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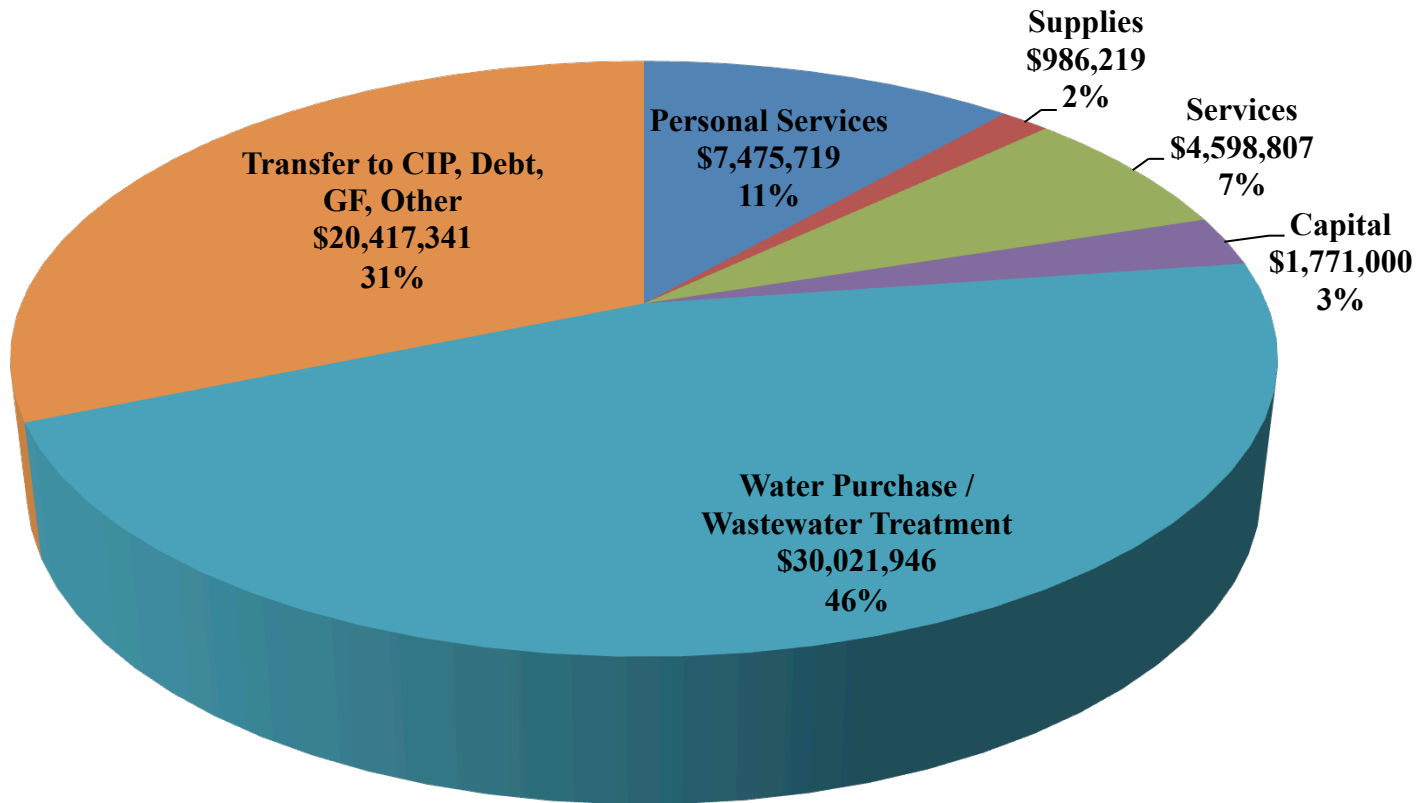
# WaterSmart

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Presented by the City of Grand Prairie

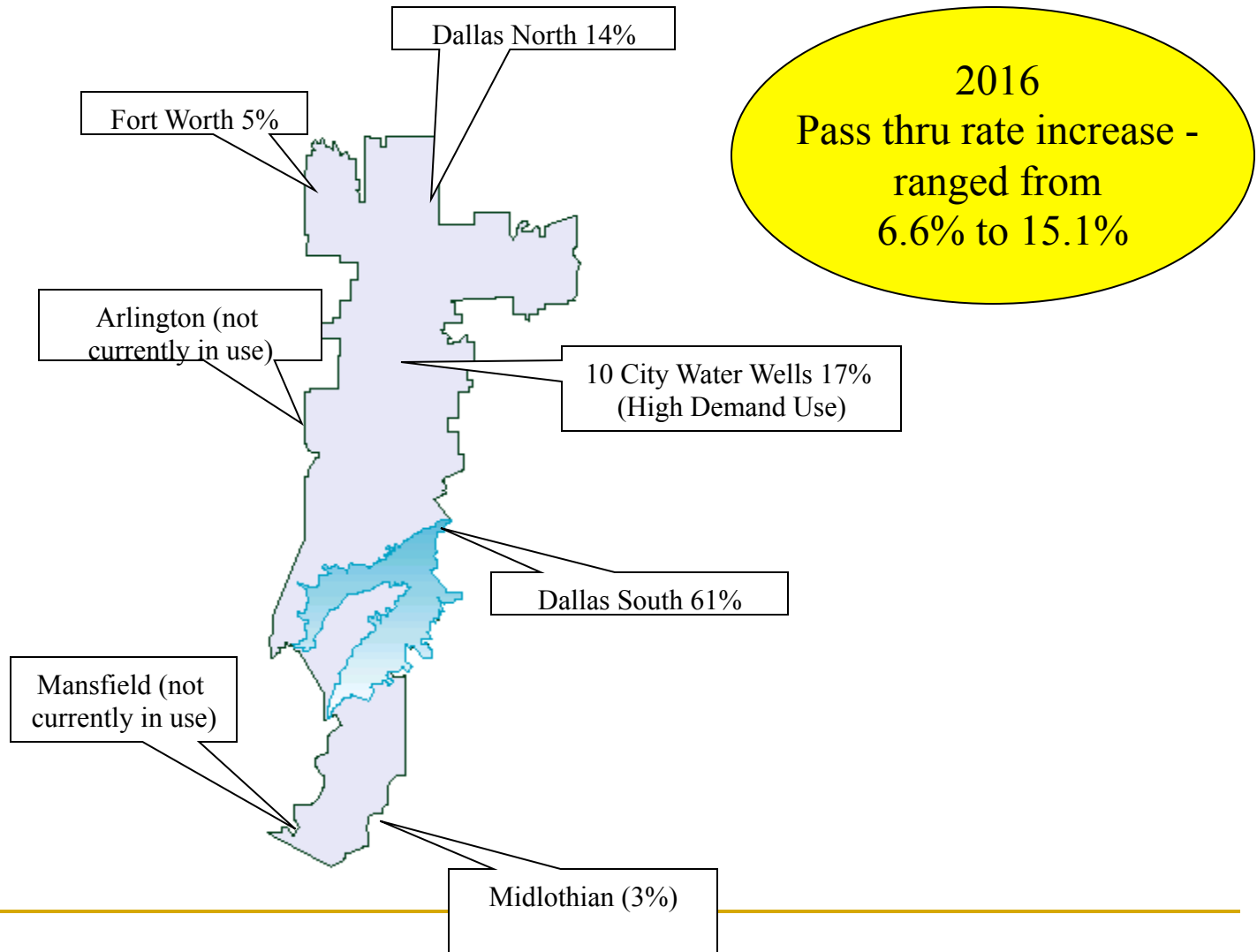
April 2016

# FY 2016 WATER WASTEWATER FUND EXPENDITURE DISTRIBUTION



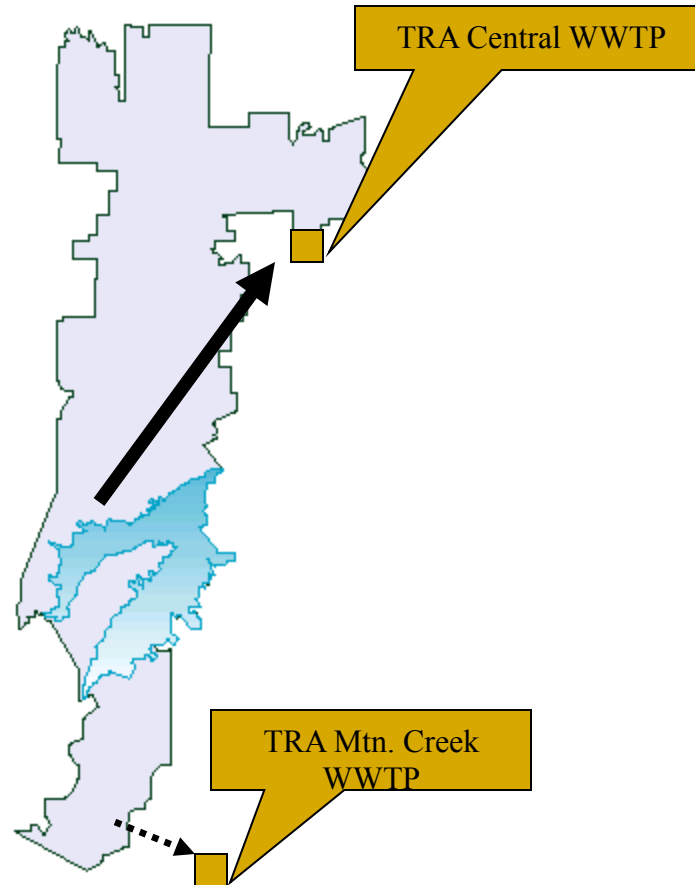
# City Water Supply Sources

## Typical Maximum Day

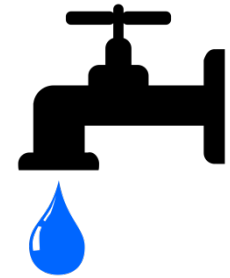


# Wastewater Treatment

2016  
TRA Pass  
thru rate increase of  
9%



# YOUR WATER BILL.... IT'S NOT JUST THE WATER



## WHAT ARE THE PARTS OF YOUR WATER BILL????

- **FIXED** monthly rate for garbage/recycling, storm drainage fee, water base and wastewater base rates.
- **VARIABLE** wastewater rate
- **VARIABLE** water rate

# THE VARIABLE WATER RATE REALLY DOES VARY

	GALLONS	Rate @ 1,000 Gallons	Water Usage
Lifeline Rate Lifeline rate applies only if you use LESS than 3,000 gallons	0 - 3000	\$0.12	Low
Tier 1 Tier 1 rate applies to all the water consumed if you exceed 3,000 gallons up to 20,000 Gallons	0 to 20,000	\$3.73	Average
Tier 2 Tier 2 rate kicks in for each additional 1,000 gallons after 20,000 consumed	21,000 and Over	\$6.42	High

# City of Grand Prairie Water Bill Comparison Based on Gallons Used

**3,000 Gallons** *(Lifeline Rate Example)*



**8,000 Gallons** *(1st Tier Rate Example)*



**30,000 Gallons** *(2nd Tier Rate Example)*



**\*** Fixed monthly rates for garbage/recycling, storm drain, water base and wastewater base (the base water and base wastewater rates are determined by meter size).

**\*\*** Variable wastewater rate based on the lower of the current month's usage or the winter month's average usage. This rate may be different for every customer depending on their consumption.

**\*\*\*** Variable water rate based on usage.

Residential Water Rate Per 1,000 Gallons			
<b>Lifeline</b>	0 to 3,000	\$0.12	Low
<i>The "Lifeline" rate only applies if you do not exceed 3,000 gallons.</i>			
<b>Tier 1</b>	0 to 20,000	\$3.73	Average
<i>The Tier 1 rate applies when you exceed 3,000 gallons (up to 20,000 gallons).</i>			
<b>Tier 2</b>	21,000 and Over	\$6.42	High
<i>After 20,000 gallons consumed (at the Tier 1 rate), each additional 1,000 gallons is charged Tier 2 rate.</i>			

# WHY THE TIERED WATER RATE STRUCTURE

- Water is a limited resource and the State and our water providers are mandating conservation efforts

- To comply with the State's water conservation efforts, the tiered system incentivizes less water use.



- Dallas and NTWD also mandate water conservation including a two day limit for irrigation systems

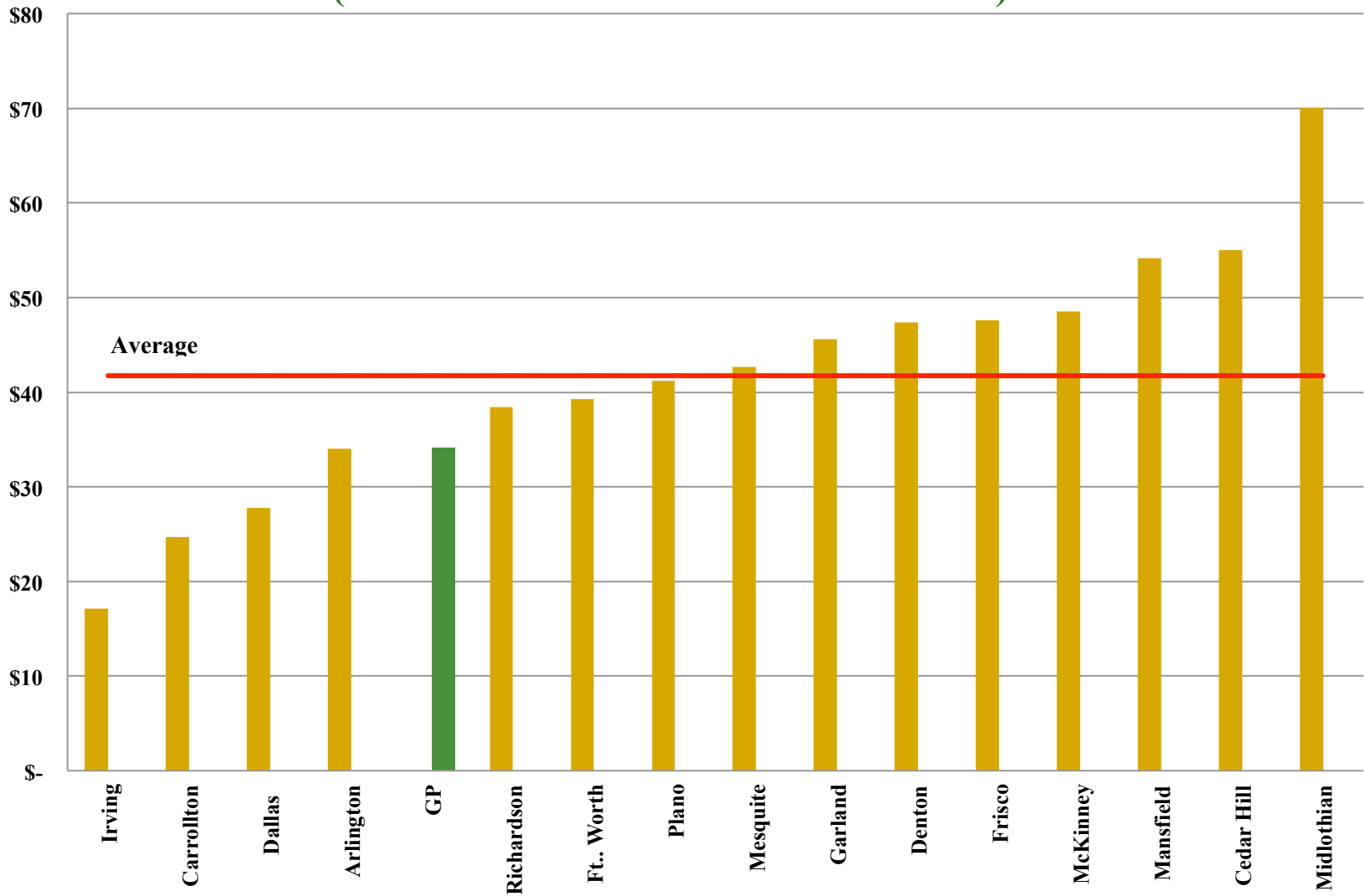


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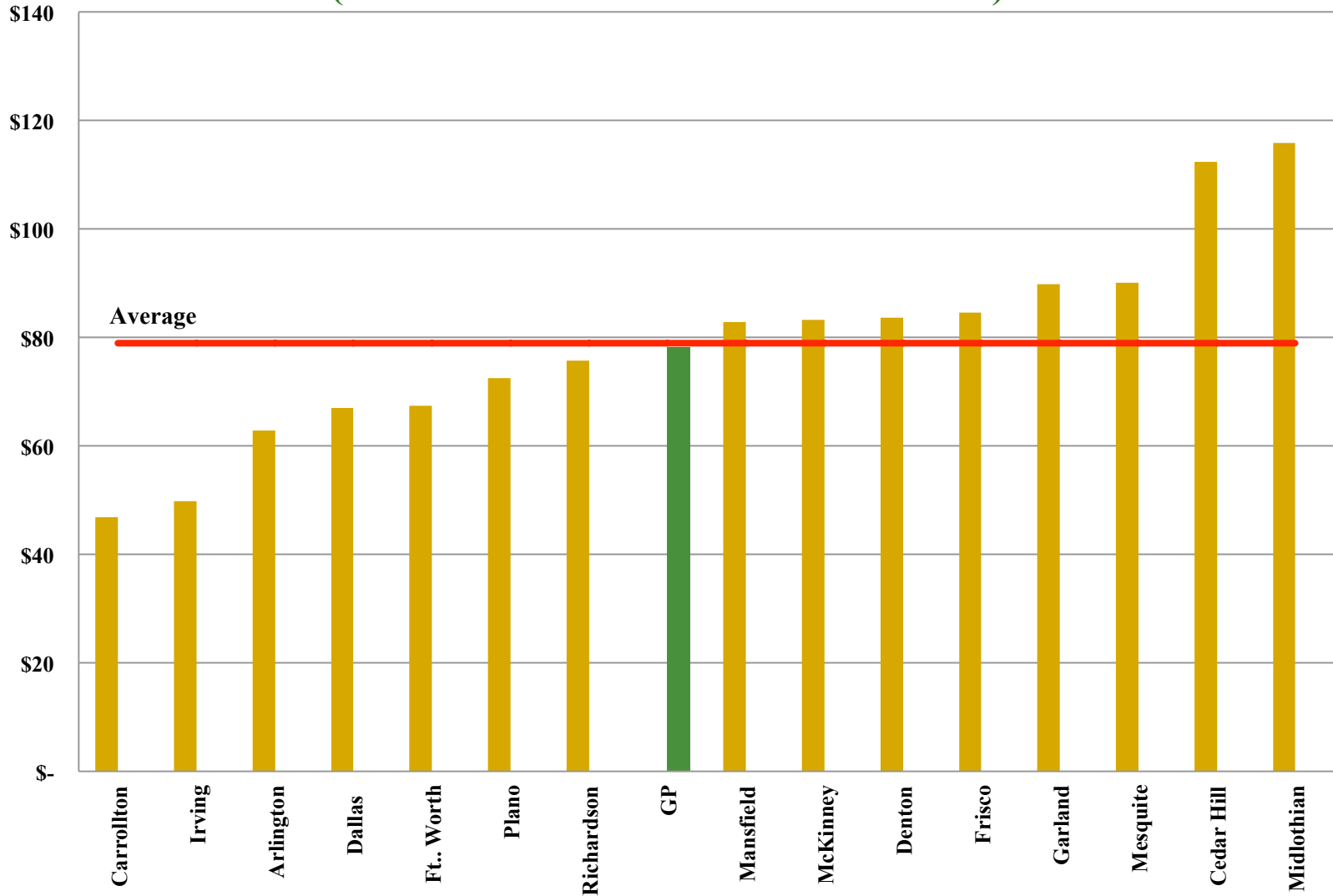
**City's water/wastewater  
rates remain competitive**



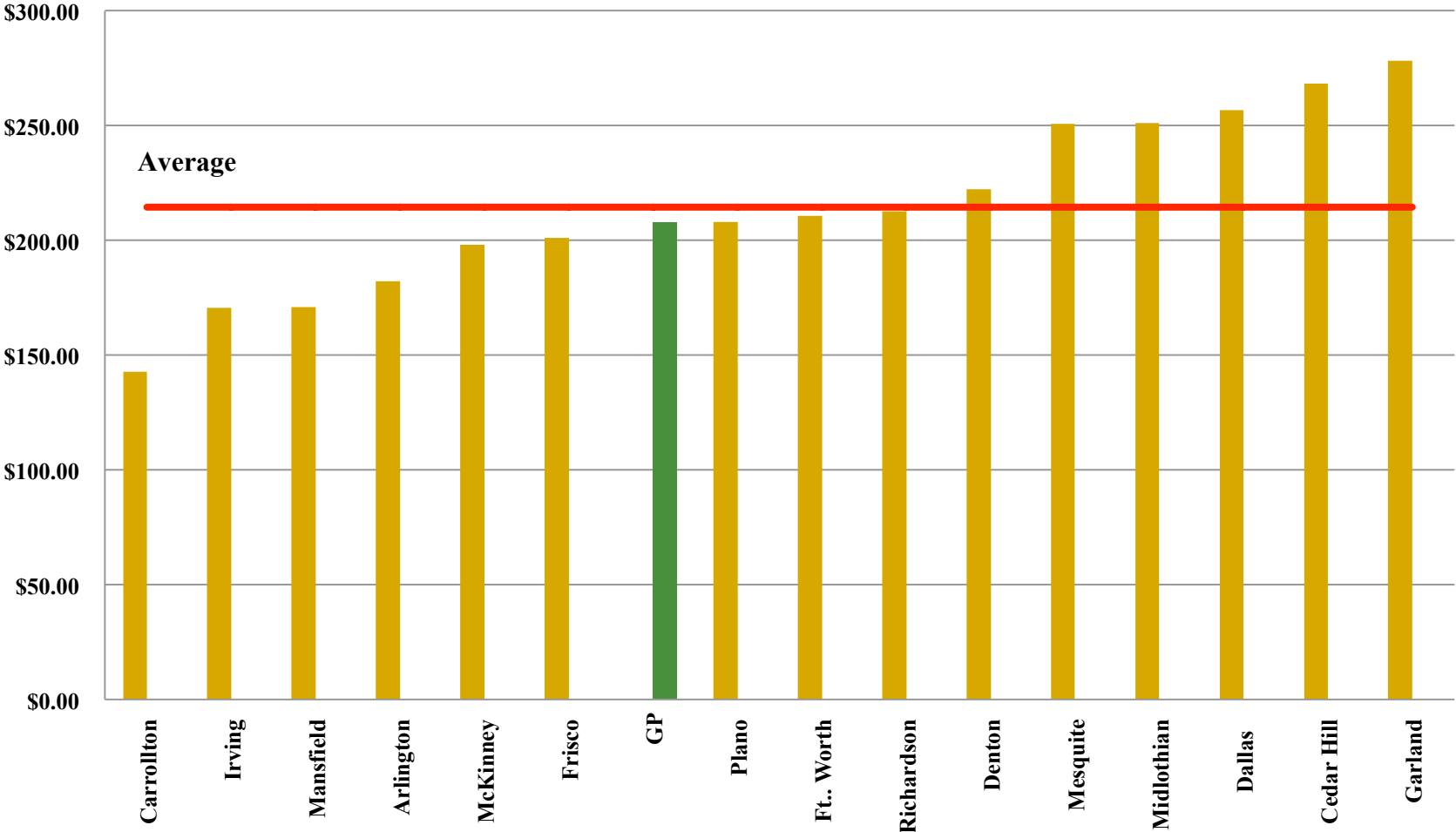
## RESIDENTIAL 3,000 GALLONS (WATER & WASTEWATER TOTALS)



## RESIDENTIAL 8,000 GALLONS (WATER & WASTEWATER TOTALS)



# RESIDENTIAL 30,000 GALLONS (WATER & WASTEWATER TOTALS)



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# City conducts water audit using independent third party verification of water meters



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# WATER AUDIT RESULTS

- 1. City's Water Rate Ordinance
  - Rate Structure encourages water conservation.
  - Water rates are competitive in the metroplex.
  - Water rates are approved annually at a City Council meeting.
  - Water rates are setup up properly within the utility billing system.

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# WATER AUDIT RESULTS

- 2. Recalculation of Water Bills
  - There is no water bill discrepancy between the utility billing system and a manual calculation.
  - There is no wastewater bill discrepancy between the utility billing system and a manual calculation.
  - There is no garbage/recycling bill discrepancy between the utility billing system and a manual calculation.
  - One discrepancy between storm drainage bill between the utility billing system and a manual calculation – coded for lower rate/customer under billed.

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# WATER AUDIT RESULTS

- 3. City's Water Billing Process
  - All controls are being followed and no significant discrepancies are occurring.
  - There is no discrepancy between the entire customer water bill and the 3<sup>rd</sup> party vendor issued water bill.



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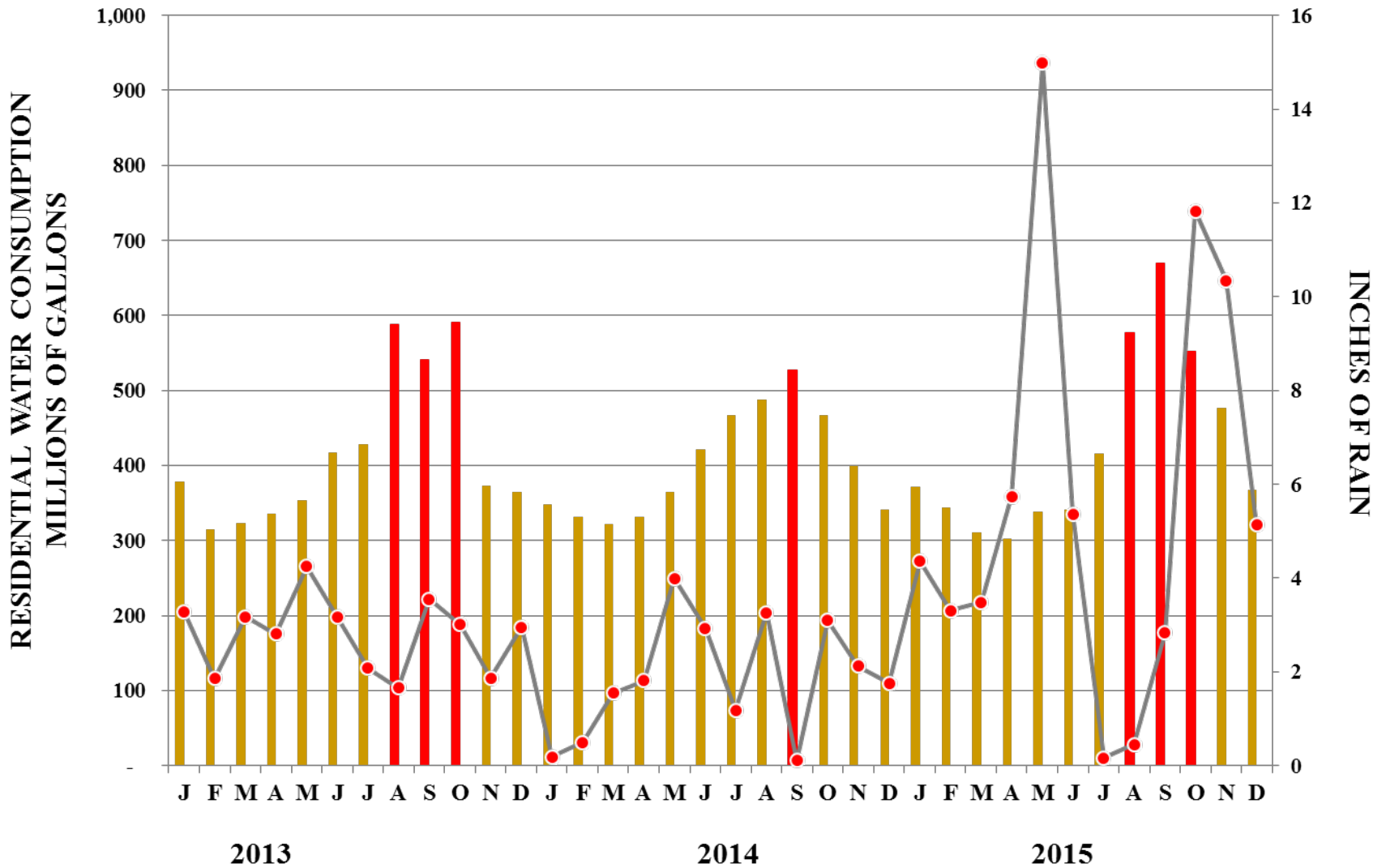
# WATER AUDIT RESULTS

- 4. City's Water Meter Accuracy
  - A sample of fifty visual meter reads versus ERT (Encoder/Receiver/Transmitter) readings indicated a variance of -10 to +70 gallons, with 91% of ERT's under reading.
  - Third party testing of fifty meters by Southern Flowmeter, Inc. indicated the average accuracy was 98.03% to 101.38%, well within AWWA (American Water Works Association) standards of 95% to 101.5%.

# WATER AUDIT RESULTS

- 5. Analytic Data
  - Water consumption is higher when the temperature is higher.
  - Water consumption is lower when precipitation is high.
  - Water data on the Peninsula compared to entire City
    - % Peninsula Water Accounts/% Water Usage = 7.9%/10.9%
  - Pool permits on Peninsula compared to entire City
    - % Peninsula Pool Permits/% Peninsula Homes = 16%/7.9%
  - Irrigation permits on Peninsula compared to entire City
    - % Peninsula Irrigation Permits/% Peninsula Homes = 32%/7.9%

**CITY OF GRAND PRAIRIE  
RESIDENTIAL WATER CONSUMPTION VERSUS RAINFALL  
2013 TO 2015 BY MONTH**



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# WATER AUDIT RESULTS

## ■ CONCLUSION

- ❑ The water billing system is working correctly.
- ❑ The meter reading system is working correctly.
- ❑ The meters are recording water consumption correctly.
- ❑ A small number of variances in the reading or recordings are not statistically significant and are well within the utility AWWA standards.
- ❑ Higher water usage on the Peninsula may be driven by the higher percentage of homes with pools and irrigation systems on the Peninsula.

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## FUTURE WATER

- Water will continue to be a scarce resource “in the future.”
- The city’s water suppliers and wastewater treatment provider forecast rate increases “in the future.”
- The City’s new AMI system will allow customers to manage their water use “in the future.”

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# At Your Local Grocery Store

A gallon of drinking  
water will cost  
you 99¢ at your  
local grocery  
store.



# At Your Local Residence

-  
A gallon of water out of  
your Grand Prairie  
faucet will cost you a  
mere  $\frac{1}{2}$  of 1¢





**QUESTIONS???**