Water Rate Analysis and Minimum Usage Modification

What is an Enterprise Fund?:

A fund in which the services provided to customers or residents are financed and operated similarly to a private business. An enterprise fund is operated so that the costs of providing services are financed through user fees and charges.

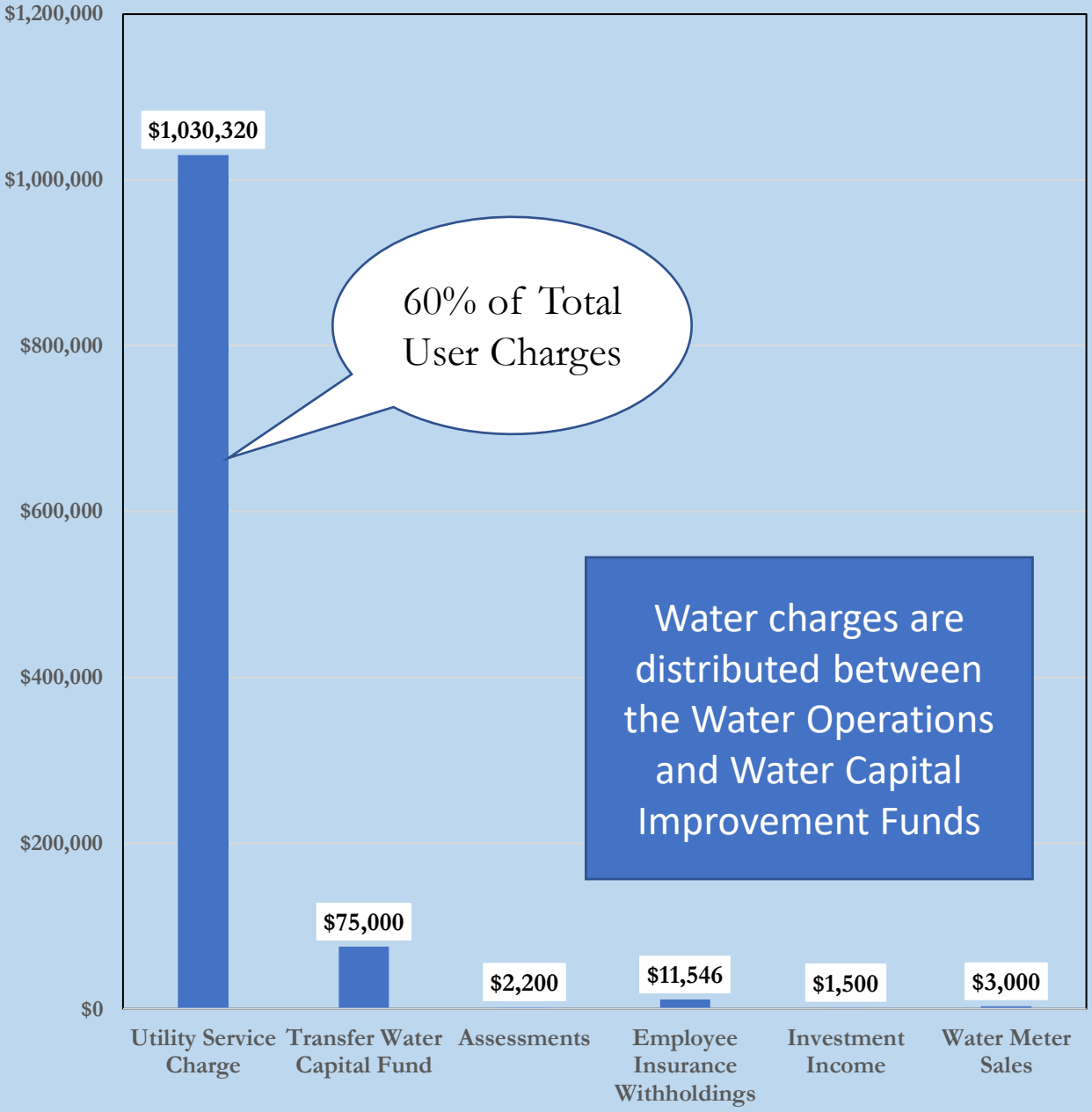
In Loveland, the City provides four services—water, sewer, stormwater and sanitation—through enterprise funds.

Budget Trends Water Operating and Water Capital Improvement Funds

2018 Actuals	Beginning Balance	Revenues	Expenses	Ending Balance
Water Operations Fund	$145,844	$1,125,557	$1,100,668	$170,733
Water Capital Improvement Fund	$370,069	$1,909,063	$1,802,869	$476,262
Total	**$515,913**	**$3,034,620**		**$646,995**
2019 Actuals	**Beginning Balance**	**Revenues**		**Ending Balance**
Water Operations Fund	$170,733	$1,166,306		$198,739
Water Capital Improvement Fund	$476,262	$754,261		$278,743
Total	**$646,995**	**$1,920,567**		**$477,482**
2020 Budget	**Beginning Balance**	**Revenues**		**Ending Balance**
Water Operations Fund	$198,739	$1,123,566		$105,378
Water Capital Improvement Fund	$278,743	$709,555		$86,391
Total	**$477,482**	**$1,833,121**		**$191,769**
2021 Forecast	**Beginning Balance**	**Revenues**	**Expense**	**Ending Balance**
Water Operations Fund	$105,378	$1,188,986	$1,187,714	$106,650
Water Capital Improvement Fund	$86,391	$765,982	$968,625	-$116,252
Total	**$191,769**	**$1,954,968**	**$2,156,339**	**-$9,602**

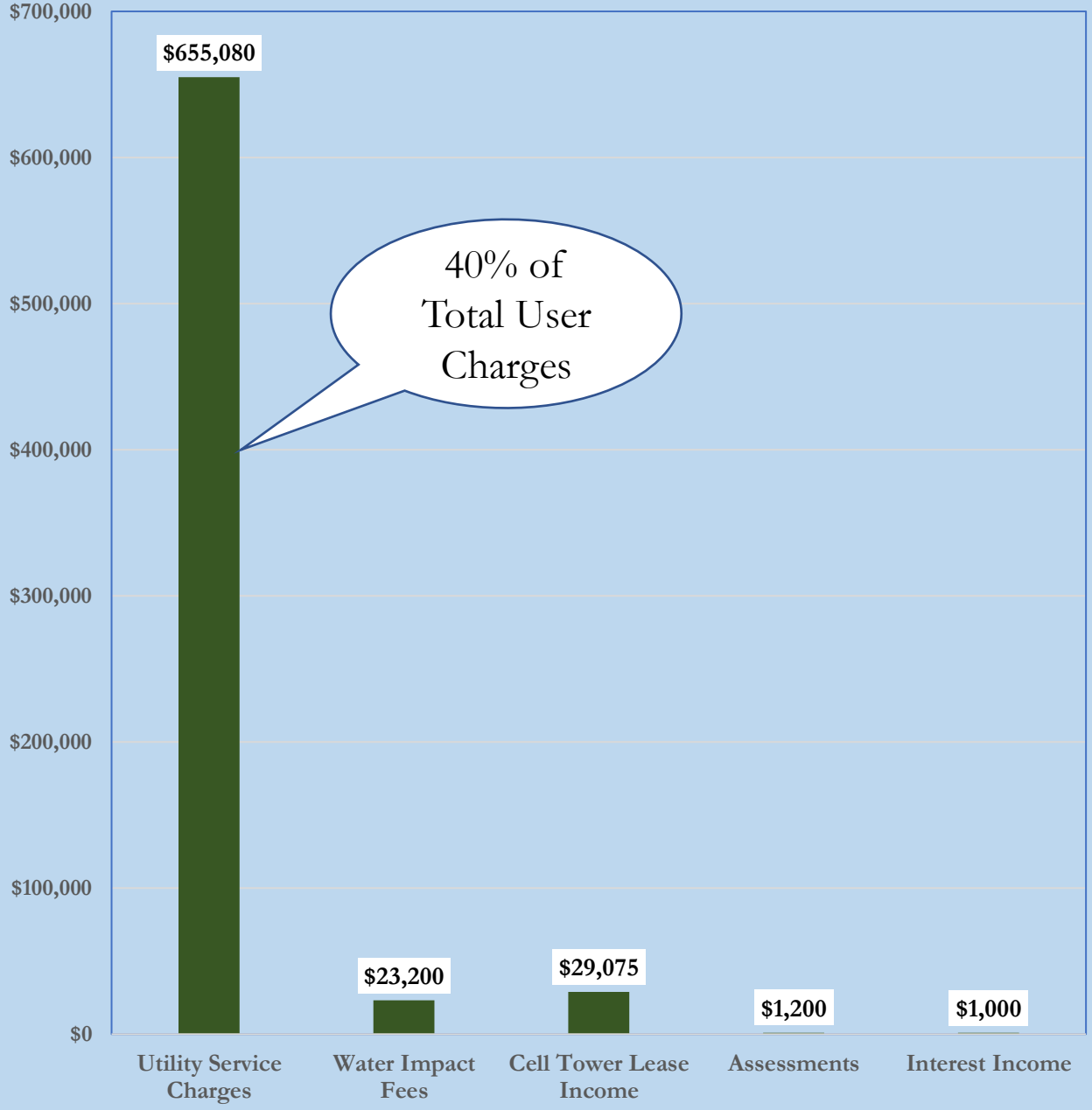
Given current water rate structure, the city is forecasting finishing the 2021 fiscal year in a deficit.

Water Operations Fund-Revenue (2020 Budget)



Total Revenue: $1,219,419

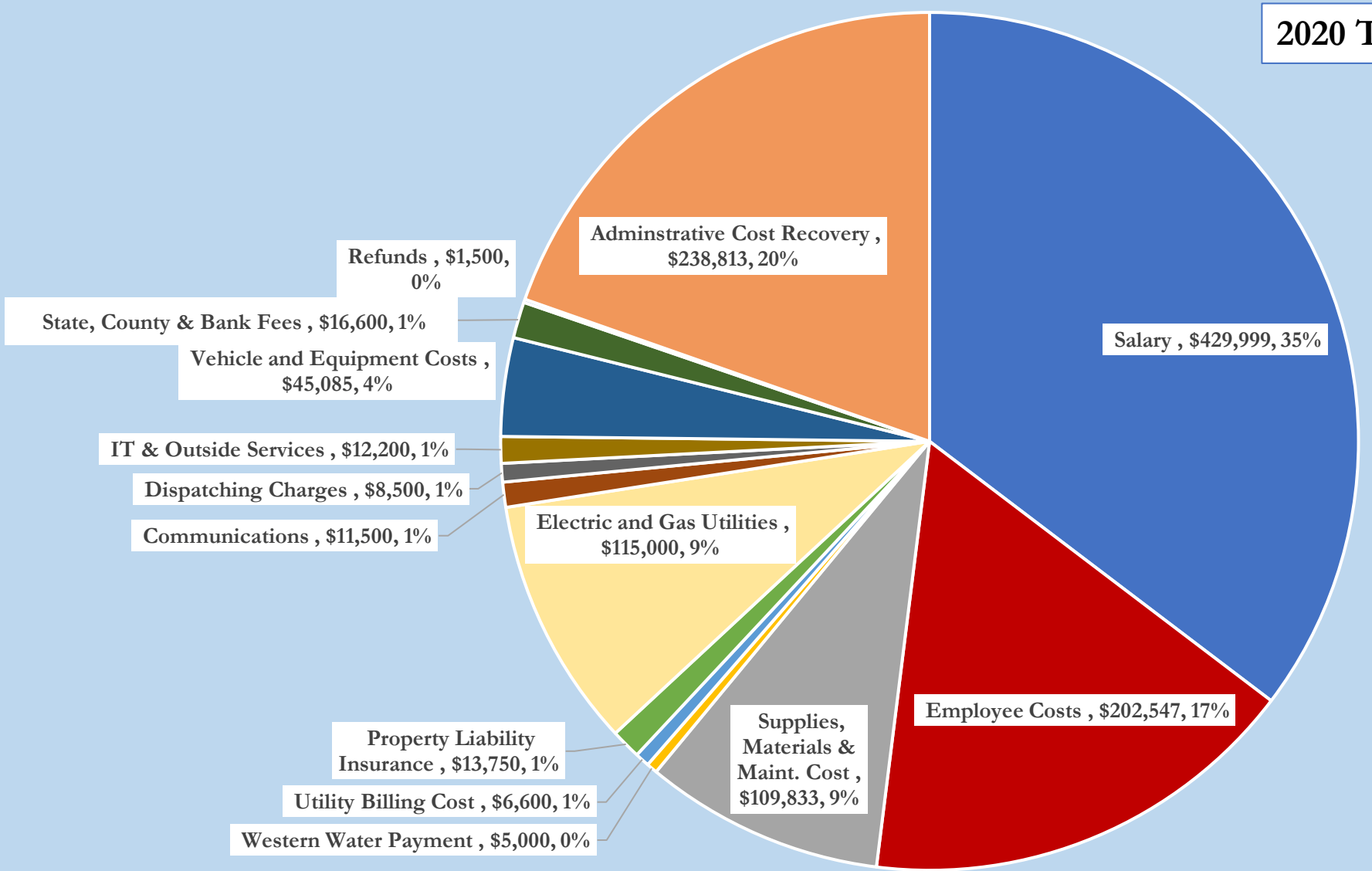
Water Capital Improvement Fund-Revenue (2020 Budget)



Total Revenue: $951,798

Water Operations Fund-Expenditures (2020 Budget)

2020 Total Expenditures: $1,216,927

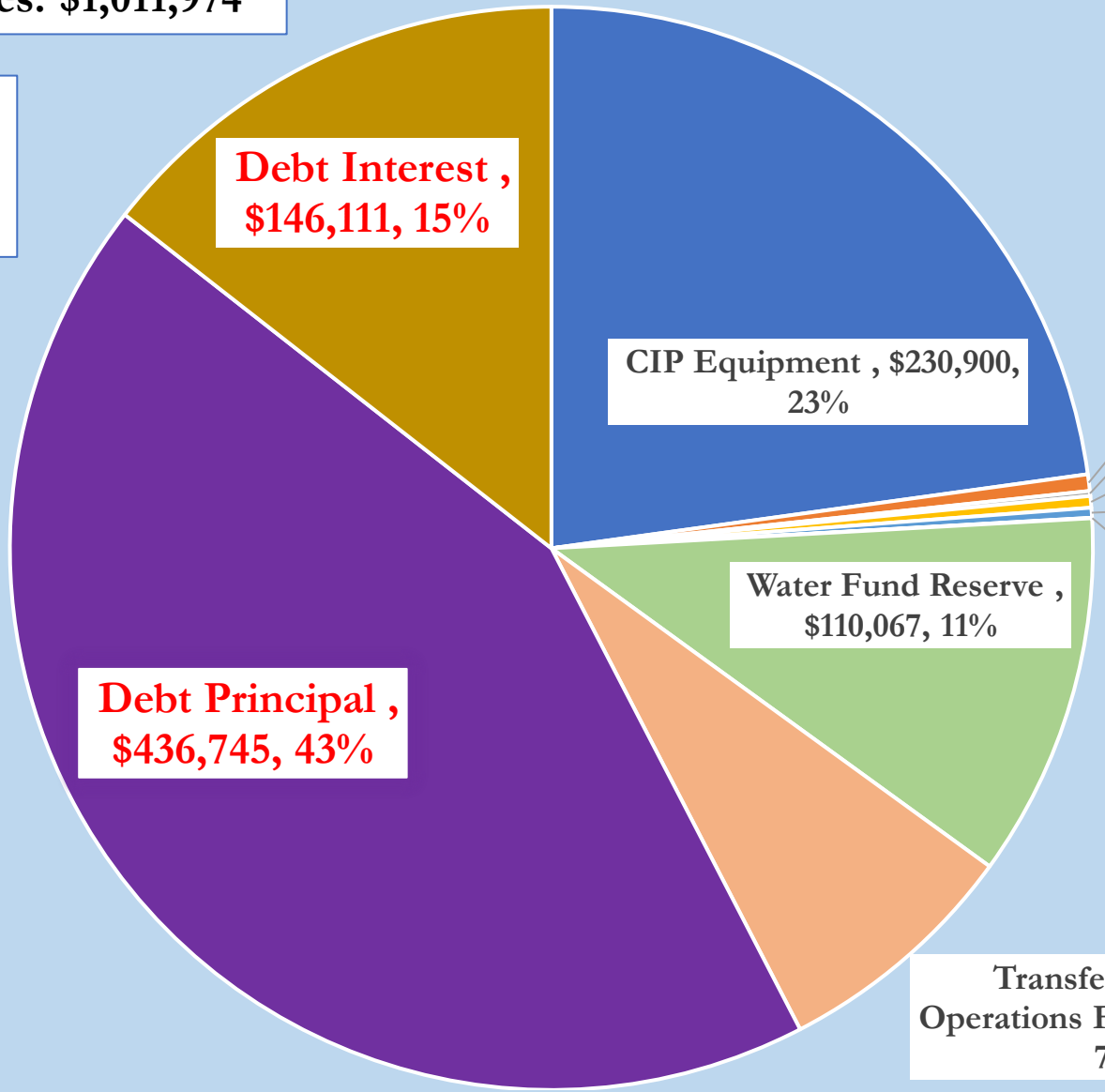


Water Operation Expenditures are utilized for the general operations of the city's water system.

Water Capital Improvements-Expenditures (2020 Budget)

Total 2020 Budgeted Expenditures: $1,011,974

Debt Service, accounts for 58% of the total Water Capital Improvements annual budget



Water Capital Improvement Expenditures are utilized for capital improvements to the city's water system.

City of Loveland

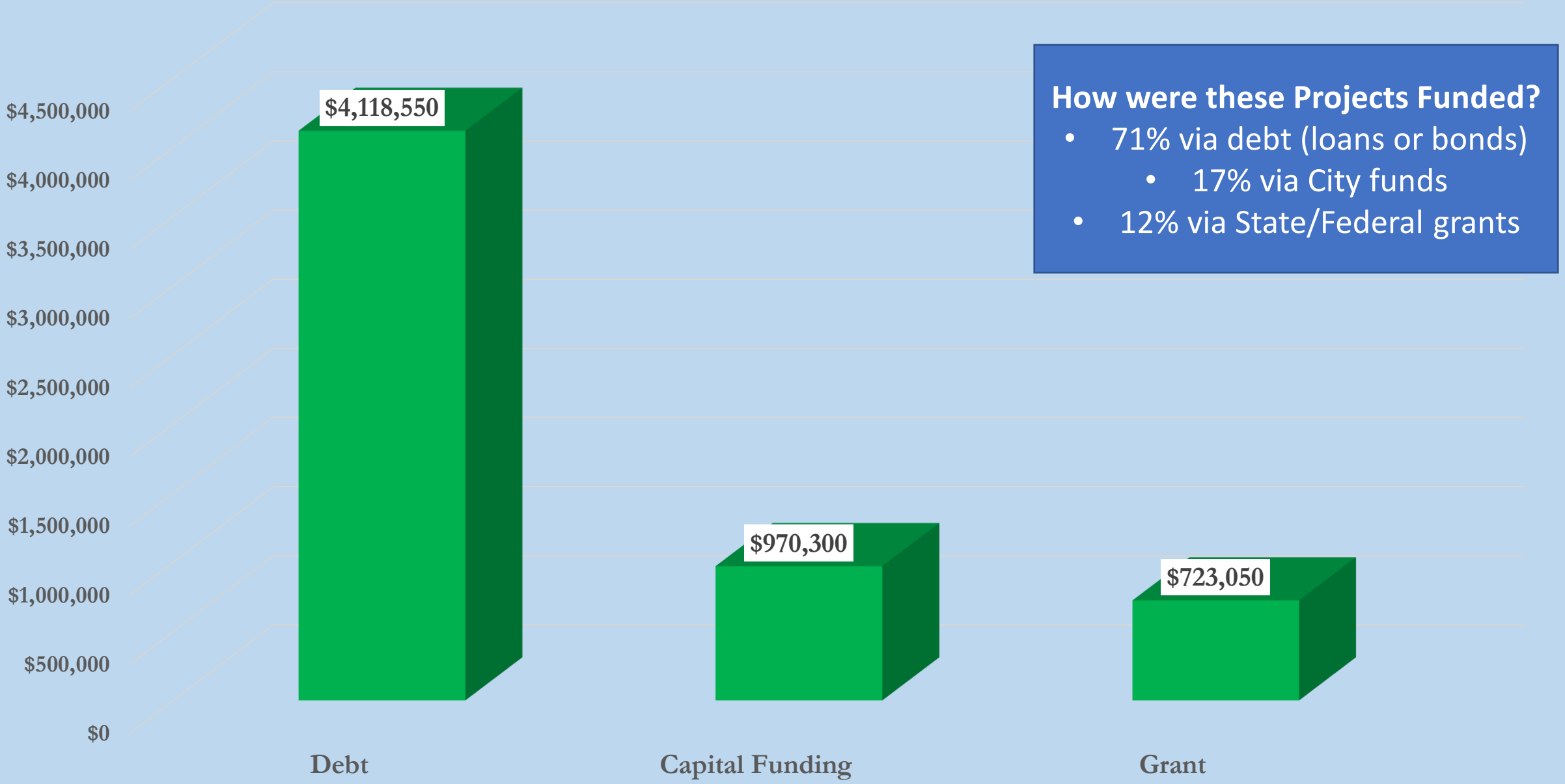
Completed Capital Improvement Projects (2014-2020)

Since 2014, the City has completed 9 significant water system improvements

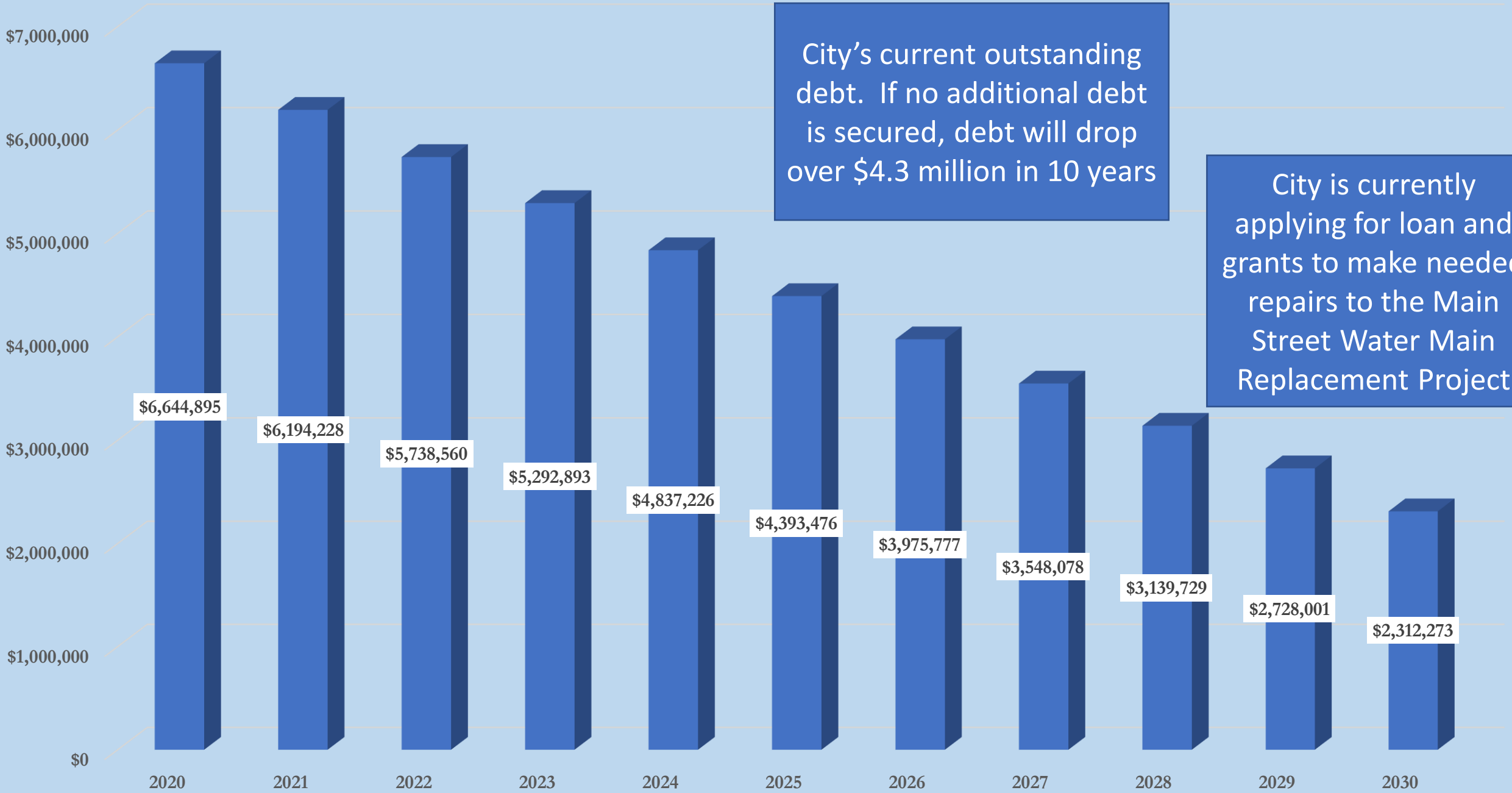
Completion Year	Project Name	Construction Cost	Funding
2013-2014	1.0 MG Commerce Park Water Tower (on Union Cemetery Rd.)	$2,469,200	Bond Funding
2014	Paint East & West Ground Storage Tanks	$294,300	City Capital Funding
2014-2015	Union Cemetery Rd. Water Line Replacement & Sidewalk Improvements Project	$936,500	Grant & Loan Funding
2015	Paint Lever Park Tank	$422,900	City Capital Funding
2018	2018 Commerce Park & White Pillars Tank Maintenance Project	$772,300	Bond Funding
2018	Heights Insert Valves	$65,000	Grant Funding
2019	SR 48 & Loveland-Miamiville Rd Water Line Replacement, Phase 1	$598,600	½ Bond Funding & ½ Grant Funding
2019	Cedar Drive Water Line Replacement	$98,100	City Capital Funding
2020	SCADA System	$155,000	City Capital Funding
	TOTAL=	**$5,811,900**	

Average Project Cost: **$654,766**

Project Funding



Water Capital Improvement Fund - Outstanding Debt Principal: 2020-2030



Water Rates

Current Water Rate Structure

Inside City Per Unit:

- $14.18 For first 4,000 gallons
- .0355 for next 1,000 gallons
- .0389 for all usage over 5,000 gallons
- Sample Charges
  - 2,000 Gallons: $14.18
  - 4,500 Gallons: $15.96
  - 5,500 Gallons: $19.68

Brandywine Subdivision:

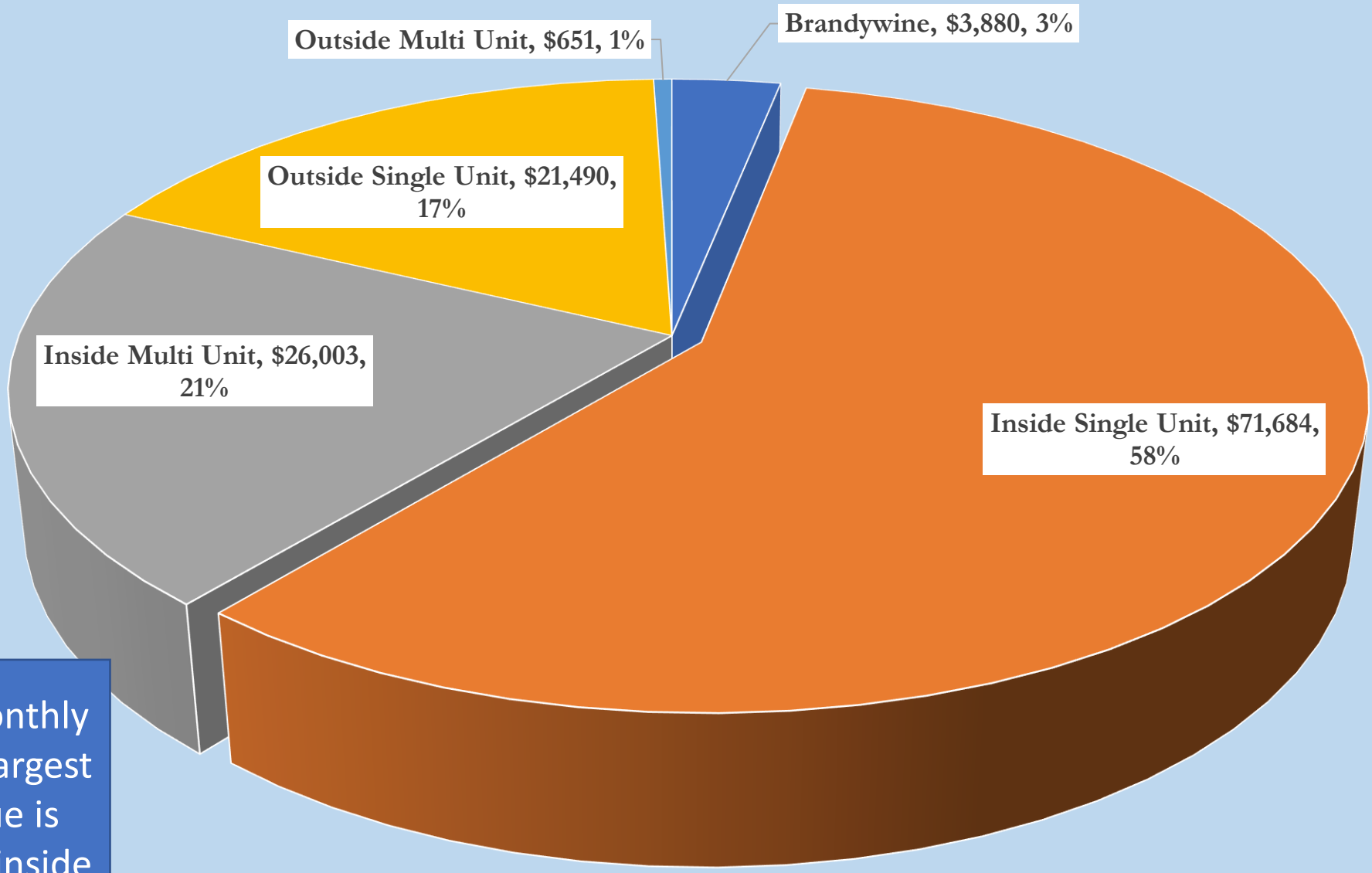
- $17.02 For first 4,000 gallons
- .0426 for next 1,000 gallons
- .0467 for all usage over 5,000 gallons
- Sample Charges
  - 2,000 Gallons: $17.02
  - 4,500 Gallons: $17.22
  - 5,500 Gallons: $23.60

The City's Current Water Rate Structure. Includes a set rate for customers using up to 4,000 gallons a month. This is called our minimum usage charge.

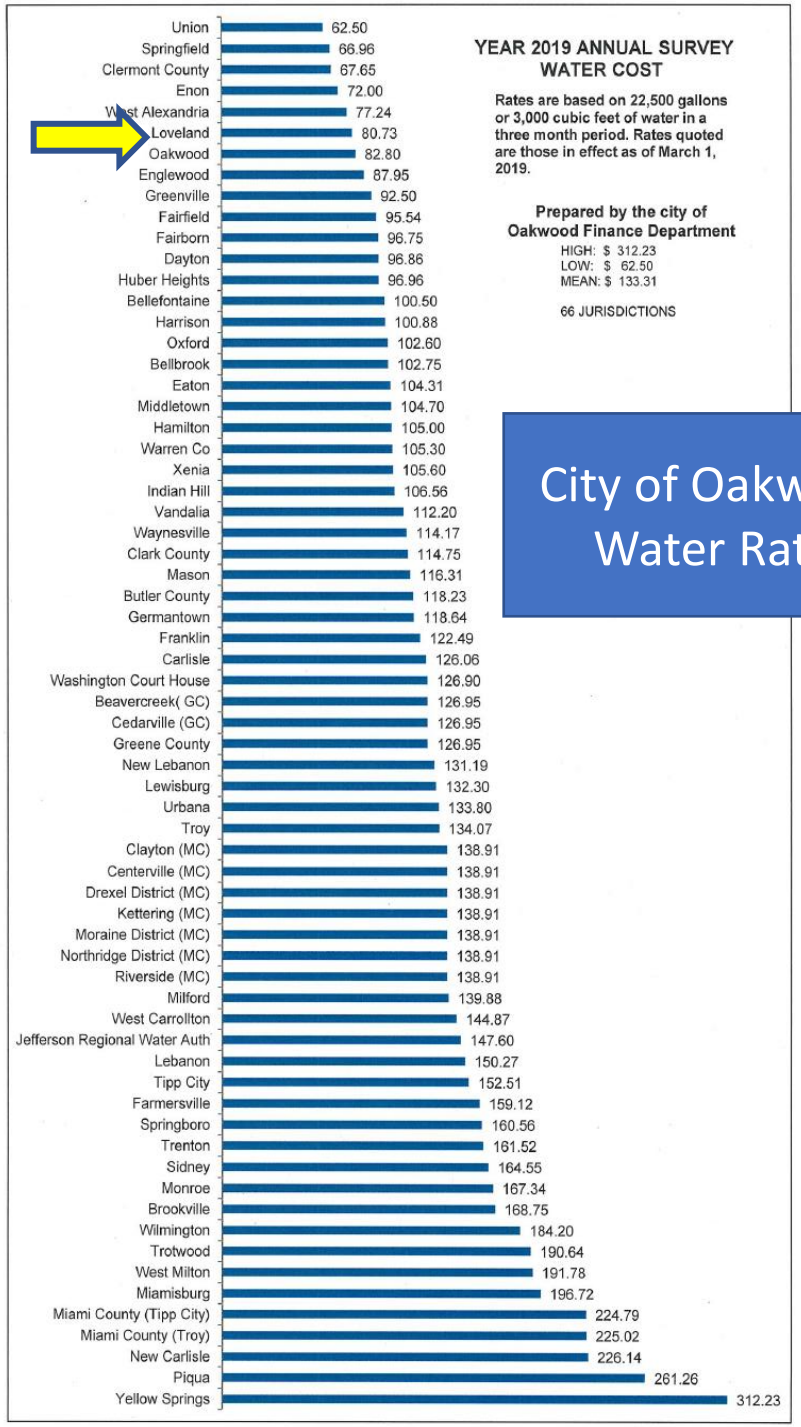
Outside City Per Unit:

- $16.87 For first 4,000 gallons
- .0422 for next 1,000 gallons
- .0463 for all usage over 5,000 gallons
- Sample Charges
  - 2,000 Gallons: $16.87
  - 4,500 Gallons: $18.98
  - 5,500 Gallons: $23.41

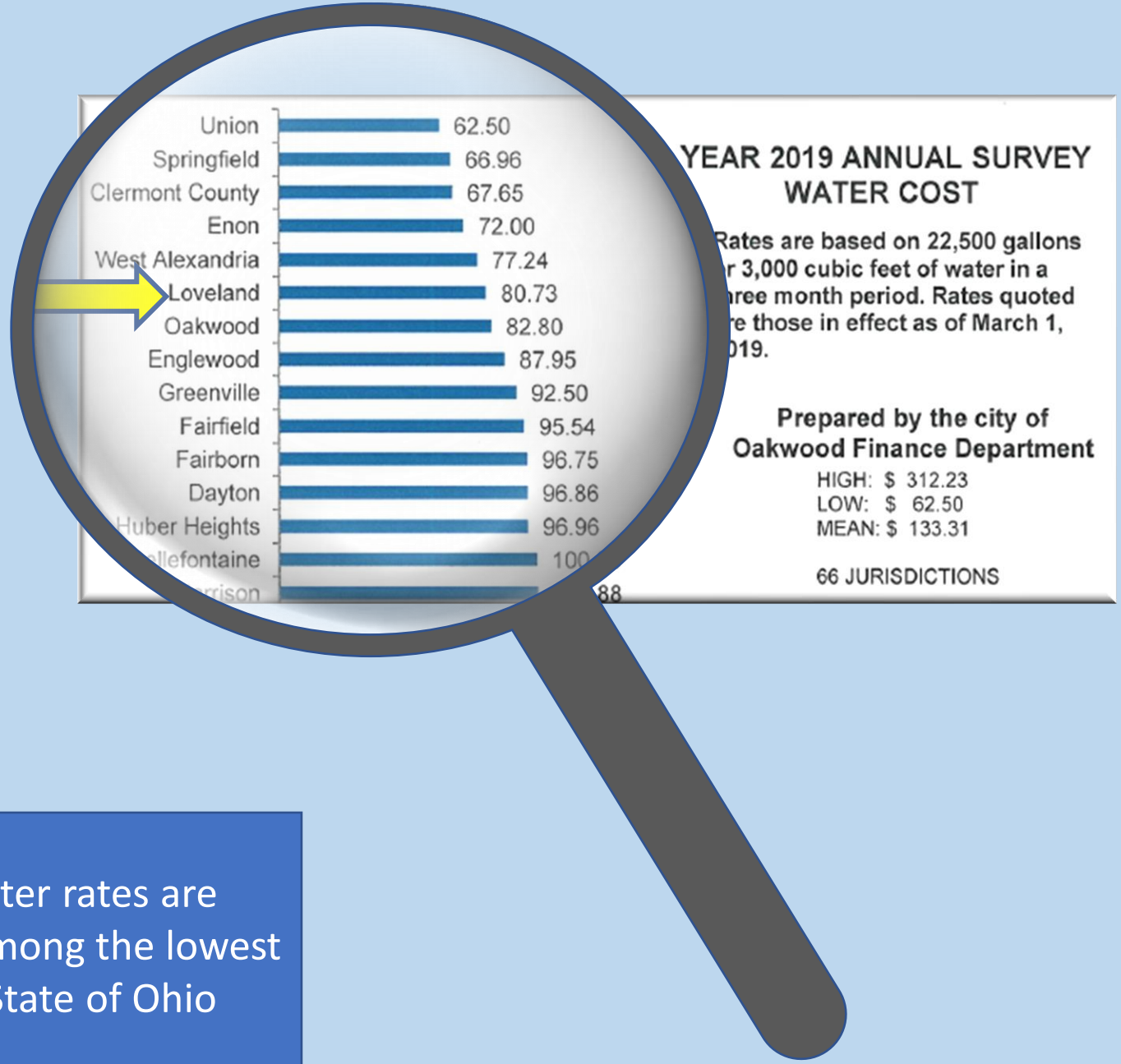
Monthly User Charge Revenue - By Type



Breakdown of monthly water receipts. Largest monthly revenue is from single units inside the City limits



City of Oakwood annual Water Rate Survey.



City water rates are typically among the lowest in the State of Ohio

Area Water Minimum Amounts

• Waynesville	1000 gallons at $3.49 per, plus surcharge of $10 & 1.88 improvement fee
• Milford	1000 gallons at $4.69 per plus 25 per month
• Monroe	1000 gallons at $6.77 per plus $5 meter charge
• Wyoming	1745 gallons monthly minimum
• Norwood	1870 monthly (7480 per quarter)
• Springboro	1999 gallon minimum at $6.09 plus $13 Per Month
• Western Water	2000 gallons monthly minimum
• Harrison	2000 gallons monthly minimum
• Middletown	2244 gallons monthly minimum
• New Richmond	2244 gallons monthly minimum
• Franklin	2490 gallons monthly minimum
• Clermont County	2500 gallons monthly minimum
• Lebanon	2500 gallons monthly minimum
• Williamsburg	3000 gallons monthly minimum
• Morrow	3000 gallons monthly minimum
• South Lebanon	3000 gallons monthly minimum
• Fairfield	3000 gallons monthly minimum
• Indian Hill	3241 gallons per month.
• Loveland	4000 gallons monthly minimum
• Warren County	6000 gallons minimum, then billed per 1000
• Glendale	7480 gallons monthly minimum

Comparison of minimum water usage to other area water systems.

The City's monthly water minimum is among the higher within the area.

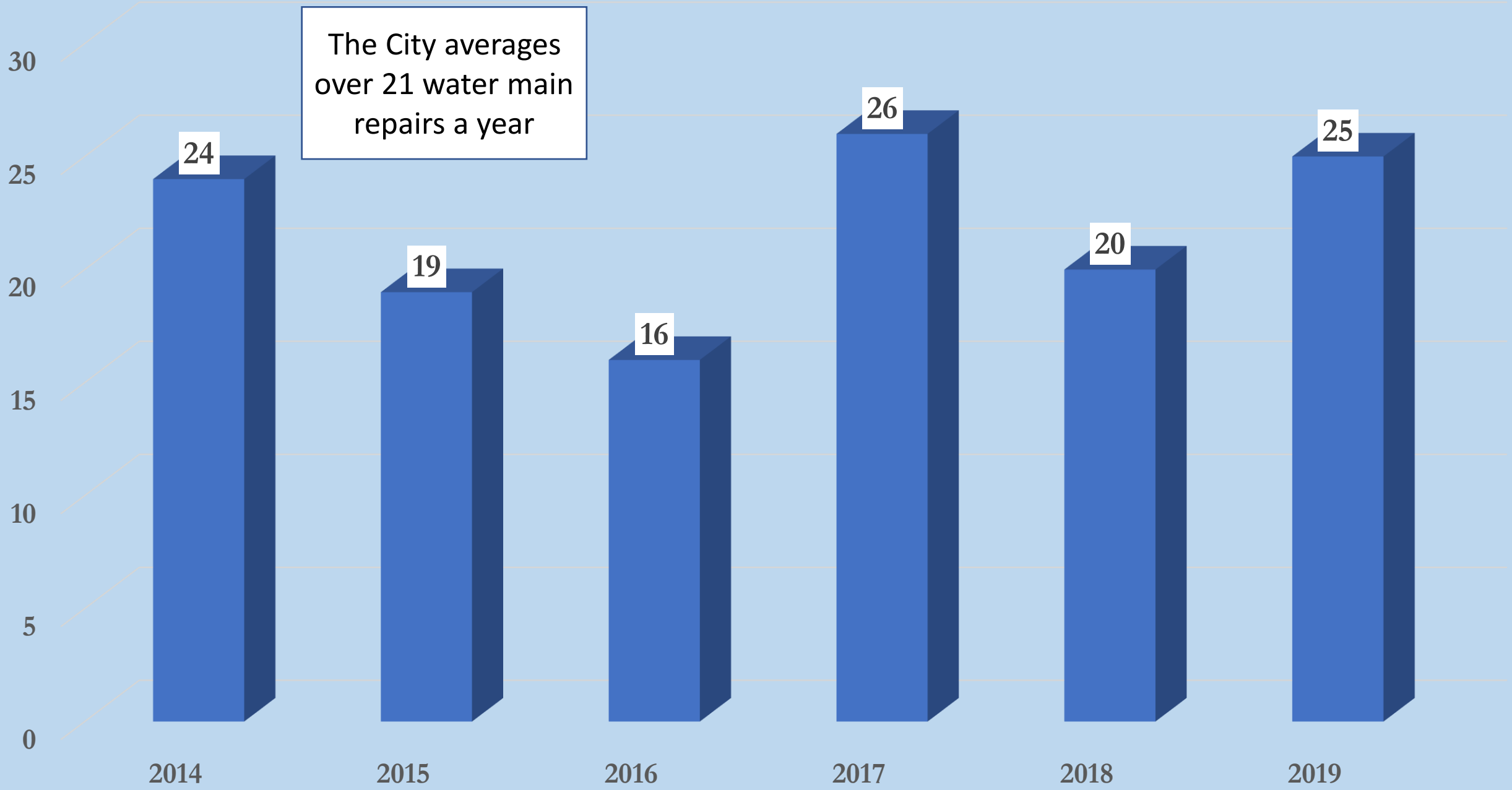
City of Loveland Water System

City of Loveland Water Treatment Plant

What Does The City of Loveland Water System Includes:

- #1 Water Treatment Plant
- #3 Wells
- #3 Water Booster Pump Stations
- #3 Ground Storage Tanks
- #4 Elevated Storage Tanks
- Approximately 76 miles of water main distribution piping
- Daily Storage Capacity: 5,000,000 Gallons
- Distribution System Includes 2 emergency water connections
  - ✓ Clermont County
  - ✓ City of Cincinnati

Water Main Repairs 2014 - 2019



WATER MAIN INSTALLATION BY DECADE

Main Street Water Main & Storm Water Replacement Project

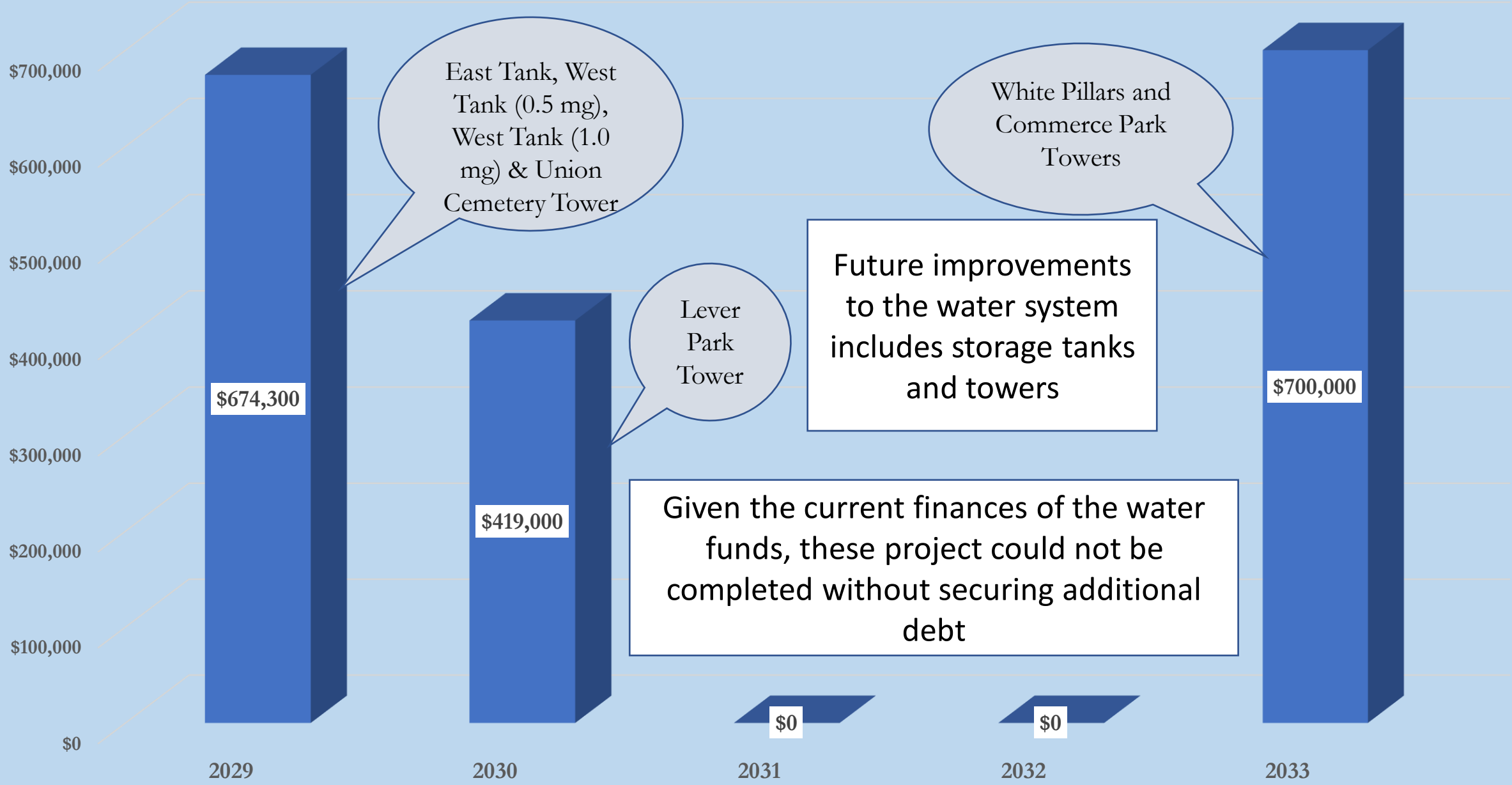
Current priority water project is the replacement of the mains on Main Street

Total Project Cost: $780,553
Total Water Main: 1110 Linear Feet
New Fire Hydrants: 4
Service Connections: 35

The city has unsuccessfully submitted for loan and grant funding for this project, for 3 consecutive years.

Unfortunately, needed road repairs can not be made until the water main project is completed

Water Tower/Tank Maintenance Schedule



Proposed Water Rate Structure

Inside City Per Unit:

- $14.18 For first 2,240 gallons
- .0355 for next 1,000 gallons
- .0389 for all usage over 3,240 gallons
- Sample Charges
  - 2,000 Gallons: $14.18
  - 4,500 Gallons: $22.63
  - 5,500 Gallons: $26.53

Brandywine Subdivision:

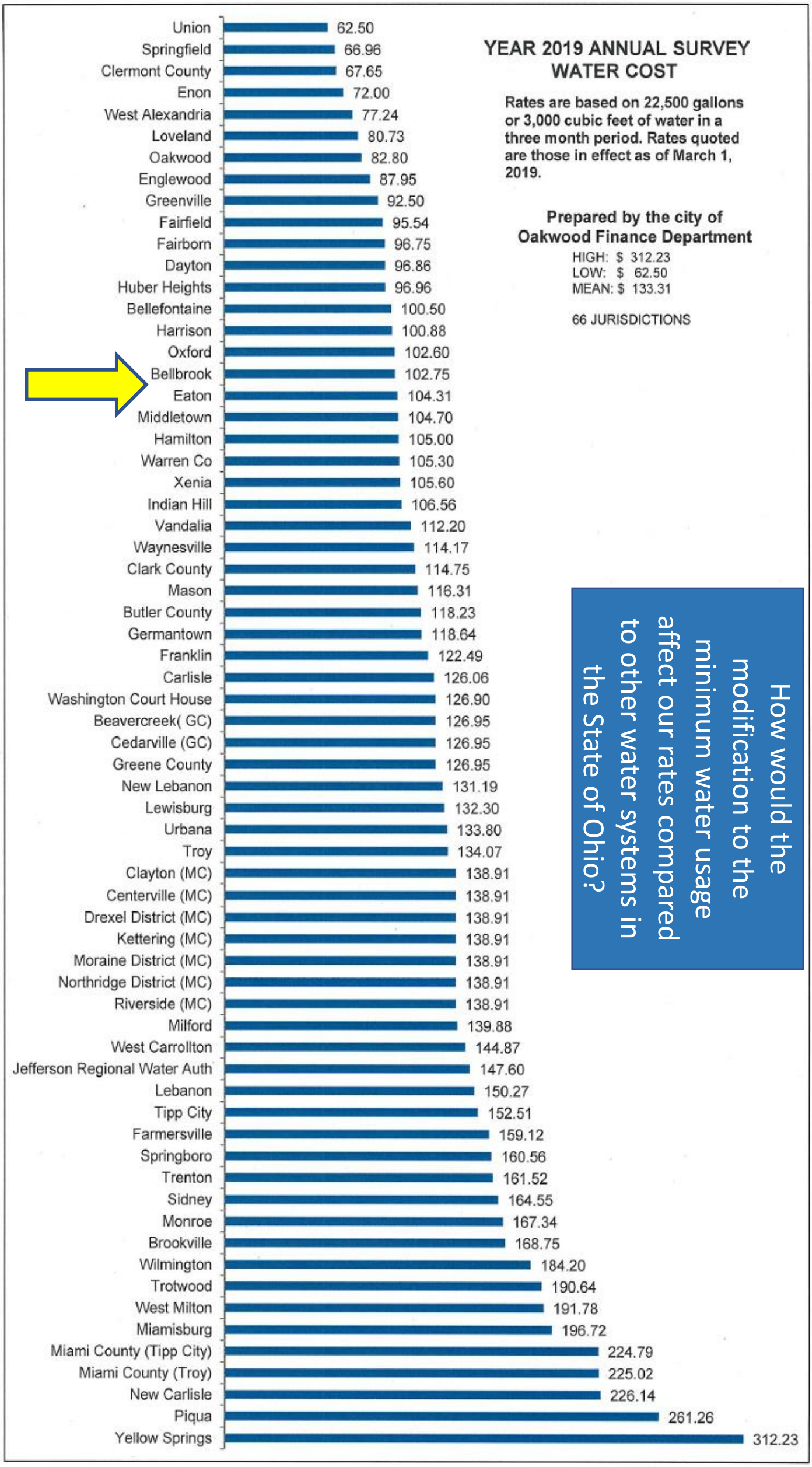
- $17.02 For first 2,240 gallons
- .0426 for next 1,000 gallons
- .0467 for all usage over 3,240 gallons
- Sample Charges
  - 2,000 Gallons: $17.02
  - 4,500 Gallons: $27.16
  - 5,500 Gallons: $31.83

Proposed Water Rate modification would involve reducing the monthly minimum usage from 4000 to 2240 gallons

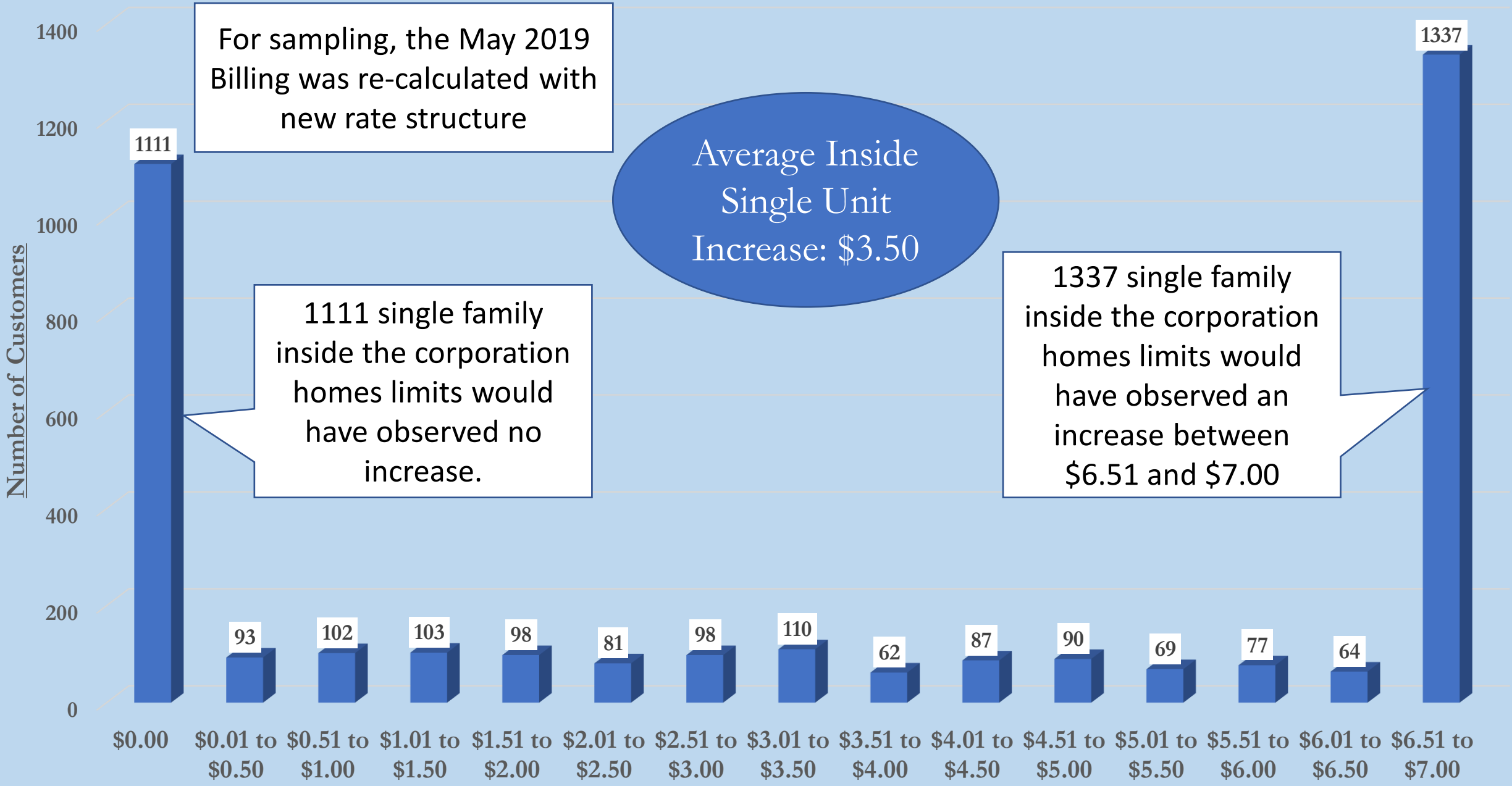
Outside City Per Unit:

- $16.87 For first 2,240 gallons
- .0422 for next 1,000 gallons
- .0463 for all usage over 3,240 gallons
- Sample Charges
  - 2,000 Gallons: $16.87
  - 4,500 Gallons: $26.92
  - 5,500 Gallons: $31.55

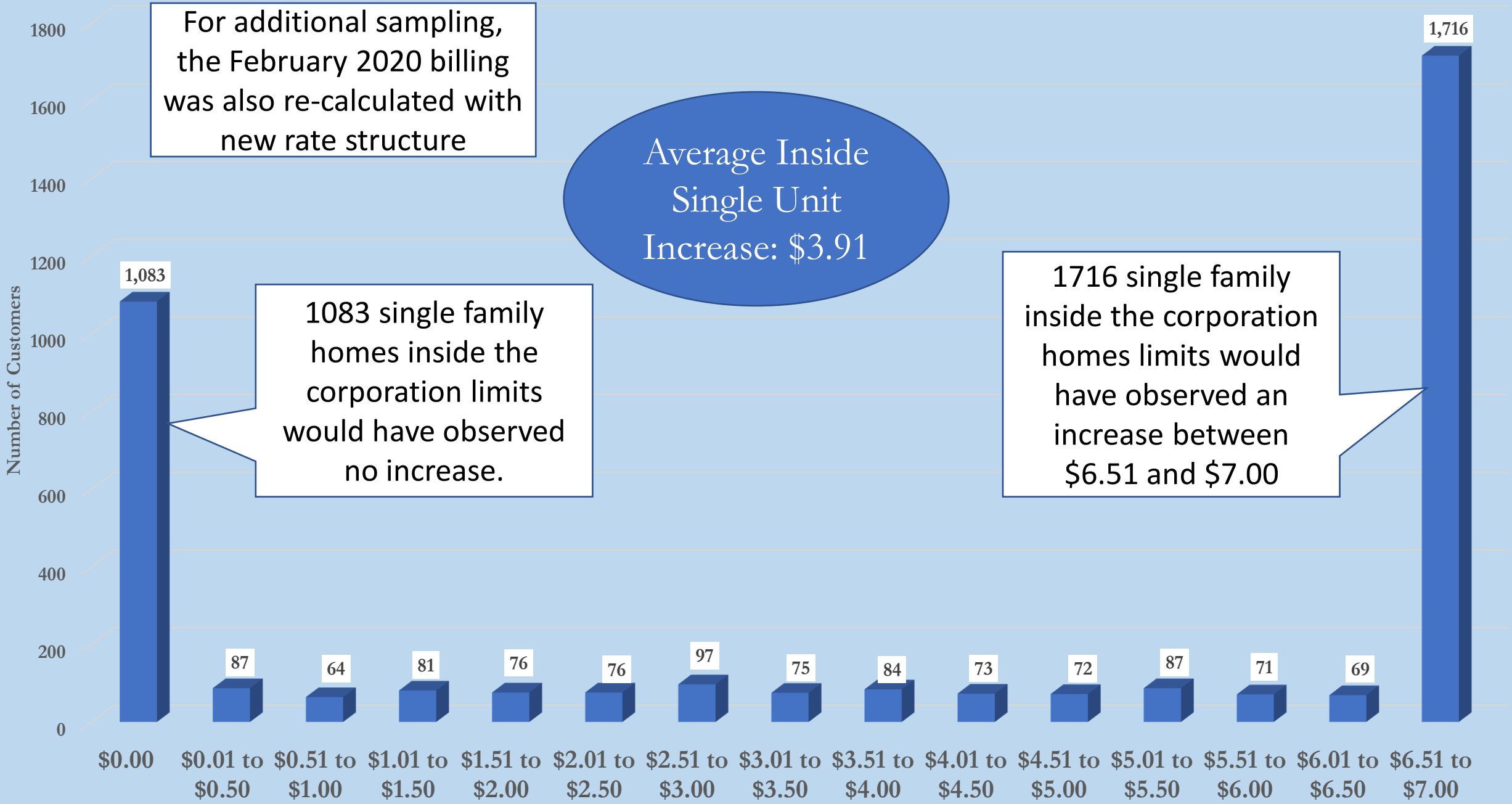
Per gallon charge would remain the same


YEAR 2019 ANNUAL SURVEY
WATER COST
Rates are based on 22,500 gallons or 3,000 cubic feet of water in a three month period. Rates quoted are those in effect as of March 1, 2019.
Prepared by the city of Oakwood Finance Department
HIGH: $ 312.23
LOW: $ 62.50
MEAN: $ 133.31
66 JURISDICTIONS
Union 62.50
Springfield 66.96
Clermont County 67.65
Enon 72.00
West Alexandria 77.24
Loveland 80.73
Oakwood 82.80
Englewood 87.95
Greenville 92.50
Fairfield 95.54
Fairborn 96.75
Dayton 96.86
Huber Heights 96.96
Bellefontaine 100.50
Harrison 100.88
Oxford 102.60
Bellbrook 102.75
Eaton 104.31
Middletown 104.70
Hamilton 105.00
Warren Co 105.30
Xenia 105.60
Indian Hill 106.56
Vandalia 112.20
Waynesville 114.17
Clark County 114.75
Mason 116.31
Butler County 118.23
Germantown 118.64
Franklin 122.49
Carlisle 126.06
Washington Court House 126.90
Beavercreek(GC) 126.95
Cedarville (GC) 126.95
Greene County 126.95
New Lebanon 131.19
Lewisburg 132.30
Urbana 133.80
Troy 134.07
Clayton (MC) 138.91
Centerville (MC) 138.91
Drexel District (MC) 138.91
Kettering (MC) 138.91
Moraine District (MC) 138.91
Northridge District (MC) 138.91
Riverside (MC) 138.91
Milford 139.88
West Carrollton 144.87
Jefferson Regional Water Auth 147.60
Lebanon 150.27
Tipp City 152.51
Farmersville 159.12
Springboro 160.56
Trenton 161.52
Sidney 164.55
Monroe 167.34
Brookville 168.75
Wilmington 184.20
Trotwood 190.64
West Milton 191.78
Miamisburg 196.72
Miami County (Tipp City) 224.79
Miami County (Troy) 225.02
New Carlisle 226.14
Piqua 261.26
Yellow Springs 312.23
How would the modification to the minimum water usage affect our rates compared to other water systems in the State of Ohio?

Inside City Single Unit Monthly Increase - May 2019 Billing



Inside Single Unit Monthly Increase - February 2020 Billing



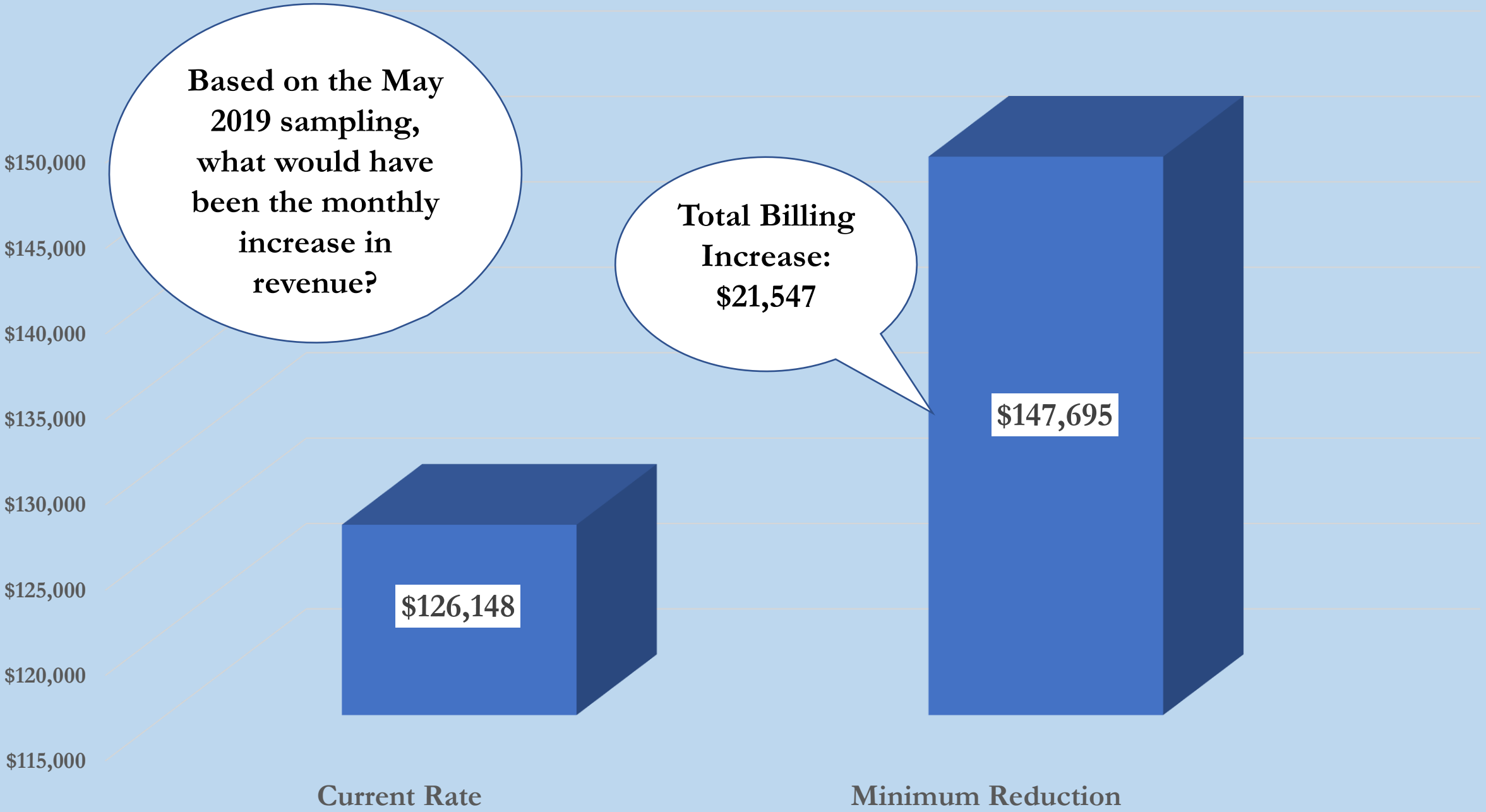
Brandywine Subdivision

Average Per Household Increase, Brandywine Subdivision: $4.39

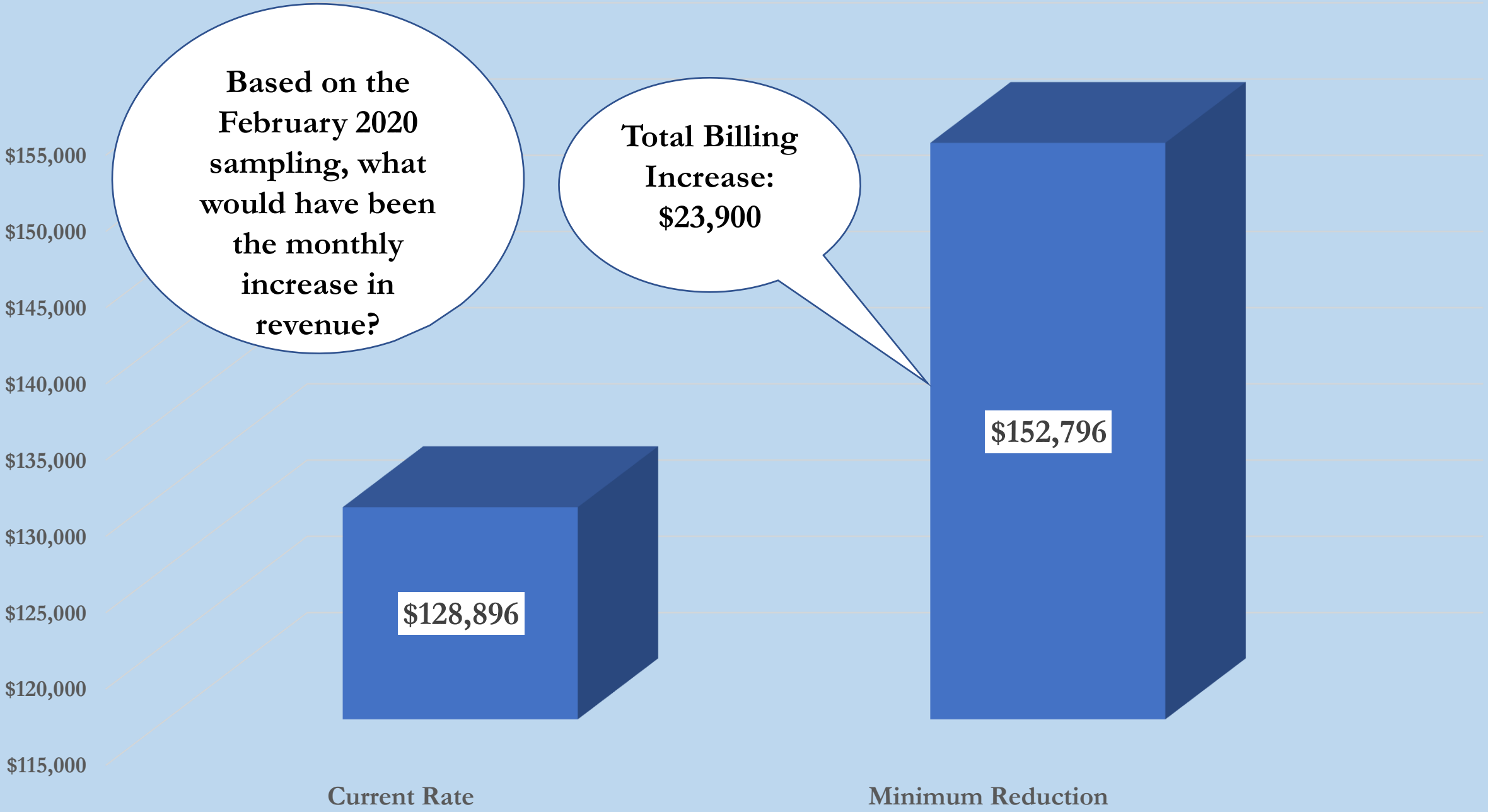
Impact on Multi Units Accounts

- Total Number of Multi Unit Accounts: **164**
- Total Number of Multi Units Accounts With No Impact: **77**
- Total Number of Multi Units Accounts With Increase: **87**
- Average Per Unit Increase: **$2.97**
- Total Monthly Increase From Multi Unit Accounts: **$3,872**

Revenue Comparison (May 2019 Billing)



Revenue Comparison (February 2020 Billing)



Summary

Estimated Annual Increased Revenue: $272,676

- Water Operations Fund (60%): $163,605
- Water Capital Improvement Fund (40%): $109,071

How would the modification of the minimum usage impact the 2021 budget forecast?

CURRENT: 2021 Forecast	Beginning Balance	Revenues	Expenses	Ending Balance
Water Operations Fund	$105,378	$1,188,986	$1,187,714	$106,650
Water Capital Improvement Fund	$86,391	$765,982	$968,625	-$116,252
Total	**$191,769**	**$1,954,968**	**$2,156,339**	**-$9,602**

2021 Forecast- With Reduced Minimum	Beginning Balance	Revenues	Expenses	Ending Balance
Water Operations Fund	$105,378	$1,352,591	$1,187,714	$270,255
Water Capital Improvement Fund	$86,391	$875,053	$968,625	-$7,181
Total	**$191,769**	**$2,227,644**	**$2,156,339**	**$263,074**

2021 Forecasted ending balance

Thanks For Viewing!!

Questions?

Contact:
David Kennedy, City Manager
513-707-1454
email: djkennedy@lovelandoh.gov