

**CITY COUNCIL CONFERENCE**

**MUNICIPAL BUILDING CONFERENCE ROOM  
201 WEST GRAY, NORMAN, OK**

**SEPTEMBER 23, 2014**

**5:00 P.M.**

- 1. DISCUSSION REGARDING A POSSIBLE WATER RATE INCREASE.**

# 031 WATER FUND



September 2014

# WATER RATES

- 1995 Water Rate Increase
- 1999 Inverted rate block adopted for conservation. Effected about 25% of residential customers
- 2006 Increased water rates to current level

## 2006 Water Rate Increase

- ☑ Arsenic project – Replace 15 wells for source of supply
  - ☑ Mandate from EPA/ODEQ
- ☑ Three projects from the Water Distribution Model
  - ☑ Small part of 2003 Engineering Study recommendations
- ☑ Resurfacing elevated water storage tanks
- ☑ Urban Service Area Water Lines
- ☑ \$100,000 for five years – replacement of water lines with adverse soil conditions

## 2006 Water Rate Increase

- Water Treatment Plant Projects (Phase I)
  - Filter underdrains and media, emergency generator, new clarifier, lime slakers
- Taste and Odor
- Meter replacement program (Large commercial meters)
- ~~1.5~~ 2.5 miles of raw water line from Lake Thunderbird – increase volume for peak treatment capacity

# Water Treatment Plant Rehabilitation

Water Treatment Plant Loan

ARRA through OWRB

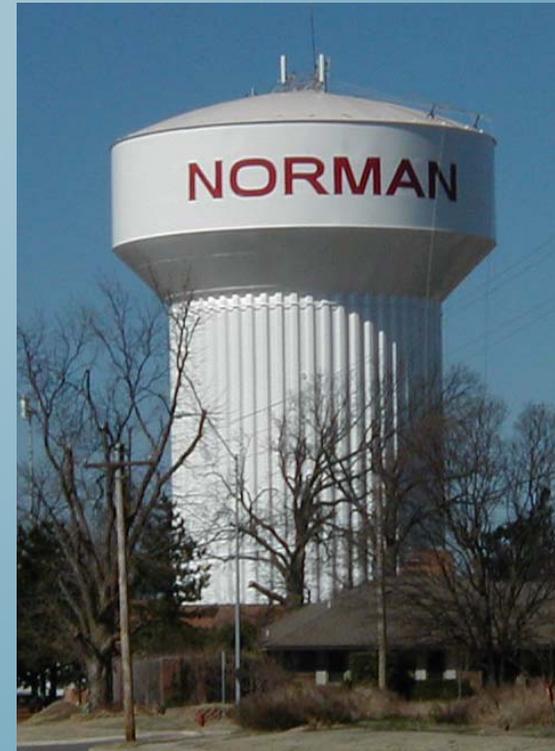
\$14 mil (\$2 mil grant)



# 48 Inch Raw Water Line – 2.5 miles



# Resurfacing Water Towers



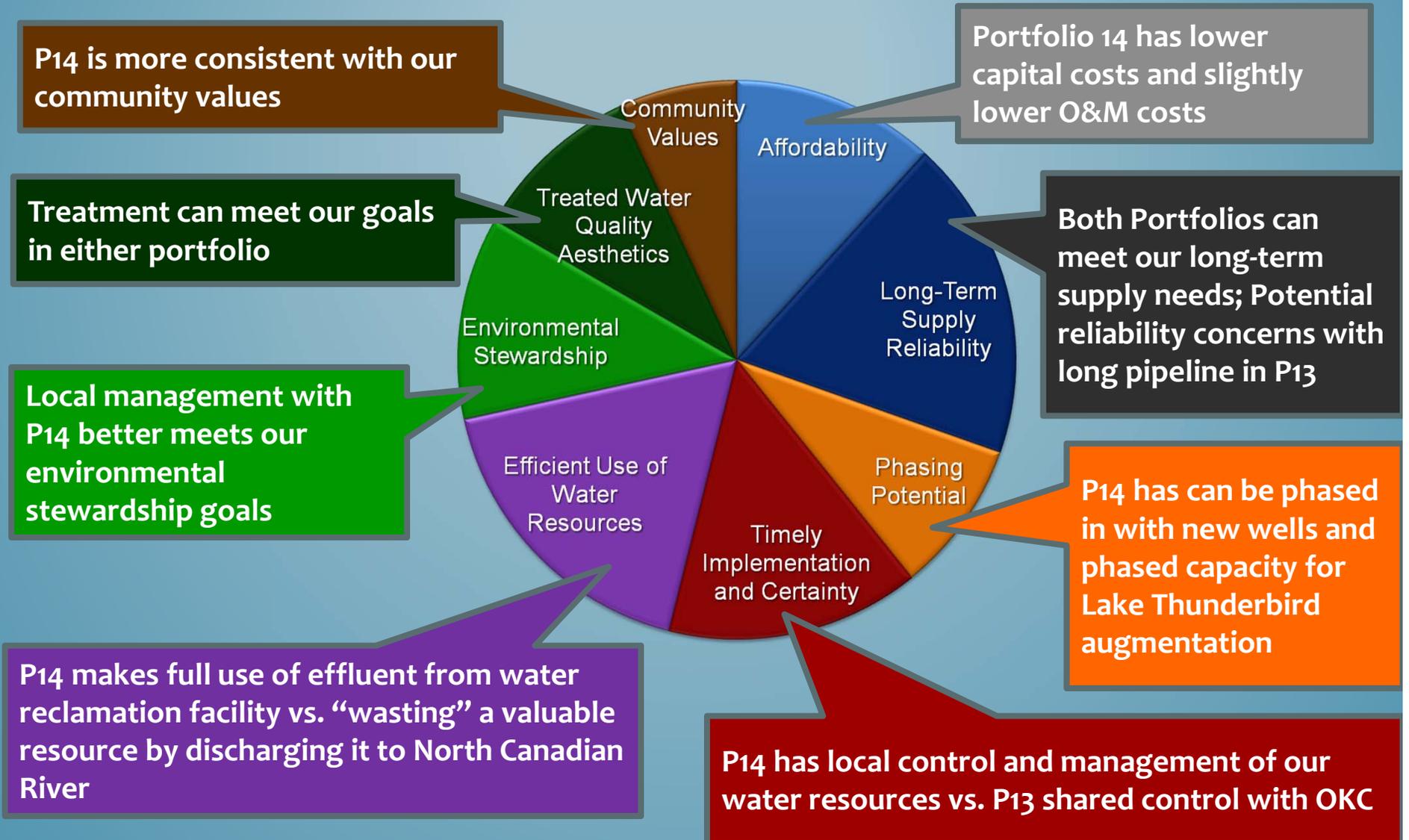
# Water Line Breaks



# Norman's 2060 Strategic Water Supply Plan

- “Addressing how Norman will meet its long term water needs is critical and urgent”
- “Today, Norman’s portfolio of local groundwater and surface water from Lake thunderbird is marginally capable of meeting annual demands and seasonal peak demands”

# AD-HOC COMMITTEE + PUBLIC FEEDBACK SUGGEST PORTFOLIO 14 MAY BE BEST FIT FOR NORMAN



# WATER TREATMENT CAPITAL ITEMS INCLUDED IN THE SWSP

\$ mil	Project	FYE 15	FYE 16	FYE 17	FYE 18	FYE 19
\$31 mil	WTP Phase 2	<u>Design</u>		<u>Construction</u>		
\$ 2 mil	New well piping changes to utilize inactive wells (4 existing wells – 1 MGD) *	<u>Design -</u>		<u>Build</u>		
\$12 mil	2 MGD New Well Field Expansion (8-10 new wells)	<u>Easement – Test - Construct</u>				
\$ 2 mil	New Ground Water Treatment Site *		Acquire			
\$85 mil	Ground Water Treatment Facility and well piping				Design - Construction	

\* Not included in City's current 5 year capital plan

# SUMMARY OF TOTAL PROJECT COSTS – PHASE II WATER TREATMENT PLANT UPGRADE

Element	Cost	Project Drivers			
		Regulatory	Enhanced Water Quality	Safety	Rehab/ Replacement
Low Lift Pumping	\$2.6 M	✓	✓		
Ozone Contactor w/ Diffusers	\$2.1 M	✓	✓		
Ozone Feed System & Building	\$12.3 M	✓	✓		
Biofiltration Upgrade	\$2.7 M		✓		
UV System	\$3.5 M	✓			
Residual Handling Improvements	\$1.2 M				✓
Chemical Feed Improvements	\$3.5 M			✓	✓
Rehab Pump Station	\$1.8 M			✓	✓
Maintenance/Storage Building	\$0.5 M				✓
Existing Building/Lighting Rehabilitation	\$0.8 M				✓
<b>TOTAL</b>	<b>\$31 M</b>	<b>\$5</b>	<b>\$18</b>	<b>\$3</b>	<b>\$5</b>
Percentage of Project	100%	16%	58%	10%	16%

# ADDITIONAL FUNDING FOR CAPITAL

## Capital

\$31 WTP Phase II – Reg.;Water Quality;Safety, etc.

\$ 2 Blending

\$12 New Wells

\$ 2 Purchase Land

\$ 3 Water Line Replacements

} Capacity

\$50 TOTAL CAPITAL

\$50 mil @ 4%, 20 yrs + reserve requirement = \$4.0 mil/yr

# WTP OPERATIONAL ITEMS

## New Annual Operational Expenses

\$ 500,000 WTP Phase II additional electrical power required for ozone treatment (FYE17)

\$ 1,000,000 Purchase 2 MGD (Million Gallons per Day) water from OKC for several years (FYE 16)

\$ 300,000 \$9.6 mil annual operational costs  
\_\_\_\_\_ adjusted by 3%

\$ 1,800,000 TOTAL ANNUAL

# ADDITIONAL ANNUAL FUNDING

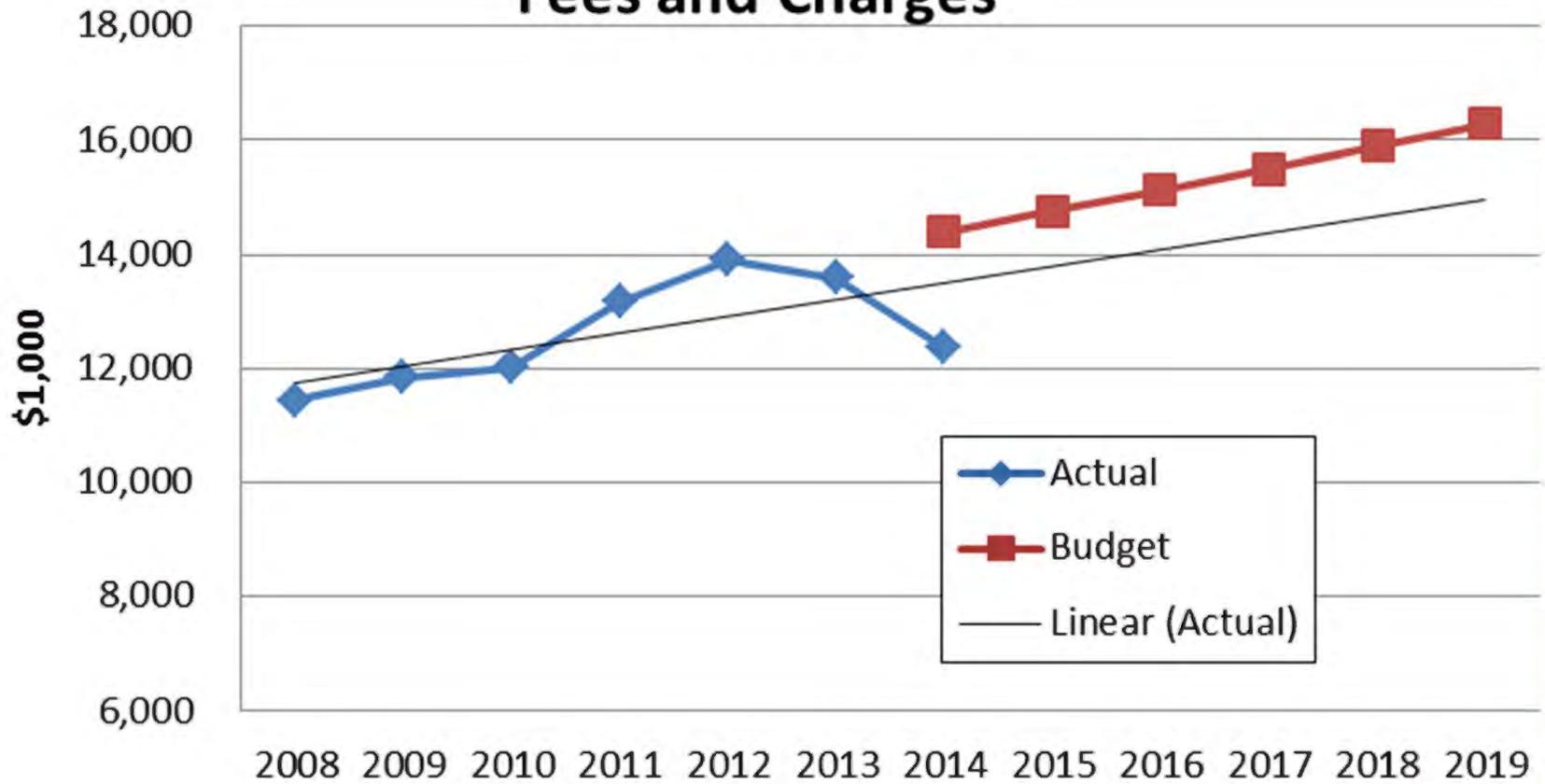
**\$4.0 million Capital**

**\$1.8 million Operational**

**\$ 5.8 million TOTAL per year**

031 Water Fund Debt				
		Lake		
	Arsenic Wells	Thunderbird	Phase I	
	Series 2006	1974 BOR	2011	
Year	3.875% - 5.00%	2.74%	3.28%	TOTAL
2013-2014	1,517,331	194,381	822,900	2,534,612
2014-2015	1,516,831	194,605	822,900	2,534,336
2015-2016	1,514,931	194,605	822,900	2,532,436
2016-2017	1,516,531	193,426	822,900	2,532,857
2017-2018	1,516,306		822,900	2,339,206
2018-2019	1,513,806		822,900	2,336,706
2019-2020	1,515,134		822,900	2,338,034
2020-2021	1,515,669		822,900	2,338,569
2021-2022	1,513,700		822,900	2,336,600
2022-2023	1,514,100		822,900	2,337,000
2023-2024	1,512,500		822,900	2,335,400
2024-2025	1,513,800		822,900	2,336,700
2025-2026	1,512,900		822,900	2,335,800
2026-2027	1,514,700		822,900	2,337,600
2027-2028			822,900	822,900
2028-2029			822,900	822,900
2029-2030			822,900	822,900
2030-2031			822,894	822,894

## Water Fund - Revenues Fees and Charges



## RESIDENTIAL RATES (PER MONTH)

	Present	Proposed
Base Fee	\$ 5.50	\$ 7.50
0 to 1,000	\$ 2.00	\$ 3.50
1,001 to 2,000	\$ 2.00	\$ 3.50
2,001 to 5,000	\$ 2.00	\$ 3.50
5,001 to 15,000	\$ 2.10	\$ 4.20
15,001 to 20,000	\$ 2.75	\$ 5.20
> 20,000	\$ 4.95	\$ 6.80

The Water Division offers utility rates at 75% of the normal rate for customers who qualify as low income households based on federal guidelines

# RESIDENTIAL RATES (PER MONTH)



Volume Consumed	Present Rates	Proposed Rates	Difference	Increase in Bill
0	\$ 5.50	\$ 7.50	\$ 2.00	36%
1,000	\$ 7.50	\$ 11.00	\$ 3.50	47%
2,000	\$ 9.50	\$ 14.50	\$ 5.00	53%
3,000	\$ 11.50	\$ 18.00	\$ 6.50	57%
4,000	\$ 13.50	\$ 21.50	\$ 8.00	59%
5,000	\$ 15.50	\$ 25.00	\$ 9.50	61%
6,000	\$ 17.60	\$ 29.20	\$ 11.60	66%
7,000	\$ 19.70	\$ 33.40	\$ 13.70	70%
8,000	\$ 21.80	\$ 37.60	\$ 15.80	72%
9,000	\$ 23.90	\$ 41.80	\$ 17.90	75%
10,000	\$ 26.00	\$ 46.00	\$ 20.00	77%
11,000	\$ 28.10	\$ 50.20	\$ 22.10	79%
12,000	\$ 30.20	\$ 54.40	\$ 24.20	80%
13,000	\$ 32.30	\$ 58.60	\$ 26.30	81%
14,000	\$ 34.40	\$ 62.80	\$ 28.40	83%
15,000	\$ 36.50	\$ 67.00	\$ 30.50	84%

58% of bills at 4,000gal/month or less

## Tiered (Conservation) Rates for Commercial Customers

AWC = Average Winter Consumption; billed water usage during Dec, Jan and Feb.

Volume usage up to AWC = \$3.80/1,000 gal  
Volume over AWC = \$4.20/1,000 gal

# COMMERCIAL RATES (PER MONTH)

Winter	Existing	Proposed
Base Fee	\$5.50	\$7.50
Consumption Per 1,000 gal.	\$2.10	\$3.80

Summer	Existing	Proposed
Base Fee	\$5.50	\$7.50
Consumption above AWC	\$2.10	\$4.20

# WINTER COMMERCIAL RATES (PER MONTH)

Volume Consumed	Present Rates	Proposed Rates	Difference	Increase in Bill
0	\$ 5.50	\$ 7.50	\$ 2.00	36%
1,000	\$ 7.60	\$ 11.30	\$ 3.70	49%
2,000	\$ 9.70	\$ 15.10	\$ 5.40	56%
3,000	\$ 11.80	\$ 18.90	\$ 7.10	60%
4,000	\$ 13.90	\$ 22.70	\$ 8.80	63%
5,000	\$ 16.00	\$ 26.50	\$ 10.50	66%
6,000	\$ 18.10	\$ 30.30	\$ 12.20	67%
7,000	\$ 20.20	\$ 34.10	\$ 13.90	69%
★ 8,000	\$ 22.30	\$ 37.90	\$ 15.60	70%
9,000	\$ 24.40	\$ 41.70	\$ 17.30	71%
10,000	\$ 26.50	\$ 45.50	\$ 19.00	72%
11,000	\$ 28.60	\$ 49.30	\$ 20.70	72%
12,000	\$ 30.70	\$ 53.10	\$ 22.40	73%
13,000	\$ 32.80	\$ 56.90	\$ 24.10	73%
14,000	\$ 34.90	\$ 60.70	\$ 25.80	74%
15,000	\$ 37.00	\$ 64.50	\$ 27.50	74%

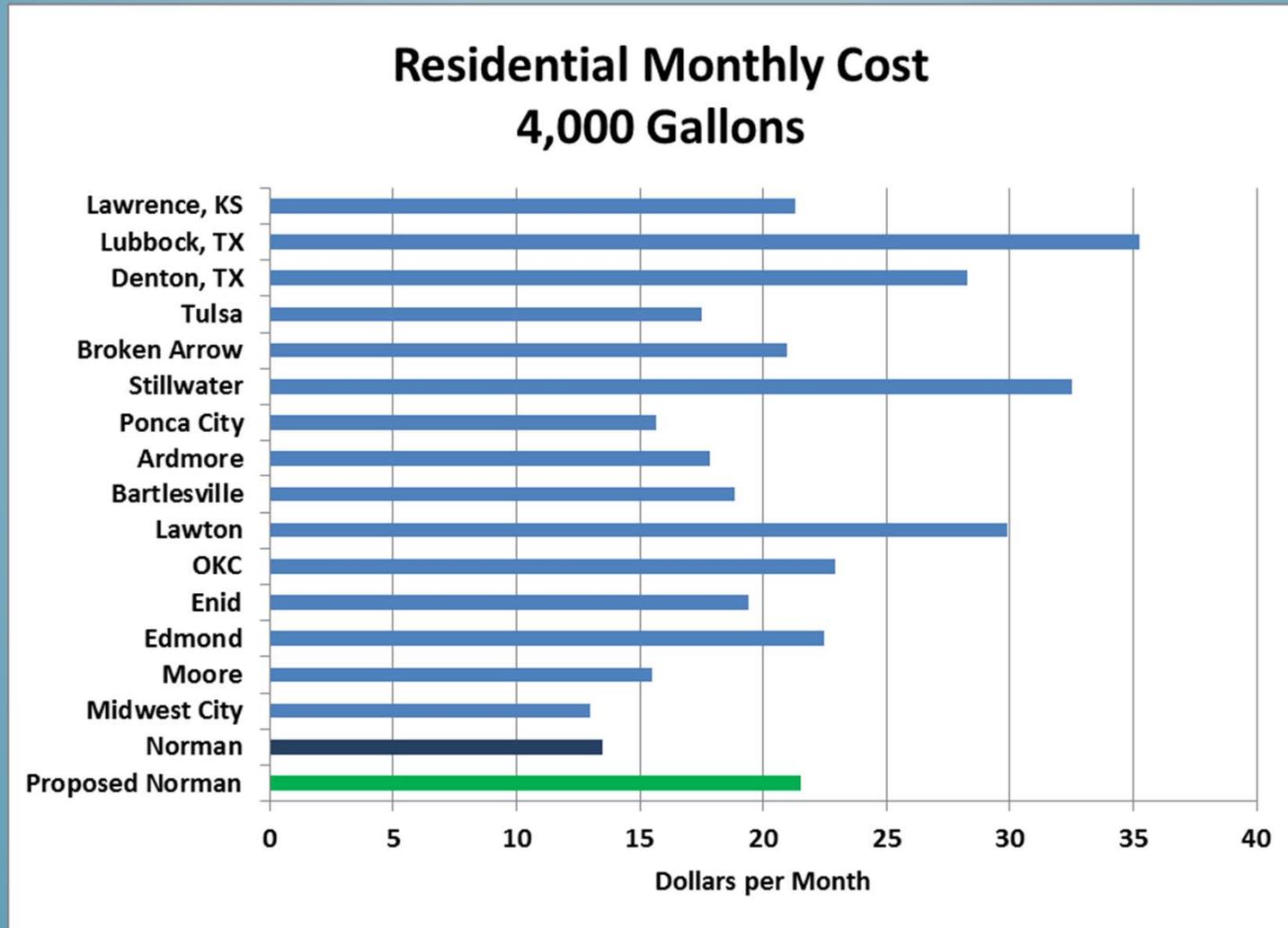
51% of Bills at 8,000 gal per month or less

# SUMMER COMMERCIAL RATES (PER MONTH)

Volume Consumed	Present Rates	Proposed Rates	Difference	Increase in Bill
0	\$ 5.50	\$ 7.50	\$ 2.00	36%
1,000	\$ 7.60	\$ 11.70	\$ 4.10	54%
2,000	\$ 9.70	\$ 15.90	\$ 6.20	64%
3,000	\$ 11.80	\$ 20.10	\$ 8.30	70%
4,000	\$ 13.90	\$ 24.30	\$ 10.40	75%
5,000	\$ 16.00	\$ 28.50	\$ 12.50	78%
6,000	\$ 18.10	\$ 32.70	\$ 14.60	81%
7,000	\$ 20.20	\$ 36.90	\$ 16.70	83%
8,000	\$ 22.30	\$ 41.10	\$ 18.80	84%
9,000	\$ 24.40	\$ 45.30	\$ 20.90	86%
10,000	\$ 26.50	\$ 49.50	\$ 23.00	87%
11,000	\$ 28.60	\$ 53.70	\$ 25.10	88%
12,000	\$ 30.70	\$ 57.90	\$ 27.20	89%
13,000	\$ 32.80	\$ 62.10	\$ 29.30	89%
14,000	\$ 34.90	\$ 66.30	\$ 31.40	90%
15,000	\$ 37.00	\$ 70.50	\$ 33.50	91%

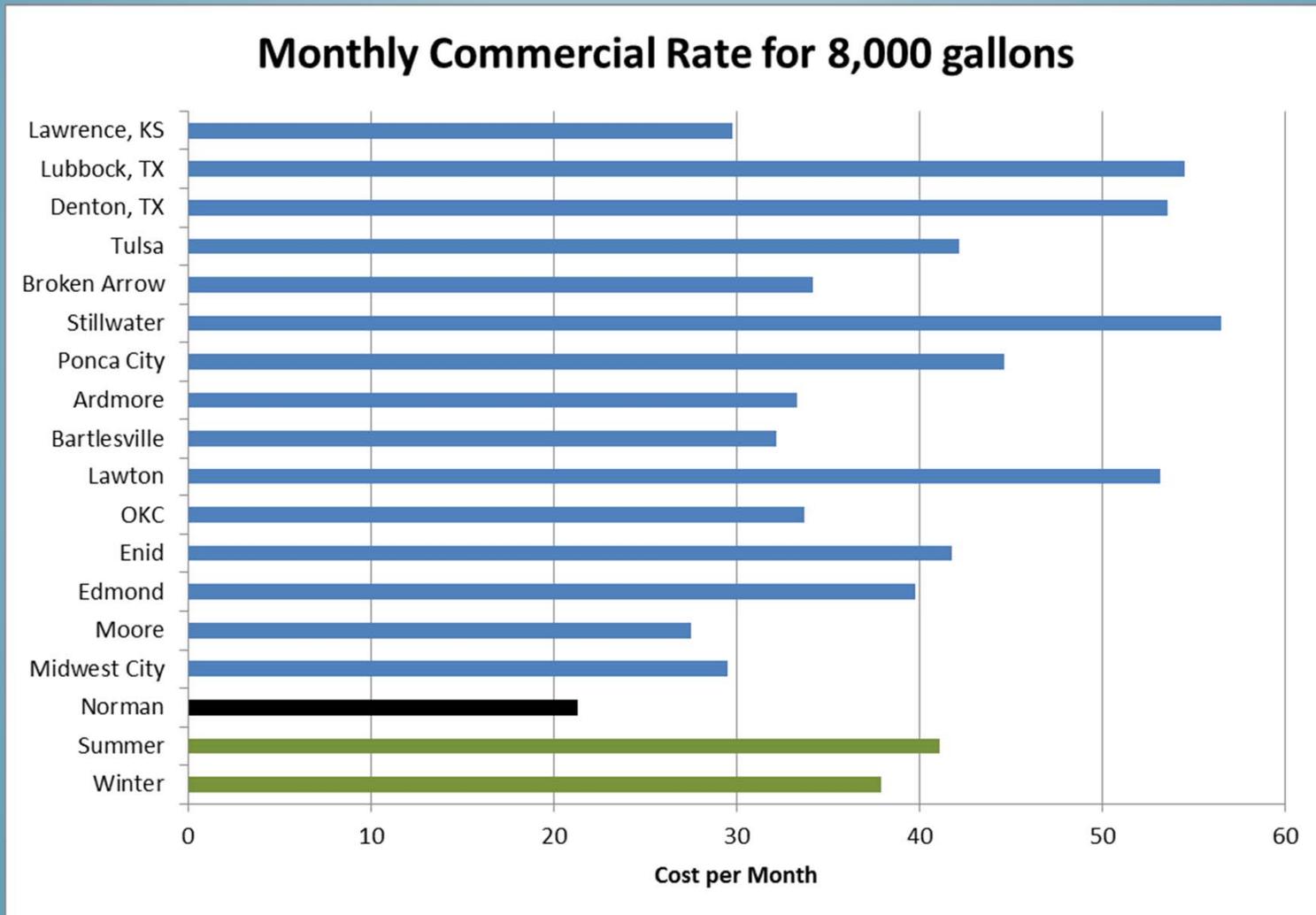
51% of Bills at 8,000 gal per month or less

# Residential Monthly Water Bill



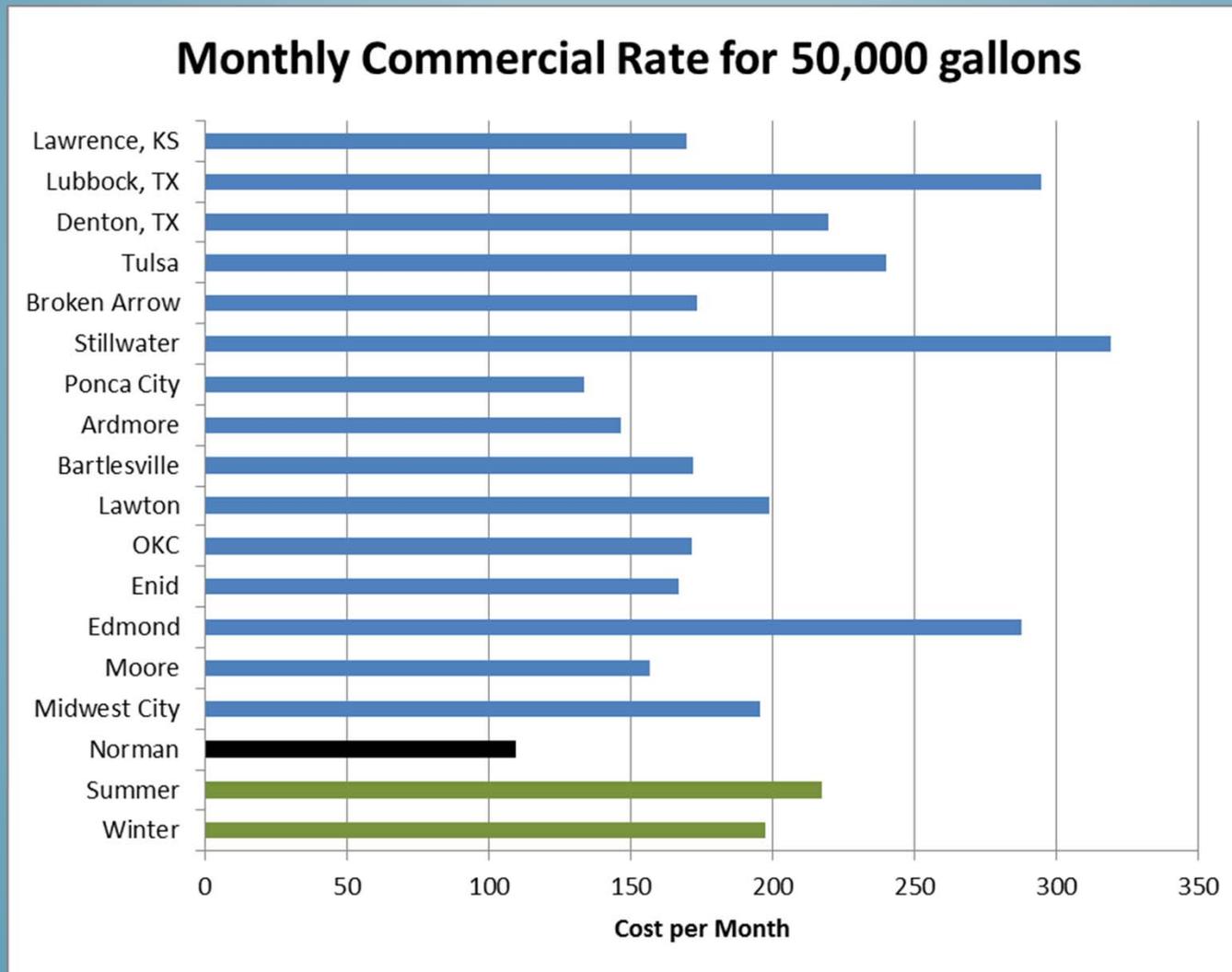
Data as of April 2014 (OKC data Oct 2014)

# Commercial Monthly Water Bill



Data as of April 2014 (OKC data Oct 2014)

# Commercial Monthly Water Bill



Data as of April 2014 (OKC data Oct 2014)

## Water Rate Analysis Additional Considerations

- **New Customer Connection Fee**  
This may also be called a System Development Charge (SDC), plant investment fee, etc. These fees are used to fund capital improvements associated with new facilities.

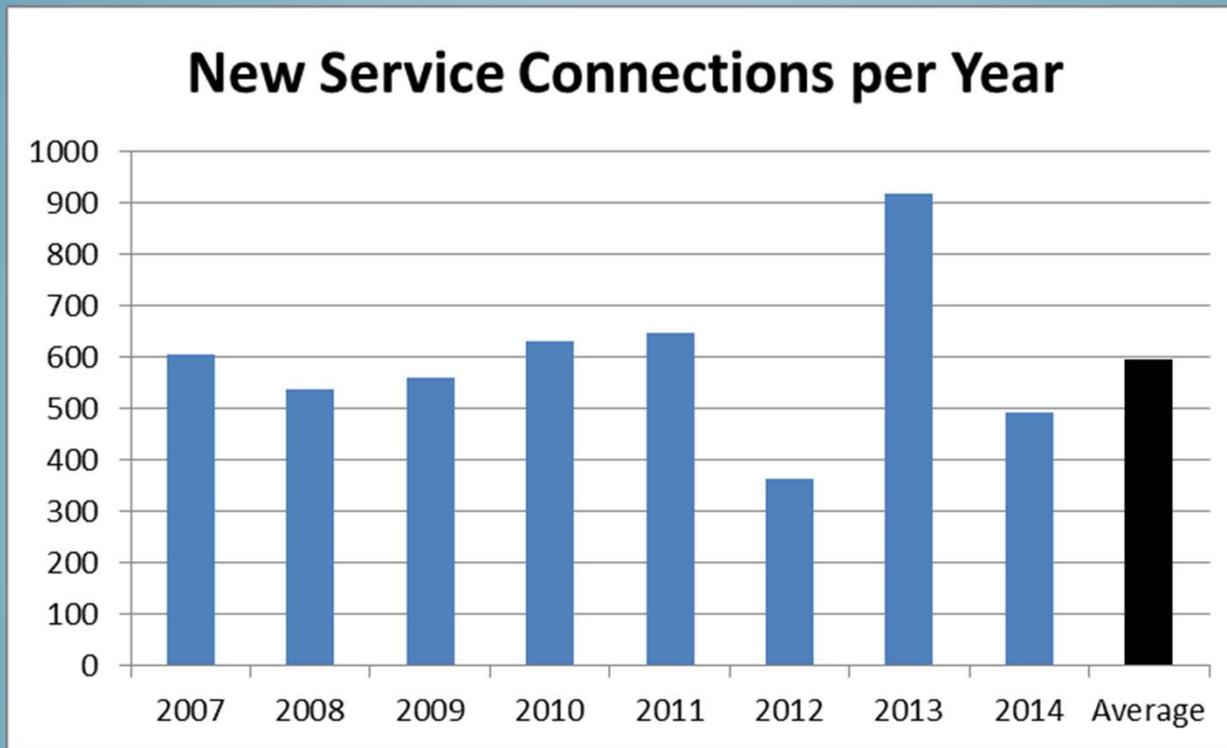
## New Customer Connection Fee

City	Meter Size	Meter Installation	Water Connection
Norman	5/8 or 3/4	\$250	\$575
Moore	3/4	\$225 - \$600	\$25
Midwest City	5/8	\$510	\$75
Edmond	5/8	\$542	\$1,106
OKC	3/4	\$425	\$100 *

\* OKC have plans to increase their Connection Fee to \$1,000 over the next three years

## Connection Charge Development

- Norman completed 19 operating wells from 2005 to 2012, with the average well cost at \$768,000
- Each wells' individual characteristics vary from depth of well, gallon output, water quality and distance to distribution system.
- An average household connection fee would be in the range of \$1,300



Existing: \$575 for 3/4" water service

Propose a \$250 per year increase for 3 years

2015 \$ 825

2016 \$1,075

2017 \$1,300

# Water Rate Adjustment Timing

## Council Consideration

First Reading – Oct. 14<sup>th</sup>

Second Reading - Oct. 28<sup>th</sup>

Special Election - January 13<sup>th</sup>

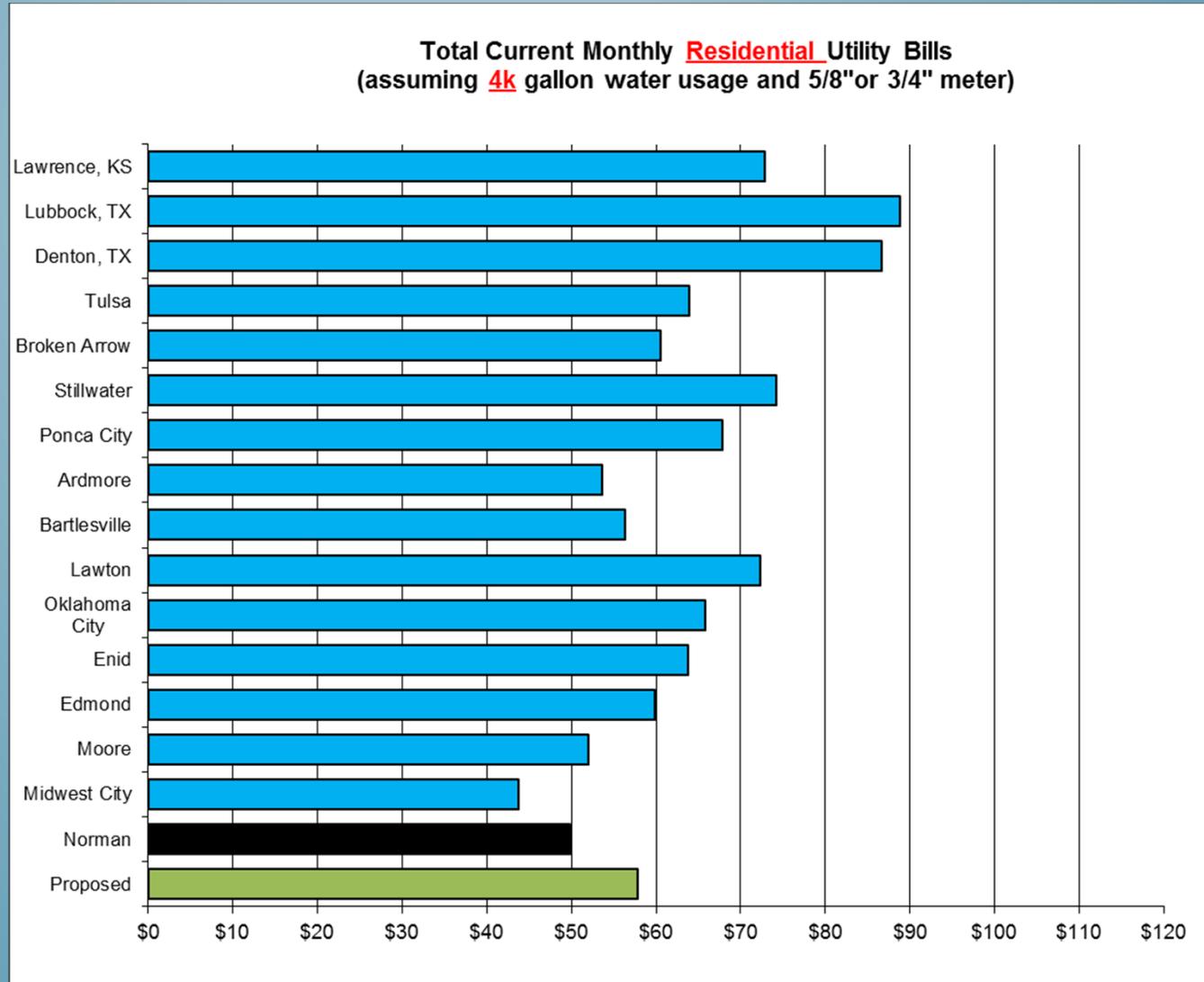
Rates Effective – March 2<sup>nd</sup>

# Residential Utility Bill

Includes; Water, Sewer, Garbage (with Curbside Recycling) Storm water, other misc.

Norman Existing rate is 22% lower than chart average

Norman Proposed rate is 10% lower than chart average

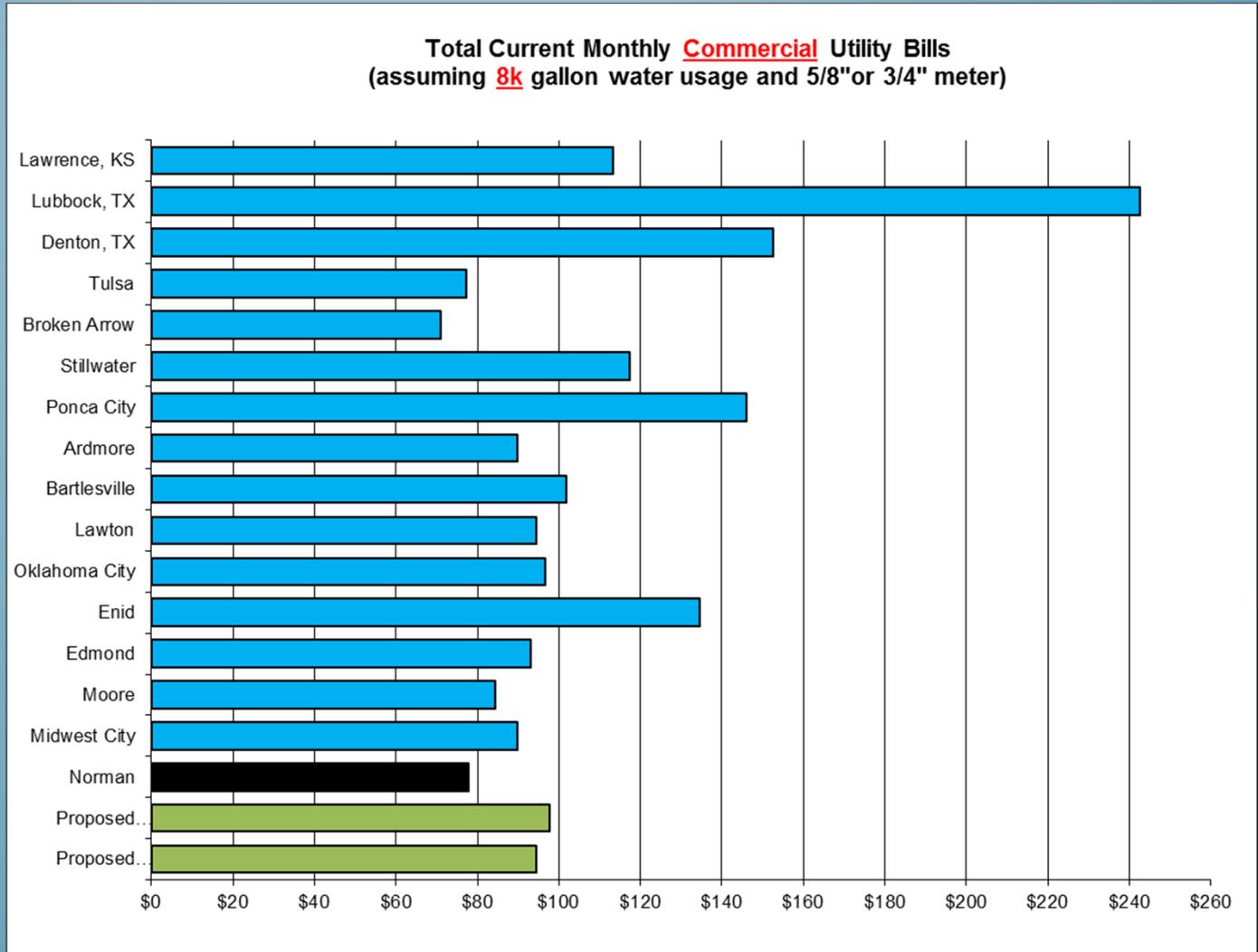


# Commercial Utility Bill

Includes; Water, Sewer, Garbage (with Curbside Recycling) Storm water, other misc.

Norman Existing rate is 30% lower than chart average

Norman Proposed rate is 14% lower than chart average

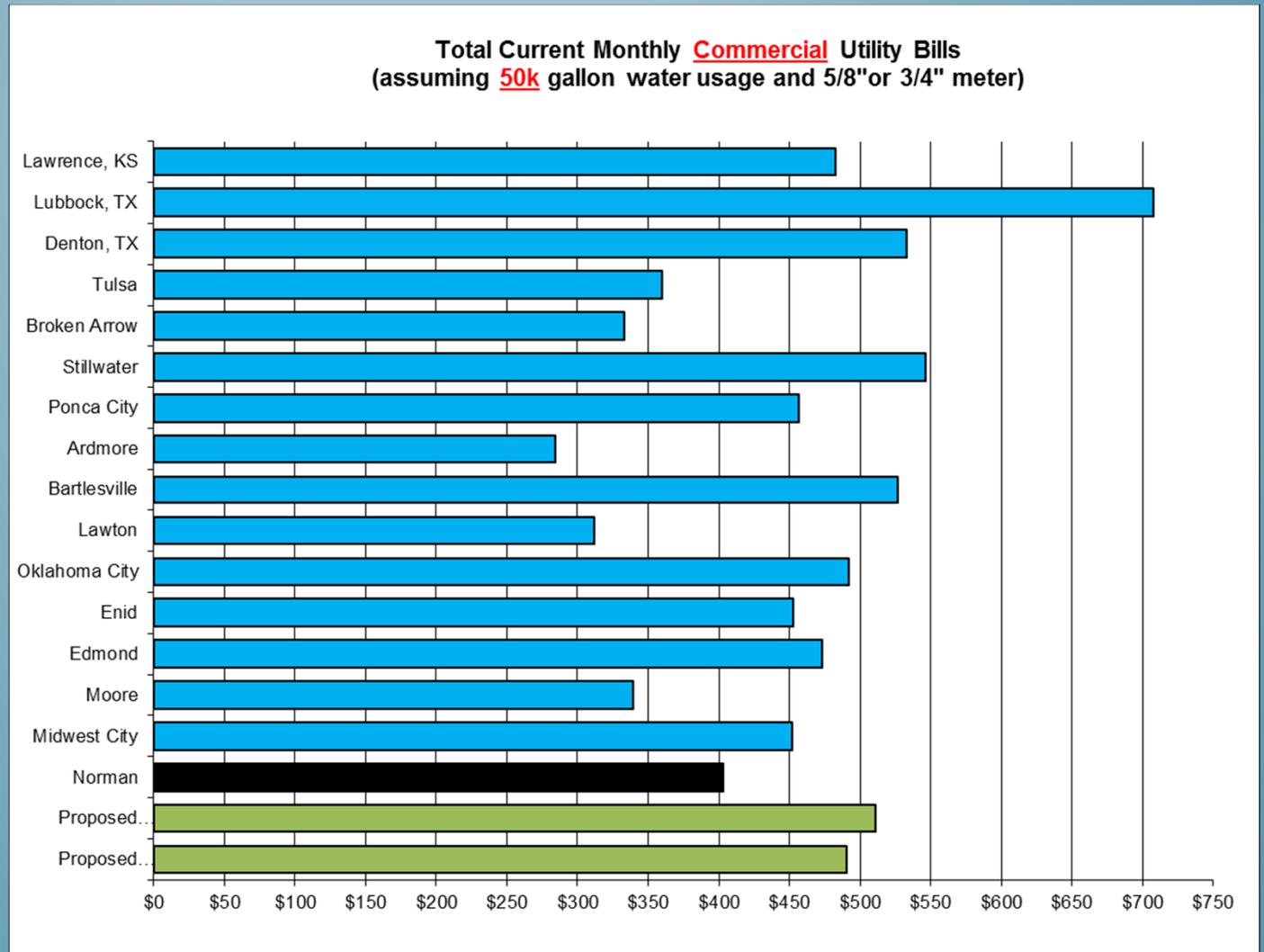


# Commercial Utility Bill

Includes; Water, Sewer, Garbage (with Curbside Recycling) Storm water, other misc.

Norman Existing rate is 10% lower than chart average

Norman Proposed rate is 11% higher than chart average



# 031 WATER FUND



September 2014