



# Austin Water Utility

## Joint Subcommittee on Financial Plan

February 1, 2012

# Presentation Outline

- Fixed Charges
- Fixed Revenue Goals
- Volatility and Volumetric Rates

# Fixed Charges

# Committee Input Summary

## Fixed Charges

- Current fixed fee components (\$7.10 for 5/8") will remain the same
- \$17 million collected from revenue stability fee would be transformed into a new fixed fee component
- Residential would have a tiered fee based on current month water usage
- Number of tiers for residential fee based on number of rate blocks
- Non-residential customer classes of multifamily and commercial would have a meter based fee
- Non-residential customer classes of large volume and wholesale would have a set fee based on fixed revenue goal

# Fixed Charges – Remaining Input

- Tiered Fees
  - Top 3 tiers the same to reduce volatility
  - Each of 5 tiers have different rates
  - Small or large spread between tiers 1 and 5

# Tiered Fees

- Tiers based on number of rate blocks
  - Top 3 tiers the same fee amount
    - Reduces volatility by not reducing the amount collected when customers reduce bill from block 5 to 4
    - Allows for larger spread between tiers 1 and 2 and 3 to 5
  - 5 tiers with different fees for each tier
    - Increases volatility due to reduction in revenue when customers reduce volume from block 5 to 4
    - Larger spread between blocks further increases the revenue volatility

# Questions and Discussion?

# Fixed Revenue Goals



## Decision Points - Input

- Basis for fixed revenue goal?
  - Percent of total revenue
  - Percent of fixed costs
  - Specific dollar amount or costs to be recovered
- Goal for each customer class?
  - Consistent for all classes
  - Different by class based on volatility of class rates and revenue

## Decision Points - Input

- Transition to meet goal?
  - Implement as soon as possible
  - Longer transition for larger change
  - 3-5 years maximum

# Basis for Fixed Revenue Goals

- Percent of total revenue
  - Fixed revenue goal based on specific percent of total revenue
  - Fixed revenue adjusts as total revenue increases
  - Example – 20% of total revenue
- Percent of fixed costs or specific costs
  - Specific percent of total fixed costs or specific component of costs
  - Examples – 20% of total fixed costs or 20% of debt service costs
- Set dollar amount - \$50 million in fixed costs
  - Would have to be changed over time as revenue increases

## Fixed Revenue Goals

- Based on Revenue Stability Fee meter size fixed revenue distribution
  - Approved fee revenue by class
  - Current revenue stability fee distribution
- Based on cost of service allocation
  - Total cost of service percentage by class
- Based on specific percentage of fixed revenue
  - Consistent percentage of fixed revenue for all classes
  - Each class has specific fixed revenue goal for that class

# Fixed Revenue Goal Alternatives Based on 2012 Fixed Revenue

	Fixed Revenue				
	2012 Revenue By Class	Minimum Charge Revenue \$	Current Revenue Stability Fee \$	Total Fixed Revenue \$	Total Fixed Revenue %
Residential	\$ 103.7	\$ 15.7	\$ 10.5	\$ 26.2	25.3%
Multifamily	\$ 42.8	\$ 3.2	\$ 2.5	\$ 5.7	13.3%
Commercial	\$ 63.0	\$ 3.9	\$ 4.0	\$ 7.9	12.5%
Large Volume	\$ 13.0	\$ 0.2	\$ 0.1	\$ 0.3	2.3%
Wholesale	\$ 11.8	\$ 0.1	\$ -	\$ 0.1	0.8%
<b>Total</b>	<b>\$ 234.3</b>	<b>\$ 23.1</b>	<b>\$ 17.1</b>	<b>\$ 40.2</b>	<b>17.2%</b>

# Fixed Revenue Goal Alternatives Based on Cost of Service by Class

	2012 Revenue By Class	Current Fixed Revenue \$	Current Fixed Revenue %	Possible COS Fixed Revenue Goal %	Alternative #2 Fixed Revenue at COS Goal Levels	
					Fixed Revenue	% of Total
Residential	\$ 103.7	\$ 26.2	25.3%	22.6%	\$ 23.4	58.2%
Multifamily	\$ 42.8	\$ 5.7	13.3%	14.7%	\$ 6.3	15.7%
Commercial	\$ 63.0	\$ 7.9	12.5%	13.5%	\$ 8.5	21.1%
Large Volume	\$ 13.0	\$ 0.3	2.3%	8.5%	\$ 1.1	2.7%
Wholesale	\$ 11.8	\$ 0.1	0.8%	7.6%	\$ 0.9	2.2%
<b>Total</b>	<b>\$ 234.3</b>	<b>\$ 40.2</b>	<b>17.2%</b>	<b>17.2%</b>	<b>\$ 40.2</b>	<b>17.2%</b>

# Fixed Revenue Goal Alternatives Based on Percent of Total Revenue

	2012 Revenue By Class	Current Fixed Revenue \$	Current Fixed Revenue %	Possible Fixed Revenue Goal %	Alternative #3 Fixed Revenue at Goal Levels	
					Fixed Revenue	% of Total
Residential	\$ 103.7	\$ 26.2	25.3%	17.2%	\$ 17.8	44.3%
Multifamily	\$ 42.8	\$ 5.7	13.3%	17.2%	\$ 7.4	18.4%
Commercial	\$ 63.0	\$ 7.9	12.5%	17.2%	\$ 10.8	26.9%
Large Volume	\$ 13.0	\$ 0.3	2.3%	17.2%	\$ 2.2	5.5%
Wholesale	\$ 11.8	\$ 0.1	0.8%	17.2%	\$ 2.0	5.0%
<b>Total</b>	<b>\$ 234.3</b>	<b>\$ 40.2</b>	<b>17.2%</b>	<b>17.2%</b>	<b>\$ 40.2</b>	<b>17.2%</b>

# Fixed Revenue Goal Alternatives Based on Percent of Total Revenue

	2012 Revenue By Class	Current Fixed Revenue \$	Current Fixed Revenue %	Possible Fixed Revenue Goal %	Alternative #4 Fixed Revenue at Goal Levels	
					Approved fee	% of Total
Residential	\$ 103.7	\$ 26.2	25.3%	30.0%	\$ 31.1	59.1%
Multifamily	\$ 42.8	\$ 5.7	13.3%	15.0%	\$ 6.4	12.2%
Commercial	\$ 63.0	\$ 7.9	12.5%	20.0%	\$ 12.6	24.0%
Large Volume	\$ 13.0	\$ 0.3	2.3%	10.0%	\$ 1.3	2.5%
Wholesale	\$ 11.8	\$ 0.1	0.8%	10.0%	\$ 1.2	2.3%
<b>Total</b>	<b>\$ 234.3</b>	<b>\$ 40.2</b>	<b>17.2%</b>	<b>22.4%</b>	<b>\$ 52.6</b>	<b>100.1%</b>



# Fixed Revenue Goal Alternatives Based on Percent of Total Revenue

	2012 Revenue By Class	Current Fixed Revenue \$	Current Fixed Revenue %	Possible Fixed Revenue Goal %	Alternative #5 Fixed Revenue at Goal Levels	
					Approved fee	% of Total
Residential	\$ 103.7	\$ 26.2	25.3%	25.0%	\$ 25.9	44.2%
Multifamily	\$ 42.8	\$ 5.7	13.3%	25.0%	\$ 10.7	18.3%
Commercial	\$ 63.0	\$ 7.9	12.5%	25.0%	\$ 15.8	27.0%
Large Volume	\$ 13.0	\$ 0.3	2.3%	25.0%	\$ 3.3	5.6%
Wholesale	\$ 11.8	\$ 0.1	0.8%	25.0%	\$ 2.9	4.9%
<b>Total</b>	<b>\$ 234.3</b>	<b>\$ 40.2</b>	<b>17.2%</b>	<b>25.0%</b>	<b>\$ 58.6</b>	<b>100.0%</b>

## Transition to Fixed Revenue Goals

- Implementing all increases in fixed revenue in one year could have significant bill impacts
- Any increases in fixed revenue for any class could be transitioned over more than one year
- Each class could have different transition period

# Questions and Discussion?

# **New Topic: Volatility & Volumetric Rates**

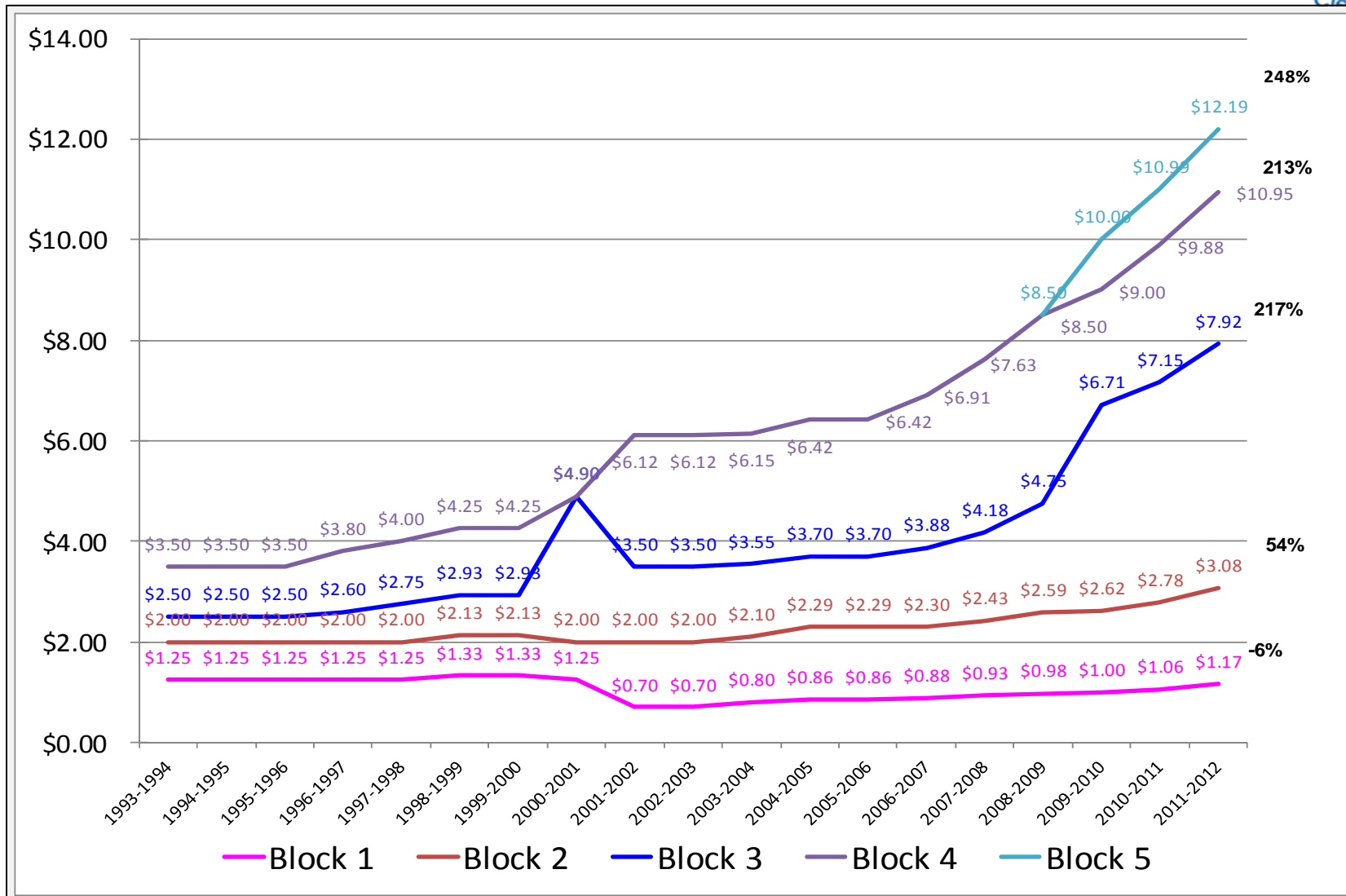
# Current Volumetric Rate Summary

- Residential
  - 5 rate blocks – inclining rates for higher usage
- Non-Residential Retail
  - Uniform rates – same rate for each 1,000 gallon unit
  - Seasonal rates - 10% higher in peak season
    - Peak season: July to October
    - off peak season: November to June
- Wholesale
  - Uniform rates – same rate for each 1,000 gallon unit

# What Creates Revenue Volatility?

- Rate Structure
  - Inclining block rates creates high volatility
  - Large variance between higher blocks increases volatility
  - Uniform rates provides less volatility
- Weather
  - Wet weather conditions, especially during the summer, significantly impact revenue volatility
- Economy
  - Economic conditions impacting growth in customers
- Water Conservation
  - Increased water conservation reduces water sales
  - Mandatory water restrictions during drought

# Historical Residential Block Rates



# Historical Residential Block Rates

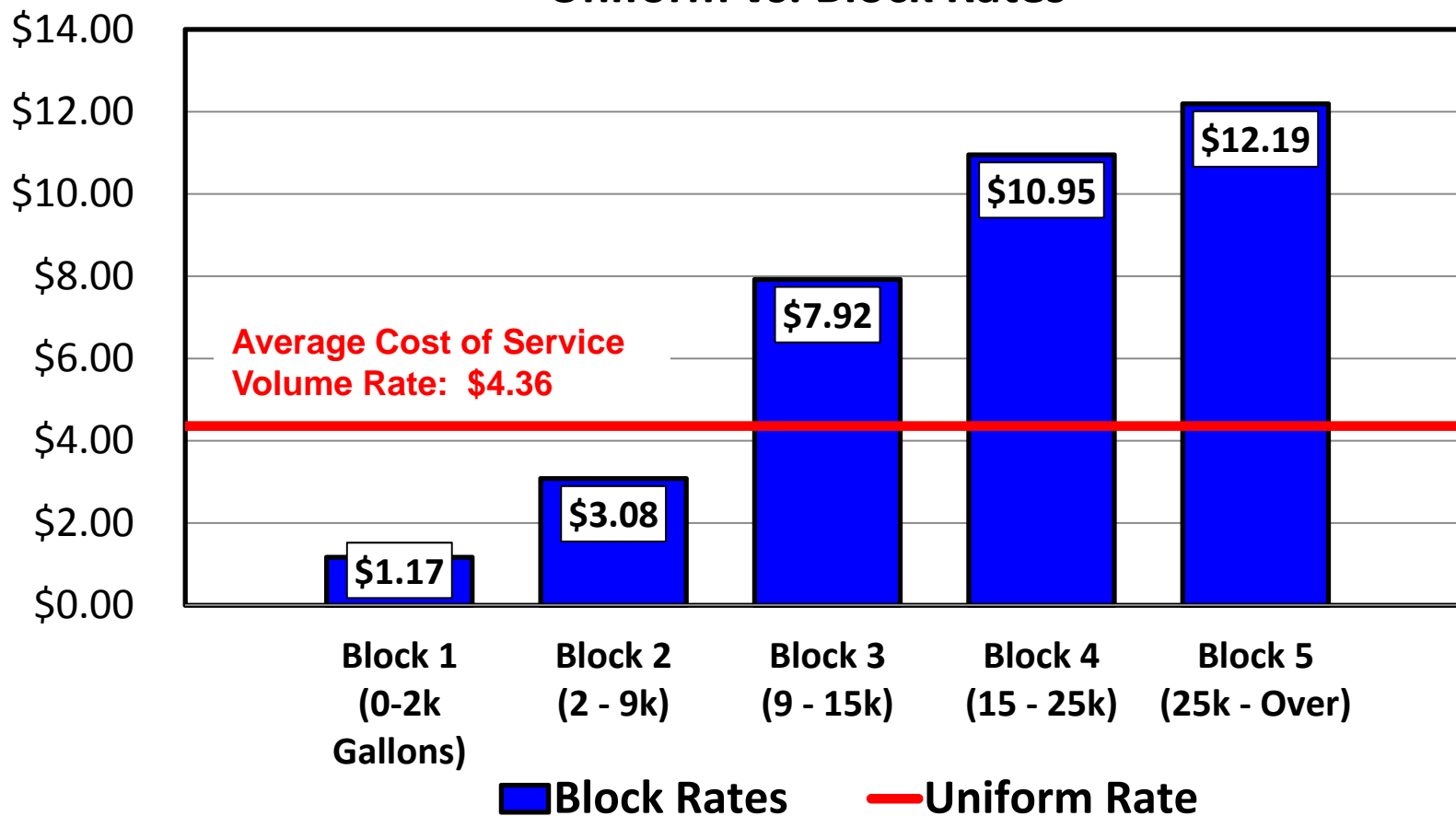
## Previous Graph Data

Fiscal Year	Block 1	Block 2	Block 3	Block 4	Block 5
1993-1994	1.25	2.00	2.50	3.50	
1994-1995	1.25	2.00	2.50	3.50	
1995-1996	1.25	2.00	2.50	3.50	
1996-1997	1.25	2.00	2.60	3.80	
1997-1998	1.25	2.00	2.75	4.00	
1998-1999	1.33	2.13	2.93	4.25	
1999-2000	1.33	2.13	2.93	4.25	
2000-2001	1.25	2.00	4.90		
2001-2002	0.70	2.00	3.50	6.12	
2002-2003	0.70	2.00	3.50	6.12	
2003-2004	0.80	2.10	3.55	6.15	
2004-2005	0.86	2.29	3.70	6.42	
2005-2006	0.86	2.29	3.70	6.42	
2006-2007	0.88	2.30	3.88	6.91	
2007-2008	0.93	2.43	4.18	7.63	
2008-2009	0.98	2.59	4.75	8.50	8.50
2009-2010	1.00	2.62	6.71	9.00	10.00
2010-2011	1.06	2.78	7.15	9.88	10.99
2011-2012	1.17	3.08	7.92	10.95	12.19
% Increase 1994 to 2012	-6.4%	54.0%	216.8%	212.9%	248.3%

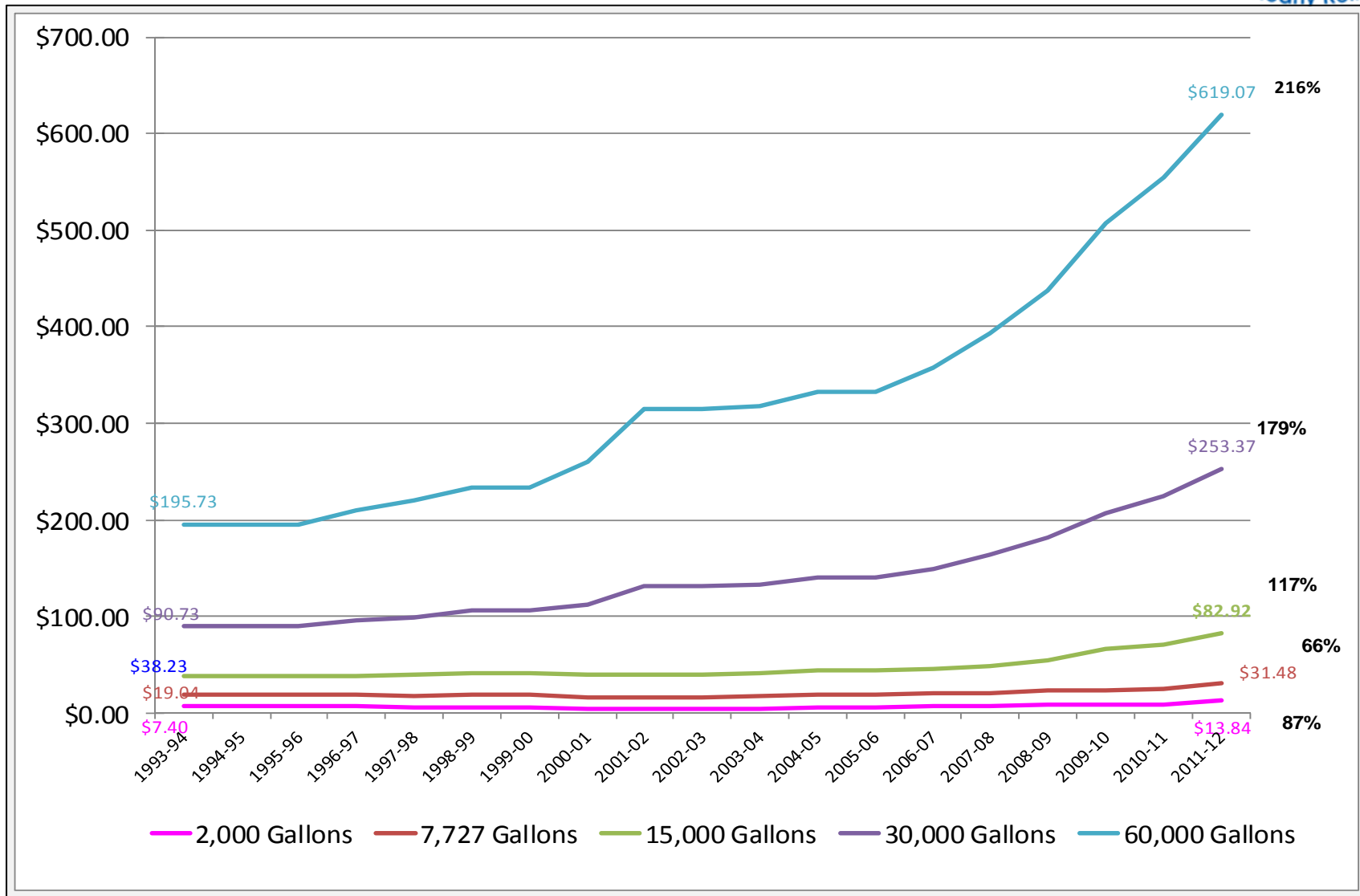


# Approved Residential Rate Design

Residential Volume Rate Per 1,000 Gallons:  
Uniform vs. Block Rates



# Historical Average Residential Bills



# Historical Average Bill

## Previous Graph Data

Fiscal Year	2,000 Gallons	7,727 Gallons	15,000 Gallons	30,000 Gallons	60,000 Gallons
1993-1994	7.40	19.04	38.23	90.73	195.73
1994-1995	7.40	19.04	38.23	90.73	195.73
1995-1996	7.40	19.04	38.23	90.73	195.73
1996-1997	6.90	18.72	38.83	95.83	209.83
1997-1998	6.40	18.47	39.73	99.73	219.73
1998-1999	6.56	19.42	42.05	105.80	233.30
1999-2000	6.56	19.42	42.05	105.80	233.30
2000-2001	4.73	16.18	39.43	112.93	259.93
2001-2002	4.72	16.17	39.72	131.52	315.12
2002-2003	4.72	16.17	39.72	131.52	315.12
2003-2004	5.10	17.13	41.10	133.35	317.85
2004-2005	5.72	18.83	43.95	140.25	332.85
2005-2006	6.07	19.18	44.30	140.60	333.20
2006-2007	7.01	20.18	46.39	150.04	357.34
2007-2008	7.21	21.13	49.30	163.75	392.65
2008-2009	8.21	23.04	54.84	182.34	437.34
2009-2010	8.70	23.70	67.30	207.30	507.30
2010-2011	9.22	25.14	71.58	225.33	555.03
2011-2012	13.84	31.48	82.92	253.37	619.07
% Increase 1994 to 2012	87.0%	65.3%	116.9%	179.3%	216.3%

# Residential Water Bill Comparison

The following 2 graphs show residential water bills for various cities:

Graph 1: bills from 0 gallons to 10,000 gallons

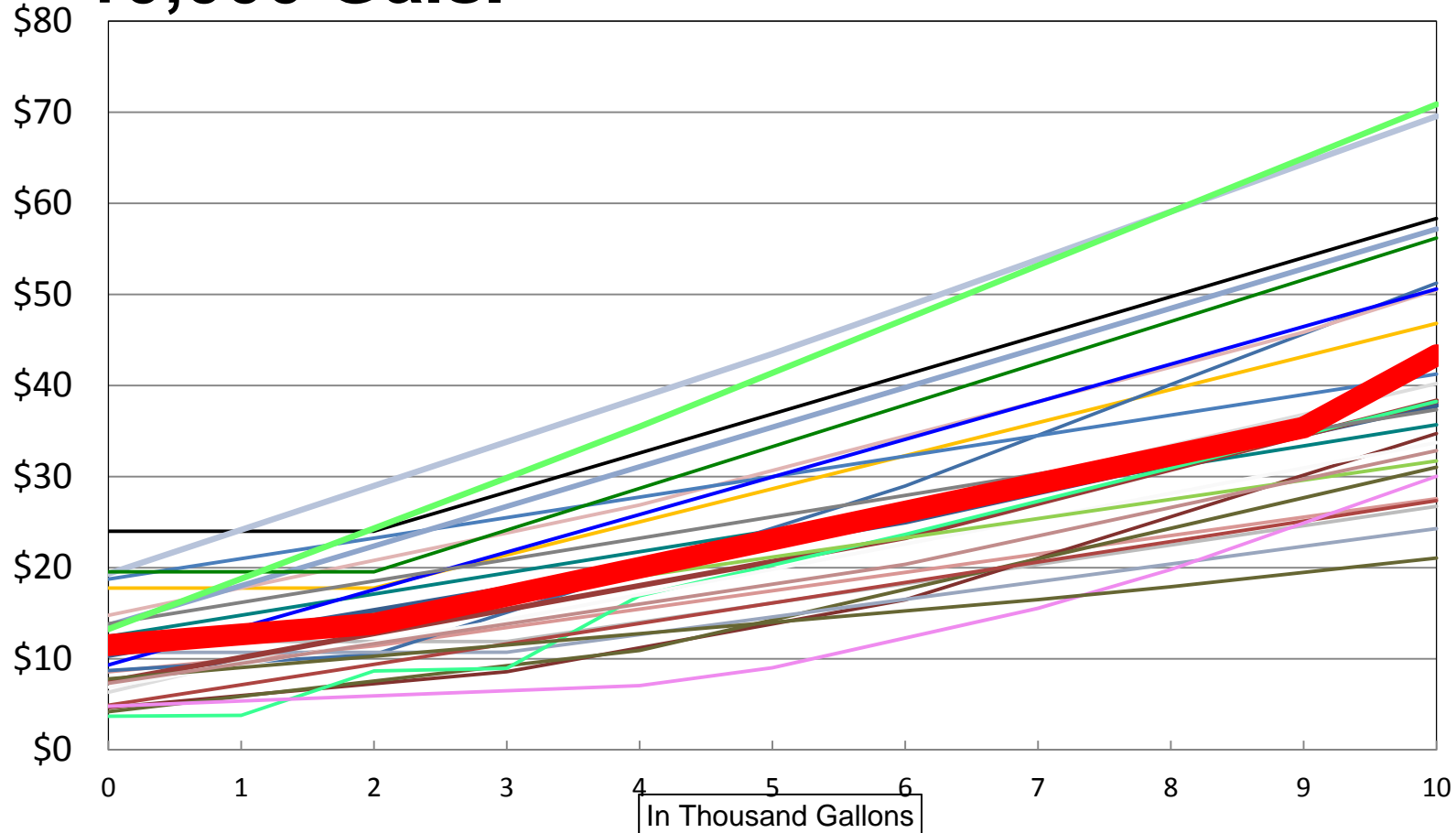
- AWU rates show below average bills compared to other cities from 0 to 10,000 gallons

Graph 2: bills from 10,000 gallons to 60,000 gallons

- After about 25,000 gallons, AWU bills are higher than all other cities shown

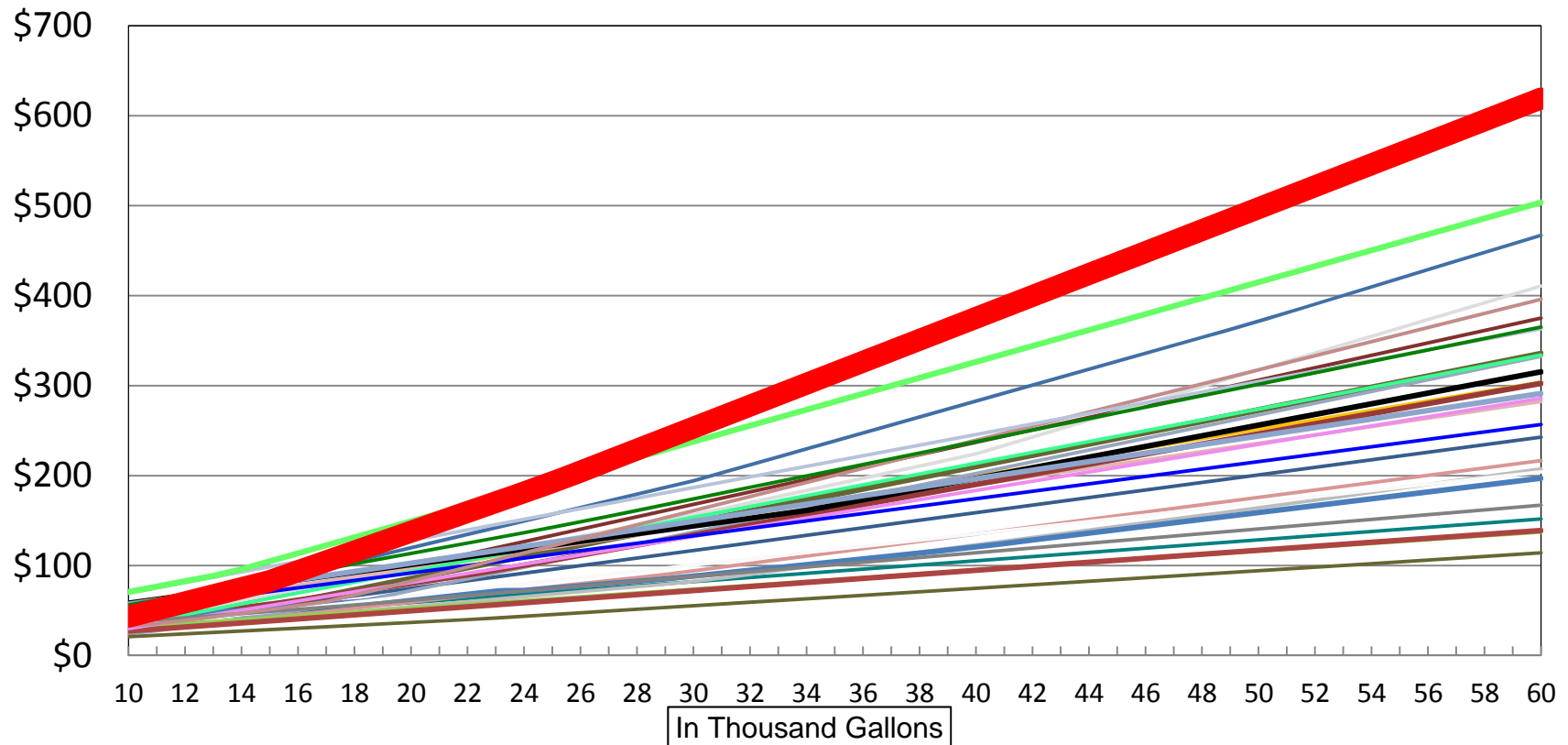
# Residential Water Bills Comparison

## 0 – 10,000 Gals.



- Abilene, TX
- Albuquerque, NM
- Amarillo, TX
- Arlington, TX
- Cedar Park, TX
- Charlotte, NC
- Corpus Christi, TX
- Dallas, TX
- Denver, CO
- East Bay MUD/Oakland
- El Paso, TX
- Fort Worth, TX
- Georgetown, TX
- Houston, TX
- Louisville, KY
- Lubbock, TX
- Memphis, TN
- Milwaukee, WI
- Portland, OR
- Round Rock, TX
- Pflugerville, TX
- Phoenix, AZ
- San Antonio, TX
- San Diego, CA
- San Marcos, TX
- Salt Lake City, UT
- Seattle, WA
- Austin, TX

# Residential Water Bills Comparison 10,000 – 60,000 Gals.



- |                |                      |                    |                 |
|----------------|----------------------|--------------------|-----------------|
| Abilene, TX    | Albuquerque, NM      | Amarillo, TX       | Arlington, TX   |
| Cedar Park, TX | Charlotte, NC        | Corpus Christi, TX | Dallas, TX      |
| Denver, CO     | East Bay MUD/Oakland | El Paso, TX        | Fort Worth, TX  |
| Georgetown, TX | Houston, TX          | Louisville, KY     | Lubbock, TX     |
| Memphis, TN    | Milwaukee, WI        | Pflugerville, TX   | Phoenix, AZ     |
| Portland, OR   | Round Rock, TX       | Salt Lake City, UT | San Antonio, TX |
| San Diego, CA  | San Marcos, TX       | Seattle, WA        | Austin, TX      |

# Comparison of Austin Water Rates with Other Cities' Rates

# Revenue Volatility – Rate Comparisons

## Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

## San Antonio, TX Residential Rates

	<u>Off-Peak</u>	<u>Peak</u>
Minimum Charge	\$ 7.31	\$ 7.31
0 – 5,985 Gals.	2.17	2.17
5,986 – 12,717 Gals.	3.07	3.19
12,718 – 17,205 Gals.	4.26	4.54
17,206 – over Gals.	7.32	8.53



# Revenue Volatility – Rate Comparisons

## Austin Water Residential Rates

<b>Minimum Charge</b>	<b>\$ 11.50</b>
<b>0 – 2,000 Gals.</b>	<b>1.17</b>
<b>2,001 – 9,000 Gals.</b>	<b>3.08</b>
<b>9,001 – 15,000 Gals.</b>	<b>7.92</b>
<b>15,001 – 25,000 Gals.</b>	<b>10.95</b>
<b>25,001 – over Gals.</b>	<b>12.19</b>

## Dallas, TX Residential Rates

<b>Minimum Charge</b>	<b>\$ 4.20</b>
<b>0 – 4,000 Gals.</b>	<b>1.68</b>
<b>4,001 – 10,000 Gals.</b>	<b>3.35</b>
<b>10,001 – 15,000 Gals.</b>	<b>4.63</b>
<b>15,001 – over Gals.</b>	<b>6.25</b>

# Revenue Volatility – Rate Comparisons

## Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

## Fort Worth, TX Residential Rates

Minimum Charge	\$ 7.50
0 – 5,984 Gals.	2.63
5,985 – 14,959 Gals.	3.74
14,960 – 22,438 Gals.	4.65
22,439 – over Gals.	5.61

# Revenue Volatility – Rate Comparisons

<b>Austin Water Residential Rates</b>	
Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

<b>Houston, TX Residential Rates</b>	
Minimum Charge	\$ 3.70
0 - 1,000 Flat Bill	3.80
2,000 Flat Bill	8.66
3,000 Flat Bill	8.95
4,000 Flat Bill	16.93
5,000 Flat Bill	20.29
6,000 Flat Bill	23.65
6,001 – 12,000 add per Kgal	3.65
Over 12,000 add per Kgal	6.01

Houston has an upcoming rate increase in April. Rates not posted yet.

## Revenue Volatility – Rate Comparisons

### Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

### Arlington, TX Residential Rates

Minimum Charge	\$8.57
0 – 2,000 Gals.	1.42
2,001 – 10,000 Gals.	2.02
10,001 – 15,000 Gals.	2.98
15,001 – 29,000 Gals.	3.41
29,001 – over Gals.	4.08

## Revenue Volatility – Rate Comparisons

### Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

### San Marcos, TX Residential Rates

Minimum Charge	\$19.55
0 – 2,000 Gals.*	0.00
2,001 – 10,000 Gals.	4.58
10,001 – 25,000 Gals.	5.74
25,001 – over Gals.	6.37

\* First 2,000 Gallons are included in customer charge

# Revenue Volatility – Rate Comparisons

## Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

## Phoenix, AZ Residential Rates

Minimum Charge	\$ 4.36
Oct – May 4,487 Kgal in min chg	
Jun– Sep 7,479 Kgal in min chg	
All Volume not included:	
Dec – Mar	\$ 4.21
Apr - May & Oct - Nov	4.49
Jun – Sep	6.16

# Revenue Volatility – Rate Comparisons

## Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

## Portland, OR Residential Rates

Minimum Charge	\$ 9.33
All Volume	4.13

\* Historically had inclining block structure as aggressive as Austin's

# Revenue Volatility – Rate Comparisons

## Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

## Seattle, WA Residential Rates

	<u>Off-Peak</u>	<u>Peak</u>
Minimum Charge	\$ 13.25	\$13.25
0 – 3,740 Gals.	5.40	5.80
3,741 – 9,723 Gals.	5.40	6.89
9,724 – over Gals.	5.40	15.78

Off Peak = Mid September to Mid May  
Peak Season = Mid May to Mid September



## Revenue Volatility – Rate Comparisons

### Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

### San Diego, CA Residential Rates

Minimum Charge	\$ 19.33
0 – 10,500 Gals.	4.83
10,501 – 21,000 Gals.	5.24
21,001 – over Gals.	5.88

## Revenue Volatility – Rate Comparisons

### Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

### Atlanta, GA Residential Rates

Minimum Charge	\$ 6.56
0 – 4,000 Gals.	3.65
4,001 – 8,000 Gals.	7.34
8,001 – over Gals.	8.44

## Revenue Volatility – Rate Comparisons

### Austin Water Residential Rates

Minimum Charge	\$ 11.50
0 – 2,000 Gals.	1.17
2,001 – 9,000 Gals.	3.08
9,001 – 15,000 Gals.	7.92
15,001 – 25,000 Gals.	10.95
25,001 – over Gals.	12.19

### Denver Water Residential Rates

Minimum Charge	\$6.33
0 – 11,000 Gals.	2.54
11,001 – 30,000 Gals.	5.09
30,001 – 40,000 Gals.	7.63
40,001 – over Gals.	10.17

# Questions & Discussion?

# Decision Points

## Volatility & Volumetric Rates

# Decision Points

## Volatility & Volumetric Rates

- Residential rate blocks
  - Differentials between blocks
  - Amount of subsidy of blocks 1 and 2
  - Costs funded from only blocks 1-4
- Non-residential rates
  - Current uniform seasonal rates
  - Excess use or block rates for non-residential
- Transition to meet goals
  - Number of years to make changes to rates

# Decision Points Volatility & Volumetric Rates

- Transition to meet goals
  - Number of years to make changes to rates

# Questions & Discussion?