction of a pipeline to Spavinaw, a stream located 50 miles northeast of Tulsa. For its time, the Spavinaw project was extremely ambitious The project cost $7.5 million ($262 million in today's money).

Once completed, Spavinaw Reservoir was the largest lake in Oklahoma and the pipeline carrying the water 55 miles to the city was the longest in the country at the time. The pipeline became operational in 1924, when Spavinaw water first flowed to the Mohawk pumping station.

28

28

TULSA – WHO WE ARE

- The City of Tulsa has a population of 400,000 and serves 600,000
- Two water treatment plants with a combined capacity of 220 MGD and 2,300 miles of water pipes
- 4 wastewater treatment plants and 2,000 miles of wastewater pipes

29

29

Water Budget of $126,800,000

Five-year CIP plan $133,000,000

Wastewater Budget of $120,400,000

Five-year CIP plan of $244,700,000

30

30

JUST STARTING OUT IN BENCHMARKING

Participated in the survey for 3 years

Each year we respond to a few more questions

Annual report mimics the benchmarking report

31

31

WHAT WE FOUND

	FY2018	*FY2019*	AWWA Benchmarking 75th percentile	Median	25th percentile
Debt Ratio	**24%**	**23%**	**27%**	**39%**	**58%**
Return on Assets	**6.15%**	**4.34%**	**3.40%**	**2.60%**	**1.60%**
Days cash on hand	618	705	**485**	**282**	**191**
Days of working capital	**493**	**562**	**139**	**192**	**400**
Operating Ratios	**50%**	**58%**	**53%**	**62%**	**78%**

32

32

WHY?

- What is days of cash on hands?
- How much cash is too much?
- Do we really have that much cash on hands?
- Difference between restricted and unrestricted cash?

33

33

ACCOUNT	ACCOUNT NAME	Unrestricted	Restricted	Notes
Operating Fund 750				
	Pooled assets with treasurer	$ 30,020,000		Daily checking account, revenue credited & expenditures debited. Transfers to Cash funded CIP, Debt Service, etc.
	Pooled assets designated 5% Reserve	5,561,000		FY19 - 5% operating reserved per TMUA policy - unappropriated
	Other payables & liabilities	(2,117,000)		Liability of collection agency, developers, accruals, contracts payable, etc.
	Sewer Escrows	(630,000)	← 630,000	Restricted customer deposits and escrows, sewer only accounts
	Reserved for encumbrances	(14,906,000)		Encumbrances, purchase order, contracts in place
		$ 17,928,000		Unappropriated operating funds (750)
Cash Funded Capital Fund 751				
	Pooled assets with treasurer	$ 45,961,000		Cash Funded CIP - monthly transfers from operating fund
	Other payables & liabilities	(628,000)		Accounts payable, contract retainage
	Balance reserved for encumbrances	(16,063,000)		Encumbrances, purchase order, contracts in place
	Unencumbered Capital Fund	29,270,000		Funds are appropriated CIP Funds
	Unrestricted Cash	$ 75,351,000		Pooled operating (C1) + pooled CIP cash (C8) minus escrows (C4)
Restricted Accounts	Sewer Escrows			
	Debt with Trustee			
	Restricted for debt funded projects			
	Total restricted funds			
Total Cash & Cash Equivalent				

	A	B	C	D	E
	ACCOUNT	ACCOUNT NAME	Unrestricted	Restricted	Notes
	Operating Fund 740				
		Pooled assets with treasurer	$ 41,766,000		Daily checking account, revenue credited & expenditures debited. Transfers to Cash funded CIP, Debt Service, etc.
		Pooled assets designated 5% Reserve	5,948,000		FY19 - 5% operating reserved per TMUA policy - unappropriated
		Other payables & liabilities	(3,901,000)		Liability of collection agency, developers, accruals, contracts payable, etc.
		Utility customer deposits	(11,255,000)	← 11,255,000	Restricted customer deposits and escrows
		Reserved for encumbrances	(6,180,000)		Encumbrances: purchase order, contracts in place
			$ 26,378,000		Unappropriated operating funds (740)
	Cash Funded Capital Fund 741				
		Pooled assets with treasurer	$ 99,894,000		Cash Funded Capital - monthly transfers from operating fund
		Other payables & liabilities	(2,592,000)		Accounts payable, contract retainage
		Balance reserved for encumbrances	(34,995,000)		Encumbrances, purchase order, contracts in place
		Unencumbered Capital Fund	$ 62,307,000		Funds are appropriated CIP Funds
		Unrestricted Cash	$ 130,405,000		Pooled operating (C1) + pooled CIP (C8) cash minus customer deposits (C4)
	Restricted Accounts	Customer Deposits		11,255,000	Restricted customer deposits and escrows
		Debt with Trustee		37,173,000	Bond Reserve, Debt Service, Bond Construction funds ($12M)
		Restricted for debt funded projects		(340,000)	Draw down cash restricted for debt funded projects
		Total restricted funds		48,088,000	
	Total Cash & Cash Equivalent*		$ 178,493,000		

34

34

35

SUMMARY

TMUA WATER FUNDING STATUS

as of: 9/30/2018

	A	B	C	D	E	F	G	H	I	J	K	L
	FUND	PROJECT	PROJECT DESCRIPTION	REVISED BUDGET	ENCUMBRANCES	PERCENT ENCUMBERED	UNENCUMBERED BALANCE	HOLD FOR PROJECT	EXPEND ON OTHER PROJECTS	RELEASE AND CLOSE	STATUS	REMARKS
1	7400	N/A	N/A	$ 237,856,955.03	$ 30,729,987.52	62%	$ 89,721,443.12	$ 79,576,741.96	$ 9,484,231.57	$ 646,320.05	Active	
2	7401	N/A	N/A	$ 7,320,000.00	$ 124,451.29	100%	$ 9,152.05	$ -	$ -	$ 9,152.05	Active	Release and Close
3	7402	N/A	N/A	$ 1,294,825.00	$ -	100%	$ -	$ -	$ -	$ -	Complete	Complete
4	7403	N/A	N/A	$ 5,100,000.00	$ -	95%	$ 249,837.96	$ 249,837.96	$ -	$ -	Active	
5	7404	N/A	N/A	$ 13,030,000.00	$ 20,000.00	99%	$ 90,597.90	$ -	$ 26,994.45	$ -	Active	
6	7405	N/A	N/A	$ 20,350,000.00	$ 1,445,698.71	100%	$ -	$ -	$ -	$ -	Active	
7	7406	N/A	N/A	$ 16,450,000.00	$ 924,451.55	100%	$ (2.38)	$ (2.38)	$ -	$ -	Active	
8	7407	N/A	N/A	$ 15,140,000.00	$ 2,693,414.82	19%	$ 12,203,128.88	$ 12,203,128.88	$ -	$ -	Active	
9	7408	N/A	N/A	$ 416,091.94	$ -	100%	$ -	$ -	$ -	$ -	Complete	Complete
10		TOTALS		$ 316,957,871.97	$ 35,938,003.89	68%	$ 102,274,157.53	$ 92,029,706.42	$ 9,511,226.02	$ 655,472.10		

CIP PROJECT REVIEW

- Most of our cash is in our CIP program
- Review of all funded projects
- Review of upcoming projects and funding sources

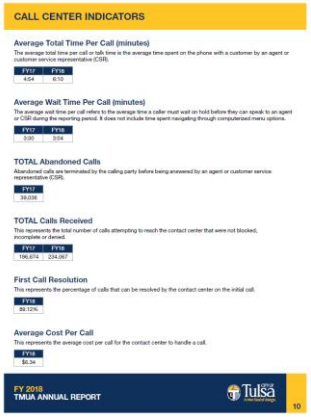
35

DASHBOARDS

36

STANDARDIZE REPORTING

37


CALL CENTER INDICATORS

Average Total Time Per Call (minutes)

The average total time per call or talk time is the average time spent on the phone with a customer by an agent or customer service representative (CSR).

FY17	FY18
4:04	4:10

Average Wait Time Per Call (minutes)

The average wait time per call refers to the average time a caller must wait on hold before they can speak to an agent or CSR during the reporting period. It does not include time spent navigating through computerized menu options.

FY17	FY18
9:00	8:04

TOTAL Abandoned Calls

Abandoned calls are terminated by the calling party before being answered by an agent or customer service representative (CSR).

FY17
39,038

TOTAL Calls Received

This represents the total number of calls attempting to reach the contact center that were not blocked, incomplete or denied.

FY17	FY18
196,674	234,067

First Call Resolution

This represents the percentage of calls that can be resolved by the contact center on the initial call.

FY18
89.12%

Average Cost Per Call

This represents the average cost per call for the contact center to handle a call.

FY18
$6.34

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BUSINESS OPERATIONS . . . 5

Days of Cash on Hand . . . 6
- Days Cash on Hand – COMBINED operations
- Days Cash on Hand – WATER operations
- Days Cash on Hand – WASTEWATER operations

Debt-Service Coverage Ratio . . . 6
- TOTAL Debt Service Coverage Ratio
- Debt Service Coverage Ratio – WATER operations
- Debt service coverage ratio – WASTEWATER operations

Days of Working Capital . . . 7
- Days of Working Capital – COMBINED
- Days of Working Capital – WATER operations
- Days of Working Capital – WASTEWATER operations

Operating Revenue . . . 7
- TOTAL Operating Revenue
- Operating Revenue – WATER operations
- Operating Revenue – WASTEWATER operations

Bond Rating . . . 8
- Corporate Bond Rating

CUSTOMER SERVICE . . . 9

Call Center Indicators . . . 10
- Average Total Time Per Call
- Average Wait Time Per Call
- TOTAL Abandoned Calls
- TOTAL Calls Received
- First Call Resolution (1)
- Average Cost Per Call

Residential Service Charges . . . 11
- Cost of Residential Service – WATER
- Cost of Residential Service – WASTEWATER

Metering Prevalence . . . 11
- Percent of Customers Metered – Residential
- Percent of Customers Metered – Commercial
- Percent of Customers Metered – Wholesale

Average Water Consumption . . . 12
- Average Residential Monthly Water Use
- Average Residential Monthly Water or Sewer Use

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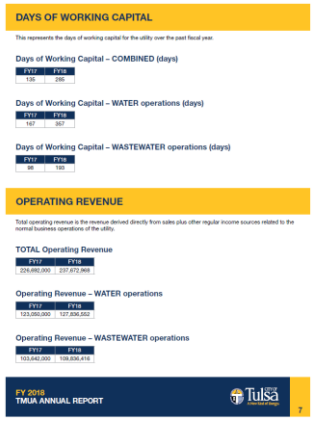

DAYS OF WORKING CAPITAL

This represents the days of working capital for the utility over the past fiscal year.

Days of Working Capital – COMBINED (days)

FY17	FY18
135	286

Days of Working Capital – WATER operations (days)

FY17	FY18
167	357

Days of Working Capital – WASTEWATER operations (days)

FY17	FY18
98	193

OPERATING REVENUE

Total operating revenue is the revenue derived directly from sales plus other regular income sources related to the normal business operations of the utility.

TOTAL Operating Revenue

FY17	FY18
226,692,000	237,472,968

Operating Revenue – WATER operations

FY17	FY18
123,050,000	127,836,552

Operating Revenue – WASTEWATER operations

FY17	FY18
103,642,000	109,636,416

FY 2018 TMUA ANNUAL REPORT Tulsa 7

ANNUAL REPORT

38

38

SUMMARY

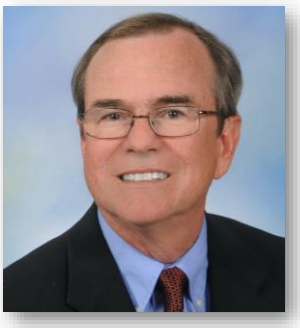
You don't need to complete the entire survey–focus on question that are important to your operations

Survey results don't have to line up with your organizations goals and objectives

39

39

ASK THE EXPERTS



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Chesterfield County Department of Utilities

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CHESTERFIELD COUNTY'S EXPERIENCE WITH AWWA BENCHMARKING

Debbie Cosgrove
Financial Manager
Chesterfield County
Department of Utilities

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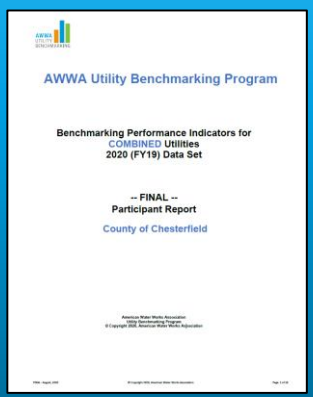
LEARNING OBJECTIVE

- Understanding how using the AWWA Utility Benchmarking Program and performance measures can strengthen your operations.


AWWA Utility Benchmarking Program

Benchmarking Performance Indicators for
COMBINED Utilities
2020 (FY19) Data Set

-- FINAL --
Participant Report

County of Chesterfield

As a result of this presentation….

See the impact of using benchmarking data with your performance measures

42

42

TODAY'S AGENDA

- Who is Chesterfield County Department of Utilities
- Benchmarking with AWWA
- Blueprint Chesterfield – our strategic plan
- Performance Plan
- Performance Measures

43

43

WHO IS CHESTERFIELD COUNTY DEPARTMENT OF UTILITIES?

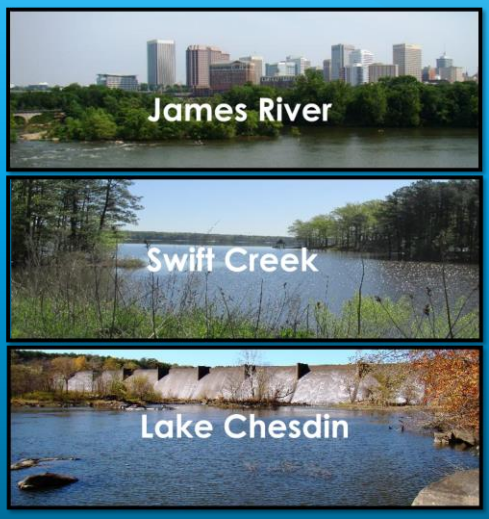
44

44

WHO IS CHESTERFIELD COUNTY DEPARTMENT OF UTILITIES?

Water Summary

- Three water sources with a total capacity of over 110 MGD, serving an estimated population of ~328K
- Over 2K miles of water lines
- 24 water storage tanks
- 14 pump stations
- 115K active services



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WHO IS CHESTERFIELD COUNTY DEPARTMENT OF UTILITIES?

Wastewater Summary

- Operate and maintain two wastewater treatment plants with a total capacity of over 41 MGD, serving a population of ~287K
- Over 2K miles of wastewater lines
- 25 pump stations
- 98K active services

Falling Creek Wastewater Treatment Plant

Proctors Creek Wastewater Treatment Plant

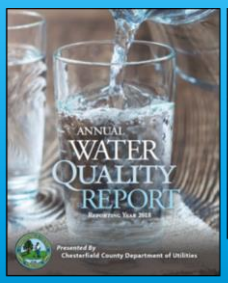
46

46

WHO IS CHESTERFIELD COUNTY DEPARTMENT OF UTILITIES?

Awards and Accomplishments

- Never Violated Safe Drinking Water Act MCL
- 21 years of Partnership for Safe Water Director's Award
- NACO Awards
- National Association of Clean Water Agencies' Excellence in Management and Peak Performance Awards



47

47

BENCHMARKING WITH AWWA

AWWA UTILITY BENCHMARKING PROGRAM

1. AWWA Survey
2. AWWA Participant Report
3. AWWA Utility Benchmarking Report

48

48

BENCHMARKING WITH AWWA

ORGANIZATION DEVELOPMENT

Q#1:

For each of the MANAGEMENT PRACTICES listed and described below, please assess your utility's score at the end of the reporting period using the following scale:

1. This practice is not practiced at our utility
2. This practice is implemented, but only occasionally or without uniformity
3. This practice is implemented, but there is room for substantial improvement
4. This practice is largely implemented, but there is room for improvement
5. This practice is fully implemented at our utility

	Last Year	Repeat?	N/A	Answer		Confidence Level
STRATEGIC PLANNING – a plan is up to date, and progress is tracked and reported to the governing body at least annually.	5	▶▶	☐	5	Score: 1 to 5	

49

49

BENCHMARKING WITH AWWA

AWWA UTILITY BENCHMARKING PROGRAM

1. **Strategic Planning**
2. **Strategic Implementation**
3. **Performance Measurement**
4. **Long-term Financial Planning**

50

50

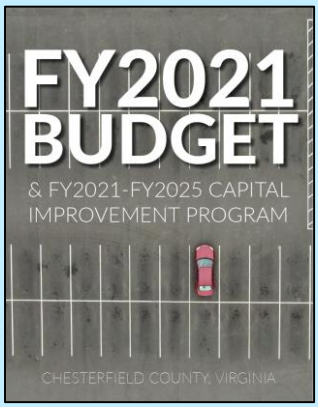
BLUEPRINT CHESTERFIELD - CHESTERFIELD COUNTY'S STRATEGIC PLAN

- The strategic plan is embedded in our annual adopted budget.

Department Blueprint: Priorities, Programs, and Performance

Priorities

- To provide water and wastewater service that is safe, reliable, and environmentally sound
- To ensure the financial integrity of the Department and efficiently allocate resources
- To meet and exceed customer expectations
- To create and maintain an excellent work environment and be the employer of choice

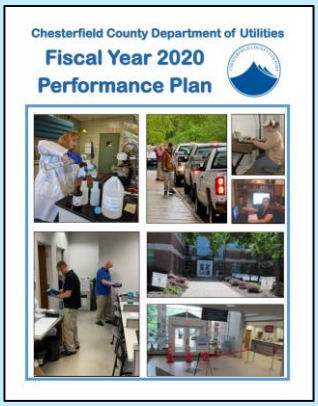


51

51

CHESTERFIELD COUNTY DEPARTMENT OF UTILITIES' PERFORMANCE PLAN

- Our Performance Plan is in line with the goals of the County's Strategic Plan, "Blueprint Chesterfield"
- The plan not only shows us where we are but also where we've been.



GOAL 1: Quality of Our Products and Services

Goal definition: **Provide water and wastewater service that is safe, reliable, and environmentally sound.**

Objectives

1.1 Provide water and wastewater services that meet all federal, state, and county compliance standards

1.2 Operate utility facilities as effectively as possible

Initiatives

1. Maintain water production performance standards by continuing to meet criteria in the "Partnership for Safe Drinking Water Program".
2. Continuously perform proactive and regulation driven water/wastewater quality analysis and maintain all laboratory testing certifications for both water and wastewater laboratories.

https://www.chesterfield.gov/DocumentCenter/View/318/Chesterfield-Utilities-Business-and-Performance-Plan-PDF?bidId=

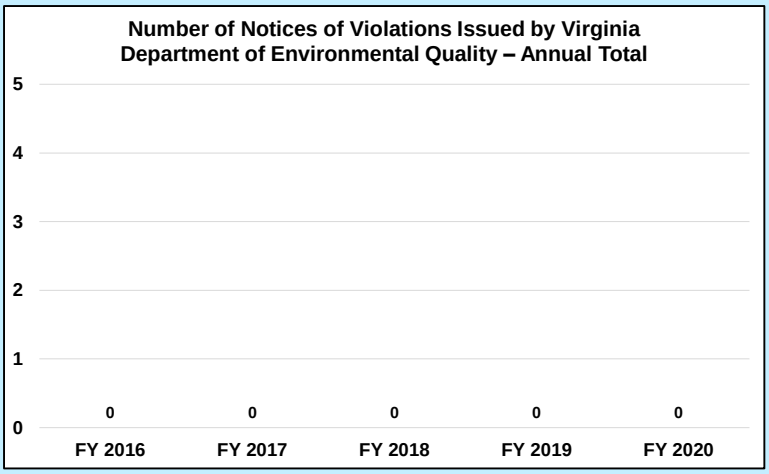
52

52

PERFORMANCE MEASURES

- There are three types of performance measures.
- Outcome Measure – Primary measure for how well a goal is met

OUTCOME MEASURE



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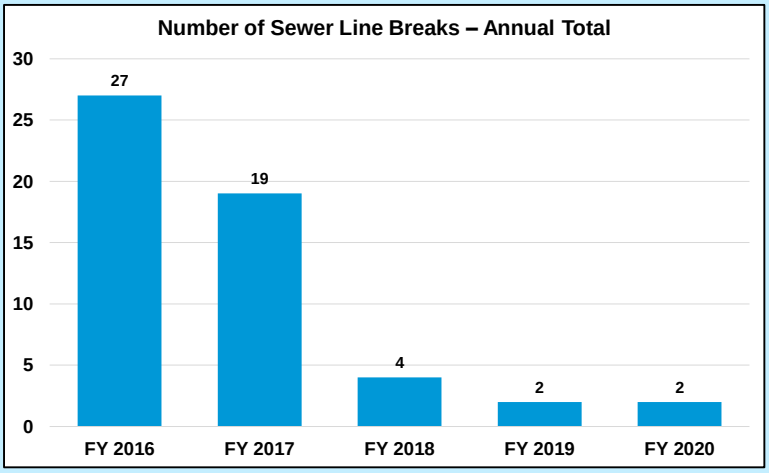
PERFORMANCE MEASURES

- Intermediate Measure – Leads to results shown for outcome measure

INTERMEDIATE MEASURE



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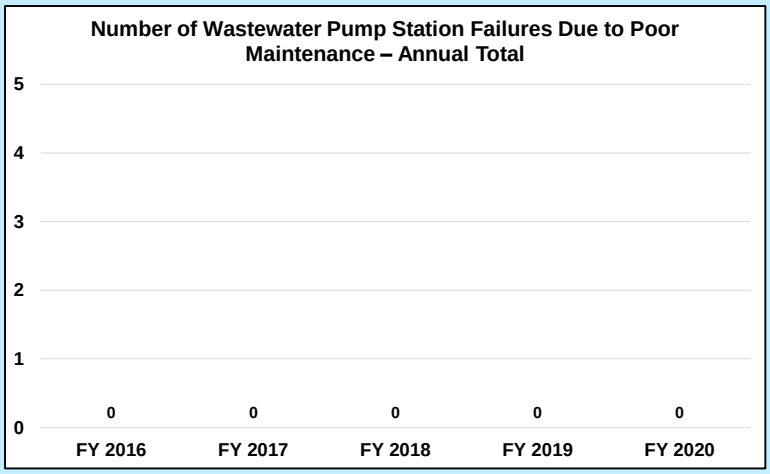
PERFORMANCE MEASURES

- Intermediate Measure – Leads to results shown for outcome measure

INTERMEDIATE MEASURE



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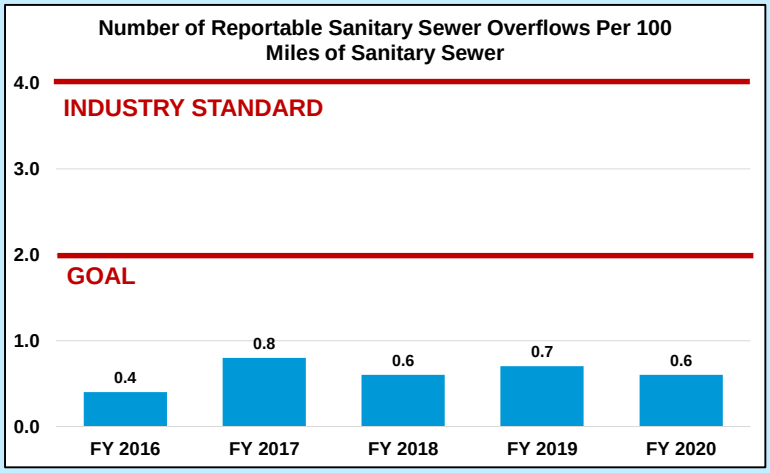
PERFORMANCE MEASURES

- Intermediate Measure – Leads to results shown for outcome measure

INTERMEDIATE MEASURE



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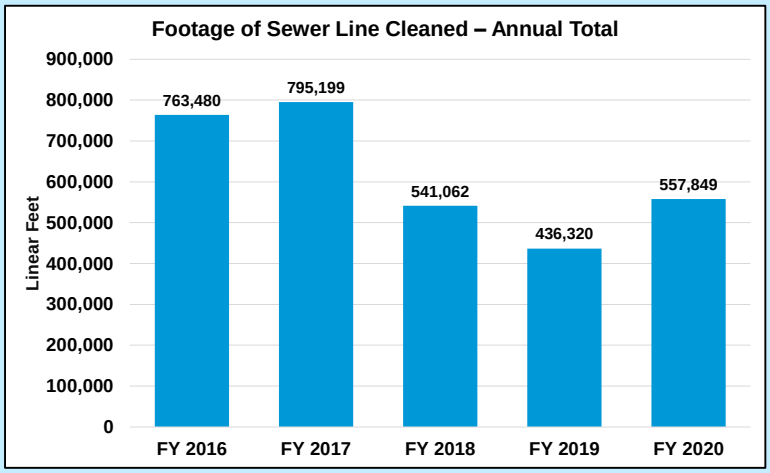
PERFORMANCE MEASURES

- Support Measure – Workload indicators support outcome and intermediate measure

SUPPORT MEASURE



Target: 300,000 linear feet or better

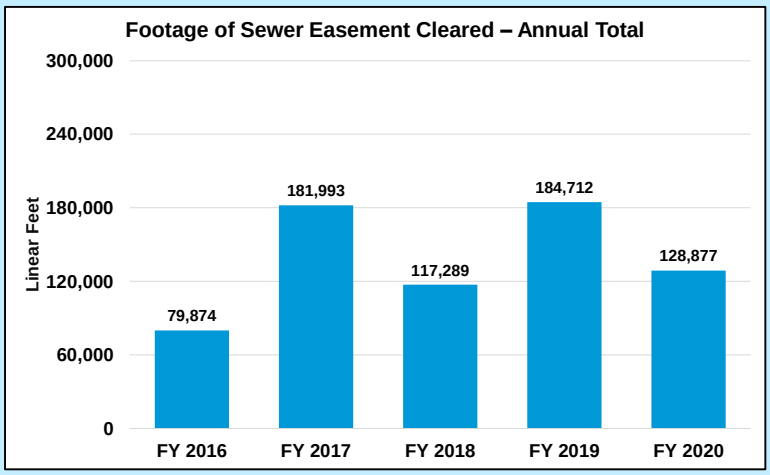
57

57

PERFORMANCE MEASURES

- Support Measure – Workload indicators support outcome and intermediate measure

SUPPORT MEASURE



Target: 100,000 linear feet or better

58

58

PERFORMANCE MEASURES

Outcome Measure: Primary measure for how well goal is met	Intermediate Measure: Leads to results shown for outcome measure	Support Measure: Workload indicators supporting Outcome and Intermediate measure
Number of Notices of Violation Issued by Virginia Department of Environmental Quality - Annual Total	Number of Main Sewer Line Breaks and Damages - Annual Total Number of Wastewater Pump Station Failures Due to Poor Maintenance - Annual Total Number of Reportable Sanitary Sewer Overflows Per 100 Miles of Sanitary Sewer – Annual Total	Footage of Sewer Line Cleaned - Annual Total Footage of Sewer Easement Cleared - Annual Total

59

59

PERFORMANCE MEASURES AND BENCHMARKING WITH AWWA

SERVICE DISRUPTIONS

Q#1:

LEAKS: Record the number of water main leaks addressed by your utility during the reporting period.

A leak refers to an unintended hole or crack in a transmission or distribution pipeline, valve, hydrant, or appurtenance which continuously loses water but that does not result in a disruption of service.

For reporting purposes, do not include planned maintenance, flow testing, etc. Do not include leaks from lateral service lines.

	Last Year	Repeat?	N/A	Answer		Confidence Level
Total number of water main leaks.	12	▶▶	☐	81	Leaks	N/A

60

60

PERFORMANCE MEASURES AND BENCHMARKING WITH AWWA

2020 (FY19) COMBINED UTILITIES PARTICIPANT REPORT

		COMBINED UTILITIES			
	Your Utility	75th Percentile	Median	25th Percentile	Count
Water Distribution System Integrity (Leaks per 100 miles of pipe)	4.0	4.1	8.9	22.6	57

61

61

PERFORMANCE MEASURES AND BENCHMARKING WITH AWWA

WASTEWATER OPERATIONS

Q#1:

SEWER OVERFLOW: Record the total number of sewer overflows experienced by your utility during the reporting period.

Include overflows due to limitations or problems with collection or treatment system components under control of the utility.

Overflows caused by limitations or problems within customer-controlled piping and facilities are specifically excluded from this definition.

	Last Year	Repeat?	N/A	Answer		Confidence Level
Total number of non-capacity sewer overflows	12	▶▶	☐	11	Sewer Overflows	N/A

62

62

PERFORMANCE MEASURES AND BENCHMARKING WITH AWWA

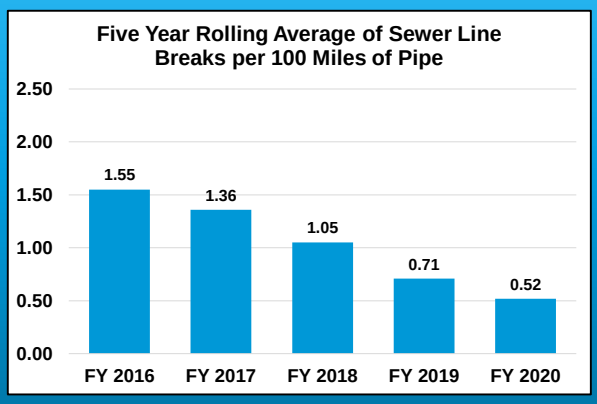
2020 (FY19) COMBINED UTILITIES PARTICIPANT REPORT

		COMBINED UTILITIES			
	Your Utility	75th Percentile	Median	25th Percentile	Count
Non-Capacity Sewer Overflow Rate (per 100 miles of pipe)	0.5	0.5	1.6	3.7	76

63

63

PERFORMANCE MEASURES – OUR SUCCESS WITH SEWER LINE BREAKS PER 100 MILES OF PIPE



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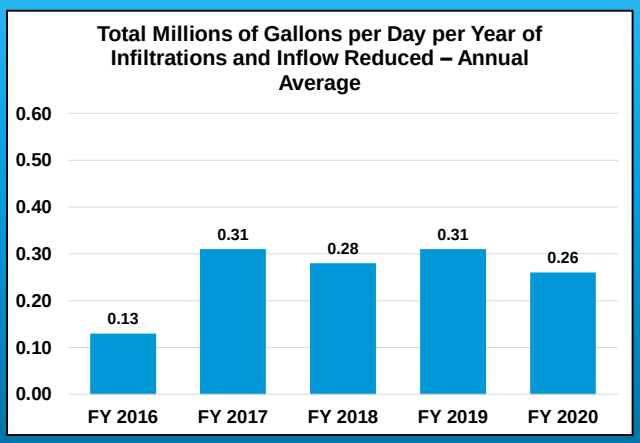
PERFORMANCE MEASURES – OUR SUCCESS WITH INFILTRATION AND INFLOW REDUCTION



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PERFORMANCE MEASURES – OUR SUCCESS

Below are some sewer line capital improvement projects that helped to improve our sewer line breaks performance measure:

- **Sewer line & Manhole Rehabilitation**
- **Cogbill Rd Sewer Replacement**
- **Huguenot Village Sewer Rehab**
- **Ashton Creek Trunk Lining**

We also look at I&I reduction

- **I & I Manhole Rehab – Johnson Creek**

66

66

SUMMARY

The use of strategic planning, long-term financial planning, performance measures and benchmarking supports our goals and initiatives making our performance stronger.

67

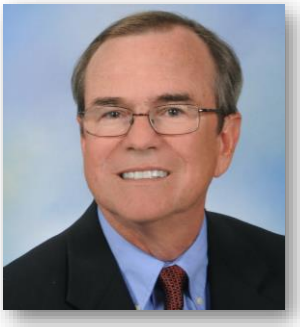
67

QUESTIONS?

68

68

ASK THE EXPERTS



Michael Sweeney, PhD
Toho Water Authority

Igor Lugonja
City of St. Petersburg

Jhoanna Murray
City of Tulsa

Debbie Cosgrove
Chesterfield County
Department of Utilities

Enter your **question** into the **question pane** on the right-hand side of the screen.

Please specify to whom you are addressing the question.

69

69

UPCOMING WEBINARS

Oct 14 - Applying Real-Time Hydraulic Models to Everyday Operations

Oct 15 - FREE Webinar: Innovation Roadmap for Utilities

Oct 16 - Getting the Lead Out: Legal Issues in EPA's Lead & Copper Rule: An AWWA Legal Community Virtual Roundtable Dialogue

Register for a 2020 Webinar Bundle

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70

70

ADDITIONAL RESOURCES

As a benefit to your registration, we are offering 30% off our publication AWWA Utility Benchmarking: Performance Management for Water and Wastewater. Just enter TAKE30 at checkout for your discount

71

71

THANK YOU FOR JOINING TODAY'S WEBINAR

- As part of your registration, you are entitled to an additional 30-day archive access of today's program.
- Until next time, keep the water safe and secure.

72

72

PRESENTER BIOGRAPHY INFORMATION

Mike Sweeney is the Deputy Executive Director of the Toho Water Authority based in Kissimmee Florida since 2011. His 40 years of experience includes serving the City of Indianapolis, the City of Cincinnati MSD and Louisville MSD and served as a consultant for utilities in North America. Mike has been involved with AWWA benchmaring for the past 20 years. He holds a Ph.D. in Environmental Engineering from Purdue University and is a registered professional engineer.

Igor Lugonja manages the continuous improvement initiatives at the City of St. Petersburg Water Resource Department, such as strategic planning, APWA accreditation and performance measurement program. He currently serves as vice-chair of the AWWA Benchmarking Advisory Committee and has over 17 years of experience in public service with the City of St. Petersburg as an analyst and investigator.

Jhoanna has been work in the public sector for almost 9 years, the last three years she's worked as a Business Analyst in the Water & Sewer Department. As a Business Analyst for the City of Tulsa Jhoanna helps plan and manage the Water and Sewer Department.

As the Finance Manager for the Department of Utilities, Debbie Cosgrove, with over 20 years of experience, guides the finance section that supports the Operating Accountant, the Capital Project Accountant, and the Sr. Utilities Rate Analyst. This team reviews, revises and formulates policies and procedures that will ensue the efficient use of the department's financial resources, determines what funding requirements exist, when funds will be needed, and plans for their availability. This team is also responsible for leading the Utilities budget process, financial accounting for assets, revenues and expenses, and determining utility rates

73

73

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76