CITY OF

Pembroke Pines

Utility Function Conversion Cost Analysis

Final Technical Memo / January 2020

RAFTELIS

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January 6, 2020

Jonathan Cooper
Environmental Services Director
601 City Center Way
Pembroke Pines, FL 33025

Subject: Utility Financial Conversion Cost Analysis Technical Memo

Dear Mr. Cooper,

Raftelis Financial Consultants, Inc. (Raftelis) is pleased to provide this Utility Financial Conversion Cost Analysis Technical Memo – Final (Memo) for the City of Pembroke Pines (City). It incorporates the second round of comments from staff at the City to the Revised Draft Memo.

The purpose of the memo is to provides a financial comparison between contracting operation, maintenance, and management of the City's water and wastewater utility system and performing these services with City personnel and resources. Several scenarios are analyzed representing the main approaches that the City could take to provide these services with City resources.

The major objectives of the study include the following:

- Develop a comparison of the costs associated with the City's current main contract operator (OMI-Jacobs) and those estimated to be incurred by the City to provide similar services, which encompasses salary, benefits, vehicles/equipment, training and certifications, an after-hours call center, and other miscellaneous costs.
- Create scenarios to demonstrate the range of costs that the City would likely incur if it were to take over operation, maintenance, and management of the utility system.
- Based on financial comparisons, comment on the feasibility of in-sourcing utility functions.

The Memo summarizes the key findings related to costs of City operation, maintenance, and management of the utility system, as well as those of the City's current contract operator. It has been a pleasure working with you, and we thank you and the City staff for the support provided during the study.

Sincerely,

Seth Garrison
Senior Manager

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Charlotte, NC 28202

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Executive Summary

On June 19, 2019, the City Commission (Commission) for the City of Pembroke Pines (City) directed the City Manager to hire an independent consulting firm to conduct a cost comparison of the Utility Function Sourcing Contract, which is currently performed by Operations Management International (OMI) a Division of Jacobs Engineering Group and Facility Contract Services (FCS) and providing similar services with City resources. The City hired Raftelis Financial Consultants, Inc. (Raftelis), with offices in Florida and across the country, for its experience working with water and wastewater utilities on financial, management and operations studies.

After projecting each cost center for the next five years and analyzing several scenarios, Raftelis has found that if the City were to assume operation, maintenance, and management of the system and maintain the current number of OMI-Jacobs staff positions, it would likely cost the City $1.5-2.0 million more on an annual basis than if it were to continue using OMI-Jacobs as a contract operator. Note that this annual cost range excludes the initial capital investment associated with hiring new staff and purchasing certain vehicles and equipment. The cost estimate is heavily dependent on the salary range of anticipated City utility employees and where the City hires employees within each positions' salary range. Raftelis made cost estimates using various points (25th and 75th percentiles, as well as medians) within the ranges, based wage data from surrounding municipal utilities.

City operation of the utility system would increase costs for several reasons, with personnel cost increases being the primary driver. First, according to the U.S. Census Bureau, the City has a low overall unemployment rate at 3.1%, and the Miami-Fort Lauderdale-Pompano Beach Metropolitan Area has only a slightly higher rate at 3.4%. The low unemployment rate, coupled with several other municipal water/wastewater utilities in the immediate vicinity, would require the City to offer competitive salary and benefit packages in order to effectively recruit. Salaries would most likely need to reflect the median of other municipal utilities in the area to attract qualified and licensed operators. Second, under the City's current benefit package, which includes FICA, retirement contributions, health insurance, life insurance, workers' compensation insurance, and OPEB, annual costs could range from $2.97 M to $3.40 M for benefits alone. This is based on the current number of utility positions and their anticipated salaries. Finally, OMI-Jacobs has reported relatively low overtime costs ($190,000 in 2017, or $1,979 per employee), but surrounding utilities have reported much higher average overtime costs per employee, ranging from $2,672 per employee at the City of Pompano Beach to $7,414 per employee at the City of Miramar. Blending the overtime budgets for several of the surrounding utilities and normalizing it based on the number of employees yielded an annual overtime estimate of $433,600.

If the City were to take over utility operation from OMI-Jacobs, there would be many challenges. Foremost is that recruiting staff to ensure that the City can take over operation of the utility will take time, and the City's Human Resources group estimates a recruitment cost of $3,000-$5,000 per full-time employee (as much as $303,000-$505,000 to replace the positions currently staffed by OMI-Jacobs). Water and sewer are essential services, and a disruption in service during a transition between City and contract operation is unacceptable. As such, it would likely be necessary for the City to build in a transition period, wherein it is actively recruiting, hiring, and training staff and paying for contract operations at the same time. The length of this transition period is heavily dependent on the ability of the City's Human Resources group to support this effort, and could be as short as three months, or as long as a year for some positions. It would also depend on how many OMI-Jacobs employees would want to stay working at the utility, but transition to City staff positions. In essence, the City would be double paying for many positions during this time period.

Operating the utility system also requires a substantial vehicle fleet. The City's Year 1 costs include a large up-front capital investment to purchase the 51-vehicle fleet provided by OMI-Jacobs, and then $200,000 in years 4 and 5 to replace vehicles already owned by the City. Note that if the City were to assume operations responsibilities, it may be able to purchase the OMI-Jacobs utility vehicles at their estimated value, which may result in some short-term savings. As with staff recruitment, if the City were not able to purchase OMI-Jacobs' utility vehicles, a

transition period of approximately six months would need to be factored in, to ensure that the City had the necessary time to procure appropriate equipment to maintain high service levels.

Estimated costs for the transition period are shown in Table 1. Raftelis has assumed a six-month timeframe for the transition, wherein the City would employ the same number of OMI-Jacobs and City employees concurrently, though some positions may require more or less time to fill. Recruitment costs include online advertising, printing resumes, reviewing resumes, setting up interviews, background checks, medical screenings, etc., and, while the City might realize efficiencies by advertising for multiple positions simultaneously, the regional unemployment rate is low and attracting qualified employees for some positions may be very challenging. As such, Raftelis assumed an initial recruitment cost of $400,000. Raftelis also assumed that the City would need to purchase an entirely new vehicle fleet and new computer workstations.

Table 1: Estimated 6-Month Transition Costs

Primary Transition Cost Category	Estimated Costs
OMI-Jacobs Agreement (FY 2020)	$4,011,763
City Recruitment Costs	$400,000
Median City Staff Salaries and Benefits (FY 2020)	$4,371,030
New 51-Vehicle Fleet	$1,790,000
Computer Work Stations	$23,000
Total Estimated 6-Month Transition Costs	**$10,595,794**

Factoring in the transition costs, as well as a full year of salary and benefits for City staff and other expenses, the total Year One costs could be as high as $15,716,725.

Introduction and Background

Background of the Study

On June 19, 2019, the City Commission (Commission) for the City of Pembroke Pines (City) directed the City Manager to hire an independent consulting firm to conduct a cost comparison of the Utility Function Sourcing Contract, which is currently performed by Operations Management International (OMI) a Division of Jacobs Engineering Group and Facility Contract Services (FCS) and providing similar services with City resources. Raftelis was engaged to aid the City in providing a cost comparison.

OBJECTIVES OF THE STUDY

The major objectives of the study include the following:

- Develop a comparison of the costs associated with the City's current main contract operator (OMI-Jacobs) and those estimated to be incurred by the City to provide similar services, which encompasses salary, benefits, vehicles/equipment, training and certifications, an after-hours call center, and other miscellaneous costs.
- Create scenarios to demonstrate the range of costs that the City would likely incur if it were to take over operation, maintenance, and management of the utility system.
- Based on financial comparisons, comment on the feasibility of in-sourcing utility functions.

Utility System Overview

The City of Pembroke Pines (City) in southern Broward County, Florida enjoys a diverse mix of residential and commercial properties. The City has grown rapidly over the past several decades and currently has an estimated population 180,000, making it the second-most populous city in Broward County after Fort Lauderdale, and the 10th most populous in Florida. The City provides a full and diverse range of services to constituents including water and wastewater utility services via a Utilities Division of Public Services.

The Utilities Division of Public Services strives to provide the community with reliable and high-quality services in the most cost-effective manner possible. Its main goals are to ensure an adequate supply of quality drinking water, the environmentally safe disposal of waste products, and highest level of firefighting water capacity. The City uses contract operators, currently Operations Management International (OMI) a Division of Jacobs Engineering Group (primary) and FCS, to perform water and wastewater utility services.

OMI-Jacobs Contract Overview

In February 2015, the City entered an agreement for operation, maintenance, and management of its utility system (Agreement) with Operations Management International (OMI-Jacobs). Specific activities covered under this contract include managing:

- Operation and maintenance/staffing for water and wastewater treatment plants and collection and distribution systems;
- Operation and maintenance/staffing for customer service, utility billing, and meter reading;
- Maintenance and repair;
- Collection and disposal of lime sludge and biosolids;
- Testing and laboratory analysis;

- Records and reports;
- Permits;
- Manufacturers' warranties;
- Inspection processes;
- Security and City access;
- Large user agreement with the City of Hollywood; and
- Use of City equipment.

The value of the agreement was $6,175,000 per year, with an additional budget of $750,000 provided for City maintenance and repair costs during the first agreement year, with the stipulation that the maintenance and repair budget for each year thereafter would be negotiated by OMI-Jacobs and the City. The maintenance and repair budget is for reimbursable pass-through expenses that are required to operate and maintain the utility, regardless of whether the City provides the services or a contract operator such as OMI-Jacobs provides the services. As such, maintenance and repair expenses are not included in this analysis. OMI-Jacobs' annual contract fee is escalated by the Consumer Price Index (CPI).

A list of key performance indicators was subsequently developed, which OMI-Jacobs reports on monthly, and can be modified by the parties as they see fit. The agreement also stipulates that OMI-Jacobs is responsible for providing resources for responding to emergency situations/unanticipated system failures, a list of key City Permits issued by different regulatory agencies, and the capacity and capability to operate the water and wastewater treatment facilities.

Utility Cost Components

Comparison of City vs. contract operation, maintenance, and management costs of the utility system requires a detailed understanding of the cost estimates for each major aspect. Because OMI-Jacobs has provided an all-in contract value and has not provided a detailed cost break-down, many cost centers must be estimated. Many of the costs associated with operating the system are identical under either City operation or OMI-Jacobs operation because the City pays the costs directly as part of the agreement, including the maintenance and repair reimbursement, electricity, chemicals, internet, etc. Because these costs are identical under either scenario, they are not discussed.

Major cost centers that the City would have to fund if it were to take over operation, maintenance, and management of the system include:

- Personnel (salaries, benefits, overtime)
- Vehicles/Equipment (inclusive of insurance, repairs, and fuel)
- Training/Certifications
- After-hours call center
- Miscellaneous Costs (uniforms, tools, work stations, telecommunications)
- Savings Associated with Maintenance and Repair Budget Taxes

As stated previously, the Year-One agreement value for operation, maintenance, and management of the utility system was $6,175,000, plus a $750,000 budget for City maintenance and repair reimbursement. The value has subsequently been escalated at 3.2% (to estimate the CPI) per year and has been amended to reflect a need for additional positions and equipment. The value of the Agreement was $7,774,733 for 2018-2019 and is $8,023,525 for 2019-2020.

The following several sections outline the estimated costs and assumptions associated with City vs. contract operation of the utility system.

Personnel

The City has engaged two contractors to operate, maintain, and manage the utility system: OMI-Jacobs and Florida Contract Services (FCS). Table 2 shows the positions by function as of June 2019. This analysis focuses primarily on the work completed by OMI-Jacobs.

Table 2: Contract Positions by Function

Contractor	Function	Number of Employees
OMI-Jacobs	Management/Supervisors	12
OMI-Jacobs	Maintenance	7
OMI-Jacobs	Lift Stations	7
OMI-Jacobs	Collection and Distribution	19
OMI-Jacobs	Water Treatment Plant	11
OMI-Jacobs	Wastewater Treatment Plant	9
OMI-Jacobs	Customer Service	28
FCS	Management/Administration	8
FCS	Mechanic/Electrician/Operator	12
	Total	**113**

OMI-JACOBS PERSONNEL

Personnel represents the largest cost driver for contract operations. According to information provided by OMI-Jacobs, approximately 85% of the Agreement's 2019-2020 value, or $6,820,000, represents labor costs, including salary, benefits, and profit for the contract operator. OMI-Jacobs' benefit package typically ranges from 45-70% of salary, based on the employee's rates and their personal benefit selections. OMI-Jacobs' personnel costs are inclusive of any required overtime, which, because Raftelis was provided with only a high-level breakdown of costs, is assumed to be included in the salary estimates. OMI-Jacobs did not provide its profit margin, but water industry contract operators and privately-owned utilities typically earn 5-15% profit, based on a range of factors. Table 3 shows a range of cost breakdowns equating to an annual personnel cost of approximately $6,820,000, based on different assumptions.

Table 3: Potential Range of OMI-Jacobs Personnel Cost Components

Aggregated Salary Costs	Assumed Benefit %	Assumed Benefit Costs	Assumed Profit %	Assumed Profit
$4,468,273	45%	$2,010,723	5%	$341,000
$4,233,101	45%	$1,904,896	10%	$682,000
$3,997,929	45%	$1,799,068	15%	$1,022,999
$4,319,331	50%	$2,159,665	5%	$341,000
$4,091,998	50%	$2,045,999	10%	$682,000
$3,864,665	50%	$1,932,332	15%	$1,022,999
$4,049,373	60%	$2,429,624	5%	$341,000
$3,836,248	60%	$2,301,749	10%	$682,000
$3,623,123	60%	$2,173,874	15%	$1,022,999
$3,811,174	70%	$2,667,822	5%	$341,000
$3,610,586	70%	$2,527,410	10%	$682,000
$3,409,998	70%	$2,386,999	15%	$1,022,999

Based on the range of cost components and assumptions, it is likely that OMI-Jacobs' aggregate salary costs fall in the middle of the ranges, between $3.8 and $4.1 million in FY 2019, and that its aggregate benefit costs are between $2.1 and $2.4 million annually. These costs should be escalated by the current consumer price index for FY 2020 and each year thereafter.

CITY PERSONNEL

OMI-Jacobs employs staff exclusively to perform the City Agreement, while also providing access to corporate resources, such as human resources, procurement, contract management; regional resources, such as maintenance, operations, information technology (IT), and compliance specialists; and consulting services on an as needed basis. Because the City would still require access to those resources if it were to operate the utility system, those FTEs have been estimated using data provided by OMI-Jacobs and added to the salary/benefit calculations in this section. These outside resources are estimated to equate to approximately eight additional FTEs.

While the City may be able to furnish some of these resources, such as human resources and IT, it if were to operate the utility system, Raftelis has assumed that these resources would need to be added under its cost models for a direct comparison.

Salary

The City provided Raftelis with the salary data it had gathered to support a previous analysis of City vs. contract operation. This analysis, conducted in 2018, took the positions included in the OMI-Jacobs contract and identified salary data for comparable positions at comparable utilities in the region, including Broward County, the City of Miramar, and the City of Hollywood. Raftelis spot checked the salary ranges and did not find significant changes between 2018 and 2019. Between the three peer utilities, at least one comparable position was identified for each of the positions included in the OMI-Jacobs Agreement.

Additionally, Raftelis selected 15 positions and compared the midpoint of the peer utility range to the median salary for City/County positions listed in the 2018 AWWA Compensation Survey for medium-sized utilities. In this comparison, the national median was lower than the midpoint in for ten of the fifteen positions, higher in four of the fifteen positions, and almost identical for the last position. For most cases, the variance between the national median and the peer midpoint salary data was 10-15%. Table 4 shows a list of unique positions and the salary range for the comparable position at a peer utility.

Table 4: Comparable Peer Utility Positions and Salary Ranges

Job Title	City Salary	Minimum Salary	Maximum Salary
Project Director	Broward	$107,123	$170,968
Operations Manager (Utility Field Operations Manager)	Broward	$69,412	$110,781
Administrative Specialist	Broward	$38,920	$62,115
Facilities Maintenance Superintendent	Broward	$60,064	$95,862
Safety Manager (Field Service Manager)	Miramar	$70,003	$118,290
Wastewater Plant Superintendent	Hollywood	$68,982	$110,372
Water Plant Superintendent	Broward	$60,064	$95,862
Customer Service Manager	Hollywood	$63,813	$102,100
Senior Utility Billing Supervisor	Miramar	$46,198	$78,063
Field Service Superintendent	Miramar	$52,150	$88,120
Lift Station Supervisor	Miramar	$52,026	$77,010
Lead Mechanic	Miramar	$47,557	$70,396
Utility Mechanic III	Miramar	$43,088	$63,782
Utility Mechanic II	Miramar	$38,621	$57,168
Utility Mechanic I	Miramar	$36,386	$53,861
Electrician II	Miramar	$47,557	$70,396
Lift Station Mechanic II	Miramar	$38,621	$57,168
Lift Station Mechanic I	Miramar	$36,386	$53,861
Lead Mechanic	Miramar	$47,557	$70,396
Heavy Equipment Operator I	Miramar	$36,386	$53,861
Jet-Vac Video Operator I	Miramar	$45,323	$67,086
Water Plant Shift Supervisor	Miramar	$52,026	$77,010
Operator in training	Miramar	$36,386	$53,861
Water System Operator I	Miramar	$32,255	$47,244
Water Plant Operator B	Miramar	$45,323	$67,086
Water Plant Operator C	Miramar	$40,853	$60,473
Utility Field Technician	Hollywood	$36,696	$55,778
Senior Utility Field Technician	Hollywood	$43,620	$66,303
WWTP Lead Operator	Miramar	$47,557	$70,396

Collections Operator I	Miramar	$32,255	$47,244
Wastewater Plant Operator B	Miramar	$45,323	$67,086
Wastewater Plant Operator C	Miramar	$40,853	$60,473
Administrative Clerk I	Miramar	$30,127	$43,939
Administrative Clerk I (Courier)	Miramar	$30,127	$43,939
Administrative Clerk II	Miramar	$32,255	$47,244
Utility Billing Specialist II	Miramar	$38,621	$57,168
Utility Billing Specialist I	Miramar	$36,386	$53,861
Meter Technician	Miramar	$38,621	$57,168
HR	Broward	$38,920	$62,115
Procurement	Broward	$38,920	$62,115
Maintenance Specialist	Broward	$38,920	$62,115
Operations Specialist	Broward	$38,920	$62,115
Compliance Specialist	Broward	$38,920	$62,115
IT Specialist	Broward	$38,920	$62,115

Applying these salary ranges to the staff employed by OMI-Jacobs on behalf of the City yields the annual salary costs shown in Table 5. Aggregate salary costs are shown at the minimum, 25% of the salary range, the median, 75% of the salary range, and 90% of the salary range. Note that when City staff conducted a cost comparison in 2018 it assumed City salaries based on 90% of maximum salary, rather than the minimum salary added to a percent (25%, 50%, 75%, 90%) of the salary range. To be consistent with the Agreement, the City's salary costs have been escalated by 3.2% for FY 2019-20.

Table 5: Estimated Aggregate Staffing Costs (City)

Salary Range	FY 2018-19	FY 2019-20
Minimum	$3,958,247	$4,084,911
25th Percentile	$4,440,697	$4,582,799
Median	$4,923,147	$5,080,688
75th Percentile	$5,405,598	$5,578,577
90th Percentile	$5,695,068	$5,877,310
Estimated OMI-Jacobs Range	$3,700,000 - $4,000,000	$3,811,000 - $4,120,000

Filling positions at the bottom of the salary range is likely unrealistic in the City for a number of reasons. According to the US Census Bureau, the City has a low overall unemployment rate at 3.1%, and the Miami-Fort Lauderdale-Pompano Beach Metropolitan Area has only a slightly higher rate at 3.4%. The low unemployment rate, coupled with several other water/wastewater utilities in the immediate vicinity, would require the City to offer competitive salary and benefit packages in order to effectively recruit. Additionally, many of the positions needed to effectively manage and operate the utility system require considerable experience, and the City would likely need to recognize that experience at higher salary levels.

The salary numbers for OMI-Jacobs employees may be lower for a variety of reasons – the company may offer faster advancement opportunities, which could compensate for lower salaries; some of the employees who work on the Utility System may work remotely and may be based in lower cost of living areas; or OMI-Jacobs may have a high vacancy rate, which could result in high staffing costs for functionally fewer people.

Benefits

The City's benefits package includes the following contributions:

- Federal Insurance Contributions Act (FICA)
- Retirement contributions
- Health insurance
- Life insurance
- Workers' compensation insurance
- Other Post-Employment Benefits (OPEB)

Contributions for each benefit category for FY 2019 and estimated contributions for FY 2020 are shown in Table 6. Except where noted, contributions are made as a percent of employees' salaries. In future years, the City's retirement costs for employees and managers may increase by 2%, as is currently being proposed to the collective bargaining unit.

Table 6: FY 2019 and FY 2020 City Benefit Contributions

Benefit Category	FY 2019	FY 2020 (Proposed)
FICA	7.65%	7.65%
Retirement	9% Employees 12% Management	9% Employees 12% Management
Health Insurance (per employee)	$17,716	$18,120
Life Insurance	.47%	.44%
Workers' Compensation Insurance	5%	6.35%
OPEB (per employee)	$3,000	$3,000

Table 7 shows the estimated benefit costs, assuming aggregate salary costs at the minimum, 25% of the salary range, the median, 75% of the salary range, and 90% of the salary range for FY 2019. Table 8 shows the same information, escalated based on the proposed FY 2020 values. For reference, OMI-Jacobs's estimated benefit costs are between $2.1 and $2.4 million annually.

Table 7: FY 2018-19 Estimated Benefit Costs by Salary Range

Benefit Category	Minimum	25%	Median	75%	90%
FICA	$294,889	$330,832	$366,774	$366,774	$424,283
Retirement	$376,906	$423,475	$470,048	$516,643	$544,573
Health Insurance (per employee)	$1,683,020	$1,683,020	$1,683,020	$1,683,020	$1,683,020
Life Insurance	$18,604	$20,871	$23,139	$25,406	$26,767
Workers' Compensation Insurance	$197,912	$222,035	$246,157	$270,280	$284,753
OPEB (per employee)	$285,000	$285,000	$285,000	$285,000	$285,000
Total Benefit Cost	**$2,856,332**	**$2,965,233**	**$3,074,139**	**$3,147,124**	**$3,248,396**

Table 8: FY 2019-20 Estimated Benefit Costs by Salary Range

Benefit Category	Minimum	25%	Median	75%	90%
FICA	$304,326	$341,419	$378,511	$415,604	$437,860
Retirement	$387,781	$435,748	$483,730	$531,705	$560,497
Health Insurance (per employee)	$1,721,400	$1,721,400	$1,721,400	$1,721,400	$1,721,400
Life Insurance	$18,162	$20,375	$22,589	$24,802	$26,131
Workers' Compensation Insurance	$259,392	$291,008	$322,624	$354,240	$373,209
OPEB (per employee)	$285,000	$285,000	$285,000	$285,000	$285,000
Total Benefit Cost	**$2,976,060**	**$3,094,949**	**$3,213,854**	**$3,332,751**	**$3,404,096**

OVERTIME

Overtime is a necessary personnel cost for utility operation, maintenance, and management, because service is required 24/7/365. Overtime costs are captured within the Personnel portion of the OMI-Jacobs Agreement, which, as previously stated, makes a direct comparison of overtime costs under City operation challenging. However, the overtime cost is already accounted for, which means that regardless of the number of hours spent by OMI-Jacobs on overtime activities, there is no added cost for the City.

If the City were to assume operation, maintenance, and management of the utility system, overtime would represent an added cost, and one that is highly variable. OMI-Jacobs provides a monthly operating report to the City, which includes the total monthly hours worked and the total monthly overtime hours. Assuming that June 2019 represents a typical month, and that overtime hours would be similar under City operation, annual overtime effort would be approximately 17,000 hours.

To get a sense of what overtime investment might look like for the City, Raftelis reviewed the annual operating budgets for the Cities of Miramar, Pompano Beach, Hialeah, and Sunrise, as shown in Table 9. Annual overtime costs for FY 2017 were provided by OMI-Jacobs to the City.

Table 9: Peer Utility Overtime Ratios

Peer Utility	FY 2018 Overtime Budget	Utility Employees	Overtime/FTE
City of Miramar	$1,004,700	135.5	$7,414.76
City of Pompano Beach	$342,127	128	$2,672.87
City of Hialeah	$245,552	62	$3,960.52
City of Sunrise	$1,500,000	279	$5,376.34
OMI-Jacobs	$190,000*	93	$2,043.01
		Average Overtime/FTE	$4,293.52

**OMI-Jacobs' costs are for FY 2017*

Applying the average overtime per FTE rate from the peer utilities to the 101 FTEs projected under City operation (93 OMI-Jacobs FTEs plus the eight additional FTEs discussed on page 6) yields an estimated total overtime cost of $433,643 for FY 2019. The total overtime cost would be then be escalated at a rate of 3.5% per year, consistent with personnel cost escalations.

Total Personnel Costs

Table 10 shows the estimated total personnel costs (salary, benefits, and overtime) for City operation, maintenance, and management of the utility system in FY 2019 and FY 2020. OMI-Jacobs' costs are also provided as a comparison. While the difference in costs between City and OMI-Jacobs operation would be less than 10% under some assumptions where the City is paying at the lower end of the estimated salary range, Raftelis finds these scenarios unlikely as they would require the vast majority of newly-recruited City employees to come in at the bottom of the positions' estimated pay scale. For the reasons discussed previously, this recruitment scenario is highly unlikely.

Table 10: Total Estimated City Personnel Costs – FY 2019 and FY 2020

Salary Range	FY 2019	FY 2020
Minimum	$7,248,222	$7,508,491
25%	$7,839,574	$8,125,269
Midpoint	$8,430,929	$8,742,062
75%	$8,986,365	$9,358,848
90%	$9,377,107	$9,728,926
OMI Jacobs	$6,587,500	$6,785,125

Additionally, recruiting sufficient staff to ensure that the City is able to immediately take over operation, maintenance, and management of the utility system will take time. Water and sewer are essential services, and a disruption in service during a transition between City and contract operation is unacceptable. As such, it would likely be necessary for the City to build in a transition period, wherein it is actively recruiting, hiring, and training staff and paying for contract operations at the same time. Recruiting staff to ensure that the City can take over operation of the utility will take time, and the City's Human Resources group estimates a recruitment cost of $3,000-$5,000 per full-time employee (as much as $303,000-$505,000 to replace the 101 FTEs currently provided by OMI-Jacobs).

Recruitment costs include online advertising, printing resumes, reviewing resumes, setting up interviews, background checks, medical screenings, etc., and the City might realize efficiencies by advertising for multiple positions simultaneously. The City's Human Resources group estimates that approximately 30% of the cost to hire a new position is staff time, with the remaining 70% going toward advertising, background checks, etc. The length of this transition period is heavily dependent on the ability of the City's Human Resources group to support this effort, and could be as short as three months, or as long as a year for some positions. A reasonable transition period estimate is six months, with the City paying new staff and the contract operator during this time.

Vehicles/Equipment

Most of the vehicles and equipment used in the operation, maintenance, and management of the system are owned by OMI-Jacobs, including specialty vehicles, such as a Kenworth Hydro-Vac, and approximately 50 other trucks, vans, forklifts, and other vehicles/equipment. The City owns nine vehicles used by OMI-Jacobs, including a backhoe, mini excavator, and a vacuum truck. Costs associated with OMI-Jacobs vehicle ownership and insurance are part of the main agreement budget ($8,023,525) and are not reimbursable through the separate budget for maintenance and repair costs. OMI-Jacobs is also responsible for paying for repair and maintenance of City vehicles through the agreement.

VEHICLE OWNERSHIP

OMI-Jacobs has provided a list of vehicles and equipment, which allowed City staff to estimate the replacement cost for each vehicle or piece of equipment, as well as to estimate the annual cost of insurance. Using the age of

OMI-Jacobs' existing fleet and a five-year depreciation period, Raftelis validated the City's estimate for purchasing new equipment and estimated the following vehicle costs per year for OMI-Jacobs. The City's Year 1 costs include a large up-front capital investment to purchase the 51-vehicle fleet provided by OMI-Jacobs, and then $200,000 in years 4 and 5 to replace vehicles already owned by the City. While the costs of investing in a fleet could be amortized over five years (estimated at $438,000 per year) to reflect the multiple years' worth of benefits accrued, the City holds little debt, and may prefer an up-front vehicle purchase with no amortization allowance. OMI-Jacobs' capital costs are spread out, based on when each vehicle is fully depreciated and needs to be replaced. For the 17 vehicles of unknown age, Raftelis assumed three remaining years of useful life, with replacement occurring in Year 3. These costs are shown in Table 11.

Table 11: Estimated Annual Capital Costs for Vehicles/Equipment

Organization	Year 1	Year 2	Year 3	Year 4	Year 5	Annual Average
City	$1,790,000	-	-	$200,000	$200,000	$438,000
OMI-Jacobs	$215,000	$415,000	$865,000	$235,000	$60,000	$358,000

Note that if the City were to assume operations and maintenance responsibilities of the utility system, it may be able to purchase the OMI-Jacobs utility vehicles at their estimated value. This may result in some short-term savings. Raftelis did not perform calculation for this option. As with staff recruitment, if the City were not able to purchase OMI-Jacobs' utility vehicles, a transition period of approximately six months would need to be factored in, to ensure that the City had the necessary time to procure appropriate equipment to maintain high service levels.

INSURANCE

To provide both annual automobile liability insurance and annual miscellaneous property casualty liability insurance, Raftelis assumes a total insurance cost of $400,000 for Year 1, which will be escalated at a rate of 3% per year. This cost is assumed to be the same, regardless of who is operating the utility system.

VEHICLE REPAIRS/FUEL

With regard to vehicle repairs and fuel, OMI-Jacobs provided the City with its actual costs to operate and maintain its fleet, which are approximately $243,000. While Raftelis does not believe that there would be significant differences in costs between the City's fleet and OMI-Jacobs' fleet, as previously discussed, the City would be purchasing entirely new vehicles. Some of these vehicles would likely be more fuel efficient and, at least in the early years, will require less maintenance. Therefore, Raftelis has assumed a 10% savings for vehicle repairs and fuel costs. These costs are escalated at 3% per year.

Table 12 shows the estimated total annual vehicle costs for the City and OMI-Jacobs.

Table 12: Estimated Total Annual Costs for Vehicles/Equipment

Organization	Year 1	Year 2	Year 3	Year 4	Year 5
City	$2,408,700	$637,261	$656,379	$876,070	$902,353
OMI-Jacobs	$858,000	$1,077,290	$1,547,159	$937,624	$783,703

Training/Certifications

Operations and maintenance of water and wastewater utility systems requires substantial and on-going training in a variety of areas. Employees are also required to hold licenses or certifications in different areas in order to continuously meet regulatory requirements. Currently, 55 OMI-Jacobs employees hold the certifications listed in Table 13.

Table 13: Licenses Held by OMI-Jacobs Personnel Working for the City

Licenses	Number Held
Wastewater (Class C through Class A)	18
Water (Class C through Class A)	12
Collections	9
Distribution	11
Backflow	5
Reliability-Centered Maintenance Professionals	2

OMI-Jacobs provided its training and certification costs to the City, and Raftelis believes that it is reasonable to assume that these costs would be similar under OMI-Jacobs or City operation of the system. Annually, these costs are approximately $12,000, which can be escalated at a rate of 3% per year for both OMI-Jacobs and the City.

After-Hours Call Center

Per the OMI-Jacobs Agreement, City customers have access to an after-hours call center, which is OMI-Jacobs operates from a central location for a group of its clients. Customer calls are forwarded to this call center after normal business hours, on weekends, and on holidays, which is a higher level of service for customers than only giving access to service or issue resolution during normal business hours. Because this service has been in place for several years, it is likely that customers have become accustomed to receiving this level of service, which the City would probably want to continue if it were to take over operations. OMI provided the City with the City's share of the annual costs required to operate the after-hours call center, which were $39,600 in 2018. Given that the City is likely interested in continuing this service, it is reasonable to expect that the city would need to establish an afterhours utility call center or provide a similar level of service through a different contractor. Switching call center operations contractors will require staff time in addition to funding, while the new operator familiarizes itself with the utility system. Estimated costs, inclusive of annual escalation costs of 3%, are shown in Table 14.

Table 14: Estimated After-Hours Call Center Costs

Organization	Year 1	Year 2	Year 3	Year 4	Year 5
City	$39,600	$40,788	$42,012	$43,272	$44,570
OMI-Jacobs	$39,600	$40,788	$42,012	$43,272	$44,570

Miscellaneous Costs

Several miscellaneous cost centers are also covered under the OMI-Jacobs Agreement, which the City would need to fund if it were to begin operation, maintenance, and management of the utility system. These costs include uniforms, tools, and telecommunications. For all of these cost components, OMI-Jacobs has provided the City with its costs, which are reasonable for the City to assume if it were to take over utility system operation. These costs have been escalated at a rate of 3% per year, as shown in Table 15. The City would also need to purchase additional workstations, which includes desktop and laptop computers and represents a cost of $23,000 (this cost would be a one-time, transition cost).

Table 15: Miscellaneous Cost Estimates

Cost	Year 1	Year 2	Year 3	Year 4	Year 5
Uniforms	$45,600	$46,968	$48,377	$49,828	$51,323
Tools	$15,000	$15,450	$15,914	$16,391	$16,883
Telecommunications	$64,000	$65,920	$67,898	$69,935	$72,033
Workstations	$23,000	-	-	-	-

Savings Associated with Maintenance and Repair Budget Taxes

Under the OMI-Jacobs Agreement, the maintenance and repair budget is $750,000, which is a reimbursable or pass-through of direct costs assumed by OMI-Jacobs to maintain and repair the utility system. While the money spent on maintenance and repair would be the same under City or OMI-Jacobs system operation, if the City were to assume operation, it would see a cost savings in this area because the City would not be taxed on many direct purchase costs. This represents a savings of 6% on this area, or approximately $45,000 per year, though the maintenance and repair budget has seen approved increases in recent years, based on the condition of the system, emergency repairs needed, etc.

Scenario Analysis

As demonstrated in the previous section, some of the costs between OMI-Jacobs and City operation, maintenance, and management of the utility system vary significantly. Therefore, Raftelis has constructed two scenarios: the first to show the range of costs associated with providing the same level of delivery resources (number of personnel) provided by OMI-Jacobs, and the second to show the changes in personnel or other delivery resources that would be associated with operating, maintaining, and managing the utility systems on OMI-Jacobs' current and projected budget. These scenarios represent both ends of the spectrum, and there are many potential scenarios that could exist between these two options.

Scenario 1: Maintain Current Delivery Resources

This scenario assumes that the utility system continues to be operated with the same number of positions as OMI-Jacobs provides, but with the assumptions previously stated for City salaries, benefits, and overtime. For comparison purposes, personnel (salary, benefit, and overtime) costs are shown for 25% of the salary range, the median, and 75% of the salary range. After 2020, personnel costs are escalated at a rate of 3.5%, because exact changes to the City's benefit package are unknown. It also assumes that the City will purchase a new fleet in its first year of operations, and that many of the miscellaneous costs are similar to those paid by OMI-Jacobs. Table 16 shows aggregated expenses and savings for the City under Scenario 1, and Table 17 shows the total costs of providing current service levels under the different salary assumptions.

Table 16: Aggregated Expenses and Savings for the City Under Scenario 1

Expenses/Savings	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
			Expenses		
City: 25%	$8,125,269	$8,409,653	$8,703,991	$9,008,631	$9,323,933
City: Median	$8,742,062	$9,048,034	$9,364,715	$9,692,480	$10,031,717
City: 75%	$9,358,848	$9,686,407	$10,025,432	$10,376,322	$10,739,493
OMI-Jacobs Transition Costs	$4,011,763	-	-	-	-
Recruitment Costs	$400,000	-	-	-	-
Vehicles: O&M	$618,700	$637,261	$656,379	$676,070	$696,352
Vehicles: Capital (Purchase Costs)	$1,790,000	-	-	$200,000	$206,000
Training and Certification	$12,000	$12,360	$12,731	$13,113	$13,506
After Hours Call Center	$39,600	$40,788	$42,012	$43,272	$44,570
Uniforms	$45,600	$46,968	$48,377	$49,828	$51,323
Tools	$15,000	$15,450	$15,914	$16,391	$16,883
Telecommunications	$64,000	$65,920	$67,898	$69,935	$72,033
Workstations	$23,000	-	-	-	-
			Savings		
Tax Savings on M&R Budget	$45,000	$45,000	$45,000	$45,000	$45,000

Table 17: Estimated Total Annual Operating Costs for the City and OMI-Jacobs

Operator	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
City: Median	$15,716,725	$9,821,781	$10,163,025	$10,716,089	$11,087,385
OMI-Jacobs	$8,023,525	$8,280,278	$8,545,247	$8,818,695	$9,100,893
Difference	$7,693,200	$1,541,503	$1,617,778	$1,897,395	$1,986,492

As Table 17 demonstrates, after the City's transition costs and purchase of a fleet to support utility system operation and maintenance, the median salary assumption puts City costs at approximately 18-22% higher than OMI-Jacobs' costs (the lowest salary assumption would put City costs at closer to 10% of OMI-Jacobs' costs, but this is likely unattainable, for the reasons discussed earlier in this Memo). OMI-Jacobs. If the City were required to increase salaries above the median in order to effectively recruit, annual costs of City operation, maintenance, and management could be more than 30% higher than those of OMI-Jacobs.

Scenario 2: Maintain Current Utility Costs

This scenario assumes that the City takes over operation, maintenance, and management of the utility system and, after the initial vehicle purchase, moves forward with an annual budget that approximates that of OMI-Jacobs. Because personnel costs are the majority of the difference between the two budgets, Table 18 highlights the differences in the personnel budgets at different salary levels between the City and OMI-Jacobs. Over the next five years, personnel costs could vary by as little as 20% or as much as 39%, depending on where people were hired within the City's salary range for each position.

Table 18: Percent Differences in Estimated Salaries between the City and OMI-Jacobs

Salary Range	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
OMI-Jacobs	**$6,798,300**	**$7,015,846**	**$7,240,353**	**$7,472,044**	**$7,711,149**
Personnel: 25%	**$8,125,269**	**$8,409,653**	**$8,703,991**	**$9,008,631**	**$9,323,933**
% Increase over OMI-Jacobs	20%	20%	20%	21%	21%
Personnel: Median	**$8,742,062**	**$9,048,034**	**$9,364,715**	**$9,692,480**	**$10,031,717**
% Increase over OMI-Jacobs	29%	29%	29%	30%	30%
Personnel: 75%	**$9,358,848**	**$9,686,407**	**$10,025,432**	**$10,376,322**	**$10,739,493**
% Increase over OMI-Jacobs	38%	38%	38%	39%	39%

In order to meet OMI-Jacobs current costs to operate, maintain, and manage the system, the City would have to reduce personnel accordingly. It was outside the scope of this engagement for Raftelis to examine OMI's performance and the extent to which different divisions are currently sufficiently staffed, so Table 19 highlights the overall staffing reductions that would be necessary at the organizational level, in order to meet OMI-Jacobs' current costs. Over the next five years, these reductions could be as few as 16 full time equivalent positions (FTEs) or as many as 27, again, depending on where people were hired within the City's salary range.

Table 19: Estimated FTE Reductions Necessary to Meet OMI-Jacobs' Costs

Salary Range	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
OMI-Jacobs	**$6,798,300**	**$7,015,846**	**$7,240,353**	**$7,472,044**	**$7,711,149**
Personnel: 25%	**$8,125,269**	**$8,409,653**	**$8,703,991**	**$9,008,631**	**$9,323,933**
% Cost Reduction	16%	17%	17%	17%	17%
~# of FTE Reductions	16	16	16	16	17
Personnel: Median	**$8,742,062**	**$9,048,034**	**$9,364,715**	**$9,692,480**	**$10,031,717**
% Increase over OMI-Jacobs	22%	22%	23%	23%	23%
~# of FTE Reductions	21	22	22	22	22
Personnel: 75%	**$9,358,848**	**$9,686,407**	**$10,025,432**	**$10,376,322**	**$10,739,493**
% Increase over OMI-Jacobs	27%	28%	28%	28%	28%
~# of FTE Reductions	26	26	27	27	27

Conclusion

In conducting its cost analysis of City and contract operation, maintenance, and management of the utility system, Raftelis considered the following cost centers:

- Personnel (salaries, benefits, overtime)
- Vehicles/Equipment (inclusive of insurance, repairs, and fuel)
- Training/Certifications
- After-hours call center
- Miscellaneous Costs (uniforms, tools, work stations, telecommunications)
- Savings Associated with Taxes on the Maintenance and Repair Budget

After projecting each cost center for the next five years and analyzing several scenarios, Raftelis has found that if the City were to assume operation, maintenance, and management of the system and maintain current delivery resources, it would likely cost the City approximately $1.5-$2 million more than if it were to continue using OMI-Jacobs as a contract operator on an annual basis (this annual cost excludes the initial capital investment associated with vehicles and the six-month staffing transition period), which would almost certainly lead to a significant increase in utility rates. If the City were to assume the same level of system operation, maintenance, and management at the same cost as that in the OMI-Jacobs Agreement, it would likely require a 16-28% staffing decrease, making utility operations and maintenance untenable. Both scenarios, and the range of options that exist between these two scenarios, are heavily dependent on where the City hires employees within each positions' salary range.