Memo

To: City Manager's Office

From: Eric Roche, Budget Officer

CC: Senior Staff, Business Administrators

Date: August 20, 2021

Re: FY22 Budget Presentation #2 Information Packet

City Manager Pearson,

The City has concluded Budget Discussion #1. A significant number of questions and follow-ups were requested. Three major memos are included in this document, along with the presentation that will be given on Monday night during Budget Discussion #2. An outline for next weeks memos is also included.

Memo 1: FY22 Budget Implementation of Comp & Class Study

This memo is a full response to councils' questions regarding the classification and compensation study and it's implementation in the FY22 Budget.

Memo 2: Enterprise Fund Revenue – Background, Formula Requirements, and Rate Options

This memo is a response to Councils request for more details regarding the calculation of the 1.4X Bond Coverage requirement, as well as providing additional rate scenarios.

Memo 3: Surface Water Treatment Plant Staffing Summary with Operations Privatization/Alternatives Options Review

This memo is a response to Councils request for more information regarding Surface Water Treatment Plant Staffing and outsourcing.

Presentation: Budget Presentation #2

This presentation will be presented to City Council and the Mayor on Monday, August 23rd. An advanced copy is included for review. The presentation will cover how this Budget ties to the Mayor and Council's goals, Compensation and Classification's effects on salaries, FTE Comparisons with similar jurisdictions, and utility rate calculations & scenarios.

Next week the Budget Office will send out the following items:

Memo 4: Budget Follow-Up #3

This memo will cover the other questions that were asked, but not covered in the memos or presentations listed above.

Memo 5: Recreation Center Operations

This memo will cover Recreation Center operations, performance, and costs, as well as the status of PISD billings.

Regards,
Eric Roche
Budget Officer

Memo

To: City Manager's Office

From: Budget Office

CC: Human Resources Department

Date: August 19, 2021

Re: FY22 Budget Implementation of Comp & Class Study

Section 1: Purpose of Memo

The purpose of this memorandum is to detail how the FY22 Proposed Budget ensures that Pearland can attract and retain the best staff possible by implementing the compensation and classification study.

Section 2: Compensation and Classification Recommendations

Pearland strives to be the Top Workplace in the state of Texas. The best employers acknolwedge that people are their most important assets in achieving the best results we need to succeed in local government. This is the reason we are aiming to build and sustain an engaged workforce with the implementation of the Compensation & Classification study recommendations.**The City's compensation plan is a significant portion of total rewards and is a big factor in attracting and retaing the best employees possible. The addition of a sick buy-back program, bi-lingual certiciation pay, along with our cafeteria of benefits makes us very competitive in the market. The Compensation and Classification study ensures that we can continue to hire top talent at the City of Pearland**.

The Compensation and Classification Study was performed by a professional consultant studying the following cities: Baytown, Beaumont, Conroe, Denton, Friendswood, Frisco, Irving, League City, Missouri City, Pasadena, Richardson, Round Rock, and Sugarland.

The goal of the plan was to make sure every position in the City of Pearland pay plan has a competitive market salary attached to it using evidence-backed recommendations.

Evergreen, our consultant, used data to establish competitive market rates for each position. Additionally, compression was addressed by adjusting individuals salaries based on the market adjustment, tenure, and moving many employees to a step plan. For example, a new employee with relatively little experience would begin below the salary midpoint. The goal of the plan is not to bring every employee to the midpoint of their salary range. **The midpoint is where you would *typically* expect to find an employee in the *midpoint* of their career.**

The goal of the implementation is to make sure we are providing fair and competitive compensation and fits within the FY 22 Budget as presented. The plan provided evidence-

backed recommendation to adjust the pay rates of employees city-wide so that Pearland remains competitive and to reduce salary compression.

The plan, along with City Council, recommended that the City adopt the "Tenure Parity 10% cap" plan. This meant that all employees would be brought up to competitive rates, and no individual would receive less than a 2% salary increase or more than a 10% salary increase – with an exception. Some employees will receive more than a 10% increase due to the transition to a step plan.

The **new step structure** for non-exempt employees will ensure that employees are moving equitably through the ranges and reaching the "market rate" on time if step increases are able to be funded each year.

- ***Non-Exempt Pay Plan Example***

  *Jane Doe is currently earning $49,920 on open pay plan. Her salary is adjusted to the **next step** in the proposed grade which is $51,416 equivalent to a 3% increase. On her anniversary date, she will move to the next step of $52,444.*

Section 3: Compensation and Classification Implementation

The FY22 Budget fully funds the implementation of the Compensation and Classification recommendations. Each employee's salary is being adjusted according to what the data says their salary should be based on years of experience and market competitiveness. Non-Exempt employees will move into step-based pay plans on October 1st, 2021 in the recommended pay plan.

$527,567 in inflation adjustments were added to salaries after the study was conducted to account for recent inflation.

The General Fund's portion of the Compensation and Classification Plan will cost a budgeted $2,494,178 in salary increases. This is the amount that will be divided amongst General Fund employees as salary increases. The exact amount employees get is based off the data in the study. Increased salaries also increase the cost of benefits. About 30%, or ~$750k in General Fund benefit cost increases are attributable to the compensation and classification adjustments.

The Enterprise Fund's portion of the Compensation and Classification Plan will cost a budgeted $290,701 in salary increases. This is the amount that will be divided amongst Enterprise Fund employees as salary increases. The exact amount employees get is based off the data in the study. Increased salaries also increase the cost of benefits. About 30%, or ~$87k in Enterprise Fund benefit cost increases are attributable to the compensation and classification adjustments.

The FY22 Budget *also* funds a sick buyback program and bi-lingual pay. These two items are estimated to cost between $450K and $500K.

Additional salary increases on top of the proposed Budget, which is based on the data from the Compensation and Classification plan, would grow salaries and benefits beyond the competitive amount(s) per the 2021 Evergreen market study.

Section 4: Salary Increase Examples

It is helpful to see how the Compensation and Classification implementation will effect employees salaries. Highlighted below are several positions that have been discussed in Council Meetings. Historically, the City's growth in salaries has been 2%. The figures below are for base salaries – they do not include overtime, bilingual pay, sickleave buyback, etc. **Note that these are averages, and thus some employees will be above or below these figures**. **Individual employees should not assume they will receive the exact increases shown.**

Plan	Job Class Title	Number of Employees with this Job	Total Salary Increase	FY21 Average Salary	FY22 Average Salary	Difference in Average Salary	Percentage Growth in Salary
Step Plan	Firefighter	64	$264,594	$57,968	$ 62,102	$4,134	7%
Step Plan	Driver Operator	21	$100,623	$63,077	$67,869	$4,792	8%
Step Plan	Fire Lieutenant	18	$279,411	$70,195	$85,718	$15,523	22%
Step Plan	Fire Captain	6	$78,319	$83,098	$96,151	$13,053	16%
Step Plan	Equipment Operator	11	$18,727	$36,640	$38,343	$1,702	5%
Step Plan	Maintenance Crew Leader	14	$ 43,412	$45,849	$48,950	$3,101	7%
Step Plan	Treatment Plant Operator	13	$30,132	$ 40,632	$42,950	$2,318	6%
Step Plan	Utility Maintenance Worker	20	$36,102	$35,732	$37,537	$1,805	5%
Step Plan	Park Maintenance Worker	16	$28,326	$32,676	$34,446	$ 1,770	5%
Step Plan	Recreation Attendent	27	$19,140	$11,593	$12,301	$709	6%
Civil Service	Police Officer	136	$628,997	$74,836	$79,461	$4,624	6%
Civil Service	Sergeant	19	$116,711	$92,574	$98,717	$6,143	7%
Open Range	All Open Range Positions*	117	$374,685	$90,498	$93,700	$3,220	4%

*Does not include Council-Appointed positions

These salary increases are significantly more generous than the historical average increase the City has been able to offer (2%). In fact, these adjustments make our sworn polices officers salaries above the market rate based on Evergreen's recommendation.

Section 4: Council Discussion on Additional Salary Increases

Staff appreciate the City Council's desire to compensate employees well and attract quality talent. The adjustments being made bring the city's salary offerings in-line with competitive market rates, thus providing a higher quality candidate pool. Increasing salaries above what is recommended by the Compensation and Classification study may have unintended consequences, such as a reduced ability to adequately staff certain functions or slowing the growth and/or quality of new and expanded services for residents.

Memo

To: Eric Roche, Budget Officer

From: Khoa Nguyen, Financial Analyst

CC: Amy Johnson, CFO
Kristen Woolley, Deputy CFO
Robert Upton, PE, Director, EPW
Manager's Office

Date: August 20, 2021

Re: Enterprise Fund Revenue – Background, Formula Requirements, and Options for FY 22

Section 1: Purpose of Memo

The purpose of this memorandum is to detail the components of the City's Water and Sewer Rate Model. This memo will outline the assumptions and methods within the model and will detail the bond requirements that must be met each year.

Section 2: Definitions

1. Revenue

"Gross Revenues" is defined as "all revenues, income and receipts of every nature derived or received by the City from the operation and ownership of the System; the interest income…; and any other revenues hereafter pledged to the payment of all Bonds." Gross Revenues do not include any grants from, or payments by any federal, state or local agency.

Of the Enterprise Fund's revenue streams – the vast majority comes from the sale of water and the related water/sewer charges. Another significant revenue stream is Impact Fees. These fees are based on the Impact fee study and are allocated to specific projects. Unlike most revenues streams that flow directly into the Enterprise Operations Fund, Impact Fees are a revenue stream into the Enterprise Debt Fund. Other, smaller revenue streams (ex: late payment fees) are forecast by Finance Staff.

When forecasting revenues for the next year, the rate model takes into account three main factors: growth in the number of customer accounts, trends in water usage, and the rate structure (FY21).

2. Expenditure

Two important distinctions exist when discussing Enterprise operations.

First, the Maintenance and Operation Expenses (M&O) refer to any normal expenditure that is made to provide water and sewer services on a regular basis. These include

accounts like salaries, benefits, water purchases, minor repairs, etc. The City's Financial Policies define M&O expenses as follows:

> *"Maintenance and Operation Expenses" shall mean the reasonable and necessary expenses of operation and maintenance of the System, including all* ***salaries, labor, materials, repairs*** *and extensions necessary to render efficient service (but only such repairs and extensions as, in the judgment of the governing body of the City, are necessary to keep the System in operation and render adequate service to the City and the inhabitants thereof, or such as might be necessary to meet some physical accident or conditions which would otherwise impair the Bonds), and all payments (including payments of amounts equal to all or a part of the debt service on bonds issued by other political subdivisions and authorities of the State of Texas) under contracts which are now or hereafter defined as operating expenses by the Legislature of Texas. Depreciation shall never be considered as a Maintenance and Operation Expense.* ***Maintenance and Operation Expenses shall include, without limitation, all payments under contracts for the impoundment, conveyance or treatment of water*** *or otherwise which are now or hereafter defined as operating expenses by the Legislature of Texas and the treatment of such payments as Maintenance and Operation Expenses shall not be affected in any way if, subsequent to entering into such contracts, the City acquires as a part of the System title to any properties or facilities used to impound, convey or treat water under such contracts, or if the City contracts to acquire title to such properties or facilities as a part of the System upon the final payment of debt service on the bonds issued to finance such properties or facilities."*

Per the City's Financial Advisor, Operating Expense should not include depreciation, *existing* debt service (except debt service on bonds issued by other political subdivisions and authorities of the State of Texas), and cash-funded CIP projects.

3. Average Annual Debt Service

From Ordinance NO. 1589, Section 2.1
"Average Annual Principal and Interest Requirements" shall mean the average annual principal and interest requirements for all Bonds

The "Average Annual Principal and Interest Requirements" is a calculation that takes into consideration *all* the cumulative debt outstanding. Traditionally, the City issues Water and Sewer System debt with a 20-year debt structure, except for a couple of the TWDB issues, that sold with a 30-year debt structure.

4. Net Revenues

From Ordinance NO. 1589, Section 6.1.(i)

> *Net Revenues are certified by the Director of Finance or Interim Director of Finance of the City or the City Manager or Deputy City Manager of the City to have been equal to at least one hundred and forty percent (140%) of the Average Annual Principal and Interest Requirements on all Bonds, after giving effect to the issuance of the Additional Bonds to be issued;*

5. Operating Reserve (Unreserved Working Capital)

From the City's Financial Policies - Water/Sewer Unreserved Working Capital

The City shall maintain a working capital sufficient to provide for reserves for emergencies and revenue shortfalls. A cash equivalent operating reserve will be established and

maintained at 25% of the current year's budget appropriation for recurring operating expenses. The cash operating reserve is derived by dividing the total cash equivalents balance by recurring operating expenses.

Section 3: Enterprise Fund Metric Requirements

1. Bond Coverage Ratio Requirement

When the City sells bonds, it agrees to meet a bond coverage ratio requirement through a binding covenant. The ratio determines if the City is bringing in enough money to satisfy the bond holders that it will be able to repay its debts. It is a point-in-time measure, and the City must meet the target of 1.40 to not have any repercussions. **The 140% coverage requirement is found in Section 6.1 of the adopted Water and Sewer System Revenue Bond Ordinances. Section 6.1(c)(i) states that no Additional Bonds may be issued unless Net Revenues for the preceding Fiscal Year are certified by the Director of Finance or City Manager to have been equal to at least 140% of the Average Annual Principal and Interest Requirements on all Bonds, after incorporating the effect of the additional bonds to be issued in the next fiscal year (FY22).** Again, as the City Manager described on Monday night, the covenant is a legal requirement for issuing debts required by the bond covenants; this is not a policy threshold or measure the City can change.

A dip below 1.40 results will result in the Texas Secretary of State's Office not allowing new bond sales to proceed for the next year – and only if the ratio is met in the future. It would also trigger the unwinding of any bond sale currently underway – a significant financial misstep. Failure to meet this test means the City cannot issue additional Water and Sewer System Revenue Bonds which are necessary to fund the CIP and required projects, including those underway and awaiting additional financing.

In years where no debt is planning to be issued, Section 5.2 of the Water and Sewer System Revenue Bond Ordinances requires rates and charges sufficient to produce Net Revenues in each Fiscal Year at least equal to 115% of the principal and interest requirements scheduled to occur in such Fiscal Year on all Bonds then outstanding. The City's failure to meet the 115% coverage requirement would be considered a technical default under Section 5.2 and may require the filing of a material event notice under Section 10.2 of the Water and Sewer System Revenue Bond Ordinances.

The Bond Coverage Ratio can be calculated using the following formula:

$$Bond\ Coverage\ Ratio = \frac{(Revenue\ -\ Operating\ Expenses)}{Current\ Debt\ Service + Proposed\ Next\ Year's\ (FY22)\ Bond\ Sale\ Debt\ Service}$$

In FY22, the Bond Coverage Ratio is unable to be met without a rate increase. Thus, staff used the rate model to increase rates, and therefore revenues, until the 1.4X ratio was met with a sufficient safety margin while still minimizing the rate increase for residents and businesses. Staff's math is shown below:

$$Bond\ Coverage\ Ratio\ (1.45) = \frac{(\$62,752,397\ -\$33,369,302)}{\$20,240,646}$$

While the multi-year model is not yet complete, it will require additional rate increases in the future.

2. **Water/Sewer Unreserved Working Capital of 25% of Recurring Operating Expense**

The City also needs to retain a 25% reserve in the Enterprise Operations Fund per the City's Financial Policies. This is similar to the "fund balance" concept that we employ in other funds. The Calculations for FY22 can be seen below.

$$Water\ \&\ Sewer\ Unreserved\ Working\ Capital\ = \frac{Ending\ cash\ equivalents\ balance}{Recurring\ Operting\ Expense}$$

$$Water\ \&\ Sewer\ Unreserved\ Working\ Capital\ = \frac{\$25{,}873{,}228}{\$33{,}369{,}302}$$

$$Water\ \&\ Sewer\ Unreserved\ Working\ Capital\ = 78\%$$

Section 4: Can the rate increase wait until after the 32/30 catch-up that's underway been completed?

The City **must** meet its bond coverage ratio in FY22. The Rate Model does not provide the flexibility to run this exact scenario, but it is safe to say that not increasing rates at this time would force the City to enact significant (Over $2M) expenditure cuts in the Enterprise Fund in FY22.

Cuts would have to come out of "operating expenses" – things like personnel, system maintenance and repairs, etc. While such cuts would offer short-term relief, they would harm the provision of service and be exceedingly difficult to re-implement moving forward. It would also further exacerbate (increase) future rate increases (FY23 and FY24).

Section 5: Flexibility in the Rate Increase Amount

The Proposed Budget was built using a 9% rate increase. The City Council requested additional data to determine what a smaller increase would look like. Important to note: smaller rate increases this year will push up the degree of rate increases in the next few years – due to the compounding effect of rate increases.

Current 9% Rate Increase Scenario:

A 9% rate increase would bring in $62,752,397 in revenue. After factoring in the proposed operating expenses ($33,369,302) this leads to a bond coverage ratio of 1.45 (A minimum of 1.40 is required). The extra 0.05 is a safety margin that allows for unplanned operational expenses (ex: Winter Storm Uri) or revenue decreases (ex: A rainy year**). However, there**

are some options to somewhat reduce the proposed rate increase by decreasing this safety margin. The trade-off is that it increases the risk of dipping below the 1.40 minimum bond coverage requirement if any unforeseen circumstances arrive.

An average household, using 6,000 gallons of water in a month, would see their bills increase by approximately $6.65 per month compares to their FY 21 bills.

8% Rate Increase Scenario

An 8% rate increase would create a total estimated revenue stream of $62,242,962. The 8% is a decrease in revenue of $509,435 compared to the 9% scenario. Without adjusting expenditures down this would result in a bond coverage ratio of 1.42 – leaving less of a safety margin above the 1.40 requirement.

Reducing operating expense will give us a higher safety margin – although these could be cut at any point in the year if the need arises.

An average household, using 6,000 gallons of water in a month, would see their bills increase approximately $5.87 per month compares to their FY 21 bills. A one percent rate reduction from the recommended 9% saves an average homeowner $0.78 per month and reduces the City's revenue by $509,435.

7% Rate Increase Scenario

A 7% rate increase would create a total estimated revenue stream of $61,743,682. This is a decrease in revenue of $1,008,715 compared to the 9% scenario. Without adjusting expenditures down this would result in a bond coverage ratio of 1.402 – just a hair above the minimum 1.40 requirement.

An average household, using 6,000 gallons of water in a month, would see their bills increase approximately $5.13 per month compares to their FY 21 bills. A two percent rate reduction from the recommended 9% saves an average homeowner $1.52 per month and reduces the City's revenue by $1,008,715.

Although not in the recommended budget, rate level *could* be adopted without expenditure cuts. **The following supplemental requests that had been included to bolster the services and capability of the utility could be removed from the FY22 Proposed Budget by the City Council to increase the safety margin above the 1.40 ratio requirement.**

- Remove Two Public Works Message Boards - $40,050
- Remove IT GIS Analyst - $41,716 (50% share in the GF for total of $83,432)
- Remove Utility Billing Specialist I - $48,506
- Reduce Replacement Vehicles/Equipment spend from $540K to $300K ($240K cut)

Cutting these four items would reduce operating expenses by $370,272. If these cuts were implemented by Council a 7% rate increase would result in a Bond Coverage ratio of 1.42.

0% Rate Increase Scenario

A 0% rate increase is not conceived but is illustrative. A 0% rate increase would create a total estimated revenue stream of $58,249,339. This is a decrease in revenue of $4,503,058 from the 9% rate increase scenario proposed in the FY22 Budget. The City cannot meet the 1.4X ratio requirement without reducing operating expenses.

To meet the operating ratio of 1.4X, $3,750,000 would have to be removed from operating expenses. The FY22 Enterprise Budget contains a total of $1,151,700 in supplemental appropriations for new staff and purchases (Ex: Message Boards, Vulnerability Scanning Software). It also contains $540,000 in vehicle and equipment replacements. Removing *all* of the supplemental requests and vehicle/equipment replacements would reduce the operating budget by $1,691,700. This leaves $2,058,300 in *additional* expenditure cuts that would need to be made to meet the bond coverage ratio requirement. It would be exceedingly difficult to reduce the Enterprise Fund Budget by an additional $2,058,300 without reducing current staffing levels downward.

Section 6: Major Drivers of Future Rates

- According to the adopted CIP FY 2022-2026, the city will issue $96 million in FY 2022, $90 million in FY 2023, and $96 million in FY 2024. Historically, what the City lists in the CIP is greater than what we the city actually sells.
- Additionally, a large project, such as Barry Rose, can cause significant swings in when the City takes on new debt – and thus when rates must be increased. The issuance of new bonds for capital improvement projects increases the revenue requirement to meet the bond coverage ratio.
- Operating expenses will be shifting as staff are added (or outsourced) to bring new plants online; however, it cannot be assumed this will significantly reduce expenses to the fund. While producing our own potable water reduces the need to purchase outside water, we will still have to meet staffing and/or contractor costs.

Memo

To: Clay Pearson, City Manager

From: Ron Burton, Surface Water Treatment Plant Manager

CC: Trent Epperson, Deputy City Manager,
Robert Upton, Director of Engineering and Public Works,
David Van Riper, Assistant Director of Public Works
Amy Johnson, CFO
LaRae James, Human Resources Director

Date: August 18, 2021

Re: Surface Water Treatment Plant Staffing Summary with Operations Privatization/Alternatives Options Review

Executive Summary

The purpose of this memo is to present a comprehensive overview for the proposed Surface Water Treatment Plant (SWTP) staffing. Staff continued to evaluate the consultant developed plan for operations of the SWTP, which included the in-house maintenance team that would service the plant and other water and wastewater facilities, establishing needed technical skills in the utilities divisions and reducing costs of contracted maintenance services.

Staff has provided a discussion and investigation comparing three options: Complete privatization, exclusively operated by the City at beginning of plant start-up, or a short-term public-private partnership relying partially on contract staff to prepare Pearland staff for operations.

When it comes to personnel costs, associated with the preventative maintenance of equipment and subsequent repairs, **it has been determined to be less expensive and more reliable to add the appropriate staff versus ongoing future operation of full outsource of maintenance**.

Even now, before the Surface Water Treatment Plant begins operation, the City stands to gain technical skills for many services that we now outsource across the entire Water and Wastewater System. Under our current capacity and outsourcing of repair work, much of the inspection work falls to the water operators, without the necessary expertise, leading to more equipment that fails and more emergency repairs. Cost reductions in outsourced services and vendor mark-up for supplies for maintenance can be achieved and realized through acquiring technical skills of a maintenance team; Maintenance Coordinator, Plant Mechanics, Instrumentation Technician and Electrician. Maintenance requests generated from Water Production and Wastewater Treatment are for relatively minor repairs that can be reduced or eliminated through a robust preventative maintenance and small repair program, which an in-house maintenance staff will provide. The recommended maintenance team offers benefits like in-house training for current operators, reduced downtime of essential equipment, maintaining a

stock inventory, elimination of parts markup, reduced labor costs and elimination of service call fees.

To avoid potential staffing issues associated with the shortage of SWTP operators, **the most beneficial approach to initially staffing SWTP operators for the City would be entering a short-term public-private contract and transitioning from there.** The process would for the operations contractor to provide qualified operators through the partnership for initial plant startup and training of non-licensed individuals to satisfy state requirements and work to transfer those operators over as City employees during the contract period. The process has proven successful for other local cities who manage and operate similar plants. **A full-service, long-term contract commitment is *not* recommended because it will cost more for operations and maintenance and would not provide the same high level of service and emergency response that we currently obtain from City personnel.**

Staff recommends the following actions:

1. Continue to move forward with the implementation of the Maintenance Team under the Surface Water Treatment Plant (SWTP) staffing plan as recommended and included within the upcoming FY 22 budget. The Maintenance team will have the understanding that they will be onsite at the SWTP, during construction, to learn the installation process of the equipment and be part of the training process so that the team knows the equipment and the preventative maintenance program, troubleshooting, investigating and repairs.
2. The Maintenance Team, consisting of one (1) Maintenance Coordinator and one (1) Instrumentation Technician requested for FY22, and two (2) Plant Mechanics and one (1) Electrician in FY23, will also be utilized system wide for the water and wastewater plants. The team will be assigned with the tasks of reviewing, researching, and analyzing the existing system equipment. The work will also include the development of preventative maintenance program for the critical equipment and then implement. The responsibility of the team will also include the maintenance and smaller repairs to the equipment. Examples of the items that the team will be responsible:
    a. Routine inspection of equipment;
    b. Periodic calibration and adjustments;
    c. Development of a preventative maintenance schedule;
    d. Better scheduling and utilization of personnel;
    e. Reduced costs for routine and emergency repairs;
    f. Better coordination between departments, especially if equipment is shared;
    g. Improved knowledge and understanding of equipment;
    h. Better organization of equipment maintenance procedures;
    i. Efficient use of lubricants;
    j. Efficient purchase of spare parts

3. **After visiting with other City operations and consultants, it is staff's recommendation to follow the plan of a Public/Private partnership for operations that has been proven to be successful.** Rather than a total outsource methodology it is to have this program start during the construction phase of startup and testing, a period estimated to last six (6) months, to train the operators on the equipment and training and continue with this service for a one-year period.
4. During the contract period and part of the contract with contracted operations will be the ability to hire the staff on a quarterly basis to slowly transition to full City operations by the end of the contract period.

Updates and Background

- **Cost Reduction Clarification and Identification.** Clarification of a February 5, 2021 memo titled "Surface Water Treatment Plant Staffing" projected a reduction of costs. That's been reviewed and now identifying $200,000 in recurring contracted services through additional staff, by sharing a more detailed overview of costs and benefits associated with adding personnel. However, estimated savings are not built into the FY22 budget and will not be fully realized until a full maintenance team is in place in FY23. As the maintenance team is on-boarded the reductions will be realize incrementally as staff is brought up to speed on the equipment throughout the system.
- **Proposed Personnel & Fiscal Year Workforce Evaluations**. A review of the revised staffing plan and a representative timeline for hiring staff in FY22 based on the Surface Water Treatment Plant (SWTP) project schedule. Additionally, the FY23 staffing recommendations necessary to develop a utility maintenance team, which will supplement service needs of the entire water and wastewater divisions. The creation of this team will be a first for the City that will provide technical services that have historically been acquired through outsource service contracts. Finally, an overview of the staffing plan that will provide maximum benefit to the City with a minimum number of staff.
- **Personnel Costs—City Operated vs. Outsourced vs Short Term Partnership.** The topic of outsourcing the SWTP was put forward during the City Council meeting held on May 17, 2021. Council's concern was the estimated annual costs that would be incurred operating the SWTP at full capacity 24/7/365 with "a staff of ten people." Council agreed that it would be interested in comparing potential costs of a City-staffed facility weighed against the potential cost of outsourcing the facility to a third party. The memo will explore some of the pros and cons of operating the plant as part of our overall water operations versus outsourcing.

Statistical Cost Reduction Clarification

The City has rapidly grown over the past 20 years we have traditionally contracted out mechanical, electrical, and instrumentation repairs. **With the addition of the SWTP, the size and needs of our overall system are at the tipping point to consider the benefits of bringing these capabilities in-house in the form of a "maintenance team.** The team will provide the proposed service internally for the overall water and wastewater divisions

Outsourcing services such as electrical, instrumentation, and motor repair to private companies under high value contracts has substantial cost impacts on Water Production, Wastewater Treatment and Lift Station budgets. Consider the following contracts that are funded primarily through Water Production and Wastewater division budgets:

- Boyer Inc. (Boyer) provides electrical repair services.
    - 2021 contract value, $500,000.
- STP Services (STP) provides mechanical repair services to pumps and motors.
    - 2021 contract value, $380,000.

- Prime Control (Prime) provides instrumentation-related services for automated systems and SCADA. There is no annual contract established as the new SCADA system is being developed and this service will be procured. Based on staff experience, a best estimate for maintaining and servicing a comparable SCADA system is $162,000 per year.

The large contracts are bid as best value for the City, but once a fully developed and staffed maintenance team, which provides service to the various divisions, would be able to offset some of the costs by performing minor electrical, pump, motor and mechanical services in-house. Even with this team, the need will not be fully removed to have a contract with our vendors; however, it would be at reduced amounts, as major repairs will still require their services.

Summary

The $200,000 savings indicated in the White Paper presented in early budget development was a projected cost reduction for service calls, labor costs, and elimination of an average 20% markup (for parts and materials) that vendors have charged for minor repairs to motors during the fiscal year for Water Production, Wastewater, and Lift Stations. Through an analysis of past work orders with Boyer and STP, **staff anticipates that with a full maintenance team, we can save the estimated $200,000 by reducing service call fees by $20,000 to $50,000 per year plus a reduction of $150,000 in labor and parts markup**.

Since it is less likely that these technical services will be needed *daily* at the SWTP during the first year due to warranty coverage for the equipment, the maintenance team will begin by addressing immediate needs in the current water and wastewater systems. The cost reductions in contractual services for other divisions will begin in FY22 when the positions are filled. The reductions will not be fully realized immediately but will be incrementally as staff is brought up to speed on the knowledge and operations of the equipment.

Proposed Personnel & Fiscal Year Workforce Evaluations Made to Reduce Head Count

In a 2017 memo, *Preliminary Staffing Plan*, developed with the City's consultant Ardurra, a **12-member** staff is recommended (Figure 1) to oversee the operations of the SWTP.

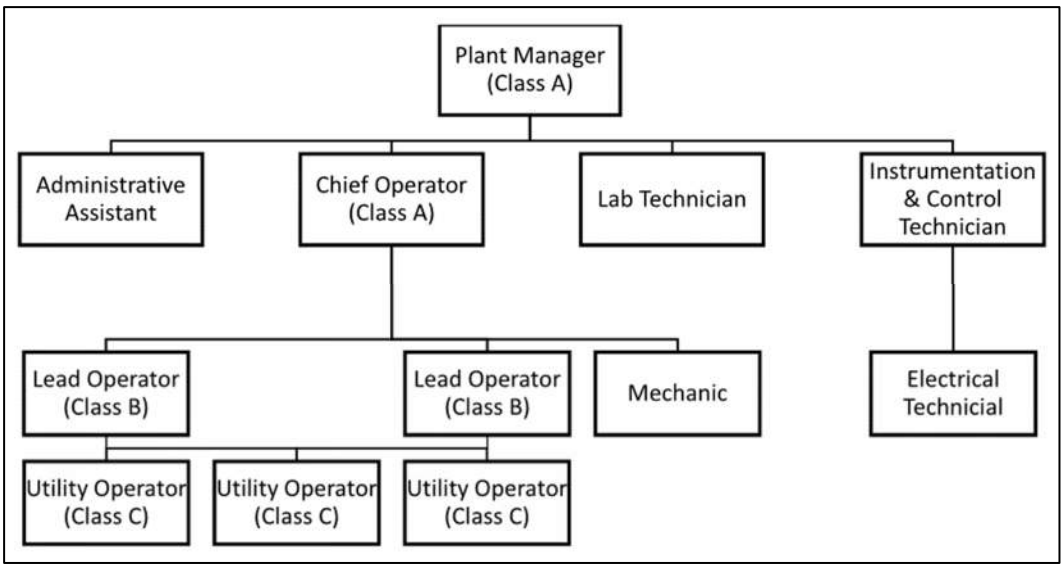


Figure 1. 2017 Preliminary Organizational Chart.

In staff's experience, the dynamic shown in Figure 1 is a typical organizational chart for a water treatment plant. However, in early 2020, staff revised the recommendation to create a more efficient management structure by grouping operations-related staff under one supervisor and likewise, grouping maintenance-related staff under another.

The revised organizational chart balances operations with maintenance across the *entire* water and wastewater system equipment, and includes two additional personnel, creating a **14-member staff, 9 of which are assigned to the SWTP and 5 to the maintenance staff**. Figure 2 shows the revised chart delineating staff according to the recommended fiscal year in which staff will be requested. Proposed staff include: one (1) Administrative Assistant, one (1) Process Control Supervisor, two (2) Operator II's, three (3) Operator I's, one (1) Laboratory Technician, one (1) Maintenance Coordinator, one (1) Electrician, one (1) Instrumentation Technician, and two (2) Plant Mechanics.

For comparison to another 10 MGD capacity membrane plant, Sugar Land's staffing plan works with 12 employees: one (1) Plant Manager, eight (8) Operators, one (1) Lab Technician, and two (2) Plant Mechanics. Sugar Land's mechanics only service the plant and rely solely on additional contracts for electrical and instrumentation at the plant. Additional contracts for equipment and electrical repairs for equipment outside of the plant boundaries are also required. The current staff proposed plan is to develop the maintenance team to provide service for the complete water and wastewater infrastructure located throughout the City's system.

For the revised staffing plan, job titles were modified from the preliminary plan to align with current market terminology, which in turn made research into market pay structures and job descriptions more comparable.

Staff adjusted the number of positions to accurately reflect the needs of this plant while considering the desire to create a “maintenance team” with aptitudes that would broaden the scope and capabilities and expertise in the utility division. The services that the proposed maintenance team would provide are currently outsourced to mechanical, electrical, and instrumentation contracts.

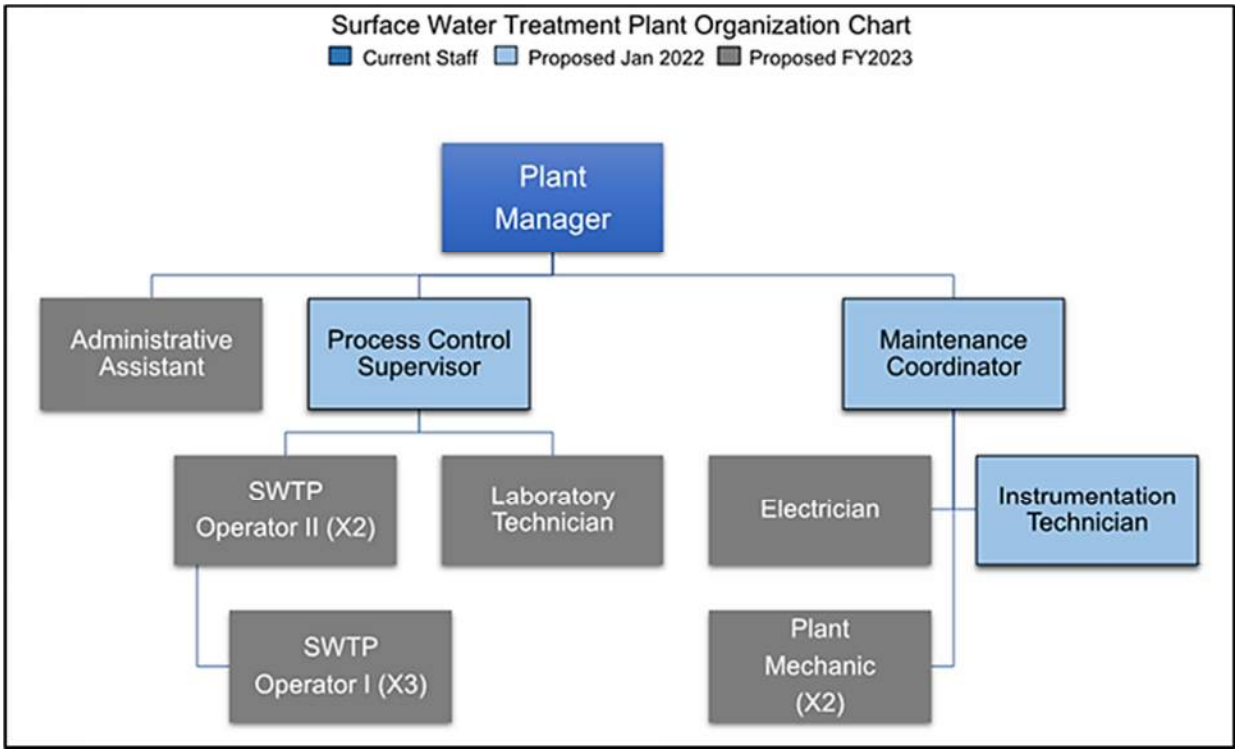


Figure 2. 2020 Revised Staffing Plan.

The recommended positions of Process Control Supervisor, Maintenance Coordinator, and Instrumentation Technician for FY22 budget along with an Electrician and Plant Mechanics that will be recommend in the future FY23 budget, are necessary personnel due to the complexity of equipment and automated systems in the surface water treatment process. It is the intention of the Department to develop a utility maintenance team, which will service the needs across both water and wastewater divisions. The creation of this team will be a first for the City as related technical services have historically been acquired through outsource service contracts.

The maintenance team is a long-term investment, like the plant itself; it involves initial costs and commitment to the concept that a more comprehensive workforce is better prepared for routine situations and emergency responses while providing long term benefits by expanding the City’s technical capabilities.

The following is a brief summary of the FY22 staff recommendations:

Process Control Supervisor

The Process Control Supervisor (PCS) will be responsible for the overall facility operations including surface water production, working closely with the Maintenance Coordinator on plant maintenance projects, maintaining the integrity of membrane filters, and determining chemical dosages and flow adjustments. Additionally, this position will be responsible for cross-training Water Production and Wastewater staff interested in earning a surface water license.

The PCS will assume a lead role in maintaining regulatory compliance, and due to the high level of knowledge and skills required, staff recommends that the City hires this position by January 2022 in order to commence formal training with the membrane filter installers, learn the various chemical feed systems capabilities, including highly specialized equipment such as the chlorine dioxide generator and the clean-in-place system for the membranes. Based on the current schedule the plant will be in early start-up in August 2022 and it is critical to have this position in place prior to that time.

Maintenance Coordinator

The Maintenance Coordinator will be responsible for the overall facility maintenance, coordinating maintenance staff on plant projects and those for other divisions, such as troubleshooting and minor repairs to equipment for the Water Production and Wastewater divisions, providing data for the asset management system, assigning work orders, and managing the preventative maintenance program.

Since this position will assume a lead role in the maintenance and troubleshooting of assets in multiple divisions, and the high level of knowledge and skills required, staff recommends that the City hires this position by January 2022 in order to work with equipment installers and manufactures' representatives on operation and maintenance training throughout plant startup and commissioning.

Instrumentation Technician

The Instrumentation Technician will be responsible for ensuring functionality of all automated systems, specifically the supervisory control and data acquisition (SCADA) systems for the water treatment plant, water production, and wastewater facilities. The goal for this position includes maintenance, repair, and upgrades of hardware and potentially software components, pending on skill level, and some basic programming necessary to integrate changes.

Because this position will assume a lead role in maintaining SCADA systems for Public Works, and due to the high level of knowledge and skills required, staff recommends that the City hires this position by January 2022 in order to commence formal training with SCADA installers, equipment suppliers, and engineers, but additionally to:

- Work with application engineering services in the development of the treatment plant's SCADA design and automated systems;
- Work with IT Department staff to become familiar with the City's integrated systems and policies;

- Work with Water Production and Wastewater divisions, learning their SCADA systems and coordinating procedures to integrate the treatment plant and WP systems.

All three positions will report to the Surface Water Treatment Plant Manager and will be responsible for enforcing policies and guidelines to ensure compliance with regulatory agencies, coordinating treatment plant operations with the Water Production and Distribution divisions, and determining proper corrective procedures regarding water quality.

The timing of the recommended staff is critical during the construction phase of the SWTP because it will give the staff the advantage of learning firsthand knowledge of the structures, substructures, and equipment as it is being built; and piping and conduit as it is installed. It also allows the opportunity to train staff in the operation of the equipment with engineers and manufacturers of the equipment. Working in conjunction with the engineers and manufacturers would better prepare these positions to assume the responsibilities of operations. The additional staff should be in place by January 2022 in time for critical equipment delivery and planned start up and testing of equipment.

Table 1 illustrates timelines for major installations through calendar years. The lines represent the progression as systems develop; testing of electronic system will be ongoing and intermittent as they correspond to other installations up to the initiation of a SCADA system. The Process Control Supervisor, Maintenance Coordinator, and Instrumentation Technician will play crucial roles in operating and maintaining these installations. January offers a prime window of opportunity to bring staff on as systems become more interconnected at that point in construction.

Table 1: Engineering Project Schedule

Installations	2021	2022							
	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
Membrane System										
Chemical Feed Systems										
Mechanical Systems										
Electronic Systems Testing										

Table 2 shows estimated recurring costs of $300,159 for salaries with benefits based on the mid-range pay rate for each position's recommended pay grade in accordance with Pearland's Pay Plan. One-time purchase of assets for Tools is $36,972 and Vehicles for $66,000. The total budgeted for FY22 is $403,131.

Table 2: Recurring and One-Time Costs

Position	Recurring	Tools	Vehicles	FY22 Budget
Process Control Supervisor	$ 104,153	N/A	N/A	$ 104,153
Maintenance Coordinator	$ 104,153	$ 20,972	$ 33,000	$ 158,125
Instrumentation Tech	$ 91,853	$ 16,000	$ 33,000	$ 140,853
Totals	**$ 300,159**	**$ 36,972**	**$ 66,000**	**$ 403,131**

Summary

Field-professional employees are essential factors in any municipality's success; after all, personnel skills accounts for 85% of an organization's assets and can affect public perception. The recommended staff in the revised staffing plan will provide a needed service to the Department by expanding our level of technical staff. As water-related topics become increasingly more prevalent in social discourse, it is important to invest in water-industry professionals who can reinforce the public's confidence in our water and wastewater utilities and be a competitive with our neighboring municipalities that already possess this degree of service for their water treatment plants.

Personnel Costs—City Operated vs. Outsourced

Providing safe and affordable drinking water service for citizens is a necessary but costly endeavor. Simply staying apprised of the latest science and regulations takes considerable resources. Implementing changes as needed to provide quality drinking water requires investment, manpower, and expertise. Therefore, in preparing each of the following categories, research was conducted in both private and public owned utilities to provide representative personnel costs.

Privatization

To provide the comparison of Privatization vs In-house staff, staff needed to research job descriptions, pay and visit with other cities that utilized privatization. Areas of responsibility include such things as, job duties, desired skills, and job knowledge / experience of potential candidates were compared from sources that include: CareerExplorer.com, ZipRecruiter.com, Salary.com, and Indeed.com. Additionally, local municipalities including Baytown, Sugar Land, Deer Park, and Houston job descriptions were reviewed and compared. The information gathered was used to develop a competitive preliminary pay schedule for the revised staffing plan using the mid-range hourly rate for each position's recommended pay grade in accordance with Pearland's Pay Plan.

Table 3 presents a comparison of the position salaries, including benefits, and compares the City's mid-range per hour rate to the standard hourly rate charged for outsourced services obtained through a public-private partnership contract used for operations at Sugar Land's plant. The Sugar Land facility was chosen for comparison because its plant design and operational needs would mirror the City's. Sugar Land is a 10 MGD capacity plant that draws raw water from the same source (Brazos River), has four membrane racks, utilizes plate-settlers and GAC filters, has the same solids de-watering process, and operates 24/7/365. Ardurra provided the pay rates for the third-party contractor that was utilized during the startup and the one year of transition from contracted to City staff.

According to Sugar Land's Plant Manager, the full-service contract with an operations and maintenance provider was for a one-year period following completion of the plant, primarily for initial plant start-up and establishing operations. Additionally, staffing the plant was included as a term of the contract, after which, the city assumed operations and hired many of the contract operators and mechanics. **Long-term privatization of the Sugar Land plant was never the intention of using a third-party, it was simply to establish operations and maintenance**

protocols for the initial start-up period of system integration and through the warranty period.

Table 3: Hourly Rate Comparison

Position	City Mid-Range Salary	Benefits	City Totals	City / Hr with Benefits	Contract Rate / Hr	Contract Total
Regional Director of Operations	See note below.				$ 205.00	$ 49,200.00
Senior Operations Specialist					$ 153.00	$ 36,720.00
Plant Manager	$ 79,077	$ 22,142	$ 101,219	$ 48.66	$ 95.00	$ 197,600.00
Administrative Assistant	$ 50,928	$ 14,260	$ 65,188	$ 31.34	$ 52.00	$ 108,160.00
Process Control Supervisor	$ 75,245	$ 21,069	$ 96,314	$ 46.30	$ 82.00	$ 170,560.00
Operator II (X2)	$ 50,928	$ 28,520	$ 158,895.36	$ 39.18	$ 77.00	$ 160,160.00
Operator I (X3)	$ 46,193	$ 38,802	$ 254,987.35	$ 35.53	$ 52.00	$ 108,160.00
Laboratory Technician	$ 50,928	$ 14,260	$ 65,188	$ 31.34	$ 69.00	$ 143,520.00
Maintenance Coordinator	$ 75,245	$ 21,069	$ 96,314	$ 46.30	$ 86.00	$ 178,880.00
Instrumentation Tech	$ 71,662	$ 20,065	$ 91,727	$ 44.10	$ 76.00	$ 158,080.00
Electrician	$ 56,149	$ 15,722	$ 71,871	$ 34.55	$ 77.00	$ 160,160.00
Plant Mechanic (X2)	$ 46,193	$ 25,868	$ 144,123.28	$ 35.53	$ 72.00	$ 149,760.00
Total	$ 602,548	$ 221,776	$ 1,145,825	$ 467.85	$ 891.00	$ 1,571,760.00

In addition to the contractor's staffing requirement to operate the plant, the company required a Regional Director of Operations and Senior Operations Specialist to be available intermittently (20-30 hours monthly) for operation and budget reviews and meetings with Sugar Land city management. Pearland already accounts for the duties of these two positions and their associated costs through the Director of Engineering and Public Works, Assistant Director of Public Works and SWTP Plant Manager.

In further costs analysis, Ardurra provided the following itemization of estimated annual expenses for the Sugar Land plant. Because of two plants similarity in size and operations, we can reasonably expect our operating costs for these items to be comparable. These costs are the same whether use City personnel or outsource the plant operations.

Labor, O&M	$	1,200,000
Chemicals	$	1,000,000
Electricity	$	900,000
Repairs	$	1,000,000
Solids Disposal	$	300,000
Laboratory	$	40,000
Total Est.	$	4,440,000

To summarize, overall personnel cost at the Pearland mid-range rate including benefits, $1,145,825, is slightly less expensive than the third-party cost for the same staff, $1,571,760. Considering this and the benefit of having an in-house technical staff compels our staffing recommendation to have in-house staff. Additionally, the in-house staff will be available for citywide emergency operations during an emergency. Whereas, other jurisdictions have experience issues with contracted operators not being available during emergency operations. The lack of response was experienced recently with a nearby City during the Winter storm Uri.

Sugar Land and Missouri City initially relied on full-service contracts to establish items like standard operating procedures, maintenance procedures, asset management, SCADA operations, and laboratory testing. Basically, these cities purchased an administrative package to produce and manage these functions.

The third-party relied on their staffing resources to bring on certified operators and management staff. However, many of these services have already been provided by our current Plant Manager, such as a Safety Program, QA/QC Plan for the laboratory, and SOPs and maintenance protocols are being developed as equipment manuals are made available. Additionally, services such as asset management and SCADA are being provided at the SWTP through design criteria and for the City through a project with CityWorks.

As far as laboratory services, the third-party contracted local labs for testing, which is our current practice; however, as mentioned, we can expand our testing abilities by maintaining our own lab, which would also provide a faster turn-around on test results leading to a quicker response to water quality issues.

The recommended staff for our plant can perform the tasks above without the over 50% markup for personnel charged by for-profit contractors (see Table 3). One way or another, the City will be paying for personnel, but as mentioned, bringing qualified technical staff into our ranks will have greater benefits for the City.

Outsourcing Maintenance Services Through Contracts

A summary of per hour labor cost for current outsourced services is illustrated in Figure 3. The contract with Boyer and STP specifies 3,040 manhours per year and that number was used to determine comparable labor costs for the City. The City does not have a contract with Prime, but hourly rates are shown based on a 2019 emergency contract for $10,000 to repair SCADA at Alice Water Plant and a lift station.

Both Boyer and Prime have separate rates for services: standard rate, which is shown as mid-range plus benefits for the City; and, an “emergency” rate that is charged for afterhours service calls—for comparison, an overtime rate was used for City staff. The City has the lowest labor cost for all four positions—even in the case of overtime. The most considerable cost reduction is apparent in the Instrumentation Tech position. Given that the City is investing a total of $4.25M in CIP funds to update/replace its antiquated SCADA system for the Water Production and Wastewater divisions, and with the SWTP coming online, having staff with the ability to mitigate system failures, reducing downtime, and fully use the automation benefits of the system will be advantageous for all three divisions.

The total contractual hours and rates for STP and Boyer, and the estimated $162,000 for a full-service SCADA contract totals $747,000, whereas City staff for the same services is $300,159, or roughly 40% of contractual costs.

Figure 3. Personnel Costs of City Mid-Range vs. Current Service Contract Rates.

Staffing Overviews

Teams Overview—*Operations & Maintenance*

Water operators carry out a range of duties to support utility activities, from ensuring compliance with federal, state, and local water quality standards, to testing water samples, to monitoring facility conditions. Likewise, mechanics, electricians, and instrument technicians rank among the most important mission-critical occupations identified in utility surveys and studies; these workers are essential to installing, calibrating, and overseeing a variety of utility equipment.

Operations *Team*

SWTP operators carry out specialized activities crucial to the long-term operation and maintenance of a water facility. City-employed operators are long-term operators. We all have colleagues who have worked at their respective plants for 15 to 20 years. The staff develop historical knowledge and transferable skills that cut across multiple disciplines and pass those skills on to new staff.

Unlike any other department or division in the City, our facility will manufacture a product; operators take a raw material, skillfully process it, and produce an indispensable commodity. Producing potable water from a raw source requires a series of treatment processes, ten (10) chemical compounds for clarifying and disinfection, and complex automated systems working together, all under the control of plant staff.

Before one drop of water can be produced, a SWTP Operator must have credentials required by the Texas Commission on Environmental Quality (TCEQ). Table 4 provides a view of TCEQ requirements that are the basis for the following positions: one (1) Process Control Supervisor (PCS), responsible for the overall facility operations and compliance, coordinating surface water operations with the Water Production and Distribution divisions, and determining proper corrective procedures regarding water quality; two (2) Operator II positions, who satisfy the Class B requirements for their respective shifts; and, (3) Operator I positions that require a Class C license and offer the opportunity as an entry-level position to acquire necessary training. The Laboratory Technician will serve as a backup for operations but is primarily responsible for strict quality control for laboratory operations including instrument calibration, performing routine tests for plant water quality and outside samples from Water Production, Environmental Services, and potentially Wastewater divisions. The position will also facilitate non-routine testing required by TCEQ and EPA.

Table 4: Summary of 30 TAC §290.46.

Minimum Operating Practices Requirement	Texas Administrative Code Reference
• Surface water systems that serve more than 1,000 connections must use at least two operators. • One of the operators must hold a Class “B” or higher surface water license and the other must hold a Class “C” or higher surface water license.	§290.46(c)(6)(B)

Minimum Operating Practices Requirement	Texas Administrative Code Reference
• All operators must work at least 32 hours per month. • Surface water system must use at least two operators who have completed the Surface Water Production I course and the Surface Water Production II course.	
• While the SWP is in operation at least one surface water operator, of Class "C" or higher, must be on duty;	§290.46(c)(6)(C)
• Class "D" operators shall not be allowed to adjust or modify the treatment process at the SWP unless an operator who holds a Class "C" or higher surface water license is present at the plant and has issued specific instructions regarding the proposed adjustments.	§290.46(c)(6)(D)
• For plants using chlorine dioxide, chlorine dioxide facilities must be operated under the direct supervision of a licensed operator who has a Class "C" or higher license.	§290.46(c)(2)(C)

There are many considerations when developing an efficient shift schedule for a twenty-four-hour operation. Figure 4 provides a preliminary example of how operations might function at our plant using three eight-hour shifts. Additionally, it fulfills the TCEQ staffing requirements. There are many possibilities for shift scheduling that will be explored as the project gets closer to completion and staff operations is brought on board. An example below was chosen for simplicity.

	S	M	T	W	TH	F	S
SHIFT 1 06:00-14:00	PCS	PCS	PCS	PCS	PCS	LT	Op I-A
		LT	LT	LT	LT	Op I-A	
SHIFT 2 14:00-22:00	Op I-A	Op II-A	Op II-A	Op II-A	Op II-A	Op II-A	Op I-B
		Op I-B	Op I-B	Op I-B	Op I-B	Op I-B	
SHIFT 3 22:00-06:00	Op I-B	Op II-B	Op II-B	Op II-B	Op II-B	Op II-B	Op I-C
			Op I-C	Op I-C	Op I-C	Op I-C	

Figure 3. Example shift schedule.

The rationality for this scheduling plan is as follows:

- The Process Control Supervisor (PCS) and both Operator II's (Op II) will act as shift leaders for their respective shifts; the shift leader will be responsible for the overall compliance and plant operation, process modifications, monthly operation reports, and data collection. The Operator I (Op I) will assist with maintaining process chemical residuals, chemical feed systems, raw water system monitoring and other process facility operation.
- Efficiency and safety:

- There will be at least two operators per shift Monday thru Friday as the standard work week is typically when business dealings occur such as, chemical deliveries, ordering supplies, transactions with vendors and other City divisions, etc.
- There are three high-demand periods during the work week: mornings, during shift 3; lunch time, during shift 1, and evenings, during shift 2. More effort is required during high plant flows in terms of testing and maintaining plant processes. Two operators are better suited to safely serve operational needs during high-demand. Conversely, weekends are typically lower demand days, so there is less need for two operators. The single-staffed days will primarily focus on the basic operations.
- Two operators per shift is standard safety protocol. There obvious hazards associated with the use of ten process chemicals, especially chlorine gas and chlorine dioxide. Two staff will be safer on the evening shifts in terms of plant security. The example shift schedule (Figure 4) shows days with only one operator, and that will be addressed through reassessing the schedule for 10- or 12-hour shifts. The schedule will continue to be further refined as we get closer to the plant completion and on-boarding of staff operations.
- Training opportunities. A benefit of having this recommended operations staff is cross-training opportunities for our Water Production staff. The WP staff hold groundwater licenses. State rules require on-hand training at a SWTP and additional class training for persons with groundwater licenses to advance to a surface water license. The ability to cross-train can provide other staffing resources for both divisions and enhance our staff's ability to respond and support other divisions.

- Reduction of overtime. Having two operations staff available on each shift reduces overtime during a shortages and absences such as sick, vacation, or training.
- The Laboratory Technician (LT) is assigned the first shift to accommodate analysis of external samples brought in from Water Production, Wastewater, or Environmental Services staff, expanding the analytical potential of these three divisions. Also, to work with TCEQ on the collection of compliance sampling.

Operations Staffing Contingency Plan

The operations plan above would not be possible without qualified personnel. A recent document published by the US Environmental Protection Agency echoes the concerns of many treatment plant managers in both water and wastewater that "major challenges facing our nation is the critical and unprecedented staff shortage in the water workforce…in the next five to ten years, water sector workers will be eligible to retire at levels that will stress our ability to operate this critical infrastructure." Speaking to colleagues locally and statewide, all have recognized a shortage in qualified SWTP operators. For this reason, it would be advisable for the City to attempt to hire SWTP operators to incorporate the profession into our Public Works community in order to establish and grow this resource internally. This will also attract and retain employees seeking a career path from licensed ground water operators higher licenses and to surface water operators.

SWTP operators are not as readily available as the groundwater licensed operators currently in Water Production and for this reason there may be a need for an initial public-private partnership to acquire these personnel as Sugar Land did for initial plant start-up.

Staff recommendation is to consider Sugar Land's approach to staffing operations, but rather than outsource total control of operations and maintenance through a full-service contract, Pearland could contract a necessary number of operators for a period of one year, or more with an option to hire on with the City at the end of the contract period.

Staff contacted two firms who provide operational outsourcing. Both verified that they provided short-term contracts that would suit our needs for staffing a necessary number of qualified operators. Additionally, both confirmed that it would be possible for them to bring in a number of qualified staff to cover the plant start-up period and during the first year. During this process, operator candidates would be hired and trained by Jacobs staff. As City staff are trained and certified as SWTP operators, outsourced staff then be phased out at intervals of three, six, and nine months prior operations being turned over exclusively to the City.

Two positive aspects for this type of Public/Private partnership is (1) the City would have a full operations staff available at the plant startup, and (2) the opportunity to cross-train City staff, or new trainees during the contract period to be prepared to take over operations at the end of the contract. A benefit to this type of approach is that the state requires one year of hands-on experience working at a SWTP to become eligible to test for a surface water license. This way we would be able to train our future staff, with the plant equipment, and utilize the experience from the private entity to oversee

Maintenance Team

The City's water and wastewater system is an approximately $60 million dollar enterprise that is responsible for our entire water cycle. The system consists of ten water wells and numerous booster pumps, 18 MG of water storage capacity, five wastewater plants, 70 lift stations, and soon include the SWTP. There is a total of over 200 pumps and motors within the system. The system is a highly complex needing constant repairs, recapitalization, and preventative maintenance to keep operating efficiently and effectively. As mentioned, we do not currently staff trained maintenance personnel, but outsource services to do all levels of repairs.

To maximize this labor investment, it is important for a maintenance team to be structured and staffed with personnel whose skill sets match maintenance tasks needed. To gain an understanding of what is needed, staff reviewed two years of work orders from Water Production and Wastewater Treatment. A large number of repairs were relatively simple and could have been performed by the recommended maintenance staff. For example:

- Resetting VFD controls—Instrumentation Tech;
- Installing small motors and actuators—Mechanic and Electrician;
- Installing bearings and impellers–Mechanics.

The following scope will provide a clear overview of the expectations for how an in-house maintenance team will service and benefit Public Works.

Recommended staff (from Figure 2):

- One (1) Maintenance Coordinator;
- One (1) Instrumentation Technician
- One (1) Electrician
- Two (2) Plant Mechanics

What benefits will a maintenance team add to Eng & Public Works Water & Wastewater utilities?

- Routine inspection of equipment;
- Periodic calibration and adjustments;
- Development of a preventative maintenance schedule;
- Better scheduling and utilization of personnel;
- Reduced costs for routine and emergency repairs;
- Better coordination between departments, especially if equipment is shared;
- Improved knowledge and understanding of equipment;
- Better organization of equipment maintenance procedures;
- Efficient use of lubricants;
- Efficient purchase of spare parts.

Developing a Preventative Maintenance Program

With our current capacity and outsourcing of repair work, much of the above inspection work falls to the water operators, without the necessary expertise, leading to more equipment that fails and more emergency repairs. The major contributor to an effective life span for a critical asset is a well-developed preventative maintenance program (PMP), which will be executed by the Maintenance Coordinator (MC). In coordination with the Asset Management Program, without proper maintenance, the usable life of any piece of equipment is much shorter than its design life, sometimes by 30 percent or lack of maintenance leads to catastrophic failure. Keeping each asset in good repair and working order equates to fewer interruptions to critical operations and ultimately less downtime over the life of the asset. To begin setting up a PMP, the MC will facilitate meetings with Water Production and Wastewater Superintendents to create a master inventory list and prioritize critical assets.

Developing Shared Maintenance Files

Once assets are identified, a survey will be conducted of all maintenance and operations manuals and required activities. All on-hand will be digitalized as PDFs and stored in a local shared files; this will allow all maintenance staff quick access when in the field. The activity will be assigned to maintenance staff and / or division staff by the MC. After all files are located, evaluated and stored, a PMP schedule can be developed.

Developing a PM Schedule

The O&M manuals will provide a manufacturer's recommendations for preventative maintenance. The MC will consolidate the information into a PM schedule for each plant. Schedules will be given to division management who will enter the information into CityWorks Asset Management

System accordingly. The system will alert maintenance staff, through a workorder, when a PM is due. CityWorks will serve as document control for the PMP.

Developing Parts & Supplies Inventories
Currently, water and wastewater divisions do not maintain adequate, if any, inventory of stock-parts or replacement equipment (small motors, actuators, etc.). When equipment fails, replacement or repair begins and ends with outsourced service that either has the required part or must order it. Delays in repairs and overall downtime can be reduced by establishing and maintaining inventories. The biggest benefit of parts and supplies inventory management is controlling the cost of maintenance by eliminating the various mark-ups charged by outsourced services. The MC will work with superintendents to identify and stock parts that have a higher frequency of failure and create a long-term budget for stock inventories.

Managing Maintenance Costs
In 2020, Water and Wastewater spent a combined $202,824 in parts and labor for repairs performed by STP; so far in 2021, $81,853 has been expended. Of the invoices that itemize, it appears that much of the cost for these two years is associated with labor. For example, STP charged $2,760 for two 4" gate valves, $1,860 for supplies and $900 for labor. Table 3 and Figure 3 both show that personnel costs for the recommended maintenance staff are mostly half of the costs of outsourced labor, therefore, the City could have saved a potential $900 on labor alone.

Reactive maintenance costs only increase as equipment ages, but by investing in a maintenance team with the knowledge and skills we would be taking a proactive approach to reducing costs by reducing equipment failures and plan for critical repairs.

Advantages of a City-staffed Facility
As a new City facility, the water treatment plant will provide a public service to the citizens, businesses, and industries of the community. Staffing the plant with City personnel would promote community ownership and further demonstrate our fiscal responsibility in delivering a reliable water source. Increasing the size and technical capabilities of our workforce will provide our citizens a greater service in response time to emergency situations and outages. Finally, staffing this facility with City personnel would reflect and advance the City's values that are uniquely designed to respond to the community's interests and public health.

In addition to these broader benefits, having an in-house team will provide:

- *A consistent and dedicated workforce*. Relying on work provided through outsourced services means that we get who they send, when they are available. An in-house team would be familiar with our specific equipment and have more accountability for maintenance because the team would have consistent firsthand experience with that equipment. Additionally, these new recommended staff will broaden our water utility's capabilities and resources. Lastly, a City workforce is vested in the best interest of the City. Staff performance is rooted in dedication and pride as opposed to profit.

- *Reliable inventory*. The City would stock supplies and replacement parts specific to our needs. This would reduce equipment downtime when outsourced service providers have to order parts. It would also reduce overhead charges from those providers, and possibly provide better warranty benefits because we could work directly with a manufacture.
- *Better prepared for emergencies.* The winter storm that affected Texas showed us a lot about what resources cities had, or more importantly, what was not available. Many outsourced services were not available due to companies that were not prepared. An in-house team would have the resources of the City to provide transportation to the wells, wastewater plants, and lift stations, and as mentioned, the stock supplies on hand for less downtime.
- *Increased security.* Water and wastewater facilities are critical infrastructure and have cyber systems and assets that are vital to the City. Their incapacity would have a debilitating impact on our physical or economic security and public health or safety. We can increase infrastructure security by having our own technical staff, reducing our dependence on outsourced services to these facilities.

Conclusion

In conclusion when it comes to personnel costs, associated with the preventative maintenance of equipment and subsequent repairs, it has been determined to be less expensive to add the appropriate staff versus the continued operation of full outsource of maintenance.

As reported, the City stands to gain technical skills for many services that we now outsource across the entire Water and Wastewater System. Under our current capacity and outsourcing of repair work, much of the inspection work falls to the water operators, without the necessary expertise, leading to more equipment that fails and more emergency repairs. Cost reductions in outsourced services and vendor mark-up for supplies for maintenance can be achieved and realized through acquiring technical skills of a maintenance team—Maintenance Coordinator, Plant Mechanics, Instrumentation Technician and Electrician. Maintenance requests generated from Water Production and Wastewater Treatment are for relatively minor repairs that can be reduced or eliminated through a robust preventative maintenance and small repair program, which an in-house maintenance staff will provide. The recommended maintenance team also offers benefits like in-house training for current operators, reduced downtime of essential equipment, maintaining a stock inventory, elimination of parts markup, reduced labor costs and elimination of service call fees.

To avoid potential staffing issues associated with the shortage of SWTP operators, **the most beneficial approach to initially staffing SWTP operators for the City would be entering a short-term public-private contract.** The process would be to provide qualified operators through the partnership for initial plant startup and training of non-licensed individuals to satisfy state requirements and transfer those operators over as City employees. The process has proven successful for other local cities who manage and operate similar plants. Table 5 provides the information on the five current SWTPs that are in operation and receive water from GCWA. **A full-service, long-term contract is not recommended** because it will cost more for operations and maintenance and would not provide the same high level of service and emergency response that we currently obtain from City personnel.

Table 5: Agency Operations Method

Agency	Million Gallons per Day	Treatment Technique	Operator	Comments
City of Missouri City	10	Membrane	Third Party	Third party during construction. City of Missouri City does not have a utility department.
City of Sugar Land	9	Membrane	In-house	Used Public/Private partnership for the first year and then took over operations.
Pecan Grove	2	Membrane	Third Party	MUD operations
WCID #2	3	Membrane	In-house	Staff operations
City of Richmond	2	Membrane	In-house	Used Public/Private partnership for the first year and then took over operations.

Recommendations

Staff recommends the following actions:

1. Continue to move forward with the implementation of the Maintenance Team under the Surface Water Treatment Plant (SWTP) staffing plan. The Maintenance team will have the understanding that they will be onsite at the SWTP, during construction, to learn the installation process of the equipment and be part of the training process so that the team knows the equipment and the preventative maintenance program, troubleshooting, investigating and repairs.
2. The Maintenance Team will also be utilized system wide for the water and wastewater plants. The team will be assigned with the tasks of reviewing, researching, and analyzing the existing system equipment. The work will also include the development of preventative maintenance program for the critical equipment and then implement. The responsibility of the team will also include the maintenance and smaller repairs to the equipment. Examples of the items that the team will be responsible:
    a. Routine inspection of equipment;
    b. Periodic calibration and adjustments;
    c. Development of a preventative maintenance schedule;
    d. Better scheduling and utilization of personnel;
    e. Reduced costs for routine and emergency repairs;
    f. Better coordination between departments, especially if equipment is shared;
    g. Improved knowledge and understanding of equipment;
    h. Better organization of equipment maintenance procedures;
    i. Efficient use of lubricants;
    j. Efficient purchase of spare parts
3. After visiting with other City operations and consultants, it is staff's recommendation to follow the plan of a Public/Private partnership for operations that has been proven to be successful. Rather than a total outsource methodology it is to have this program start during the construction phase of start up to train the operators on the equipment and training and continue with this service for a one-year period.
4. During the contract period and part of the contract with contracted operations will be the ability to hire the staff on a quarterly basis to slowly transition to full City operations by the end of the contract period.

Reference Documents

Ardurra's Preliminary Staffing Plan Memo.
https://pearlandtx-my.sharepoint.com/personal/rburton_pearlandtx_gov/Documents/Desktop/Staff/Staffing/Ardurra/100417-Tech%20Memo%20-%20Staffing%20Plan.pdf

Revised Staffing Plan.
https://pearlandtx-my.sharepoint.com/personal/rburton_pearlandtx_gov/Documents/Desktop/Staff/Staffing/SWTP%20Staffing%20Plan%20with%20Job%20Desciptions.docx

2021-2025 COP Capital Improvement Program
See project numbers: WA2107 and WW2103.
https://www.pearlandtx.gov/home/showpublisheddocument/28459/637321439561970000

USEPA. Sustainable Water Infrastructure Sector. *America's Water Sector Workforce Initiative: A Call to Action*. 2020.
https://www.epa.gov/sites/production/files/2020-11/documents/americas_water_sector_workforce_initative_final.pdf

City of Pearland FY22 Proposed Budget

“Adapting to Change”

Budget Schedule

~~2/7/21 – Early Budget Input Session~~
~~8/6/21 – Budget Delivered to City Council and Mayor~~
~~8/14/21 – Budget Discussion #1~~
8/23/21 – Budget Discussion #2
8/30/21 – Public Hearing & Budget Discussion #3
9/13/21 – Budget Reading #1 & 1st vote on tax rate and fee ordinances
9/27/21 – Budget Reading #2 & 2nd vote on tax rate and fee ordinances

City Council Follow-Ups

- Memo sent out on 8/19/21 answering some questions
- Other questions will be answered tonight
  - **Can staff further outline how the goals the City Council and Mayor created in the strategic retreat are being worked towards in this budget?**
  - **General Fund**
    - Please provide a comparison of Pearland's FTE count per 1,000 residents with our comparable cities.
    - What are the effects of the recommended new pay plan (Comp and Class) that is in the budget and provides bringing positions 100% up to market and creates a step plan for non-exempt positions?
  - **Enterprise Fund**
    - What are the options and implications of not fully bringing water/sewer revenue up to the calculated 9% necessary?
    - What is the calculation and implications for the required 1.4x revenue in the agreed bond covenants?

How does the Budget Reflect Council's Goals?

Goal #1

Building quality of life on a well-planned and maintained foundation of essential water, transportation, and flooding infrastructure, appealing amenities, and long-term value.

- Significant capital improvement funding for the City's water, sewer, and streets/traffic infrastructure via the CIP.
- Great infrastructure requires great staff. To that end, this budget funds several new positions - including an Asset Manager, GIS Technician, Utility Maintenance Worker, three Surface Water Treatment Plant Staff, and three Wastewater Treatment Plant Operators.

Goal #2

Fostering a diverse and unified community with events, amenities, and public spaces that bring people together.

- After the popularity and positive feedback of the fireworks at the Hometown Christmas Tree Lighting, $15K has been allocated to again have fireworks at this event in FY22.
- The re-plastering of the activity pool and Centennial Park restroom upgrades will improve existing spaces where the community can gather and have events.
- New zero-turn lawn mowers are being replaced – which will help keep parks mowed and looking great due to improved vehicle uptime.

Goal #3

Delivering transparent, high-quality, and accessible City services by developing cutting edge solutions, engaging with the community, and continuously improving our capabilities.

- An additional position in Communications, focused on public safety, expands the capacity to support and enhance engagement with the community.
- The FY22 Budget further funds the City's investment in records management – which will improve staff, elected officials, and most importantly the public's ability to request and receive city documents.

Goal #4

Providing long-term community value through trusted stewardship and responsible financial management.

- This budget reflects the City Council and Mayor’s direction to lower the City's portion of the property tax rate.
- For the second year in a row the City has proposed a budget that lowers the overall tax rate.
- These are tax **cuts** as defined by the State Law regarding the No New Revenue Tax Rate – which is the rate a city would adopt to bring in the same total dollar figure from property taxes as previous years.

Goal #4

Providing long-term community value through trusted stewardship and responsible financial management.

Year	No-New-Revenue Tax Rate	City Adopted / Proposed Rate	Difference between No-New-Revenue Rate and City Rate
FY21	0.737640	0.720000 (adopted)	0.017640
FY22	0.735485	0.708250 (proposed)	0.027235
		Total Tax Decrease	**0.044875**

Goal #5

Making Pearland a welcoming place for everyone by ensuring a safe environment and providing efficient and effective Public Safety services for residents, businesses, and visitors.

- Pearland's public safety services continue to receive high marks in our resident satisfaction survey.
- This budget continues to further strengthen this Council goal by adding a Police Officer, Animal Shelter Attendant, and Senior Office Assistant position in the Police Department.
- Additionally, two utility vehicles for Police are being funded for use at special events.
- The existing Fire training tower is also receiving supplemental funding – which will improve firefighter training and performance.
- This budget also funds three items important to cybersecurity: Log management software, vulnerability scanning software, and an IT Strategic Plan.

Goal #6

Developing and investing in an attractive community that allows talent, entrepreneurs, and businesses to thrive for generations to come by supporting stable, steady growth, and unending opportunities.

- Investing in an online portal to serve as a “virtual front door” for starting or expanding a business in Pearland, improving the customer experience and assist businesses with a better understanding of the development rules in Pearland.
- $419,000 to conduct a search for the development and implementation of an Entrepreneurship Hub to foster startups in Pearland.
- $30,000 for completion and implementation of a workforce strategy study that will address workforce skills gaps, career planning and work-based learning opportunities, diversity and inclusion, and development of young professionals in Pearland.
- $15.4 million for the final phase of 288 Corridor Master Plan Improvements which will transform that key corridor into an efficient, aesthetically pleasing, and well-maintained entrance into Pearland in order to be attractive destinations for jobs and investment.

General Fund

What are the effects of the new pay plan in the General Fund?

City Councils Concern

- City Council had questions regarding the competitiveness of salaries being provided by the City of Pearland.
- Staff will briefly cover the main objectives of the Class and Comp study as it is implemented in the proposed budget.

Overview of Classification and Compensation Study

- The Compensation and Classification is a data-driven study that examined every staff member's compensation.
- The Evergreen class and comp study was further expanded to cover additional cities.
- Recent inflation has been considered. An *additional* $527,567 in adjustments were added to counteract it.
- The goal of the plan is *not* to bring every employee to the midpoint of their salary range. The *midpoint* is where you would *typically* expect to find an employee in the midpoint of their career. The goal of the plan is to make sure we are providing fair and competitive compensation which is what is recommended and fit into the budget.
- The plan provided evidence-backed recommendation to adjust the pay rates of employees city-wide so that Pearland remains competitive and to reduce salary compression.

How the FY22 Proposed Budget Implements the Compensation and Classification Plan

- The FY22 Proposed Budget **fully implements** the Compensation and Classification Plan. Moreover, the recommendation budget now includes bilingual pay *and* a sick bank buyback plan for existing employees.
- Each employee's salary is being adjusted according to what the data says their salary should be based on years of experience and market competitiveness.
- No employee is receiving less than a 2% raise or more than a 10% raise. The base pay additions are exclusive of bilingual position pay payment.
- Non-Exempt employees will move into step-based pay plans on October 1st, 2021 in the recommended pay plan.

General Fund Salaries

- **The General Fund's portion of the Compensation and Classification Plan will cost a budgeted $2,494,178**. This is the amount that will be divided amongst General Fund employees as salary increases. The exact amount employees get is based off the data in the study.
- When this proposed budget is adopted, employees will be at a competitive salary based on their experience and the comprehensive compensation study performed by a professional consultant.
- *Additional* salary increases on top of the proposed Budget, which is based on the data from the Compensation and Classification plan, would grow salaries and benefits beyond competitive per the market study.

Selected Position Salary Comparisons

Note that these are averages, and thus some employees will be above or below these figures. **Individual employees should not assume they will receive the exact increases shown.**

Plan	Job Class Title	Number of Employees with this Job	Total Salary Increase	FY21 Average Salary	FY22 Average Salary	Difference in Average Salary	Percentage Growth in Salary
Step Plan	Firefighter	64	$264,594	$57,968	$ 62,102	$4,134	7%
Step Plan	Driver Operator	21	$100,623	$63,077	$67,869	$4,792	8%
Step Plan	Fire Lieutenant	18	$279,411	$70,195	$85,718	$15,523	22%
Step Plan	Fire Captain	6	$78,319	$83,098	$96,151	$13,053	16%
Step Plan	Equipment Operator	11	$18,727	$36,640	$38,343	$1,702	5%
Step Plan	Maintenance Crew Leader	14	$ 43,412	$45,849	$48,950	$3,101	7%
Step Plan	Park Maintenance Worker	16	$28,326	$32,676	$34,446	$ 1,770	5%
Step Plan	Recreation Attendant	27	$19,140	$11,593	$12,301	$709	6%
Civil Service	Police Officer	136	$628,997	$74,836	$79,461	$4,624	6%
Civil Service	Sergeant	19	$116,711	$92,574	$98,717	$6,143	7%
Open Range	All Open Range Positions*	117	$374,685	$90,498	$93,700	$3,220	4%

* Does not include Council appointed positions

How does Pearland's General Fund FTE Count compare to Other Cities?

Some notes:

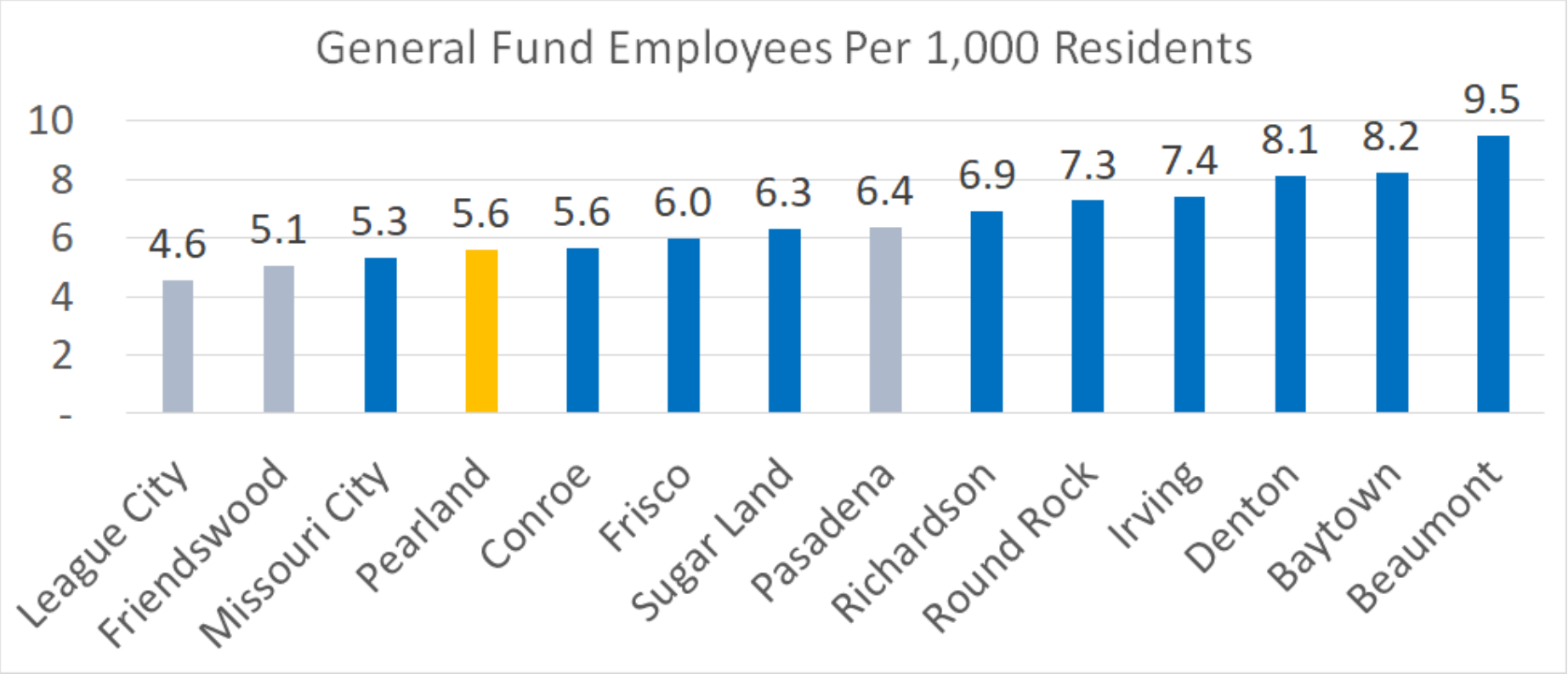
Comparing cities is a little tricky because each city has a slightly different scope

- Some may have MUDs that cover most of their water, sewer and drainage operations.
- Some have volunteer fire departments.
- Some rely on county services.
- Some employees are “hidden” via outsourcing and don’t show up on the FTE rolls, but there are still people doing these jobs.
- The same cities used in the Evergreen Study classification and compensation work (2021) shown on next slide are used for comparison.

Classification and Compensation study comparison cities

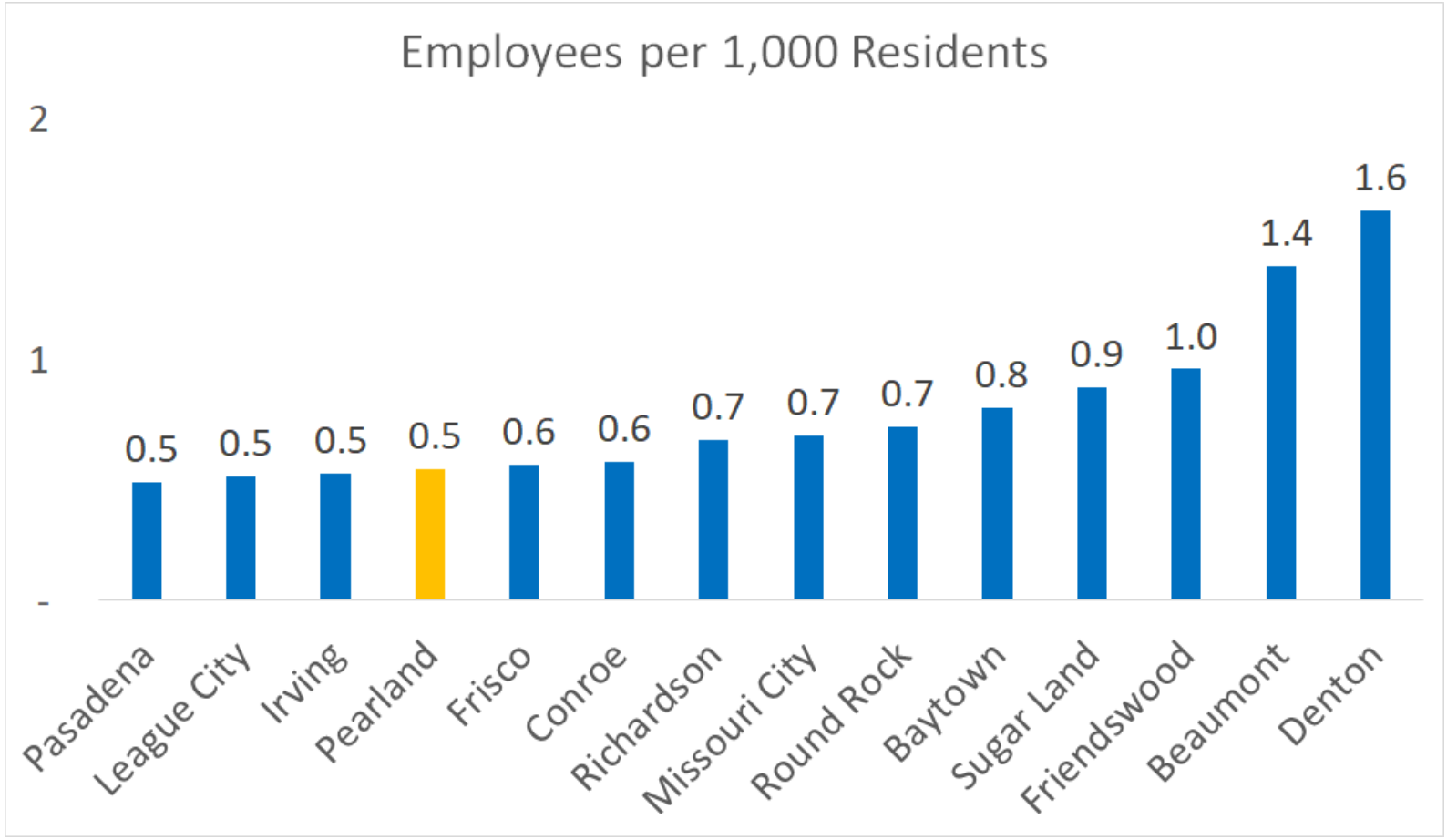
City	2020 Census Population	City	2020 Census Population
Missouri City	74,259	Pasadena	144,379
League City	114,392	Richardson	119,469
Friendswood	41,213	Round Rock	119,468
Pearland	125,828	Irving	256,684
Conroe	89,956	Baytown	83,471
Frisco	200,509	Beaumont	115,008
Sugar Land	111,026	Denton	110,093

Pearland has fewer General Fund employees per capita than many other cities.



- Friendswood, League City, and Pasadena have volunteer fire departments.
- Not all cities have data at a detailed enough level to break their FTE counts into Service Areas or Departments. Key areas are broken down in following slides.

General Government Comparison



Departments Included in “General Government”.

- City Manager’s Office
- Mayor’s Office
- City Secretary's Office
- Finance
- Human Resources
- IT
- Legal

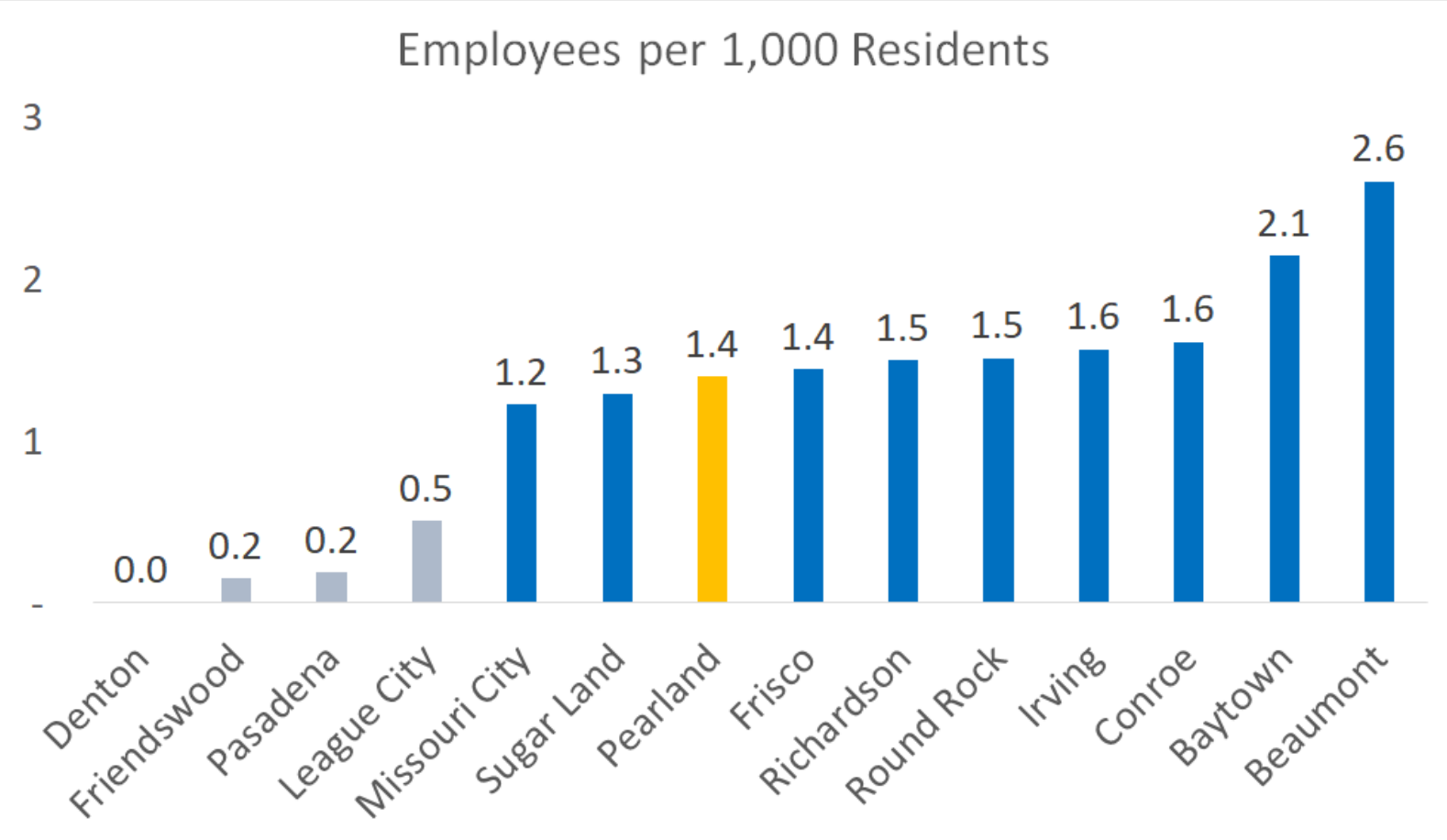
Public Safety Comparison

Pearland has approximately the same number of Public Safety FTE's as Sugar Land.

Departments included in "Public Safety".

- Fire
- Emergency Management
- Police
- Friendswood, League City, and Pasadena have *volunteer* fire departments. Pasadena has 58 Fire Department FTE's.
- EMS (Separate department in other cities)
- We can further breakdown Police and Fire

Fire Department Comparison



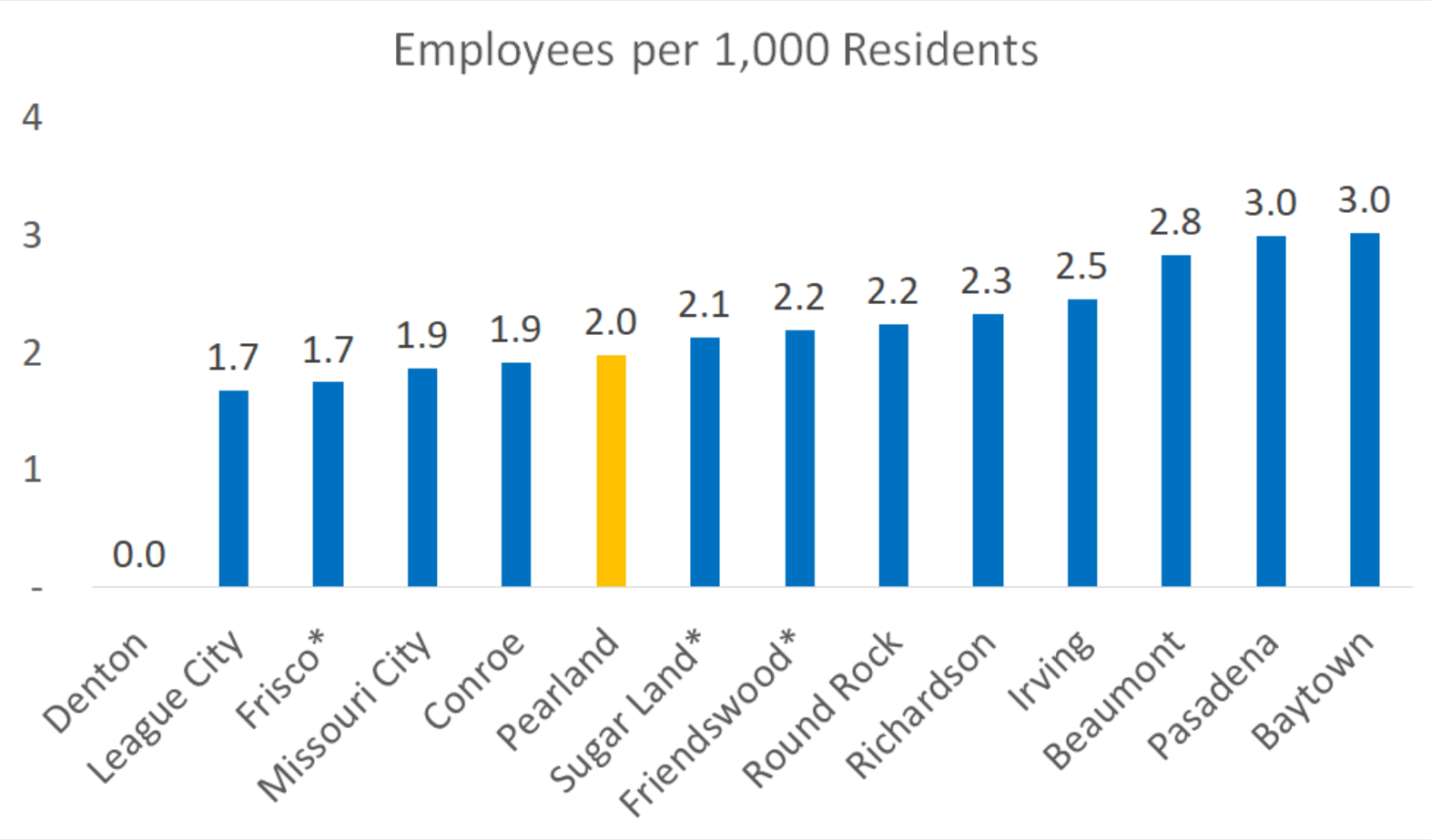
Pearland has approximately the same number of Fire FTE's per 1,000 residents as Frisco.

Friendswood, League City, and Pasadena have volunteer fire departments. Pasadena has 58 Fire Department FTE's.

This includes all Fire Department personnel.

Denton did not provide a breakdown of Public Safety personnel between Police and Fire

Police Department Comparison



Pearland has approximately the same number of FTE's per 1,000 residents as Conroe.

- This includes all Police Department personnel, both sworn and professional.
- Some cities do not have jails or dispatch staff.
- Denton did not provide a breakdown of Public Safety personnel between Police and Fire
- *Non-Civil Service Police Depts.

FTE Comparison

- These comparisons used City's FY22 Budget wherever possible.
- Pearland's figures contain the recommended and budgeted new positions. If you remove those Pearland would have fewer FTEs per 1,000 residents.
- In every area Pearland has fewer FTEs than similar cities.

New General Fund Positions in FY22

Department/Division	Position Title	FY22 FTEs	Note
Communications	Communications Specialist	1.0	High priority.
Information Technology	Database Administrator	.5	Split cost with Enterprise. Less of a GF budget impact.
Information Technology	GIS Analyst	.5	Could wait until mid year. Split cost with Enterprise. Less of a GF budget impact.
Public Works-Admin	Asset Manager	.25	Small effect on General Fund.
Public Works-Admin	GIS Technician	.25	Small effect on General Fund.
Police-Patrol	Police Officer	1.0	High priority.
Police-Community Services	Senior Office Assistant	1.0	Could wait until mid year.
Police-Animal Services	Animal Shelter Attendant	1.0	Could wait until mid year.
Finance	Payroll Technician	1.0	High priority. No backup in this position currently.
Engineering-Capital Projects	Senior Construction Manager	1.0	Charges to Projects, no GF Impact.
Total FTE's		**7.5**	

Questions and Comments on the General Fund FTE Comparisons with Other Cities?

- Items for Follow-ups
- Changes are made by consensus

Enterprise Fund

What is the 1.4x Bond Coverage Requirement? How does it relate to rates?

Water and Sewer Bonds Ordinances

- The definition of Bond Coverage Requirement is clearly defined in any ordinance regarding the issuance of Water and Sewer Bonds
- Ordinance No. 1577 Section 6.1

CITY OF PEARLAND, TEXAS

WATER AND SEWER SYSTEM REVENUE AND REFUNDING BONDS SERIES 2019B

ORDINANCE NO. 1577

(1) Net Revenues are certified by the Director of Finance of the City to have been equal to at least one hundred and forty percent (140%) of the Average Annual Principal and Interest Requirements on all Bonds, after giving effect to the issuance of the Additional Bonds to be issued; or

Ordinance No. 1577 Section 2.1: Definition

"Average Annual Principal and Interest Requirements" shall mean the average annual principal and interest requirements for all Bonds.

- The "Average Annual Principal and Interest Requirements" is a calculation that takes into consideration all cumulative debt outstanding. Traditionally, the City issues Water and Sewer System debt with a 20-year debt structure, except for a couple of the TWDB issues, that sold with a 30-year debt structure.
- "Average Annual Principal and Interest Requirements" of the city is calculated by taking the average of all the principals and interest payments of outstanding Bond for 30 years

Ordinance No. 1577 Section 2.1: Definition

- *"Net Revenues" shall mean all Gross Revenues remaining after deducting the Maintenance and Operation Expenses.*
- *"Gross Revenues" shall mean all revenues, income and receipts of every nature derived or received by the City from the operation and ownership of the System; the interest income from the investment or deposit of money in the Revenue Fund and the Reserve Fund (each hereinafter defined in Article V hereof); and any other revenues hereafter pledged to the payment of all Bonds. Gross Revenues shall not include any of (i) grants from, or payments by, any federal, state or local governmental agency or authority or any other entity or person, the use of which is restricted by law or by the terms of the grant or payment to capital expenditures of the System, (ii) capital assets, debt service funds or debt service reserve funds of water districts or other public or private sewer systems annexed, acquired or otherwise assumed by the City or (iii) any interest earned on items (i) or (ii) above.*

Ordinance No. 1577 Section 2.1: Definition

Maintenance and Operation Expenses" shall mean the reasonable and necessary expenses of operation and maintenance of the System, including all salaries, labor, materials, repairs and extensions necessary to render efficient service (but only such repairs and extensions as, in the judgment of the governing body of the City, are necessary to keep the System in operation and render adequate service to the City and the inhabitants thereof, or such as might be necessary to meet some physical accident or conditions which would otherwise impair the Bonds), and all payments (including payments of amounts equal to all or a part of the debt service on bonds issued by other political subdivisions and authorities of the State of Texas) under contracts which are now or hereafter defined as operating expenses ,by the Legislature of Texas. ***Depreciation shall never be considered as a Maintenance and Operation Expense. Maintenance and Operation Expenses shall include, without limitation, all payments under contracts for the impoundment, conveyance or treatment of water*** *or otherwise which are now or hereafter defined as operating expenses by the Legislature of Texas and the treatment of such payments as Maintenance and Operation Expenses shall not be affected in any way if, subsequent to entering into such contracts, the City acquires as a part of the System title to any properties or facilities used to impound, convey or treat water under such contracts, or if the City contracts to acquire title to such properties or facilities as a part of the System upon the final payment of debt service on the bonds issued to finance such properties or facilities.*

Maintenance and Operation Expenses

- Per the City's Financial Advisor, Operating Expense should not include depreciation, *existing* debt service (except debt service on bonds issued by other political subdivisions and authorities of the State of Texas), and cash funded CIP projects

Bond Coverage Ratio Calculation

Ordinance No. 1577, Section 6.1

Net Revenues are certified by the Director of Finance of the City to have been equal to at least one hundred and forty percent (140%) of the Average Annual Principal and Interest Requirements on all Bonds, after giving effect to the issuance of the Additional Bonds to be issued

$$Bond\ Coverage\ Ratio = \frac{(Revenue\ -Operating\ Expenses)}{Current\ Debt\ Service + Proposed\ Next\ Year's\ (FY22)\ Bond\ Sale\ Debt\ Service}$$

$$Bond\ Coverage\ Ratio\ (1.45) = \frac{(\$62,752,397\ -\$33,369,302)}{\$20,240,646}$$

Failure to meet Bond Coverage Ratio

- Again, as the City Manager described was likely on Monday night, we have confirmed that the covenant is a legal requirement for issuing debt, and is required by the bond covenants; this is not a policy threshold or measure the city can change upon review.
- A dip below 1.40 results will result in the Texas Secretary of State's Office not allowing bond sales to proceed for the next year – and only if the ratio is met in the future. It would also trigger the unwinding of any bond sale currently underway – a significant financial misstep. Failure to meet this test means the City cannot issue additional Water and Sewer System Revenue Bonds which are necessary to fund the CIP and required projects, including those underway and awaiting additional financing.

Rate Scenarios

9% Rate Scenario (As Proposed)

- A 9% rate increase would bring in $62,752,397 in revenue.
- Bond Coverage Ratio of 1.45. Minimum is 1.40.
- The extra 0.05 is a safety margin that allows for unplanned operational expenses.

- An average household, using 6,000 gallons of water in a month, would see their bills increase by approximately $6.65 per month compares to their FY 21 bills.

8% Rate Scenario

- An 8% rate increase would create a total estimated revenue stream of $62,242,962.
- The 8% is a decrease in revenue of $509,435 compared to the 9% scenario.
- This results in a bond coverage ratio of 1.42 – a smaller safety margin (assuming no expenditure cuts).

- An average household, using 6,000 gallons of water in a month, would see their bills increase approximately $5.87 per month compares to their FY 21 bills. A one percent rate reduction from the recommended 9% saves an average homeowner $0.78 per month and reduces the City's revenue by $509,435.

7% Rate Scenario (no cuts)

- A 7% rate increase would create a total estimated revenue stream of $61,743,682.
- This is a decrease in revenue of $1,008,715 compared to the 9% scenario.
- Without adjusting expenditures down this would result in a bond coverage ratio of 1.402 just a hair above the minimum 1.40 requirement.

- An average household, using 6,000 gallons of water in a month, would see their bills increase approximately $5.13 per month compares to their FY 21 bills. A two percent rate reduction from the recommended 9% saves an average homeowner $1.52 per month and reduces the City's revenue by $1,008,715.

7% Rate Scenario (no cuts)

- Although not in the recommended budget, this rate level *could* be adopted without expenditure cuts.
- The following supplemental requests that had been included to bolster the services and capability of the utility could be removed from the FY22 Proposed Budget by the City Council to increase the safety margin above the 1.40 ratio requirement to 1.42.

<u>$370,272 in Reduced Expenditures</u>

- Remove Two Public Works Message Boards - $40,050
- Remove IT GIS Analyst - $41,716 (50% share in the GF for total of $83,432)
- Remove Utility Billing Specialist I - $48,506
- Reduce Replacement Vehicles/Equipment spend from $540K to $300K ($240K cut)

0% Rate Scenario

- A 0% rate increase would create a total estimated revenue stream of $58,249,339.
- This is a decrease in revenue of $4,503,058 from the 9% rate increase scenario proposed in the FY22 Budget.
- To meet the operating ratio of 1.4X, $3,750,000 would have to be removed from operating expenses.
- Removing *all* of the supplemental requests and all vehicle/equipment replacements would reduce the operating budget by $1,691,700.
- It would be exceedingly difficult to reduce the Enterprise Fund Budget by an additional $2,058,300 without reducing current staffing levels downward.

Rate Scenarios Summary

Rate Increase Scenario	9.0%	8.0%	7.0%	0.0%
Gross Revenue	$ 62,752,397	62,242,962	$61,743,682	58,249,340
Maintenance and Operating Expenses	$ 33,369,302	$33,369,302	$33,369,302	$33,369,302
Net Revenue	$ 29,383,095	$28,873,660	$28,374,380	$24,880,038
Average DS	$ 20,249,646	$20,249,646	$20,249,646	$20,249,646
Bond Coverage Ratio	1.45	1.43	1.40	1.23
City Revenue Reduction from 9% proposed rate	$ -	$ (509,435)	$ (1,008,715)	$ (4,503,057)
Monthly 6,000 Gal Residential Water & Sewer Charge	$ 80.23	$ 79.45	$ 78.71	$ 73.58
Monthly 12,000 Gal Residential Water & Sewer Charge	$ 145.27	$ 143.89	$ 142.55	$ 133.23

Major drivers of Future Rate Increases

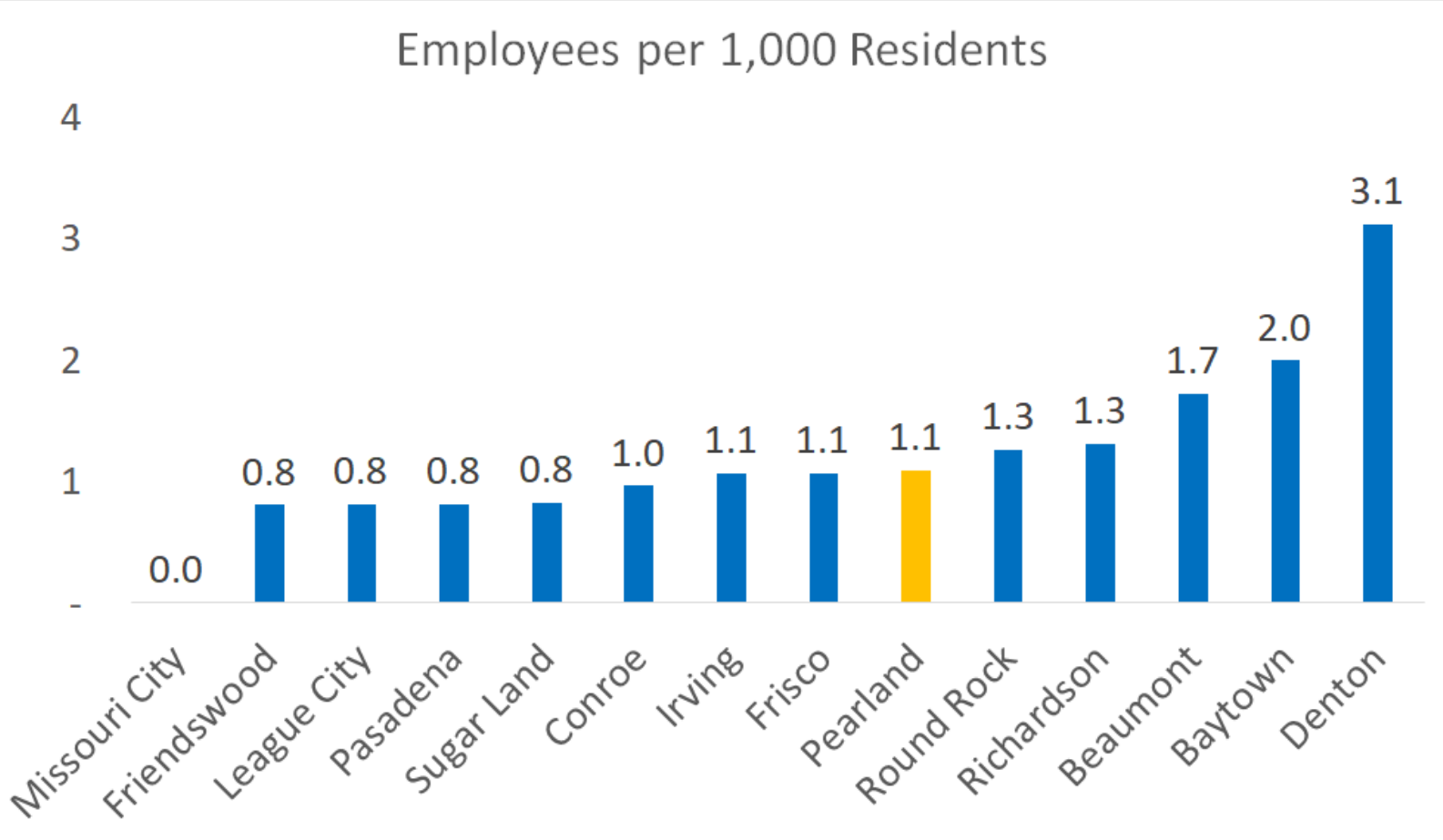
- According to the adopted CIP FY 2022-2026, the City will be issuing $96 million in FY 2022, $90 million in FY 2023, and $96 million in FY 2024. Historically, what the City lists in the CIP is greater than what it actually sells.
- Additionally, a large project, such as Barry Rose, can cause significant swings in when the City takes on new debt – and thus when rates must be increased. The issuance of new bonds for capital improvement projects increases the revenue requirement to meet the bond coverage ratio.
- Operating expenses will be shifting as staff are added (or outsourced) to bring new plants online; however, it cannot be assumed this will significantly reduce expenses to the fund. While producing our own potable water reduces the need to purchase outside water, we will still have to meet staffing and/or contractor costs.

Questions and Comments on Rate Increases

- Items for Follow-ups
- Changes are made by consensus

How does Pearland's Enterprise Fund FTE Count compare to Other Cities?

Enterprise Fund Comparison



Enterprise Fund contains Water and Sewer components of Public Works.

Pearland has approximately the same number of FTE's per 1,000 residents as Frisco and Irving.

Missouri City water provided by MUDs.

Enterprise Fund Staffing Highlights

Division	Position Title	Cost	FTE	Notes
Information Technology	Database Administrator	$106,704	.5	High Priority. Split cost with Enterprise. Less of a budget impact.
Information Technology	GIS Analyst	$83,432	.5	Could wait until mid year. Split cost with Enterprise. Less of a budget impact.
Public Works-Administration	Asset Manager	$94,640	.75	High Priority.
Public Works-Administration	GIS Technician	$67,807	.75	High Priority
Public Works-Distribution & Collections	Utility Maintenance Worker	$48,356	1.0	Could wait until mid year
Public Works-Surface Water Treatment Plant	Process Control Supervisor	$104,153	1.0	High Priority
Public Works-Surface Water Treatment Plant	Maintenance Coordinator (with vehicle)*	$158,125	1.0	High Priority
Public Works-Surface Water Treatment Plant	Instrumentation Technician (with vehicle)*	$140,853	1.0	High Priority
Public Works-Wastewater	Treatment Plant Operator I	$54,452	1.0	High Priority
Public Works-Wastewater	Treatment Plant Operator II (with vehicle)*	$106,499	1.0	High Priority
Public Works-Water Production	Treatment Plant Operator I (with vehicle)*	$96,442	1.0	High Priority
Utility Billing	Billing Specialist I	$48,506	1.0	Could wait until mid year
	Total Impact to Enterprise Fund	**$974,289**	**10.5**	

*Position include cost include one-time vehicle purchase

What are the effects of the new pay plan in the Enterprise Fund?

Salary Increases in the Enterprise Fund

- The Classification and Compensation Study already includes salaries be increased by a total of $290,701 in order to be competitive and fair.
- The FY22 Budget funds the full $290,701 in salary increases in the Enterprise Fund and brings positions to a competitive market rate based on an individuals experience and what other similar cities pay their employees.
- Additional salary increases on top of the proposed Budget, which is based on the data from the Compensation and Classification plan, are not necessary to remain competitive per the study.

Selected Position Salary Comparisons

Note that these are averages, and thus some employees will be above or below these figures. Individual employees should not assume they will receive the exact increases shown.

Plan	Job Class Title	Number of Employees with this Job	Total Salary Increase	FY21 Average Salary	FY22 Average Salary	Difference in Average Salary	Percentage Growth in Salary
Step Plan	Equipment Operator	11	$18,727	$36,640	$38,343	$1,702	5%
Step Plan	Maintenance Crew Leader	14	$ 43,412	$45,849	$48,950	$3,101	7%
Step Plan	Treatment Plant Operator	13	$30,132	$ 40,632	$42,950	$2,318	6%
Step Plan	Utility Maintenance Worker	20	$36,102	$35,732	$37,537	$1,805	5%

Questions and Comments on the Pay Plan?

- Items for Follow-ups
- Changes are made by consensus

Budget Schedule

~~2/7/21 – Early Budget Input Session~~

~~8/6/21 – Budget Delivered to City Council and Mayor~~

~~8/14/21 – Budget Discussion #1~~

~~8/23/21 – Budget Discussion #2~~

8/30/21 – Public Hearing & Budget Discussion #3

9/13/21 – Budget Reading #1 & 1st vote on tax rate and fee ordinances

9/27/21 – Budget Reading #2 & 2nd vote on tax rate and fee ordinances