

**AUSTIN WATER COST OF SERVICE RATE STUDY
PUBLIC INVOLVEMENT COMMITTEE
DECEMBER 13, 2016 – 4:00 P.M.
WALLER CREEK CENTER – ROOM #104
625 E. 10TH STREET, AUSTIN, TEXAS**



AGENDA

For more information, please visit <http://www.austintexas.gov/department/2016-cost-service-rate-study>

MISSION: The purpose of the Public Involvement Committee (PIC) is to examine the methodology being developed to determine cost of service for all customer classes with a primary focus on the retail customer classes, discuss the impacts of key cost of service factors, and advise the Austin Water Executive Team in their decision-making process.

MEETING GOALS: Discuss the cost allocation process and the development of units of service for each customer class.

CALL TO ORDER

1. CITIZEN COMMUNICATION

The first 10 speakers signed up prior to the meeting being called to order will each be allowed a three-minute allotment to address their concerns regarding items not posted on the agenda.

2. DISCUSSION ITEMS

- a. Previous PIC Meeting Review
- b. Cost allocation of revenue requirements
- c. Costs by demand parameters
- d. Units of service for each customer class
- e. Unit costs by demand parameters

3. STAFF BRIEFINGS, PRESENTATIONS, AND OR REPORTS

- a. Discuss the cost of service process, including cost functionalization and common-to-all or retail only cost allocation of water expenses
- b. Discuss the cost allocation of functional categories to demand parameters
- c. Discuss the development of units of service for each customer class according to demand parameters
- d. Discuss the unit cost development

4. COMMITTEE DISCUSSION

- a. PIC Member Questions and Discussion

5. FUTURE AGENDA ITEMS

6. PUBLIC COMMENT

7. ADJOURN

The City of Austin is committed to compliance with the American with Disabilities Act. Reasonable modifications and equal access to communications will be provided upon request. Meeting locations are planned with wheelchair access. If requiring Sign Language Interpreters or alternative formats, please give at least 4 days notice before the meeting date. Please call Felicia Cancino at the Austin Water Utility Department at 512-972-0114, for additional information; TTY users route through Relay Texas at 711 **Page 2 of 2**



Presentation | PIC



Presentation | PIC



Presentation | PIC



Presentation | PIC

CITY OF AUSTIN



SYSTEM REVENUE REQUIREMENTS PIC Meeting #6 / December 13, 2016



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TODAY'S PIC MEETING

1. Welcome
2. Citizen Comment (Standard Format – 3 Min)
3. Executive Team Recap
4. PIC comments from the last meeting
5. Cost allocation of Water Fund
6. Customer class units of service
7. Summary of today's meeting and look ahead
8. PIC and Public Comments
9. Adjourn

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CITIZEN COMMENT



EXECUTIVE TEAM RECAP



PIC COMMENTS FROM LAST MEETING



COST OF SERVICE REVIEW



WHAT IS COST OF SERVICE?



- » Recover costs from users in proportion to their use of the system, recognizing the impact of each class on system facilities and operations
 - Converting revenue requirements into unit costs
 - Allocate costs to customer classes based on customer usage characteristics
- » COS is the fundamental benchmark used to establish utility rates across the United States

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WATER COS OVERVIEW

Step #1: Net Total System Revenue Requirement

Step #2: Assign Revenue Requirement to Functions

- Examples:
- Raw Water Supply
 - Treatment
 - Pumping
 - Storage
 - Transmission & Distribution
 - Meters, Customer Service, Fire

Step #3: Identify Functionalized Costs as Joint or Specific

- Common-to-All
- Retail Only
- Wholesale Only

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WATER COS OVERVIEW

Step #4: Functionalized Costs Assigned to Demand Parameters

- Base Demand
- Max Day Demand
- Max Hour Demand

Step #5: Calculate System Unit Cost for Each Demand Parameter

- $\text{Base Cost} / \text{Base Units} = \text{Base Unit Cost (\$/Gallon)}$
- $\text{Max Day Cost} / \text{Max Day Units} = \text{Max Day Unit Cost (\$/Gallon)}$
- $\text{Max Hour Costs} / \text{Max Hour Units} = \text{Max Day Unit Cost (\$/Gallon)}$

Step #6: Calculate Customer Class Revenue Requirement

- $\text{Base Unit Cost} \times \text{Customer Base Units} = \text{Base Revenue Requirement}$
- $\text{Max Day Unit Cost} \times \text{Customer Max Day Units} = \text{Max Day Revenue Requirement}$
- $\text{Max Hour Unit Cost} \times \text{Customer Max Hour Units} = \text{Max Hour Revenue Requirement}$
- **Total Customer Class Revenue Requirement**

COST ALLOCATION

**Cost Functionalization,
Common-to-all vs.
Retail/Wholesale Only,
And Assignment to Demand Parameters**

WATER O&M COST CENTERS

Water Cost Centers

- Water Treatment
- Pipeline Operations
- Distribution System Support
- One Stop Shop
- Support Services
- Conservation & Reuse
- Billing & Customer Services
- Transfers & Other Requirements
- Water Conservation



Key Water Service Functions

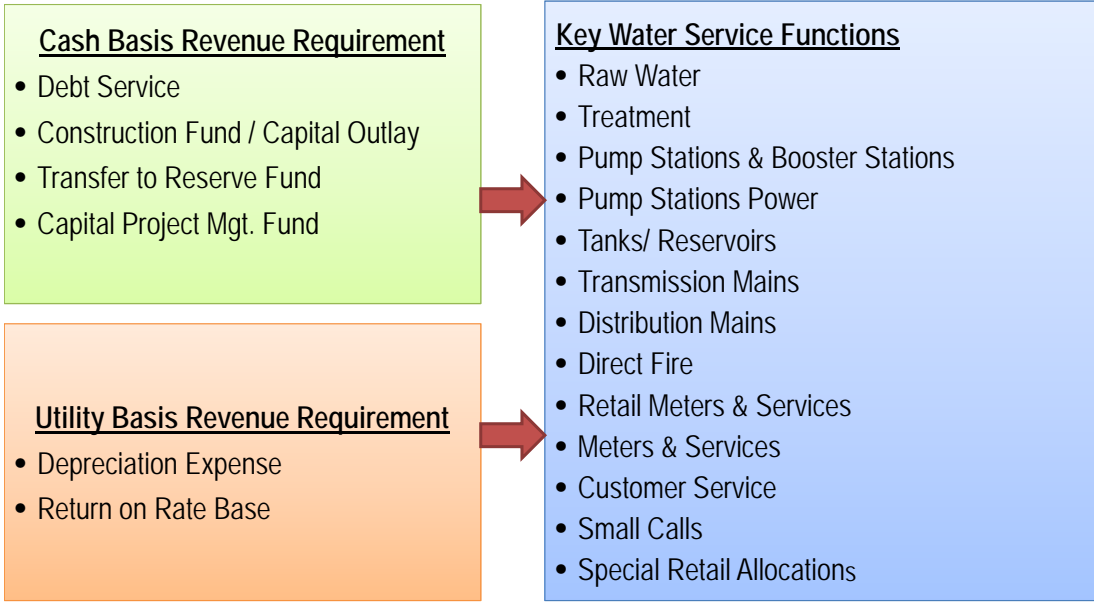
- Raw Water
- Treatment
- Pump Stations & Booster Stations
- Pump Stations Power
- Tanks/ Reservoirs
- Transmission Mains
- Distribution Mains
- Direct Fire
- Retail Meters & Services
- Meters & Services
- Customer Service
- Small Calls
- Special Retail Allocations

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WATER O&M COST ALLOCATIONS

| Function | Common to All Costs (Retail and Wholesale) | Retail Only Costs | Wholesale Only Costs |
|--------------------------------------|---|-------------------|---------------------------------------|
| Raw Water – LCRA Water Rights | X | | There are no Wholesale Only O&M Costs |
| Raw Water – Watershed Land Purchases | | X | |
| Treatment | X | | |
| Pump Stations & Booster Stations | X | | |
| Pump Stations Power | X | | |
| Tanks/ Reservoirs | X | | |
| Transmission Mains | X | | |
| Distribution Mains | | X | |
| Direct Fire | | X | |
| Retail Meters & Services | | X | |
| Meters & Services | X | | |
| Customer Service | X | | |
| Small Calls | X | | |
| Special Retail Allocations | | X | |

WATER CAPITAL COSTS

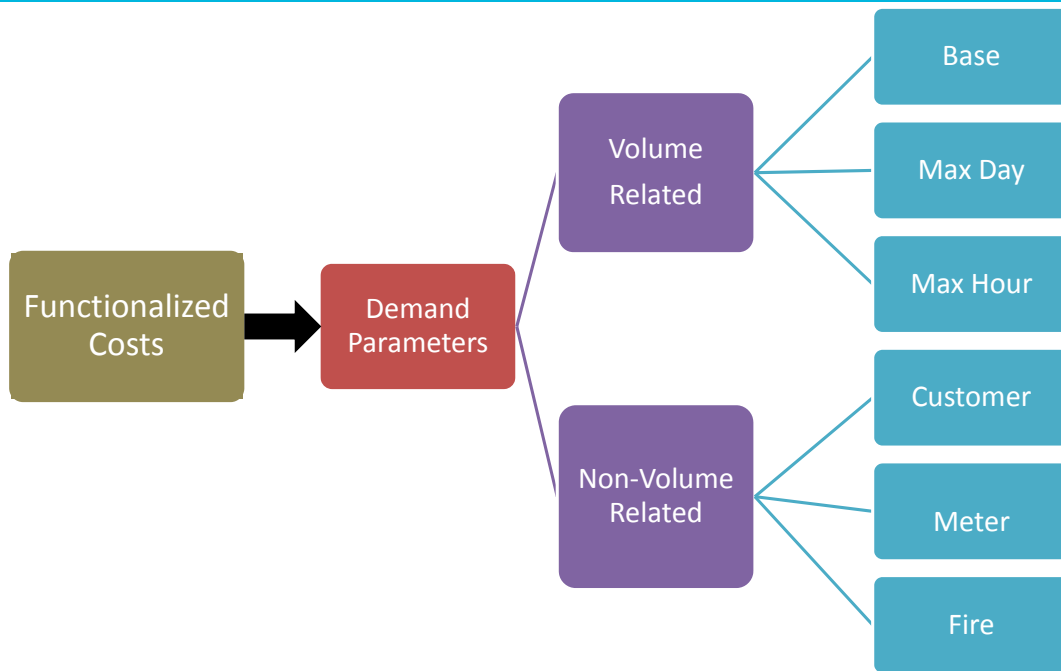


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WATER CAPITAL COST ALLOCATIONS

| Function | Common to All Costs (Retail and Wholesale) | Retail Only Costs | Wholesale Only Costs |
|--------------------------------------|---|-------------------|---------------------------------------|
| Raw Water – LCRA Water Rights | X | | There are no Wholesale Only O&M Costs |
| Raw Water – Watershed Land Purchases | | X | |
| Treatment | X | | |
| Pump Stations & Booster Stations | X | | |
| Pump Stations Power | X | | |
| Tanks/ Reservoirs | X | | |
| Transmission Mains | X | | |
| Distribution Mains | | X | |
| Direct Fire | | X | |
| Retail Meters & Services | | X | |
| Meters & Services | X | | |
| Customer Service | X | | |
| Small Calls | X | | |
| Special Retail Allocations | | X | |

ALLOCATION TO DEMAND PARAMETERS



DEMAND PARAMETERS

| | |
|----------|---|
| Base | O&M expenses and capital costs associated with service to customers under average load conditions |
| Max Day | Costs associated with meeting <u>peak day</u> demands in excess of base use |
| Max Hour | Costs associated with meeting <u>peak hour</u> demands excess of base and peak day use |
| Customer | Costs associated with serving customers, irrespective of the amount or rate of use |
| Meter | Maintenance and capital costs related to meters |
| Fire | Costs that apply solely to the fire protection function |

FUNCTIONALIZED COST ALLOCATED TO PARAMETER

Example: Transmission Mains



Transmission main for average day demand



Transmission main must be sized larger to meet max day demand

- » Transmission costs are allocated to the Base and Max Day Demand Parameters

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O&M ALLOCATIONS COMMON-TO-ALL (\$ Millions)

| Function | Base | Max Day | Max Hour | Customer | Meter | Fire | Special Retail | Total |
|----------------------------|----------------|---------------|---------------|----------------|---------------|---------------|----------------|-----------------|
| Raw Water | 6.97 | | | | | | | 6.97 |
| Treatment Facilities | 4.48 | 2.12 | | | | | | 6.60 |
| Chemicals & Power | 44.80 | | | | | | | 44.80 |
| Pump & Booster Stations | 6.72 | | | | | | | 6.72 |
| Tanks/ Reservoirs | 0.51 | 0.24 | | | | | | 0.75 |
| Transmission Mains | 11.14 | 5.28 | | | | | | 16.42 |
| Distribution Mains | | | | | | | | |
| Fire | | | | | | | | |
| Meters & Services | | | | | 4.52 | | | 4.52 |
| Customer Service | | | | 17.42 | | | | 17.42 |
| Special Retail Allocation | | | | | | | | |
| General Fund Transfer | 22.59 | | | | | | | 22.59 |
| Total Common-To-All | \$97.20 | \$7.65 | \$0.00 | \$17.42 | \$4.52 | \$0.00 | \$0.00 | \$126.78 |
| Retail | 92.09 | 6.94 | | 17.41 | 4.47 | | | 120.92 |
| Wholesale | 5.11 | 0.70 | | | 0.04 | | | 5.86 |
| Total Common-To-All | \$97.20 | \$7.65 | \$0.00 | \$17.42 | \$4.52 | \$0.00 | \$0.00 | \$126.78 |

O&M ALLOCATIONS RETAIL ONLY (\$ Millions)

| Function | Base | Max Day | Max Hour | Customer | Meter | Fire | Special Retail | Total |
|---------------------------|----------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
| Raw Water | 5.69 | | | | | | | 5.69 |
| Treatment Facilities | | | | | | | | |
| Chemicals & Power | | | | | | | | |
| Pump & Booster Stations | | | | | | | | |
| Tanks/ Reservoirs | | | | | | | | |
| Transmission Mains | | | | | | | | |
| Distribution Mains | 8.88 | 4.06 | 5.34 | | | 1.16 | | 19.44 |
| Fire | | | | | | 2.10 | | 2.10 |
| Meters & Services | | | | | 3.17 | | | 3.17 |
| Customer Service | | | | | | | | |
| Special Retail Allocation | | | | | | | 6.98 | 6.98 |
| General Fund Transfer | | | | | | | | |
| Total Retail Only | \$14.57 | \$4.06 | \$5.34 | \$0.00 | \$3.17 | \$3.26 | \$6.98 | \$37.37 |

O&M ALLOCATIONS SUMMARY (\$ Millions)

| Function | Base | Max Day | Max Hour | Customer | Meter | Fire | Special Retail | Total |
|------------------------|-----------------|----------------|---------------|----------------|---------------|---------------|----------------|-----------------|
| <u>Retail</u> | | | | | | | | |
| Common-to All | 92.09 | 6.94 | | 17.41 | 4.47 | | | 120.92 |
| Retail Only | 14.57 | 4.06 | 5.34 | | 3.17 | 3.26 | 6.98 | 37.37 |
| Total Retail | 106.66 | 11.00 | 5.34 | 17.41 | 7.64 | 3.26 | 6.98 | 158.29 |
| <u>Wholesale</u> | | | | | | | | |
| Common-to-All | 5.11 | 0.70 | | | 0.04 | | | 5.86 |
| Wholesale Only | | | | | | | | |
| Total Wholesale | 5.11 | 0.70 | | | 0.04 | | | 5.86 |
| Total System | \$111.77 | \$11.71 | \$5.34 | \$17.42 | \$7.68 | \$3.26 | \$6.98 | \$164.15 |
| Retail | 95% | 94% | 100% | 100% | 99% | 100% | 100% | 96% |
| Wholesale | 5% | 6% | 0% | 0% | 1% | 0% | 0% | 4% |
| Total | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 100% |

CAPITAL ALLOCATIONS COMMON-TO-ALL (\$ Millions)

| Function | Base | Max Day | Max Hour | Customer | Meter | Fire | Special Retail | Total |
|----------------------------|---------------|---------------|---------------|---------------|--------------|---------------|----------------|----------------|
| Raw Water | | | | | | | | |
| Treatment Facilities | 39.14 | 18.57 | | | | | | 57.71 |
| Chemicals & Power | 0.00 | 0.00 | | | | | | 0.00 |
| Pump & Booster Stations | 4.03 | 0.00 | | | | | | 4.03 |
| Tanks/ Reservoirs | 4.28 | 2.03 | | | | | | 6.31 |
| Transmission Mains | 23.12 | 10.97 | | | | | | 34.09 |
| Distribution Mains | | | | | | | | 0.00 |
| Fire | | | | | | | | 0.00 |
| Meters & Services | | | | | 3.75 | | | 3.75 |
| Customer Service | | | | | | | | 0.00 |
| Special Retail Allocation | | | | | | | | 0.00 |
| General Fund Transfer | | | | | | | | 0.00 |
| Total Common-To-All | 70.58 | 31.56 | \$0.00 | \$0.00 | 3.75 | \$0.00 | \$0.00 | 105.89 |
| Retail | 66.52 | 28.66 | | | 3.72 | | | 98.89 |
| Wholesale | 4.06 | 2.91 | | | 0.04 | | | 7.00 |
| Total Common-To-All | \$70.6 | \$31.6 | \$0.00 | \$0.00 | \$3.8 | \$0.00 | \$0.00 | \$105.9 |

CAPITAL ALLOCATIONS RETAIL ONLY (\$ Millions)

| Function | Base | Max Day | Max Hour | Customer | Meter | Fire | Special Retail | Total |
|---------------------------|---------------|---------------|---------------|---------------|---------------|---------------|----------------|----------------|
| Raw Water | | | | | | | | |
| Treatment Facilities | | | | | | | | |
| Chemicals & Power | | | | | | | | |
| Pump & Booster Stations | | | | | | | | |
| Tanks/ Reservoirs | | | | | | | | |
| Transmission Mains | | | | | | | | |
| Distribution Mains | 8.96 | 4.10 | 5.39 | | | 1.17 | | 19.62 |
| Fire | | | | | | 1.71 | | 1.71 |
| Meters & Services | | | | | | | | |
| Customer Service | | | | | | | | |
| Special Retail Allocation | | | | | | | | |
| General Fund Transfer | | | | | | | | |
| Total Retail Only | \$8.96 | \$4.10 | \$5.39 | \$0.00 | \$0.00 | \$2.88 | \$0.00 | \$21.33 |

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CAPITAL ALLOCATIONS SUMMARY (\$ Millions)

| Function | Base | Max Day | Max Hour | Customer | Meter | Fire | Special Retail | Total |
|------------------------|----------------|----------------|---------------|---------------|---------------|---------------|----------------|-----------------|
| Retail | | | | | | | | |
| Common-to All | 66.52 | 28.66 | 0.00 | 0.00 | 3.72 | 0.00 | 0.00 | 98.89 |
| Retail Only | 8.96 | 4.10 | 5.39 | 0.00 | 0.00 | 2.88 | 0.00 | 21.33 |
| Total Retail | 75.48 | 32.75 | 5.39 | 0.00 | 3.72 | 2.88 | 0.00 | 120.22 |
| Wholesale | | | | | | | | |
| Common-to-All | 4.06 | 2.91 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 7.00 |
| Wholesale Only | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total Wholesale | 4.06 | 2.91 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 7.00 |
| Total System | \$79.54 | \$35.66 | \$5.39 | \$0.00 | \$3.75 | \$2.88 | \$0.00 | \$127.23 |
| Retail | 95% | 92% | 100% | 0% | 99% | 100% | 0% | 94% |
| Wholesale | 5% | 8% | 0% | 0% | 1% | 0% | 0% | 6% |
| Total | 100% | 100% | 100% | 0% | 100% | 100% | 0% | 100% |

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CONCEPTUAL DEVELOPMENT OF UNITS



WATER CUSTOMER CLASSES

Existing Classes

- » Residential
- » Residential CAP
- » Multi-Family
- » Commercial
- » Industrial Customers
- » Wholesale Customers

Potential New Class

- » Small Multi-Family
- » Outside City Retail

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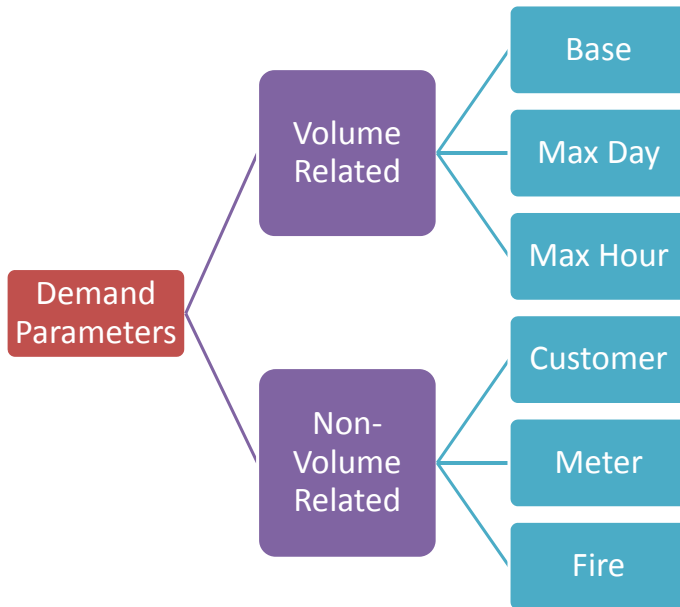
WATER CUSTOMER CLASSES

For Each Customer Class:

- » Annual Usage or Base Units
- » Max Day Units
 - Extra Capacity Max Day Units
- » Max Hour Units
 - Extra Capacity Max Hour Units
- » Customer Units:
 - Number of bills
 - Equivalent meters

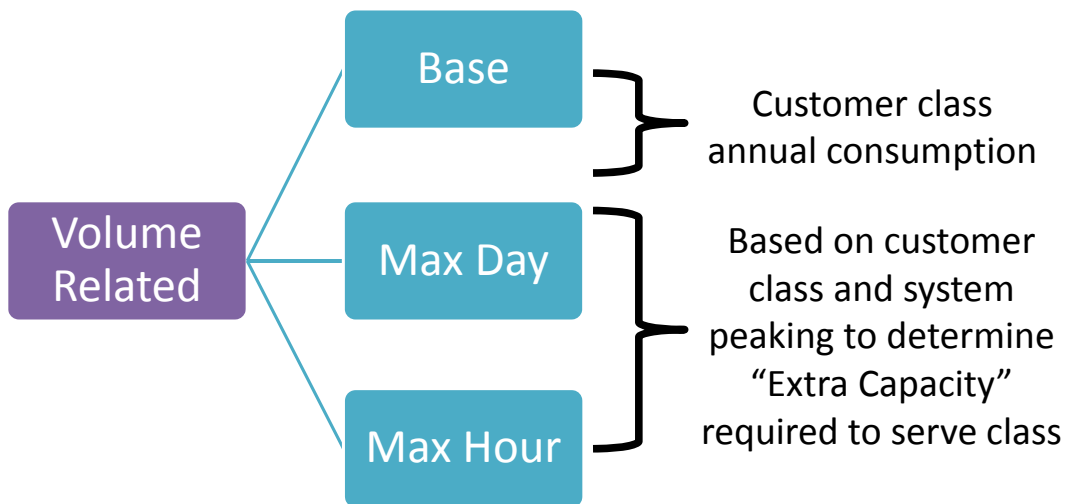
26

DETERMINING UNITS



27

VOLUME UNITS



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WATER CUSTOMER CLASSES

Class Max Day Peaking Factor

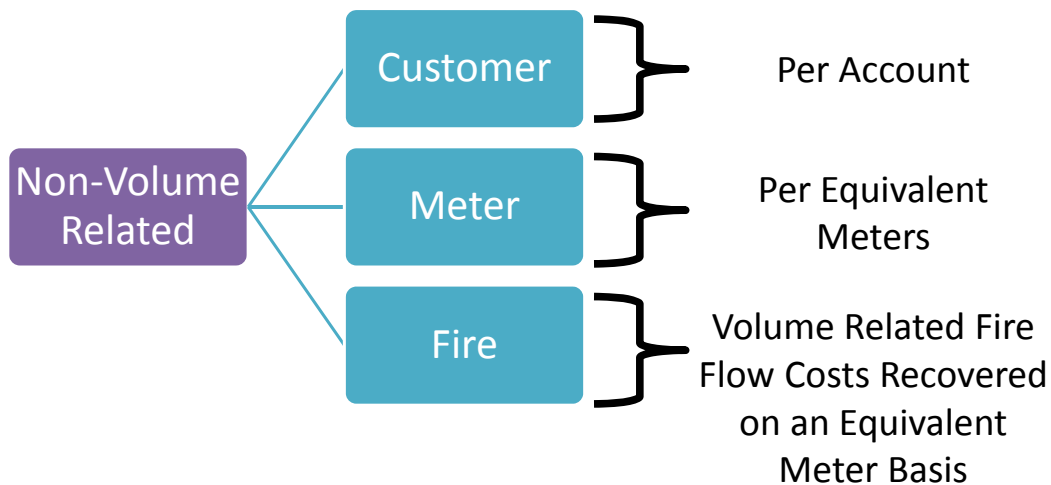
$$\frac{\text{Average Day of Max Month}}{\text{Annual Average Day}} \times \frac{\text{System Max Day}}{\text{System Average Day Of Max Month}}$$

Class Max Hour Peaking Factor

$$\frac{\text{Average Day of Max Month}}{\text{Annual Average Day}} \times \frac{\text{System Max Hour}}{\text{System Average Day Of Max Month}}$$

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NON-VOLUME UNITS



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EQUIVALENT METERS

- » Meter service costs can be distributed to customers in proportion to the replacement cost of the meter. Capacity (Peaking) related costs can be distributed to customers in proportion to the hydraulic capacity of installed meters

| Meter Size | Current Meter Ratios |
|------------|----------------------|
| 5/8 – in | 1.0 |
| 3/4 – in | 1.5 |
| 1 – in | 2.5 |
| 1 ½ – in | 5.0 |
| 2 – in | 8.0 |
| 3 – in | 16.0 |
| 4 – in | 25.0 |
| 6 – in | 50.0 |
| 8 – in | 80.0 |
| 10 – in | 115.0 |

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2017 UNITS



Austin Water Customer Classes' Units of Service

Joseph Gonzales, Utility Budget & Finance Manager



CUSTOMER CLASS SUMMARY

Volume Related Units:

- Base Units – Annual Consumption by Class
- Max Day Units
 - Extra Capacity Max Day Units
- Max Hour Units
 - Extra Capacity Max Hour Units



CUSTOMER CLASS SUMMARY

Retail Peaking Factors

| | MAX DAY NCPs | | | MAX HOUR NCPs | | |
|------------------------|---|---|----------------|---|---|----------------|
| | COS 2015-16 | COS 2016-17 | Percent Change | COS 2015-16 | COS 2016-17 | Percent Change |
| | 3 Year Average FY 2011-12 to FY 2013-14 | 3 Year Average FY 2012-13 to FY 2014-15 | | 3 Year Average FY 2011-12 to FY 2013-14 | 3 Year Average FY 2011-12 to FY 2013-14 | |
| RETAIL | | | | | | |
| Residential | 154 | 150 | -2.7% | 226 | 226 | 0.0% |
| Residential CAP | 175 | 159 | -10.1% | 252 | 222 | -13.5% |
| Multifamily | 137 | 134 | -2.2% | 189 | 179 | -5.6% |
| Commercial | 163 | 151 | -7.9% | 212 | 207 | -2.4% |
| Large Volume: | | | | | | |
| Spancion | 131 | 130 | -0.8% | 189 | 181 | -4.4% |
| NXP - Ed Bluestein | 132 | 125 | -5.6% | 191 | 172 | -11.0% |
| NXP - W William Cannon | 132 | 134 | 1.5% | 191 | 186 | -2.7% |
| Samsung | 137 | 141 | 2.8% | 205 | 197 | -4.1% |
| Novati | 137 | 129 | -6.2% | 198 | 180 | -10.0% |
| University of Texas | 151 | 142 | -6.3% | 217 | 197 | -10.2% |
| System Average | 158 | 166 | 4.8% | 228 | 232 | 1.7% |

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CUSTOMER CLASS SUMMARY

Wholesale Peaking Factors

| | MAX DAY NCPs | | | MAX HOUR NCPs | | |
|------------------------|---|---|----------------|---|---|----------------|
| | COS 2015-16 | COS 2016-17 | Percent Change | COS 2015-16 | COS 2016-17 | Percent Change |
| | 3 Year Average FY 2011-12 to FY 2013-14 | 3 Year Average FY 2012-13 to FY 2014-15 | | 3 Year Average FY 2011-12 to FY 2013-14 | 3 Year Average FY 2011-12 to FY 2013-14 | |
| WHOLESALE * | | | | | | |
| Creedmoor-Maha | 160 | 151 | -6.0% | 231 | 211 | -9.5% |
| High Valley W.S.C. | 175 | 175 | 0.0% | 251 | 244 | -2.9% |
| Marsha W.S.C. | 158 | 179 | 11.7% | 272 | 249 | -9.2% |
| Mid Tex Utilities | 0 | 236 | 100.0% | 0 | 330 | 100.0% |
| Morningside | 227 | 209 | -8.6% | 377 | 291 | -29.6% |
| Night Hawk W.S.C. | 150 | 165 | 9.1% | 250 | 230 | -8.7% |
| North Austin MUD #1 | 170 | 172 | 1.2% | 246 | 240 | -2.5% |
| Northtown MUD | 146 | 140 | -4.3% | 211 | 195 | -8.2% |
| Rivercrest MUD | 183 | 186 | 1.6% | 264 | 260 | -1.5% |
| Rollingwood, City of | 205 | 200 | -2.5% | 304 | 279 | -9.0% |
| Shady Hollow MUD | 215 | 235 | 8.5% | 308 | 328 | 6.1% |
| Sunset Valley, City of | 158 | 161 | 1.9% | 228 | 226 | -0.9% |
| Village of San Leanna | 138 | 132 | -4.5% | 200 | 184 | -8.7% |
| Travis Co. WCID #10 | 184 | 190 | 3.2% | 265 | 266 | 0.4% |
| Wells Branch MUD | 157 | 154 | -1.9% | 226 | 215 | -5.1% |
| Southwest Water | 179 | 162 | -10.5% | 261 | 226 | -15.5% |
| System Average | 158 | 166 | 4.8% | 228 | 232 | 1.7% |

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CUSTOMER CLASS SUMMARY

Non-Volume Related Units:

- Customer Units:
 - Number of accounts
 - Equivalent meters
 - Equivalent fires services

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**SUMMARY AND
LOOK AHEAD**

RECAP OF TODAY'S DISCUSSION

I. Cost Allocation

II. Conceptual Units of Service

III. AW's Customer Classes' Units

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PIC -SCHEDULE & TOPICS

| <u>Meeting</u> | <u>Day</u> | <u>Date</u> | <u>Objective</u> |
|----------------|------------|-------------|--|
| 1 | Tues | 27-Sep | Orientation |
| 2 | Wed | 5-Oct | Revenue requirements |
| 3 | Tues | 25-Oct | Revenue requirements - Cont'd |
| 4 | Tues | 8-Nov | Revenue requirements - Cont'd |
| 5 | Tues | 29-Nov | Revenue requirements |
| 6 | Tues | 13-Dec | Water Cost Allocation |
| 7 | Wed | 4-Jan | Wastewater Cost Allocation |
| 8 | Tues | 17-Jan | Rates and Customer Impacts |
| 9 | Tues | 31-Jan | Rates and Customer Impacts - Cont'd |
| 10 | Tues | 21-Feb | Overview of Results and Wrap-up |

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ADDITIONAL COMMENTS



ADJOURN



**THANK
YOU**



CONTACT: RICK GIARDINA

rgiardina@raftelis.com

www.raftelis.com



Customer Class 2017 Units|PIC



Customer Class 2017 Units|PIC



Customer Class 2017 Units|PIC



Customer Class 2017 Units|PIC

Table 64
Austin Water Utility
Water Cost of Service Model - Base/Extra-Capacity Method
Percentage of Annual Water Demands by Customer Class

| Customer Class | Annual Demand (MG) | Average Day Demand (MGD) | Percent of Total |
|-------------------------|-----------------------|-----------------------------|------------------|
| Residential | 13,244.1 | 36.3 | 32.58% |
| Multi-Family | 9,392.1 | 25.7 | 23.10% |
| Commercial | 11,212.8 | 30.7 | 27.58% |
| Residential CAP | 1,321.8 | 3.6 | 3.25% |
| Creedmore-Maha | 77.1 | 0.2 | 0.19% |
| High Valley | 6.5 | 0.0 | 0.02% |
| Manor, City of | 0.0 | 0.0 | 0.00% |
| Mid Tex Utilities | 21.9 | 0.1 | 0.05% |
| Marsha Water | 11.8 | 0.0 | 0.03% |
| Morningside | 1.9 | 0.0 | 0.00% |
| Nighthawk | 12.3 | 0.0 | 0.03% |
| North Austin MUD | 293.0 | 0.8 | 0.72% |
| Northtown MUD | 277.4 | 0.8 | 0.68% |
| Rivercrest | 112.2 | 0.3 | 0.28% |
| Rollingwood | 110.0 | 0.3 | 0.27% |
| Shady Hollow | 152.5 | 0.4 | 0.38% |
| Sunset Valley MUD | 105.1 | 0.3 | 0.26% |
| Village of San Leanna | 4.5 | 0.0 | 0.01% |
| Water District 10 | 726.9 | 2.0 | 1.79% |
| Wells Branch MUD | 421.5 | 1.2 | 1.04% |
| Southwest Water | 4.8 | 0.0 | 0.01% |
| Spanson | 301.3 | 0.8 | 0.74% |
| NXP - Ed Bluestein Blvd | 432.2 | 1.2 | 1.06% |
| NXP - W William Cannon | 303.3 | 0.8 | 0.75% |
| Samsung | 1,689.7 | 4.6 | 4.16% |
| Novati | 67.0 | 0.2 | 0.16% |
| University of Texas | 349.3 | 1.0 | 0.86% |
| Total | 40,652.9 | 111.4 | 100.00% |

Austin Water
Peaking Factors
FY 2017

MAX DAY NCPs

MAX HOUR NCPs

| | COS 2015-16 | | | COS 2016-17 | | |
|------------------------|-----------------------|-----------------------|----------------|-----------------------|-----------------------|----------------|
| | 3 Year Average | 3 Year Average | Percent | 3 Year Average | 3 Year Average | Percent |
| | FY 2011-12 to | FY 2012-13 to | Change | FY 2011-12 to | FY 2011-12 to | Change |
| | FY 2013-14 | FY 2014-15 | | FY 2013-14 | FY 2013-14 | |
| RETAIL | | | | | | |
| Residential | 154 | 150 | -2.7% | 226 | 226 | 0.0% |
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| Samsung | 137 | 141 | 2.8% | 205 | 197 | -4.1% |
| Novati | 137 | 129 | -6.2% | 198 | 180 | -10.0% |
| University of Texas | 151 | 142 | -6.3% | 217 | 197 | -10.2% |
| System Average | 158 | 166 | 4.8% | 228 | 232 | 1.7% |

MAX DAY NCPs

MAX HOUR NCPs

| | COS 2015-16 | | | COS 2016-17 | | |
|------------------------|-----------------------|-----------------------|----------------|-----------------------|-----------------------|----------------|
| | 3 Year Average | 3 Year Average | Percent | 3 Year Average | 3 Year Average | Percent |
| | FY 2011-12 to | FY 2012-13 to | Change | FY 2011-12 to | FY 2011-12 to | Change |
| | FY 2013-14 | FY 2014-15 | | FY 2013-14 | FY 2013-14 | |
| WHOLESALE * | | | | | | |
| Creedmoor-Maha | 160 | 151 | -6.0% | 231 | 211 | -9.5% |
| High Valley W.S.C. | 175 | 175 | 0.0% | 251 | 244 | -2.9% |
| Marsha W.S.C. | 158 | 179 | 11.7% | 272 | 249 | -9.2% |
| Mid Tex Utilities | 0 | 236 | 100.0% | 0 | 330 | 100.0% |
| Morningside | 227 | 209 | -8.6% | 377 | 291 | -29.6% |
| Night Hawk W.S.C. | 150 | 165 | 9.1% | 250 | 230 | -8.7% |
| North Austin MUD #1 | 170 | 172 | 1.2% | 246 | 240 | -2.5% |
| Northtown MUD | 146 | 140 | -4.3% | 211 | 195 | -8.2% |
| Rivercrest MUD | 183 | 186 | 1.6% | 264 | 260 | -1.5% |
| Rollingwood, City of | 205 | 200 | -2.5% | 304 | 279 | -9.0% |
| Shady Hollow MUD | 215 | 235 | 8.5% | 308 | 328 | 6.1% |
| Sunset Valley, City of | 158 | 161 | 1.9% | 228 | 226 | -0.9% |
| Village of San Leanna | 138 | 132 | -4.5% | 200 | 184 | -8.7% |
| Travis Co. WCID #10 | 184 | 190 | 3.2% | 265 | 266 | 0.4% |
| Wells Branch MUD | 157 | 154 | -1.9% | 226 | 215 | -5.1% |
| Southwest Water | 179 | 162 | -10.5% | 261 | 226 | -15.5% |
| System Average | 158 | 166 | 4.8% | 228 | 232 | 1.7% |

*City of Manor was excluded from this table

Table 67
Austin Water Utility
Water Cost of Service Model - Base/Extra-Capacity Method
Percentage of Accounts by Customer Class

| Customer Class | Number of Accounts | Percent of Total |
|-------------------------|-----------------------|------------------|
| Residential | 184,490 | 81.37% |
| Multi-Family | 5,954 | 2.63% |
| Commercial | 17,860 | 7.88% |
| Residential CAP | 18,344 | 8.09% |
| Creedmore-Maha | 3 | 0.00% |
| High Valley | 1 | 0.00% |
| Manor, City of | 1 | 0.00% |
| Mid Tex Utilities | 1 | 0.00% |
| Marsha Water | 1 | 0.00% |
| Morningside | 1 | 0.00% |
| Nighthawk | 1 | 0.00% |
| North Austin MUD | 7 | 0.00% |
| Northtown MUD | 7 | 0.00% |
| Rivercrest | 2 | 0.00% |
| Rollingwood | 3 | 0.00% |
| Shady Hollow | 2 | 0.00% |
| Sunset Valley MUD | 7 | 0.00% |
| Village of San Leanna | 1 | 0.00% |
| Water District 10 | 4 | 0.00% |
| Wells Branch MUD | 7 | 0.00% |
| Southwest Water | 1 | 0.00% |
| Spansion | 2 | 0.00% |
| NXP - Ed Bluestein Blvd | 1 | 0.00% |
| NXP - W William Cannon | 1 | 0.00% |
| Samsung | 3 | 0.00% |
| Novati | 1 | 0.00% |
| University of Texas | 19 | 0.01% |
| Total | 226,725 | 100.00% |

Table 68
Austin Water Utility
Water Cost of Service Model - Base/Extra-Capacity Method
Percentage of Equivalent Meters by Customer Class

| Customer Class | Number of Equivalent Meters | Percent of Total |
|-------------------------|--------------------------------|------------------|
| Residential | 202,141 | 56.79% |
| Multi-Family | 44,111 | 12.39% |
| Commercial | 84,114 | 23.63% |
| Residential CAP | 20,099 | 5.65% |
| Creedmore-Maha | 41 | 0.01% |
| High Valley | 8 | 0.00% |
| Manor, City of | 16 | 0.00% |
| Mid Tex Utilities | 80 | 0.02% |
| Marsha Water | 8 | 0.00% |
| Morningside | 8 | 0.00% |
| Nighthawk | 16 | 0.00% |
| North Austin MUD | 740 | 0.21% |
| Northtown MUD | 700 | 0.20% |
| Rivercrest | 230 | 0.06% |
| Rollingwood | 150 | 0.04% |
| Shady Hollow | 100 | 0.03% |
| Sunset Valley MUD | 446 | 0.13% |
| Village of San Leanna | 16 | 0.00% |
| Water District 10 | 385 | 0.11% |
| Wells Branch MUD | 405 | 0.11% |
| Southwest Water | 50 | 0.01% |
| Spansion | 195 | 0.05% |
| NXP - Ed Bluestein Blvd | 80 | 0.02% |
| NXP - W William Cannon | 80 | 0.02% |
| Samsung | 345 | 0.10% |
| Novati | 115 | 0.03% |
| University of Texas | 1,283 | 0.36% |
| Total | 355,961 | 100.00% |

Table 69
Austin Water Utility
Water Cost of Service Model - Base/Extra-Capacity Method
Fire by Customer Class

| Customer Class | Fire Allocation | |
|-------------------------|--------------------|------------------|
| | Basis - Equivalent | Percent of Total |
| | Fire Services | |
| Residential | 211,766.03 | 36.12% |
| Multi-Family | 162,078.11 | 27.64% |
| Commercial | 176,242.15 | 30.06% |
| Residential CAP | 21,056.05 | 3.59% |
| Creedmore-Maha | 0.00 | 0.00% |
| High Valley | 0.00 | 0.00% |
| Manor, City of | 0.00 | 0.00% |
| Mid Tex Utilities | 0.00 | 0.00% |
| Marsha Water | 0.00 | 0.00% |
| Morningside | 0.00 | 0.00% |
| Nighthawk | 0.00 | 0.00% |
| North Austin MUD | 0.00 | 0.00% |
| Northtown MUD | 0.00 | 0.00% |
| Rivercrest | 0.00 | 0.00% |
| Rollingwood | 0.00 | 0.00% |
| Shady Hollow | 0.00 | 0.00% |
| Sunset Valley MUD | 0.00 | 0.00% |
| Village of San Leanna | 0.00 | 0.00% |
| Water District 10 | 0.00 | 0.00% |
| Wells Branch MUD | 0.00 | 0.00% |
| Southwest Water | 0.00 | 0.00% |
| Spansion | 1,700.00 | 0.29% |
| NXP - Ed Bluestein Blvd | 800.00 | 0.14% |
| NXP - W William Cannon | 800.00 | 0.14% |
| Samsung | 2,700.00 | 0.46% |
| Novati | 900.00 | 0.15% |
| University of Texas | 8,301.84 | 1.42% |
| Total | 586,344.18 | 100.00% |