



Water Utilities

FY 2017-18 Budget Presentation



Water Utilities Goals and Accomplishments

Accomplishments

- Condition assessment for the 30 inch raw water transmission pipeline from Lake Lewisville to the Water Treatment Plant.
 - Robotics inspection complete; final report in June.
- Flow tested Lake Lewisville Water Treatment Plant to verify plant performance after 2016 plant rehabilitation and process upgrade.
- Rehabilitated ozone generators at the Lake Ray Roberts Plant to improve system reliability and performance.



Water Utilities Goals and Accomplishments

Goals

- Complete design for Lewisville Plant (Phase 2 Plant Upgrade)
- Improve zebra mussel control for Lewisville and Ray Roberts raw water transmission systems.
- Install communication systems to improve security for unmanned plant facilities
- Implement process to share SCADA resources between the two Plants.
- Complete water supply line improvements for Southwest Booster Pump Station to satisfy growing water demands.
- Complete waterline replacements prior to the Hickory Street reconstruction project.



Water Utilities Performance Measures

Current performance measures

- New water meter installations
- Water meter replacements
- Water mains replacements (feet)
- Processed water volume

New performance measures

- Main breaks per 100 miles
- Unbilled water volume



Water Utilities

Cost Containment Strategies

- Eliminated FTEs (Water Admin intern, Customer Service - Savings of \$47,854)
- Budgeted salary savings of \$175,000 (vacancies)
- Reduced \$615,519 from O&M budget (FY17 to FY18)
 - Machinery and equipment, outside contract services, and miscellaneous materials
- Improved debt service efficiency by balancing CIP projects and cash flow schedules.
- Reduced revenue funded capital variability by leveling over 5 years
- Total reductions are approximately equal to a 2.5% rate increase



Water Utilities Process Improvements

Completed Process Improvement / Lean projects

- Improved the metering reading, billing and work order process with team members from Water Metering, Electric Metering and Water Utilities Customer Service (reduced redundancy, errors, and rework).

Future Process Improvement

- Evaluate Capital Project coordination and implementation processes.
- Complete system distribution master plan and implement
- Improve work order data reliability for CityWorks
- Continue to improve asset management program



Water Utilities

Future Risks and Mitigation

- Raw Water Transmission Line costs
 - Assessment studies used to target repairs where needed
- Lewisville Dam repair
 - Working with Army Corps of Engineers for cost sharing
- Other transmission lines replacement funding
 - Using studies, system planning, and assessments to target funding where needed
- Age and condition of Lake Lewisville pump station
 - Programming into future CIP
- Declining per capita water usage
 - adjusting forecasts downwards beginning in 2020



Water Utilities Assumptions

- All rates based on cost of service
- Minimum debt coverage ratio is 1.25 (higher is better)
- Annual revenue funded capital based on depreciation schedules.
- Distribution system replacement funding target is 100% revenue
- Treatment plant infrastructure funding target is 25% revenue, 75% debt
- Reserves maintained within 120-180 day range
- Use multi-year financial planning to minimize rate increases



Water Utilities

5 Year Forecast – Zero Rate Increase

	Actual FY 2016	Budget FY 2017	Estimate FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Revenues (x 1,000)								
Rate Revenue	\$32,804	\$37,334	\$35,530	\$37,120	\$38,086	\$37,265	\$36,660	\$36,649
Non Rate Revenue	\$14,299*	\$7,449	\$6,679	\$6,934	\$7,106	\$7,302	\$7,436	\$7,585
Impact Fee From Reserves	\$4,000	\$4,000	\$4,000	\$3,755	\$4,534	\$5,200	\$5,200	\$4,800
Subtotal	\$51,104	\$48,783	\$46,208	\$47,809	\$49,726	\$49,767	\$49,296	\$49,034
Planned Use of Reserves	0	3,000	3,299	0	0	0	0	0
TOTAL REVENUE	\$51,104	\$51,783	\$49,507	\$47,809	\$49,726	\$49,767	\$49,296	\$49,034
Expenditures (x 1,000)								
O&M	\$17,844	\$22,417	\$20,679	\$21,505	\$21,914	\$22,584	\$23,139	\$24,255
Revenue Funded Capital	\$8,035	\$12,394	\$12,447	\$8,269	\$8,269	\$8,269	\$8,269	\$8,269
Transfers (Internal and External)	\$2,046	\$2,223	\$2,098	\$2,174	\$2,256	\$2,367	\$2,427	\$2,489
ROI/Franchise Fee	\$2,849	\$3,217	\$3,087	\$3,224	\$3,307	\$3,239	\$3,184	\$3,184
Debt Service	\$13,443	\$11,533	\$11,195	\$12,638	\$13,508	\$14,765	\$14,024	\$13,113
TOTAL EXPENSE	\$44,217	\$51,783	\$49,507	\$47,809	\$49,254	\$51,223	\$51,043	\$51,310
Net Income	\$6,887*	\$0	\$0	\$0	\$472	(\$1,456)	(\$1,747)	(\$2,276)
Rate Increases	5.0%	5.0%	5.0%	0.0%	0.0%	0.0%	0.0%	0.0%
<i>FY 2017 Rate Increases</i>	3.0%	5.0%	5.0%	4.0%	3.0%	2.0%	3.0%	--
RESERVE BALANCES								
Working Cptl + Op Reserve	\$24,150	\$21,599	\$20,601	\$20,351	\$20,573	\$18,867	\$17,120	\$14,844
Number of Working Days (Target 120 – 180 Days)	199	152	152	155	152	134	122	106
Development Plan Lines	\$0	\$0	\$250	\$500	\$750	\$1,000	\$1,000	\$1,000
Impact Fee Reserve	\$5,607	\$5,225	\$5,281	\$5,250	\$4,440	\$2,980	\$1,970	\$1,140
Debt Coverage Ratio - 1.25	2.34	2.48	2.42	1.96	1.93	1.72	1.73	1.74

*Includes one-time transfer of \$7.5 million related to refunding of the Utility Revenue Bonds and release of related reserve funds.

Water Utilities Options

Option 1: Zero rate increases FY 2018 to FY 2022

- \$5.0 million withdrawn from reserves FY 2018 to FY 2022
- Reserves fall below minimum target in FY 2022

Option 2: Zero rate increase in FY 2018 and FY 2019, 2% future years

- \$850,000 withdrawn from reserves FY 2018 to FY 2022
- Reserves decrease but remain within target range

Both Options use impact fees revenue in excess of projected impact fee income to draw down balance and one time utility revenue bond refunding (part of revenue funded capital)



Water Utilities

5 Year Forecast – Proposed

	Actual FY 2016	Budget FY 2017	Estimate FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022
Revenues (x 1,000)								
Rate Revenue	\$32,804	\$37,334	\$35,530	\$37,120	\$38,086	\$38,008	\$38,150	\$38,919
Non Rate Revenue	\$14,299*	\$7,449	\$6,679	\$6,934	\$7,106	\$7,302	\$7,447	\$7,623
Impact Fee From Reserves	\$4,000	\$4,000	\$4,000	\$3,755	\$4,534	\$5,200	\$5,200	\$4,800
Subtotal	\$51,104	\$48,783	\$46,208	\$47,809	\$49,726	\$50,510	\$50,797	\$51,342
Planned Use of Reserves	0	3,000	3,299	0	0	0	0	0
TOTAL REVENUE	\$51,104	\$51,783	\$49,507	\$47,809	\$49,726	\$50,510	\$50,797	\$51,342
Expenditures (x 1,000)								
O&M	\$17,844	\$22,417	\$20,679	\$21,505	\$21,914	\$22,586	\$23,143	\$24,262
Revenue Funded Capital	\$8,035	\$12,394	\$12,447	\$8,269	\$8,269	\$8,269	\$8,269	\$8,269
Transfers (Internal and External)	\$2,046	\$2,223	\$2,098	\$2,174	\$2,256	\$2,367	\$2,427	\$2,489
ROI/Franchise Fee	\$2,849	\$3,217	\$3,087	\$3,224	\$3,307	\$3,302	\$3,310	\$3,377
Debt Service	\$13,443	\$11,533	\$11,195	\$12,638	\$13,508	\$14,765	\$14,024	\$13,113
TOTAL EXPENSE	\$44,217	\$51,783	\$49,507	\$47,809	\$49,254	\$51,289	\$51,173	\$51,510
Net Income	\$6,887*	\$0	\$0	\$0	\$472	(\$778)	(\$376)	(\$167)
Rate Increases	5.0%	5.0%	5.0%	0.0%	0.0%	2.0%	2.0%	2.0%
FY 2017 Rate Increases	3.0%	5.0%	5.0%	4.0%	3.0%	2.0%	3.0%	--
RESERVE BALANCES								
Working Cptl + Op Reserve	\$24,150	\$21,599	\$20,601	\$20,351	\$20,573	\$19,545	\$19,169	\$19,002
Number of Working Days (Target 120 – 180 Days)	199	152	152	155	152	139	137	135
Development Plan Lines	\$0	\$0	\$250	\$500	\$750	\$1,000	\$1,000	\$1,000
Impact Fee Reserve	\$5,607	\$5,225	\$5,281	\$5,250	\$4,440	\$2,980	\$1,970	\$1,140
Debt Coverage Ratio - 1.25	2.34	2.48	2.42	1.96	1.93	1.77	1.84	1.92

*Includes one-time transfer of \$7.5 million related to refunding of the Utility Revenue Bonds and release of related reserve funds.

Water Utilities Budget Highlights

Revenues	FY 2015-16 Actuals	FY 2016-17 Budget	FY 2016-17 Estimate	FY 2017-18 Proposed
Interest Operating	99,325	148,000	148,000	175,000
Water Sales Residential	16,705,733	19,449,831	18,420,786	19,550,225
Water Sales Commercial	15,481,755	17,335,218	16,557,548	17,016,173
Water for Resale	616,588	548,878	551,171	553,406
Other Water	1,183,685	794,235	791,612	811,832
Cost of Service - General Fund	572,961	766,283	720,288	648,189
Cost of Service - Electric	3,089,574	3,616,304	3,221,468	3,432,604
Cost of Service - Wastewater	1,053,147	1,247,131	1,027,036	1,083,019
Cost of Service - Solid Waste	733,128	877,291	770,284	783,469
Other Transfers	7,567,639	-	-	-
Impact Fee Revenue Utilization	4,000,000	4,000,000	4,000,000	3,755,404
Use of Reserves	-	2,999,520	3,299,006	-
Total	\$ 51,103,535	\$ 51,782,691	\$ 49,507,199	\$ 47,809,321



Water Utilities Budget Highlights

Expenses	FY 2015-16 Actuals	FY 2016-17 Budget	FY 2016-17 Estimate	FY 2017-18 Proposed
Purchased Power	1,295,189	1,687,487	1,514,562	1,600,000
Personal Services	9,563,805	11,552,965	11,061,897	11,408,173
Materials & Supplies	1,478,542	1,837,081	1,668,760	1,721,614
Maintenance & Repairs	1,215,538	1,749,468	1,482,487	1,558,572
Insurance	231,299	238,949	238,949	222,481
Return on Investment	1,173,001	1,334,486	1,271,239	1,327,607
Franchise Fee	1,675,715	1,882,155	1,816,056	1,896,582
Miscellaneous	324,843	307,115	308,297	342,778
Operations	1,732,764	3,067,453	2,429,435	2,639,209
Debt Service	13,443,255	11,532,670	11,195,412	12,638,094
Administrative Transfer - General Fund	1,332,629	1,365,798	1,365,798	1,300,002
Other Transfers	2,046,042	2,222,615	2,098,358	2,173,766
Transfer to Capital Projects	8,704,026	13,004,449	13,055,949	8,980,443
Total	\$ 44,216,648	\$ 51,782,691	\$ 49,507,199	\$ 47,809,321

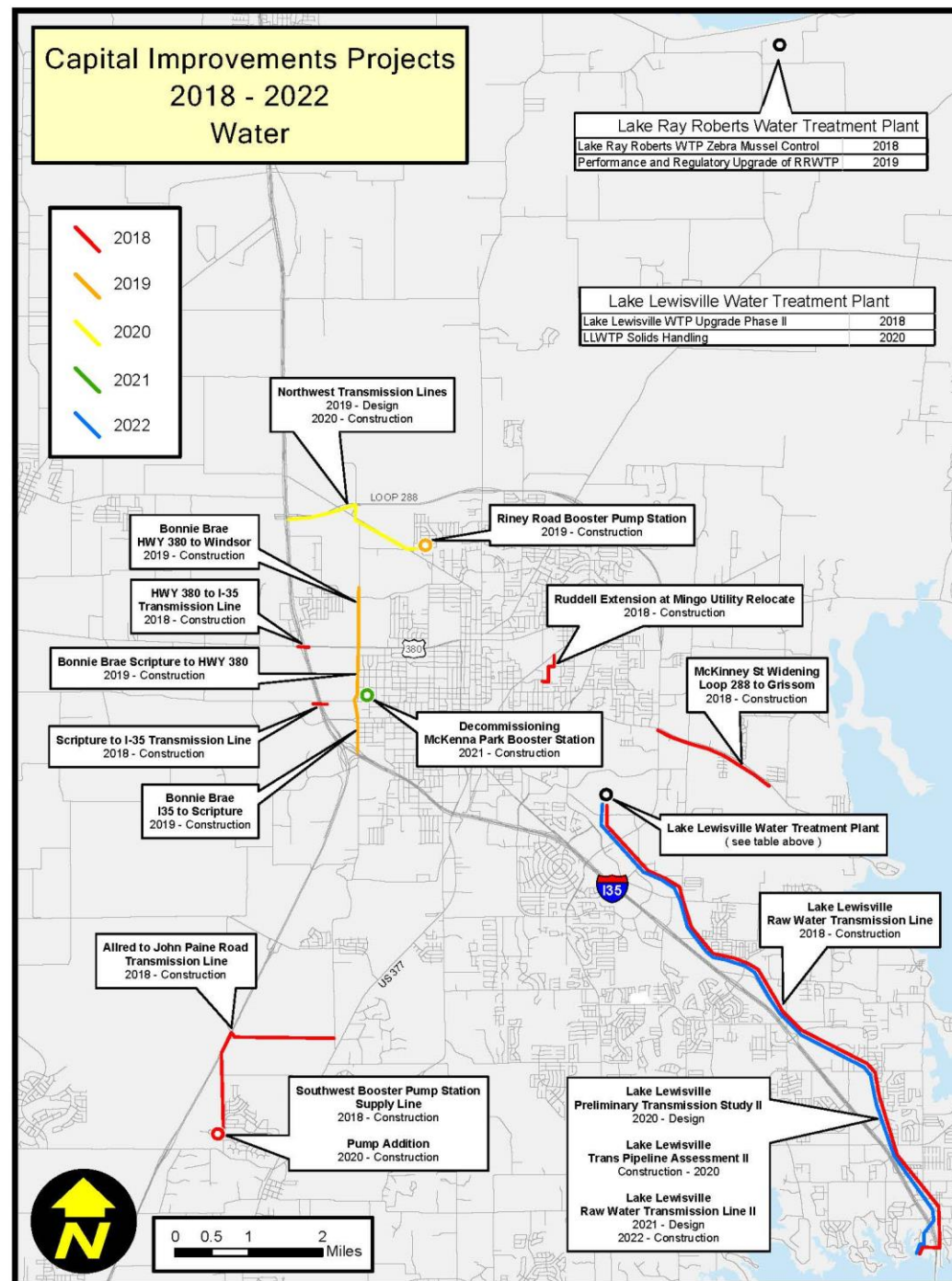


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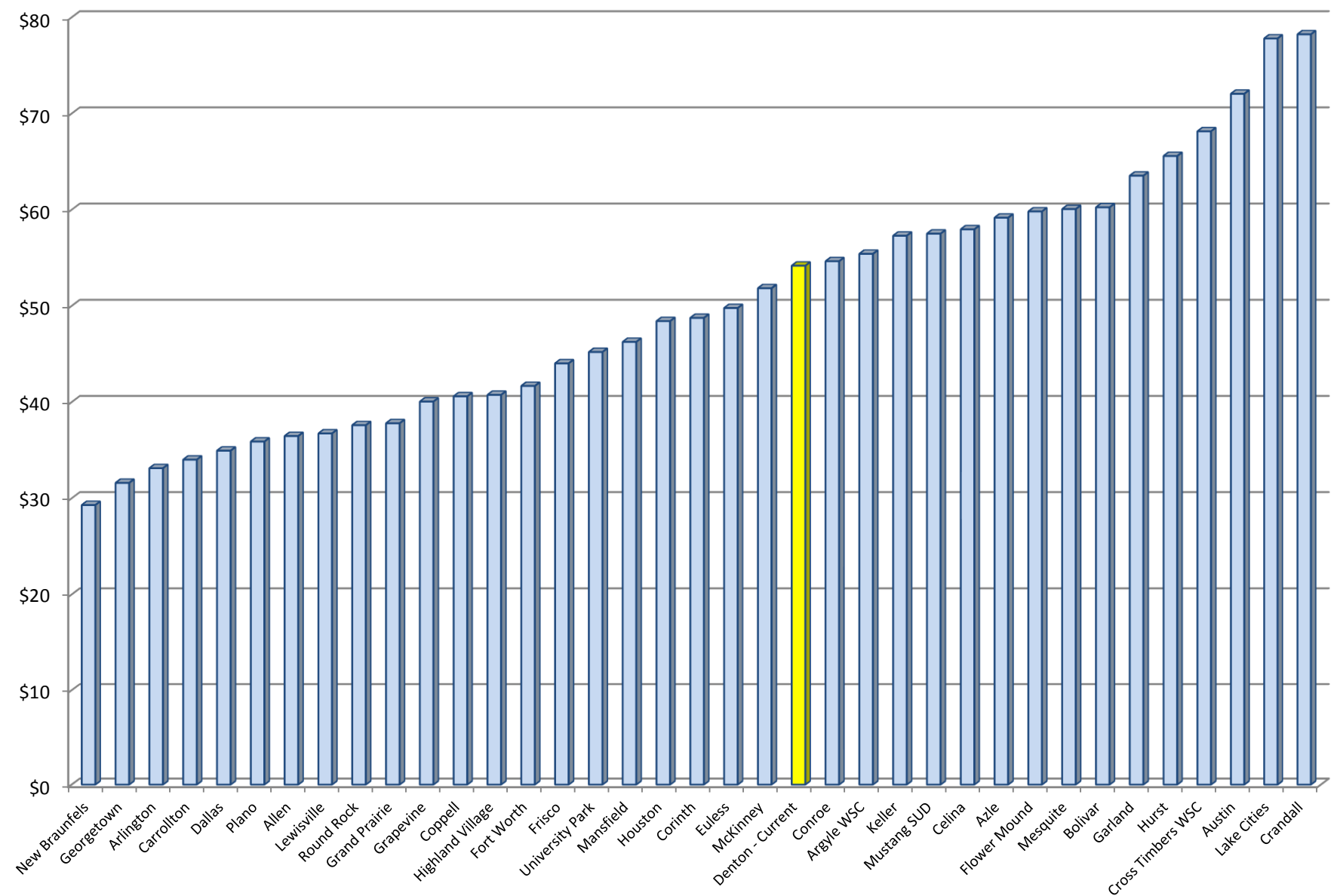
5 Year Capital Plan

Categories	FY 17-18	FY 18-19	FY 19-20	FY 20-21	FY 21-22	Total
BOOSTER STATION	\$380,000	\$4,000,000	\$350,000			\$4,730,000
FIELD SERVICES REPLCE	\$1,433,876	\$1,408,719	\$1,451,476	\$1,521,988	\$1,427,922	\$7,243,981
LAKE LEWISVILLE DAM REPAIR		\$3,750,000	\$3,750,000	\$3,750,000	\$3,750,000	\$15,000,000
OFFICE FURN/COMPUTER/EQUIP			\$50,000			\$50,000
OVERSIZE LINES	\$200,000	\$200,000	\$200,000	\$200,000	\$200,000	\$1,000,000
REPLACE LINES	\$3,780,000	\$3,810,000	\$2,000,000	\$2,000,000	\$2,000,000	\$13,590,000
TAPS,FIRE HYDS, METERS	\$1,275,530	\$1,334,547	\$1,393,832	\$1,453,398	\$1,513,250	\$6,970,557
TOOLS & EQUIPMENT	\$10,000	\$10,000	\$10,000	\$270,000	\$10,000	\$310,000
TRANSMISSION LINES	\$12,260,000	\$1,300,000	\$5,090,000	\$10,600,000		\$29,250,000
PLANT IMPROVEMENTS	\$13,470,000	\$11,600,000	\$6,000,000	\$150,000		\$31,220,000
VEHICLES	\$340,000	\$499,000	\$773,000	\$322,000	\$199,000	\$2,133,000
Total	\$33,149,406	\$27,912,266	\$21,068,308	\$20,267,386	\$9,100,172	\$111,497,538
Funding						
Aid in Construction	\$250,530	\$258,047	\$265,788	\$273,762	\$281,975	\$1,330,102
Revenue	\$19,988,876	\$10,404,219	\$6,512,520	\$16,043,624	\$4,868,197	\$57,817,436
Existing C.O.	\$1,910,000	\$750,000	\$290,000	\$450,000	\$450,000	\$3,850,000
New C.O.	\$11,000,000	\$16,500,000	\$14,000,000	\$3,500,000	\$3,500,000	\$48,500,000
Total	\$33,149,406	\$27,912,266	\$21,068,308	\$20,267,386	\$9,100,172	\$111,497,538

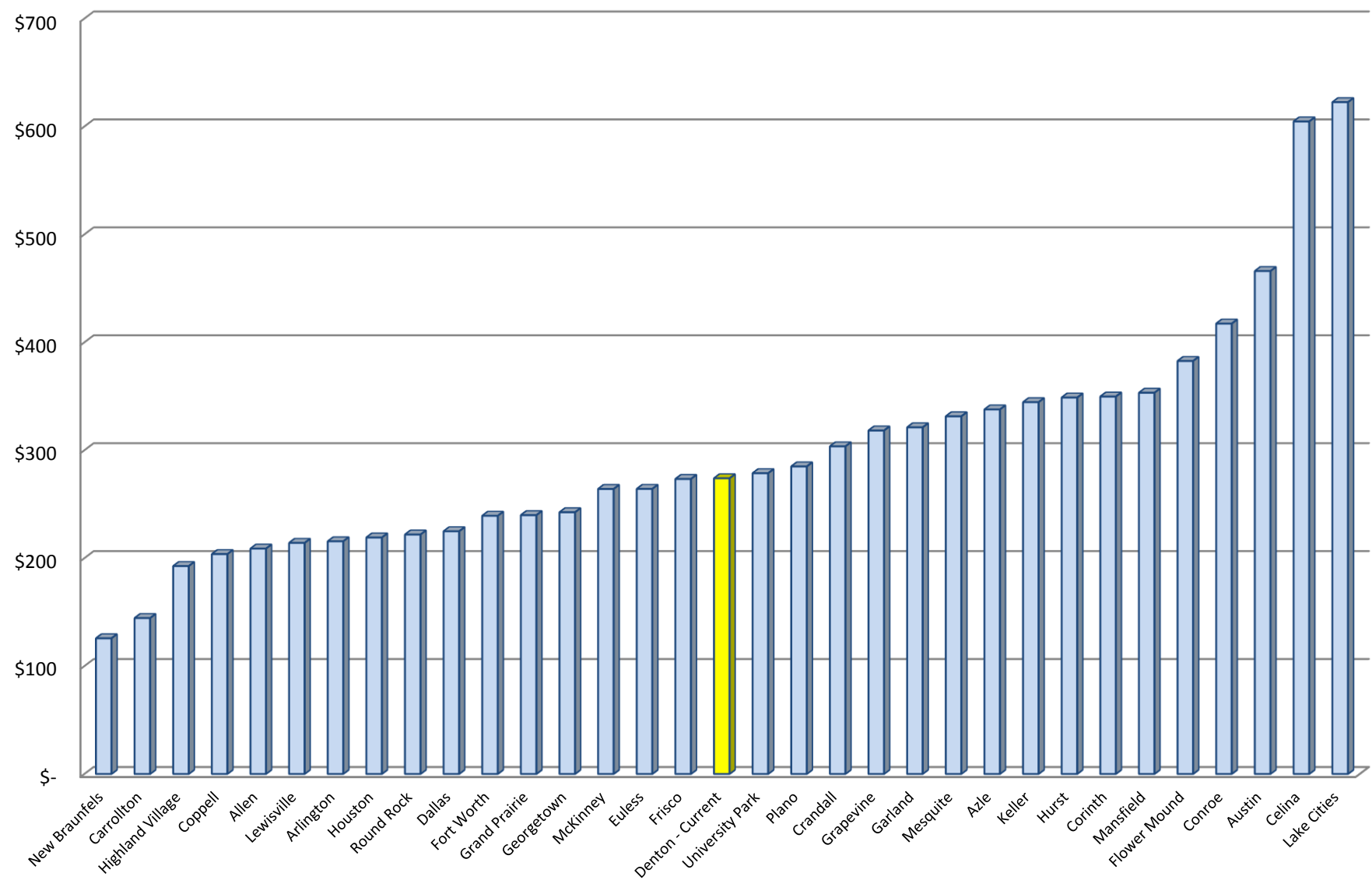




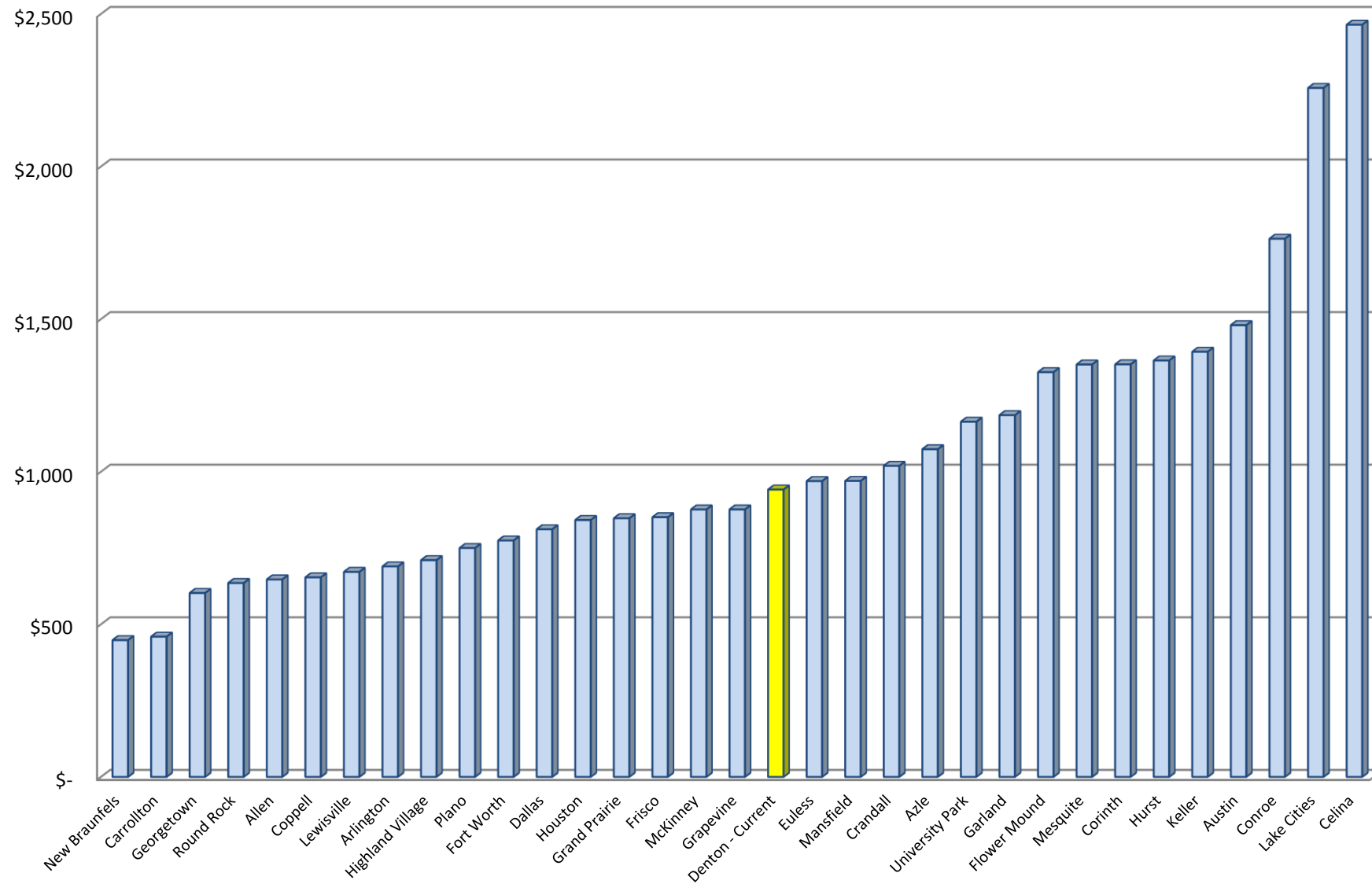
Residential Water 9,200 Gallons



Commercial Water 50,000 Gallons
2" Meters



Commercial Water 200,000 Gallons 2" Meters





Water Utilities

Questions / Comments

