

# Supply Chain Management Transformation Update

to the  
WSSC Commission  
11/18/2015  
David E. Malone – Chief Procurement Officer

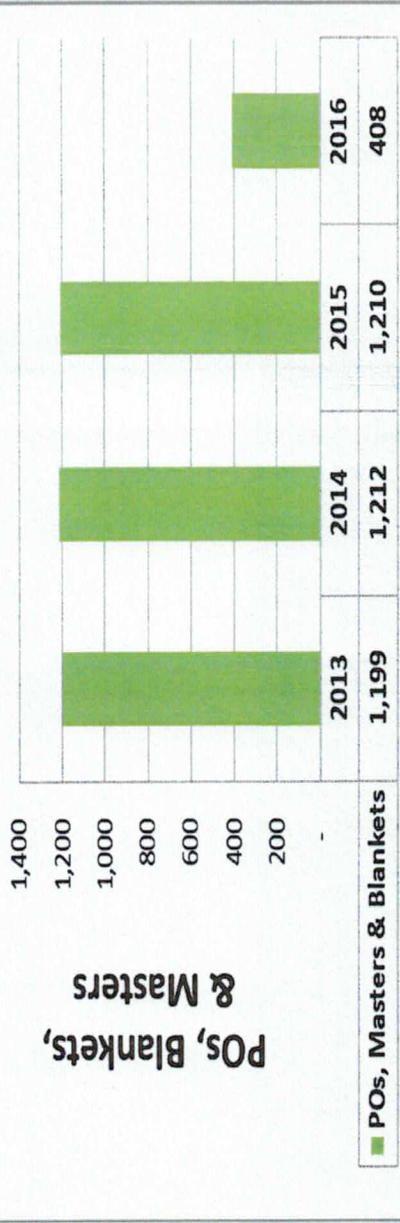
# Agenda

- Procurement Footprint
- Supply Chain Transformation Next Level
- Organization Design Modification
- Operational Refinements
- Current and Future Technology Improvements
- Accomplishments To Date

# Procurement Footprint

## Volume Metrics

**Total POs, Blankets & Masters  
by Fiscal Year**

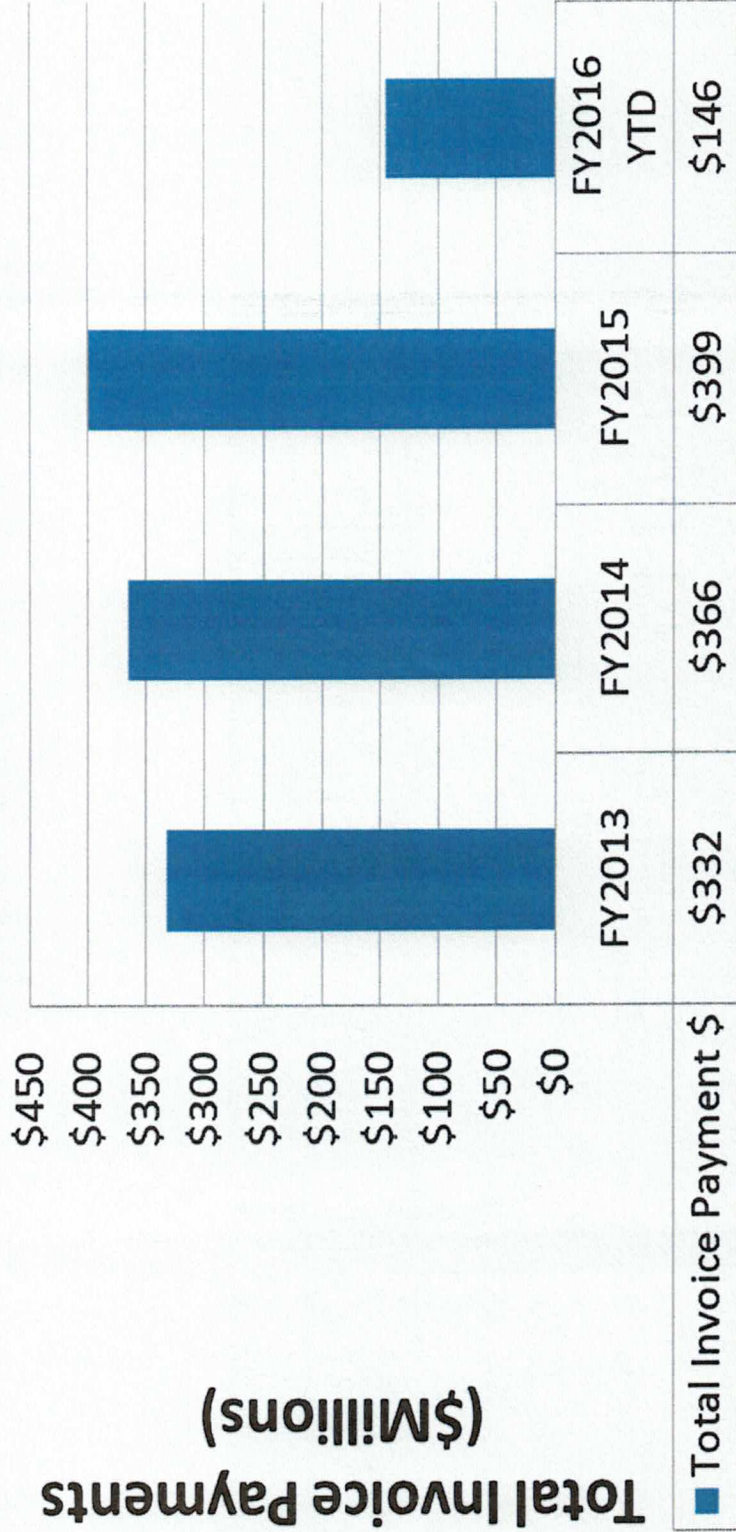


**Active Vendors**



# Procurement Footprint (cont'd)

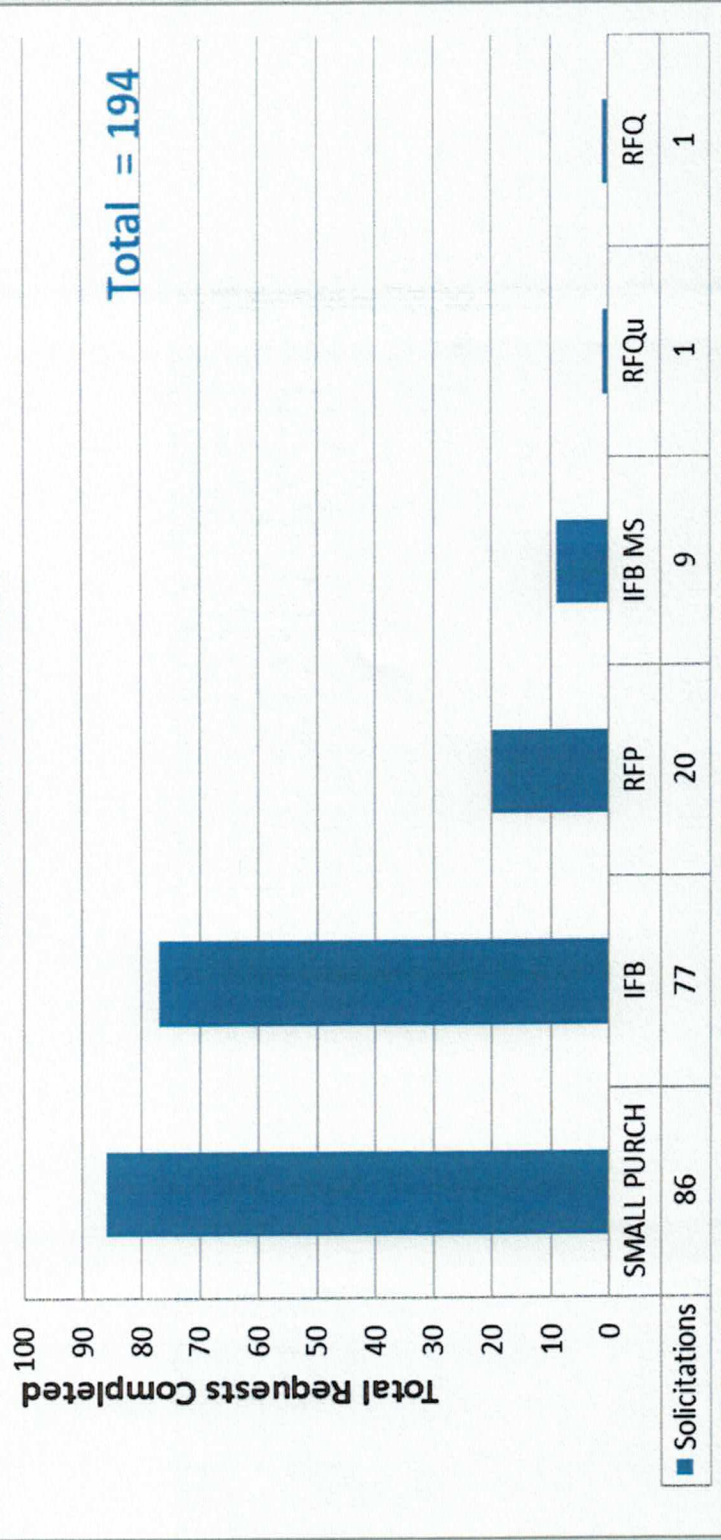
## Total Spend by Fiscal Year



# Procurement Footprint (cont'd)

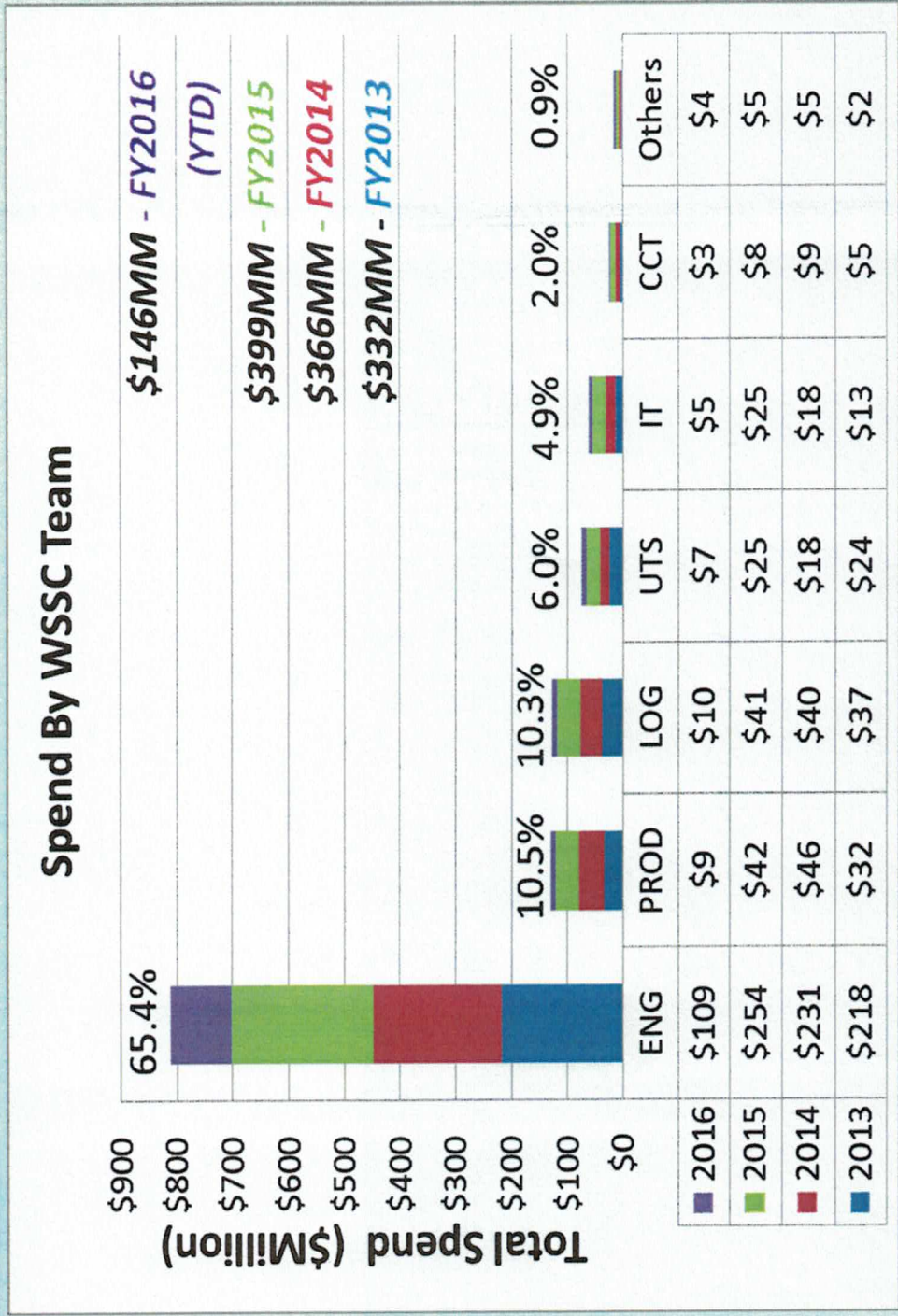
Solicitation Volume

## Solicitations Nov 2014 to Oct 2015



# Procurement Footprint (cont'd)

Dept. Level Spend



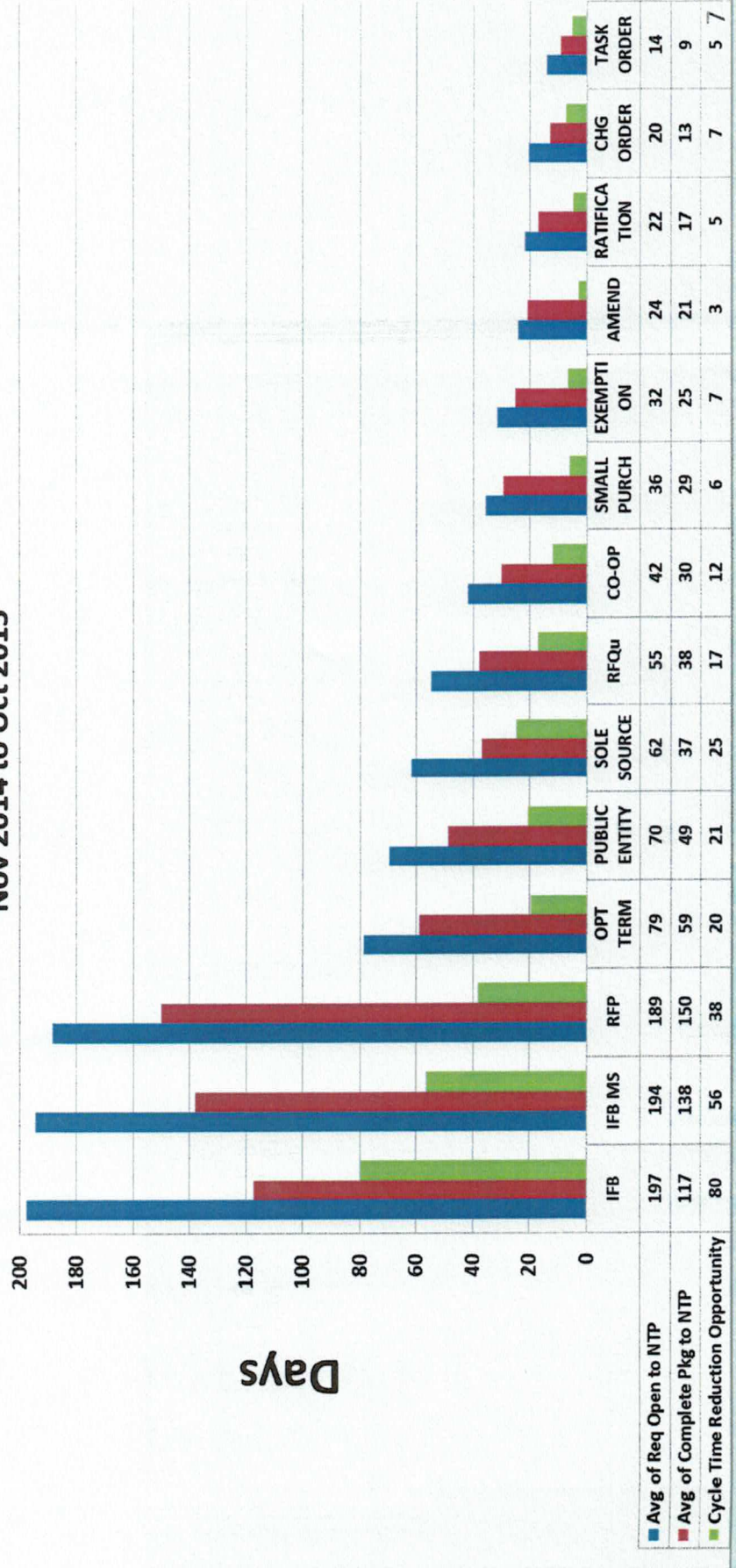
# Procurement Footprint (cont'd)

## Cycle Time Metrics

*"Focus on reducing cycle times"*

### Average Procurement Cycle Times

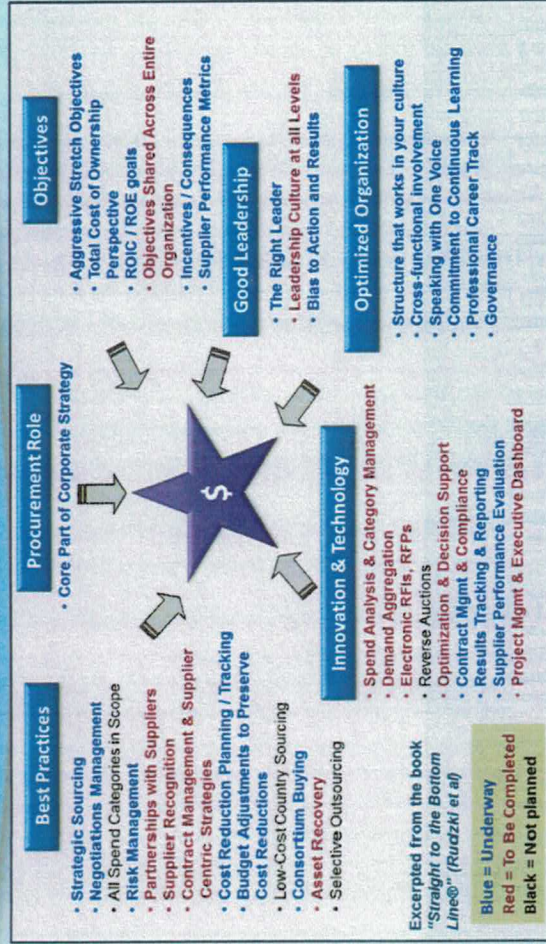
Nov 2014 to Oct 2015



11/18/15

# Moving the Transformation to the Next Level

## Reaching this Point



## Next Level Focus

- **People** - Translate strategy into tangible actions by people
  - Clarify roles
  - Elevate organizational skills to match new strategies
- **Process** – Continue to sequence activities for best results
  - Balance current client needs and team workload with process improvement activities
- **Technology** – Optimize technology initiatives to enhance functional capability for efficiency, analytics and metrics
- **Metrics** – Maintain a data driven environment leading to fact based decisions and sourcing optimization

*The "Transformation Roadmap" has brought us through two years of change and development. Evaluating where we are - "now is the time" to evaluate - what has happened and what needs to happen next.*



# Moving the Transformation to the Next Level

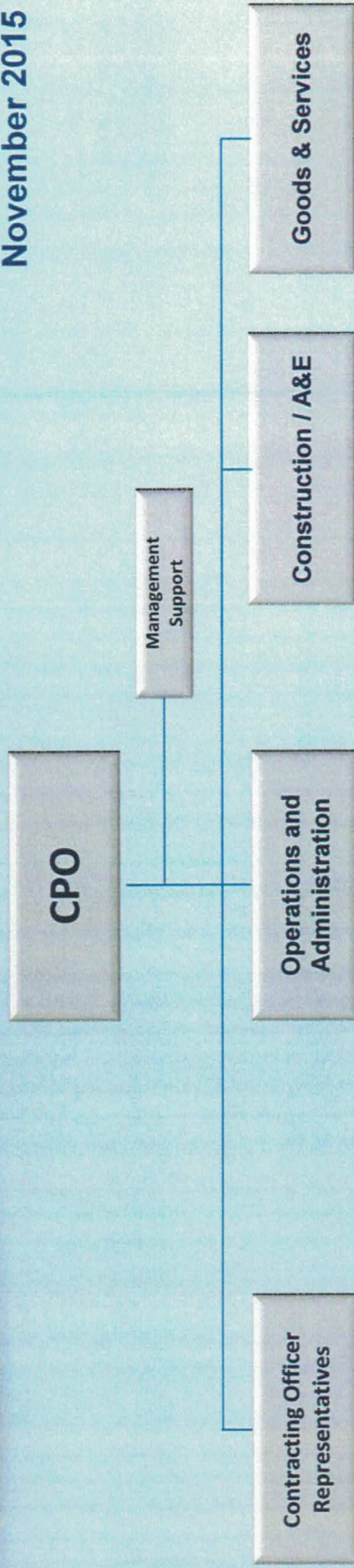
## People

### Organization Design Modification

- Ensures that Procurement Professionals and Sourcing Teams enhance both tactical and strategic skills across all purchasing categories
- Continue integrating Strategic Sourcing and compliment with operational support – seamless execution of sourcing strategies. “No hand offs” .
- Contracting Officer Representatives (CORs) will emerge as Subject Matter Experts
- Continue to drive professional certifications

# Washington Suburban Sanitary Commission Procurement Functional Chart

November 2015



## Planning & Post Execution

- Procurement Forecasting
- Solicitation Planning
- Change order Management
- Option Terms
- Liaison to CM's
- Cure Notices
- Contract Administration
- Signatory facilitation
- Site Management
- Task Orders
- Amendments

## Total Cost of Ownership

- Strategic Sourcing
- Solicitations (RFQ, IFB, etc.)
- Negotiations
- Cost reduction
- Contractor Evaluation
- Data Analysis
- Benchmarking
- Supplier liaison
- Market research

- Intake
- Bonds & Insurance
- P-Card Administration
- SLMBE Support
- Reception
- Risk Management
- Operations Analysis

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# Moving the Transformation to the Next Level

## Process

### Operational Refinements (next 12 months)

- Continue to refine Intake Process
- Focus on further reducing cycle times
- Improve supplier performance by implementing Contractor Performance Evaluation – objective vs. subjective measures.
- Support SLMBE goals and process efficiency
- Continue to identify new sourcing/cost savings opportunities
- Integrate strong data analytics
- Complete transition from consultant assisted effort to internal WSSC management

# Moving the Transformation to the Next Level

## Technology

- **Current Access database which measures processes and cycle times will be migrated to Oracle to ensure full data integration.**
- **Staff level Procurement dashboards are being scoped and will become available near term**
- **Contract Management system will enhance the solicitation experience – consistency and collaboration with Oracle implementation**
- **Contractor Performance Evaluation tool complete by 12/15/15. Will provide historical track record of Contractors (to be completed by Greybeard)**

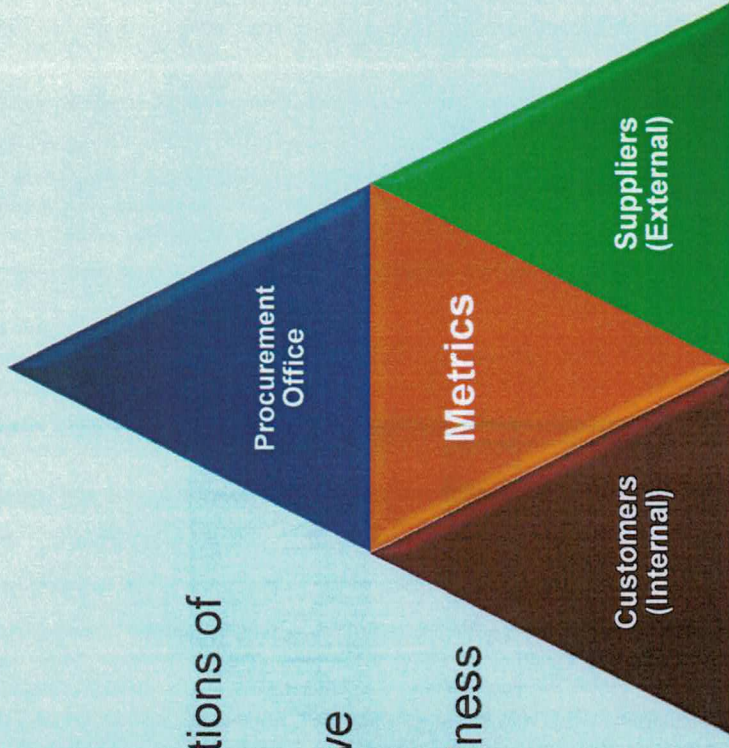
# Moving the Transformation to the Next Level

## Metrics

### With metrics we can tell:

- Our performance against objectives
- Where we need to improve
- Whether or not we are meeting the expectations of our customers
- Where and under what circumstances are we adding value
- How much cost we're driving out of the business

**Metrics Drive Behavior**



# Accomplishments / Results to Date

11/18/15



# Sourcing Teams – Update



## Ductile Iron Pipe

### Objectives

- Seek value added services related to Pipe (i.e. dedicated inventory, design reviews)
- Ensure a reliable supply of pipe / materials to support the Water Main Replacement Program and emergency repairs
- Identify / specify new pipe materials – improving quality and reliability

### Key Strategies

- Assess current state of pipe market through (RFI) and interviews
- Use RFP to encourage bidders to present innovative approaches e.g. early involvement
- Leverage WWSC's position as a major purchaser of DIP
- Capitalize on manufacturer / distributor experience and expertise to improve designs and reduce costs

### Results

- *Price Reductions – New Contract*
- On small diameter pipe @ 75% of spend = \$200k per year
- On large diameter = \$400k per year
- Pricing Stability - first 18 months of contract
- WWSC furnishes materials for University City III project - *immediate savings of \$194K*

## PCCP

### Objectives

- Convert multiple independent contracts supporting the PCCP program to a holistic Sourcing Strategy
- Leverage WWSC's leadership position in PCCP management to promote innovations from world-class suppliers and contractors
- Drive the evolution of the PCCP program to new levels while reducing costs and risks
- Move beyond sole source dependencies

### Key Strategies

- Establish cost baselines to better manage ongoing program costs
- Research best practices for maintaining, repairing and rehabilitation of PCCP across industries (e.g. Utilities, Energy)
- Create competition for key services: Repair, Rehabilitation, Assessing and Monitoring
- Negotiate cost components

### Results

- *Projected cost reduction:*
- for Fiber Reinforced Polymer (FRP) for rehabilitation 23% to 30% based on pipe diameter (~\$7.3MM against baseline)
- for Repair and Replacement (R&R) 12.5% to 16.7 % based pipe diameter/depth

11/18/15

# Sourcing Teams – Update



## Water & Wastewater Chemicals

- Ensure continuity of operations and reduce supply risks while reducing chemicals costs
- Establish workable alternatives for current single sourced Polyaluminum Chloride (PACL) products to minimize brand dependency
- Develop new sourcing options for Methanol

### Objectives

### Key Strategies

- Update specifications and testing protocols to expand the number of suppliers and identify alternative products.
- Leverage buying power by participating in a regional Cooperative Purchase.
- Negotiate with existing Single Sources to reduce existing prices

### Results

- Bulk Chemicals – reduced costs by 9.5% resulting in \$414k in annual savings
- PACL Sole Source – negotiated \$340k reduction
- Initiated testing of Water and Wastewater Polymer to identify product alternatives and reduce supply risks/dependencies



## Fleet

- Standardize vehicle types and specifications by job function
- Streamline the requirements development and acquisition processes so that they are aligned to the budget cycle
- Develop tools to monitor Fleet total cost of operation by age, mileage and repair costs
- Reduce Total Cost of Operations for the WSSC vehicle fleet

### Objectives

### Key Strategies

- Review the vehicle acquisition process for opportunities to reduce purchasing times
- Develop a methodology to standardize the fleet by job function and class of vehicle
- Focus initial strategic sourcing events on long lead time specialty vehicles representing high potential to reduce the acquisition costs
- Initiate sourcing events for FY 16 and FY 17 replacement vehicles

### Results

- Mapped processes and reduced acquisition timeline by six months
- Completed Total Cost model for all elements of Fleet management – acquisition, operation, maintenance, repair
- Developed Fleet Request form to automate (supervisor) review/approvals for deployment
- Completed strategic sourcing of CCTV and JetRodder trucks resulting in \$1M in savings

11/18/15



# Sourcing Teams – Update



## Tank Rehabilitation

- Develop a manageable Tank Repair and Rehabilitation schedule.
- Reduce costs and rework associated with tank inspection, design of repairs, and minimize on-going deterioration of tanks
- Streamline/improve the contracting process from specification development to award
- Increase the pool of contractors and increase minority contractor participation

### Objectives

- Establish a contract mechanism to synchronize design, procurement and tank rehabilitation to meet operating schedules
- Conduct a formal sourcing event to identify additional prime contractors and SLMBE subs to promote competitive pricing
- Execute a sourcing plan that focuses on the first eight tanks to be rehabilitated as assessments and specifications are finalized

### Key Strategies

- Developing Multi-Award IDIQ Request for Proposals (RFP) to:
  - Reduce lead times by 3 to 6 months
  - Reduce inspection and design re-work
  - Reduce deterioration of Tanks due to missed scheduled repairs
  - Establish a pool of qualified contractors and subs
  - Completed outreach for contractors and SLMBEs

### Results



## Water Main Replacement

- Where possible reduce the costs of design and construction for the WSSC water main repair, replacement and rehabilitation (WMR3) program
- Streamline the process and reduce the time associated with the award of WMR3
- Complete the same volume of work, or do more, on a fiscal year basis while staying within budget

### Objectives

- Research WMR with other utilities and benchmark against best practices for to discover inventive contracting approaches
- Evaluate potential for contracting with a defined pool of technically prequalified contractors and subcontractors
- Implement methods for integrated design and delivery to reduce change orders, errors in design, reduced cycle times from bid to award
- Drive competition to reduce costs

### Key Strategies

- Collaborating with the DIP Team to optimize cost reduction by having WSSC furnish materials
- RFP Identified pool of Contractors "technically" capable
- Negotiations ongoing

### Results

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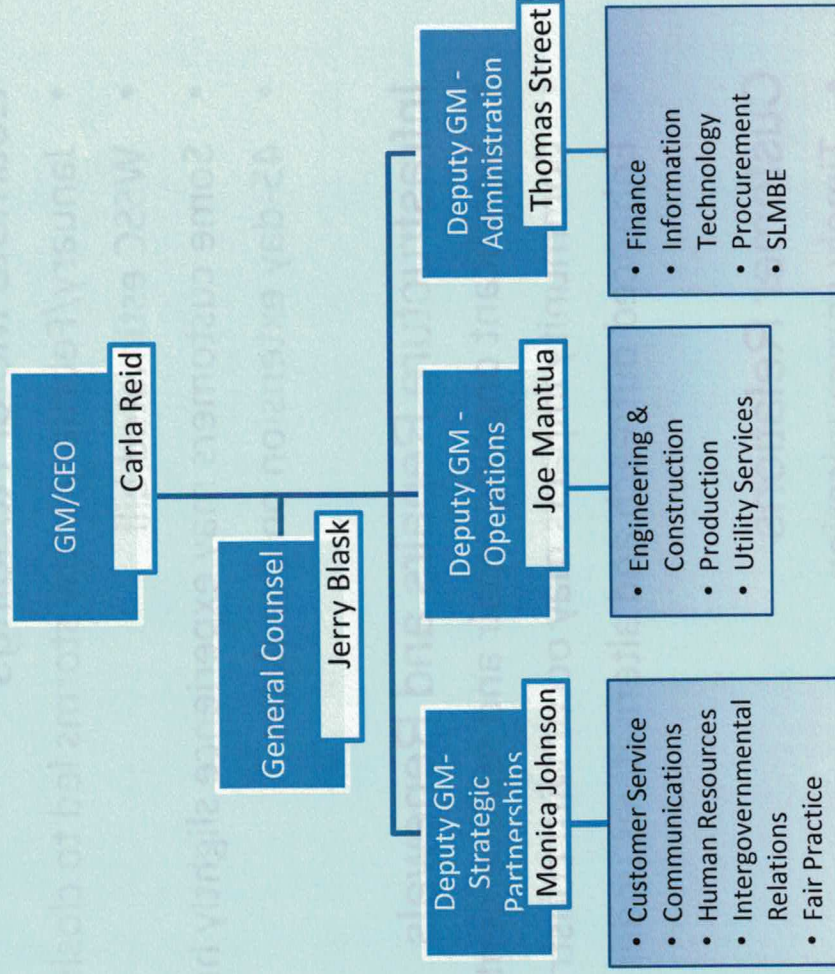
# Questions & Comments

11/18/15



# New Organizational Structure

- Aligned to address issues
  - Operations
  - Administration
  - Strategic Partnerships
- Stakeholder focus
  - Improve collaboration
  - Improve communication
  - Improve customer relations
  - Provide world-class service



# Current Topics

## Estimate Meter Readings

- January/February snow storms led to closings and delays in meter readings
- WSSC estimated bill
- Some customers may experience slightly higher bills due to longer billing cycle
- 45-day extension on due dates

## Infrastructure Repairs and Renewals

- Significant ongoing repair and replacement program in streets and right-of-ways
- Community impacts may occur with construction activity
- Enhanced outreach and alternatives under review

## Customer Relations

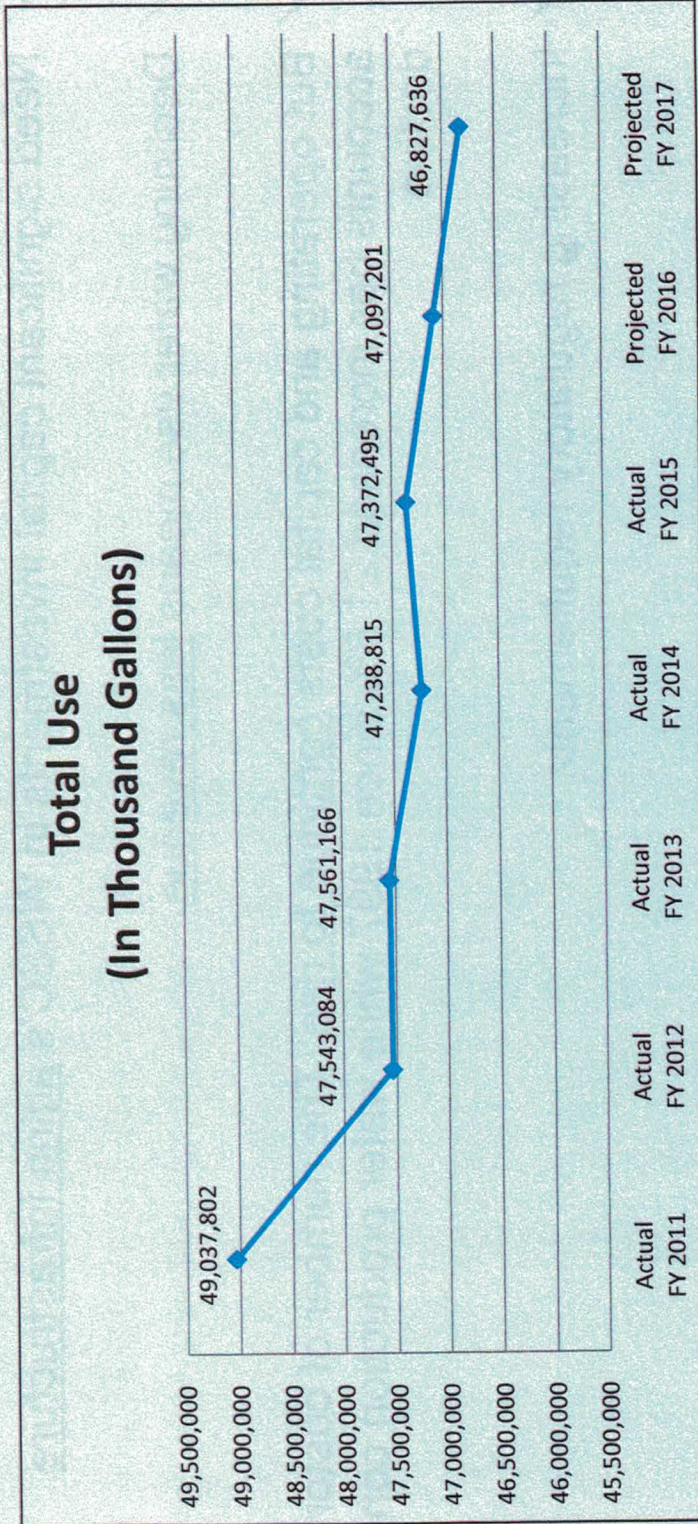
- Timely communication

# Changing Business Environment

- WSSC and other utilities nationwide face new challenges:
  - ✓ Need significant capital investments in WSSC's aging infrastructure
  - ✓ Declining water use means less revenue
  - ✓ But operating and capital costs continue to rise. The number of customer accounts has increased 21.6% since 1997 while water production continues to decline
  - ✓ Increasing regulatory requirements

# Changing Business Environment

## WSSC Historical & Projected Billed Consumption FY2011-2017



# Aging Pipes Continue to be a Challenge

- The 5 year average for breaks and leaks in the month of January is 401, compared to this year's experience of 379 in the same month
- WSSC crews were able restore service timely
- 57 miles of small water main, house connection renewals, and large meter and vault replacements to be rehabilitated in FY17
  - Continuing to use WSSC crews to replace 10 of the 57 miles

# Aging Pipes Continue to be a Challenge (cont.)



Installed in 1962



Installed in 1980



Installed in 1982



# FY 2017 Proposed Budget

## The FY'17 Proposed Capital and Operating Budget totals \$1.4 Billion

- Transmitted on March 1
- 3.0% Rate Increase, Infrastructure Investment Fee Final Phase-in
- Rehabilitation of 53 miles of sewer mains and lateral lines for the Sewer Reconstruction and Trunk Sewer Reconstruction Programs
- 57 miles of water main replacement and associated house connection renewals
- Pending Adjustments
  - Additional 5.0 workyears to further enhance customer service
  - Blue Plains sewage disposal operating cost increases
  - Consent Decrees

# FY 2017 Proposed Budget

## Consent Decree Modification

- WSSC has negotiated the terms of a Second Amendment to the Consent Decree with EPA, DOJ and MDE that provides an extension for work delayed by the permitting processes in ESAs
- The extension period is for up to six (6) years, with mandatory progress milestones during the extension period
- Extension period for projects requiring NPS permits runs for up to two (2) years from receipt of permit
- The Second Amendment was lodged with U.S. District Court for approval on November 30, 2015; the public comment period expired on January 5, 2016.
- The parties to the Second Amendment await Court review and approval

# Cost Saving Measures

## Cutting Costs

- Alternative energy sources, strategic energy purchases
- Supply Chain Management
- Debt management
  - Bond refundings
  - switch to 30 year debt and refinancing existing debt
- Asset Management Plan
- Increased employees share of benefits package
- Increased co-pays
- Public-Private Partnerships
- Go-Green Initiative

# FY 2017 Proposed Budget Overview

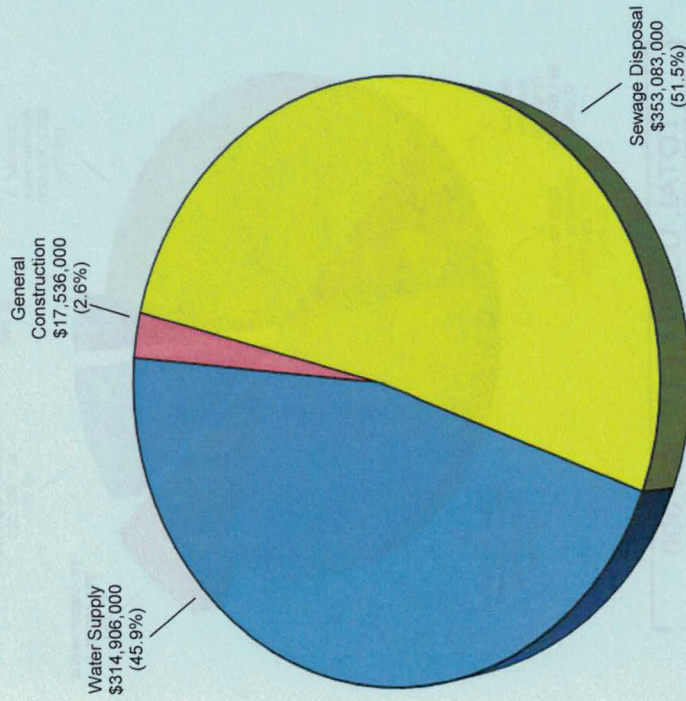
Letitia Carolina-Powell  
Budget Group Leader



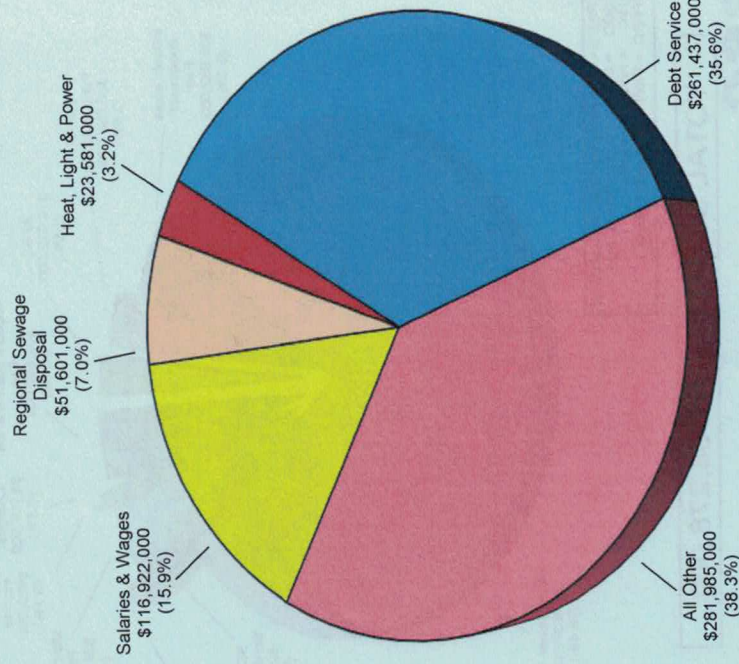
# FY 2017 Proposed Budget Overview

## FY 2017 PROPOSED BUDGET

**CAPITAL = \$685,525,000**



**OPERATING = \$735,526,000**

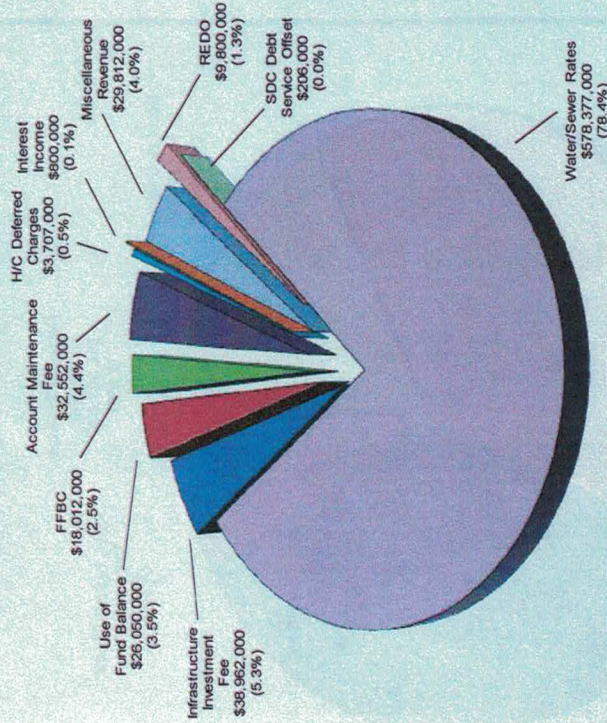


**GRAND TOTAL = \$1,421,051,000**

# FY 2017 Proposed Budget Overview

## FY 2017 PROPOSED BUDGET OPERATING

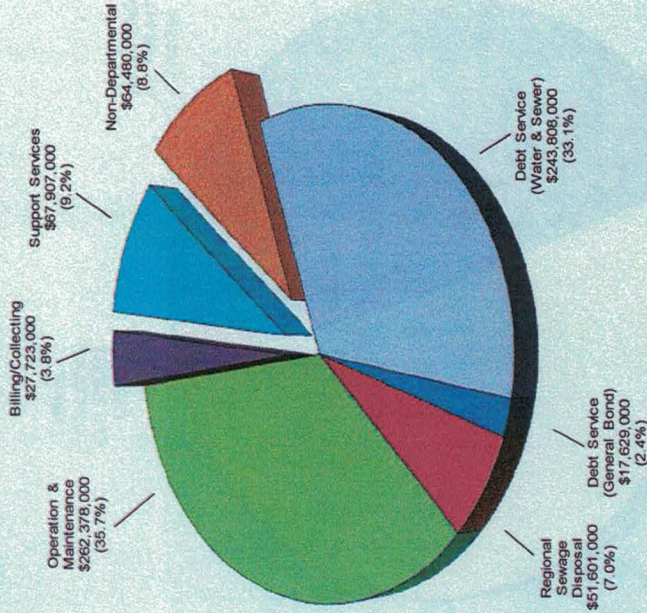
### FUNDING SOURCES



REDO = Reconstruction Debt Service Offset  
 SDC = System Development Charge  
 H/C = House Connection  
 FFBC = Front Foot Benefit Charge

TOTAL SOURCES = \$738,278,000

### FUNDING USES



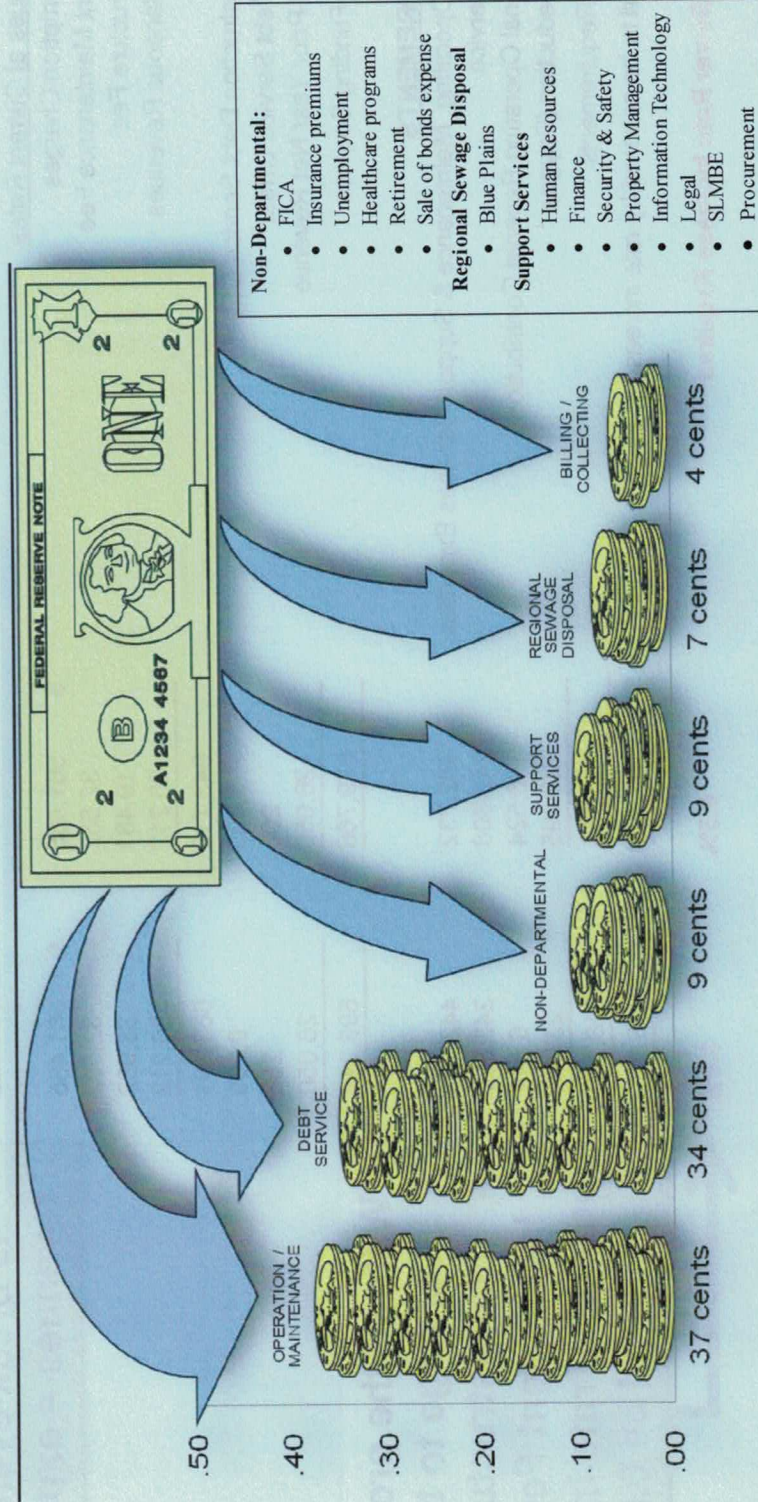
TOTAL USES = \$735,526,000

# FY 2017 Proposed Budget Overview

## How Each Dollar Of An FY'17 Water And Sewer Bill Will Be Spent\*

### FY'17 PROPOSED BUDGET

(How Each Dollar of a Water and Sewer Bill Is Spent)



\*Does not include General Bond Debt Service Fund.

# FY 2017 Proposed Budget Overview

Water & Sewer Operating Funds 6.5% Revenue Requirement

## COMBINED WATER/SEWER OPERATING FUNDS PROPOSED FY'17 RATE ANALYSIS (In Thousands)

	STATUS QUO	FY17 PROPOSED
<b>FUNDING SOURCES</b>		
Revenues at Current Rates		
Consumption Charges	\$ 561,465	\$ 561,465
Account Maintenance Fee	32,552	32,552
Infrastructure Fee	19,481	38,962
Miscellaneous Revenues	30,212	30,212
<b>Total</b>	<b>643,710</b>	<b>663,191</b>
Reconstruction Debt Service Offset	9,800	9,800
SDC Debt Service Offset	206	206
Use of Prior Year Net Revenue	26,050	26,050
<b>Total Funding Sources</b>	<b>679,766</b>	<b>699,247</b>
<b>REQUIREMENTS</b>		
Other Operating, Maintenance & Support Services Expenses	442,732	442,732
Debt Service	243,808	243,808
Additional Operating Reserve Contribution	6,524	6,524
Debt Reduction (Paygo)	23,095	23,095
<b>Total Requirements</b>	<b>716,159</b>	<b>716,159</b>
Shortfall to be covered by rate increase	\$ (36,393)	\$ (16,912)
	<b>6.5%</b>	<b>3.0%</b>

As a governmental, not-for-profit entity, WSSC's water and sewer budget is break-even, i.e. revenues = expenses.

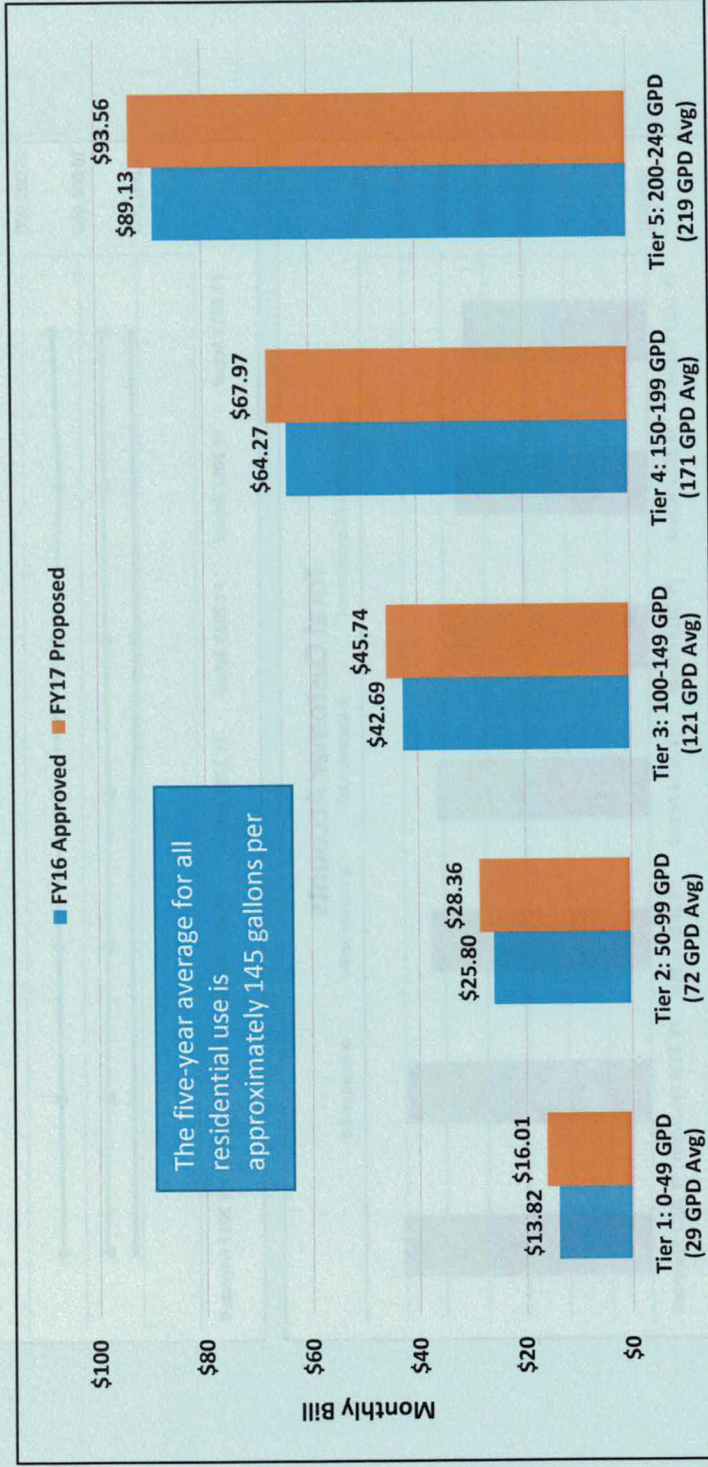
Without the proposed change to the Infrastructure Investment Fee, the proposed rate increase would be 6.5%



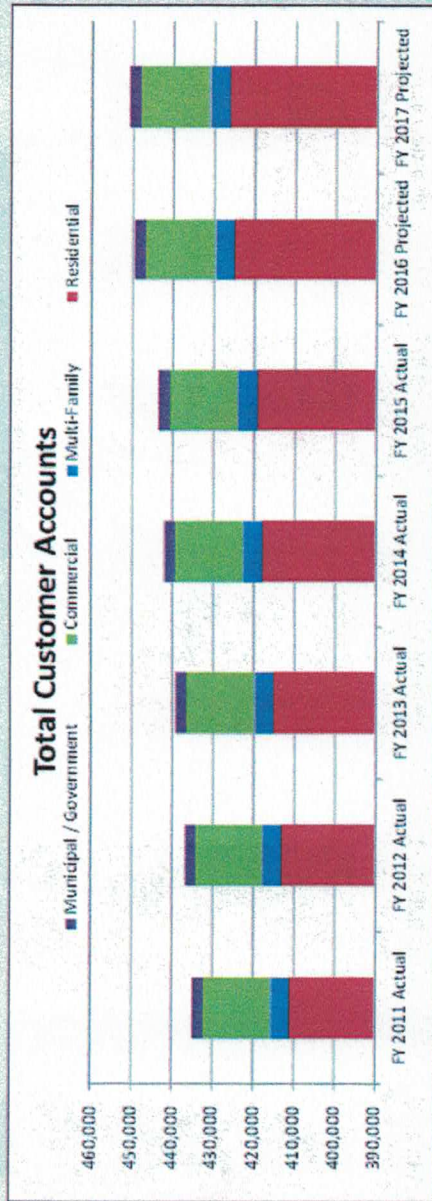
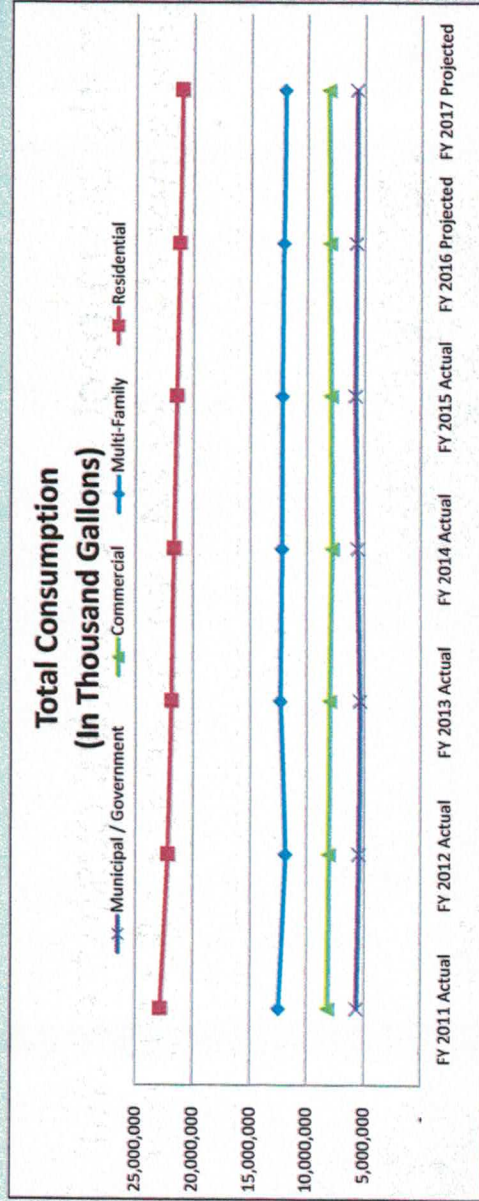


# Changes to Customer Bills

Average quarterly bill impact for residential customer with 3/4" meter using 145 gallons per day (\$9.84 per quarter or \$3.28 per month)

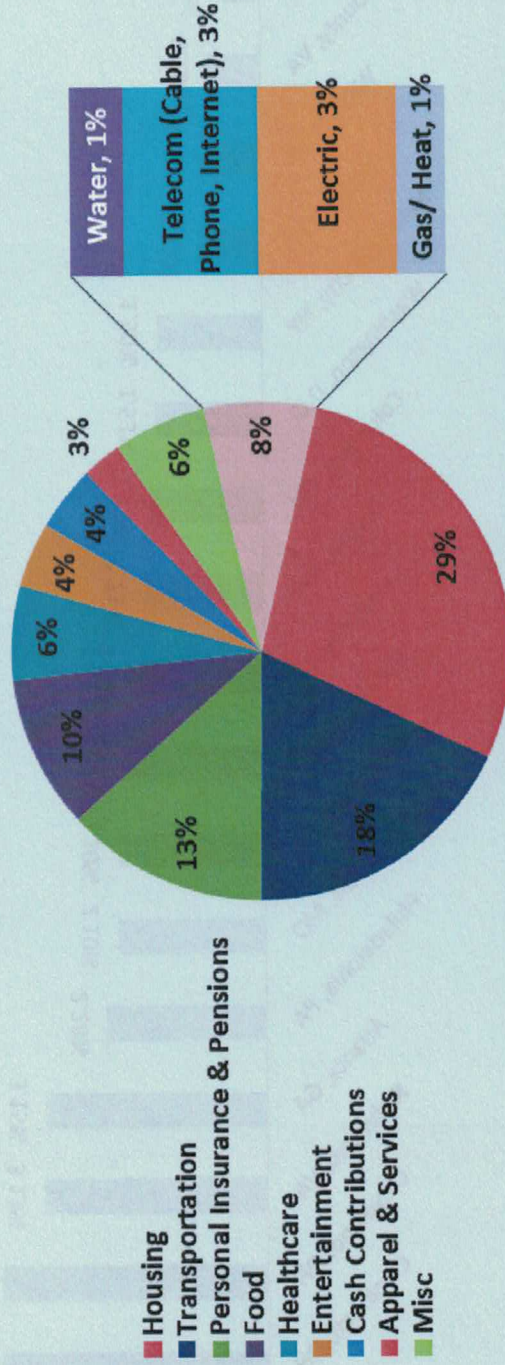


# FY 2017 Proposed Budget Overview



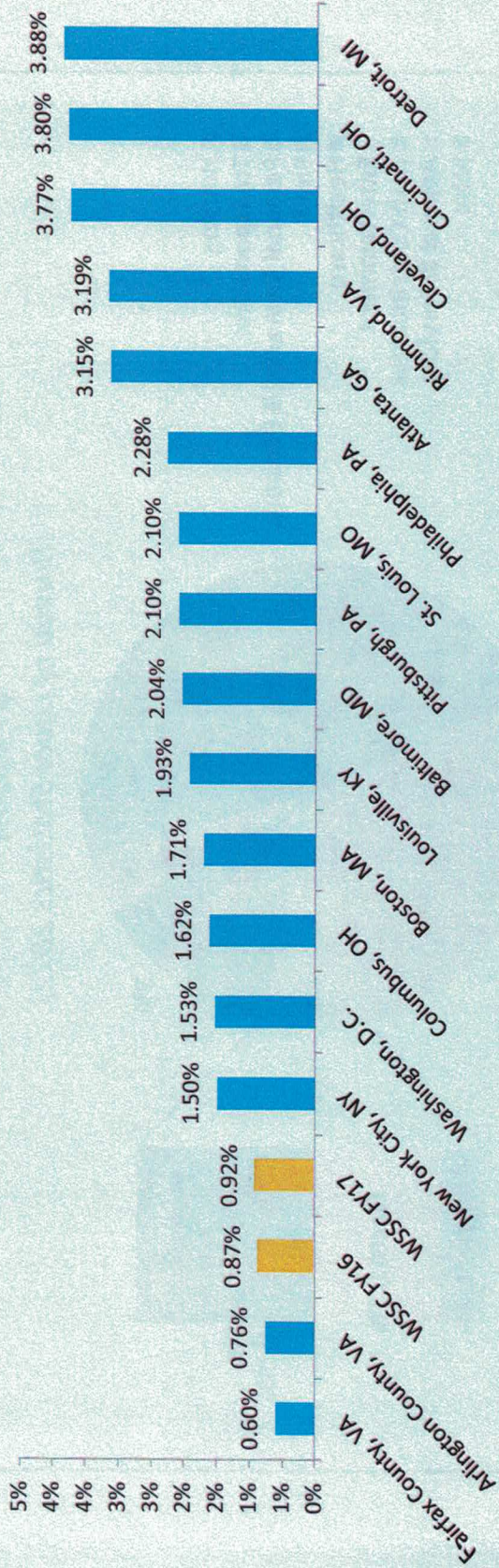
# FY 2017 Proposed Budget Overview

## Consumer Expenditures Based on Median Income of \$70,004 (Bureau of Labor Statistics 2012)



# FY 2017 Proposed Budget Overview

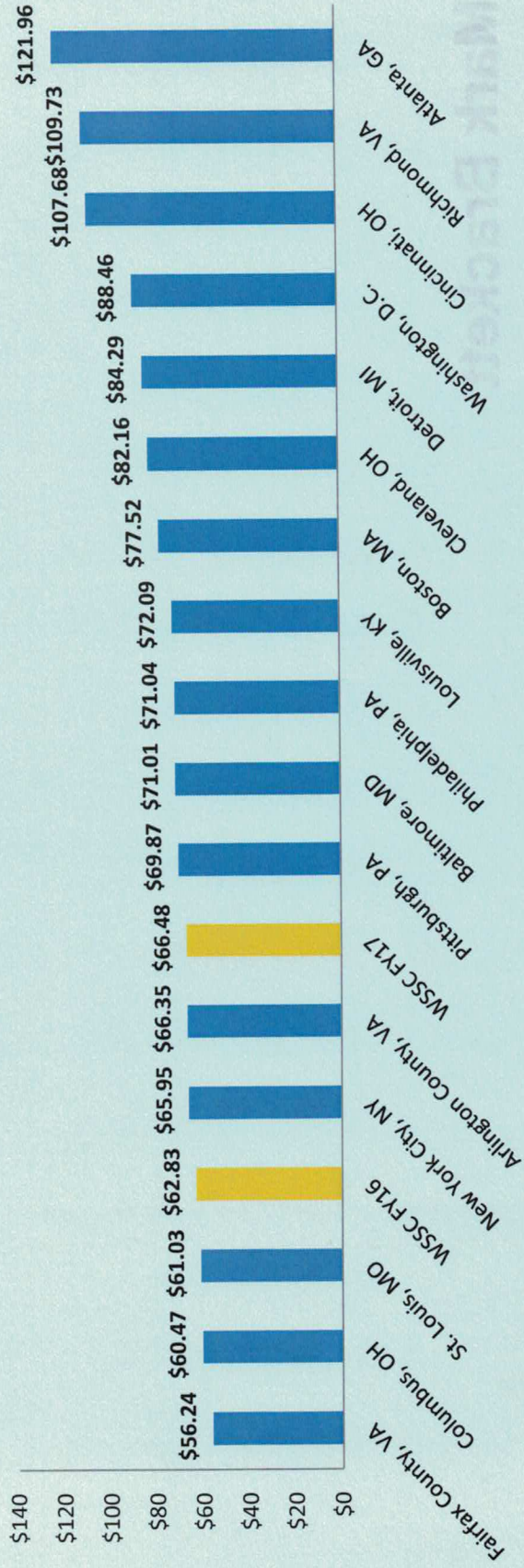
**Average Monthly Bill Comparison as a Percentage of Median Income  
(5000 GPM Avg)**



# FY 2017 Proposed Budget Overview

## 2016 Residential Monthly Water/Sewer Bill Comparison

(5000 GPM Avg)



# FY 2017 Proposed Budget Overview

**Mark Brackett**  
**Budget Unit Coordinator**

