

# TMUA COMPREHENSIVE ASSESSMENT: SPECIAL BRIEFING SUMMARY

## Overview

The Tulsa Utility Board and the Tulsa Metropolitan Utility Authority are tasked with providing efficient and reliable water and sewer services to its customers (hereafter referred to jointly as TMUA). In doing so, it depends upon services provided by departments within the Tulsa city government. Like all water and sewer utilities, TMUA faces an evolving business and regulatory environment. Achieving TMUA's strategic mission is made even more difficult by the constraints of short-term municipal budgeting and rate setting. Accordingly, TMUA determined that it needed a genuinely strategic context – a Comprehensive Assessment – within which the array of shorter-term decisions can be made. In this summary, the IMG Team presents the key findings and recommendations of each of the seven separate tasks of the Assessment.

Overall, the IMG Team finds that the Tulsa metropolitan region enjoys water and sewer services that operate within industry norms for service quality and – excluding non-core administrative and engineering support services – within the norms for cost-efficiency. However, without significant changes to the utility, increasingly stringent national and state regulations and the system's aging infrastructure will combine to force water and sewer rates to grow significantly faster than local household incomes for decades to come. Moreover, TMUA's financial condition – including high sewer-related debt, asset replacement liabilities, and non-core service costs – has heretofore limited the utility's ability to respond.

The Comprehensive Assessment analyzed all of these issues as well as the current and projected condition of the utility. The bulk of the Assessment was devoted to asset condition and operating efficiency, but the concluding tasks evaluated several options for performance improvement and for mitigating future rate increases. The options ranged from various forms of privatization to aggressive internal improvement.

IMG concluded that TMUA's unique structural attribute (in which the governing board and owner of the assets contracts with the City for utility operating services) could be used to impose significant and lasting improvements in a way that most US water utilities cannot. IMG concludes that operating and capital program improvements could – if supported by critical new performance and asset management systems linked to the TMUA-City lease and operating contract – make durable improvements roughly equivalent to privatization, and thereby reduce future rate increases by 20 to 30 percent compared to current projections.

## 1.0 Governance and Management Analysis

### Key Findings

**The utilities' fragmented structure restrains performance and limits the TMUA's ability to deliver value to ratepayers.** The dispersion of authority among TMUA and various City departments, as well as the disconnection of critical support services from utility operations (particularly engineering and customer service), could lead to a steady erosion of staff cohesion, service levels and asset preservation.

**The utility's indirect costs are significantly out of line with peers and best practices.** Notwithstanding some recent efforts by the respective support service managers, the utility's indirect costs appear excessive

compared to the ratio of indirect to direct costs for peer utilities. Part of the gap is likely due to inadequate information technology investment that would support higher levels of efficiency, communication and responsiveness of the service processes (e.g., unification of work order and customer inquiry systems), and part is due to the lack of enforceable, competitive service level agreements.

To address these issues, IMG recommends the following for improving governance, management and the relationship between the TMUA and the City of Tulsa:

Governance & Management Recommendations	
• Nurture a stronger unity of purpose via the TUB	• Significantly expand utility performance reporting
• Appoint a full-time board coordinator	• Pursue long-term rate covenants
• Enhance board consultation on senior utility management	• Pursue accumulation of strategic financial reserves
• Implement more enterprise-like support contracts	• Focus on enterprise value via cutting edge analytic tools
• Significantly improve asset management systems	• Implement new governance information reporting
• Provide TMUA with greater utility budget input	

### The Bottom Line

*TMUA currently lacks even the most basic information tools necessary to carry out its governance mandate, let alone to compel and oversee the kind of operational and capital program reforms required to hold down future rate increases. Addressing this shortcoming and managing the utility in a more enterprise-like fashion is key to better performance. Fortunately, the TMUA-City contractual relationship offers an opportunity to implement these reforms in a manner reminiscent of the best corporate reformatations.*

## 2.0 Operations Analysis

### Key Findings

**Considering the organizational and budgetary limitations, the Water System operates very effectively. Even so, there are numerous opportunities for efficiencies that can deliver significant new value to ratepayers.** The utility is efficiently managed at the plant and field service level, with few examples of overstaffing or understaffing compared to workload. Outsourcing of selected services is generally well-directed, although there are opportunities for expanding and streamlining the outsourcing. That said, IMG has identified significant operational efficiencies that the utility can achieve.

**The utility lacks critical tools and systems that will help them operate at more efficient levels.** Technology usage appears below the level of high-performing municipal utilities, particularly for performance management information and linking core utility services to support services. Although operations and maintenance staff clearly recognize the issues and opportunities, and seem eager to implement improved and consolidated systems for work order management, asset management and customer service, progress has been slow. IMG attributes the slow progress to an absence of both budgetary resources and an overall utility-oriented technology strategy. That said, several new initiatives are currently underway to improve existing systems, streamline technology-dependent processes, and bring upgraded software and hardware into the utility.

**The utility is eager to shift to a more performance-based culture.** IMG found that core utility management and staff are eager to shift to a more performance-based organization. Staff offered numerous suggestions for improvement, with most of them related to technology and business process improvement for core software systems and support services.

## Recommendations

IMG believes that TMUA can lower water bills by implementing the following recommendations:

Enterprise-wide Improvements	Water Optimization	Wastewater Optimization
<ul style="list-style-type: none"> <li>• Employ enterprise approach to performance management</li> <li>• Plan enterprise-wide operations improvement transition period</li> <li>• Develop internal optimization specialists team</li> <li>• Implement enterprise-wide asset management system &amp; CMMS</li> </ul>	<ul style="list-style-type: none"> <li>• Optimize chemical costs</li> <li>• Optimize hauling costs</li> <li>• Implement aggressive pipeline monitoring program</li> <li>• Expand use of AMR meters</li> <li>• Expand use of seasonal hires</li> <li>• Make Spavinaw treatment plant a training facility</li> </ul>	<ul style="list-style-type: none"> <li>• Pursue aggressive sludge optimization</li> <li>• Install operator process labs</li> <li>• Optimize digesters</li> <li>• Reduce recycle loads</li> <li>• Pursue aggressive SSO performance improvement</li> <li>• Implement risk-based cleaning</li> </ul>

## The Bottom Line

*Compared to the top-performing water and sewer utilities, the utility's performance management systems are fragmented, outdated or non-existent. In that light, the performance of its core services versus its peers is impressive and representative of a positive internal culture. However, the IMG Team noted numerous points of stress in the utility's business processes, particularly HR, operations-engineering collaboration, and utility information technologies. Improvement programs do exist, but appear to be relatively uncoordinated.*

## 3.0 Capital Improvement Program

### Key Findings

**Water Growth:** Based upon the most credible demographic projections, an annual growth rate of 1% was established for the Tulsa metro area. This growth is largely manageable with current facilities except for drought conditions. It is financially untenable for TMUA to develop and maintain standby capacity sufficient to cover 100 percent of potential drought conditions, nor is it common practice among US utilities to do so.

TMUA has adopted the 60% drought coverage for planning purposes, which means Tulsa's projected raw water conveyance needs will exceed current capacity by around 2039. This represents the latest that a third flow line to the AB Jewell Water Treatment Plant would need to be in place and operational.

**Distribution Needs:** The cumulative system upgrades relative to the current (2011) water distribution system required to meet the needs of the anticipated 2030 water system include:

- 10.9 miles of 72-inch waterline
- 8.9 miles of 48-inch waterline
- 13.3 miles of 24-inch waterline

- 2.1 miles of 16-inch waterline
- 25.6 miles of 12-inch waterline.

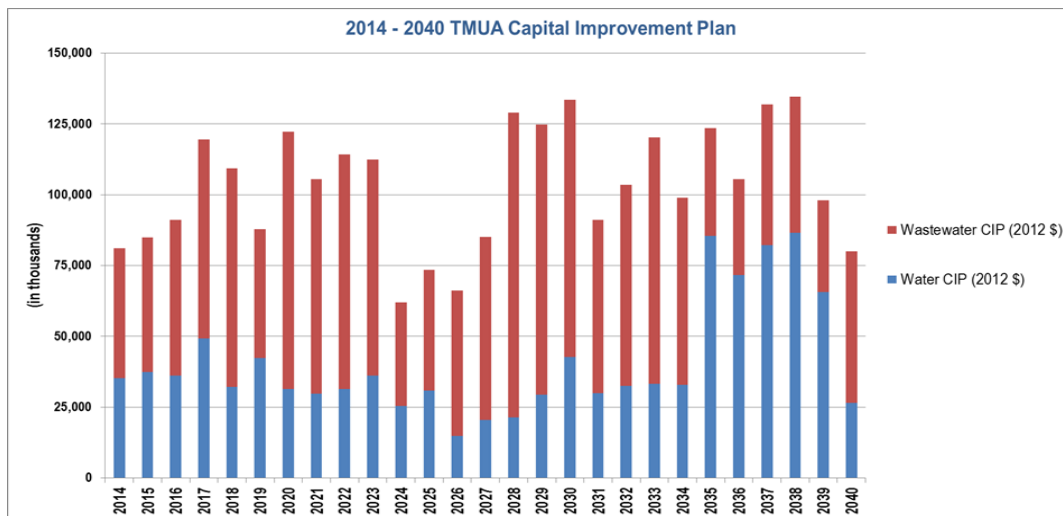
**Wastewater Growth:** Wastewater growth will parallel water usage growth. Portions of the existing collection system will require capacity enhancement improvements in order to accommodate increased flows from population growth and expansion into new areas. Additional capacity enhancements will be needed to eliminate persistent SSOs. The TMUA/RMUA treatment plants are generally functioning appropriately and meeting the permitted effluent limits. However, maintenance and replacement of worn and deteriorated equipment is a continuing, ongoing necessity.

**Collection System Needs:** Reinvestment to replace aging and deteriorating pipelines is needed and will be efficiently administered as asset management processes are incorporated into the organizational culture. A parallel effort to aggressively identify and eliminate I&I sources is needed and, if successfully executed, is the single greatest cost efficiency obtainable for the TMUA. These two collection system programs represent 30% of the overall CIP cost for the TMUA over the next 50 years.

**Wastewater Capacity:** As part of this Comprehensive Plan, the historical performance of each of the wastewater treatment plants was reviewed, and the operation of each facility was assessed. The results of this review of historical performance and operation identified several key process constraints at each wastewater treatment plant that would impact future treatment capacity without additional expansion.

## Recommendations

1. Assignment of an asset manager or director.
2. Implementation of a cross functional management team for asset management /CIP decisions.
3. The IMG Team recommends that TMUA pursue the following capital improvement spending plan to properly address its long-term infrastructure needs.



## The Bottom Line

*Task 3 identified an extensive roster of capital improvement and major repair and replacement needs over the coming decades. These needs were organized into short-term and long-term capital improvement*

programs, the costs of which are summarized in the chart above. These costs are the primary driver of the rate increases expected over the coming decades. Unfortunately, Tulsa does yet not have a robust asset management system or sufficient asset condition databases – especially for underground infrastructure – that could help it reduce and/or smooth out these expenditure

## 4.0 Market Expansion Analysis

### Key Findings

Task 4 included a comprehensive review of new revenue opportunities for TMUA, including expanding the utility’s service area for water or sewer. It also examined opportunities for the utility to provide certain types of specialty services to smaller systems in Oklahoma, including laboratory services and the use of expert licensed operating engineers. The tables below summarize the IMG Team’s assessment of the most promising service expansion opportunities.

Collinsville	Bixby	Glenpool	Non-Core Opportunities
<ul style="list-style-type: none"> <li>• Service: Water</li> <li>• Avg usage: 0.6 mgd</li> <li>• Growth: 2%</li> <li>• Rate: \$2.59/1,000 gal</li> <li>• Return: 10%</li> <li>• Revenue: \$567K/year</li> </ul>	<ul style="list-style-type: none"> <li>• Service: Wastewater</li> <li>• Avg usage: 1.35 mgd</li> <li>• Growth: 2.3%</li> <li>• Rate: \$3.24/1,000 gal</li> <li>• Return: 10%</li> <li>• Revenue: \$1.6M/year</li> </ul>	<ul style="list-style-type: none"> <li>• Service: Wastewater</li> <li>• Avg usage: 1.2 mgd</li> <li>• Growth: 2.3%</li> <li>• Rate: \$3.44/1,000 gal</li> <li>• Return: 10%</li> <li>• Revenue: \$1.5M/year</li> </ul>	<ul style="list-style-type: none"> <li>• Service: Consulting</li> <li>• Enterprise Group</li> <li>• Non-profit corporation</li> <li>• Technical Services Agreement w/ TMUA</li> <li>• 100% profits to TMUA</li> </ul>

### The Bottom Line

The IMG Team examined a wide range of potential service expansions but concluded that only three – water services to Collinsville and wastewater treatment services to Bixby and Glenpool – could benefit both parties. Non-core services such as lab testing and consulting provided by an internal enterprise unit (akin to several independent airport authorities in North America) could offer some additional limited revenue, but they are not likely to succeed until TMUA implements a broader performance improvement initiative.

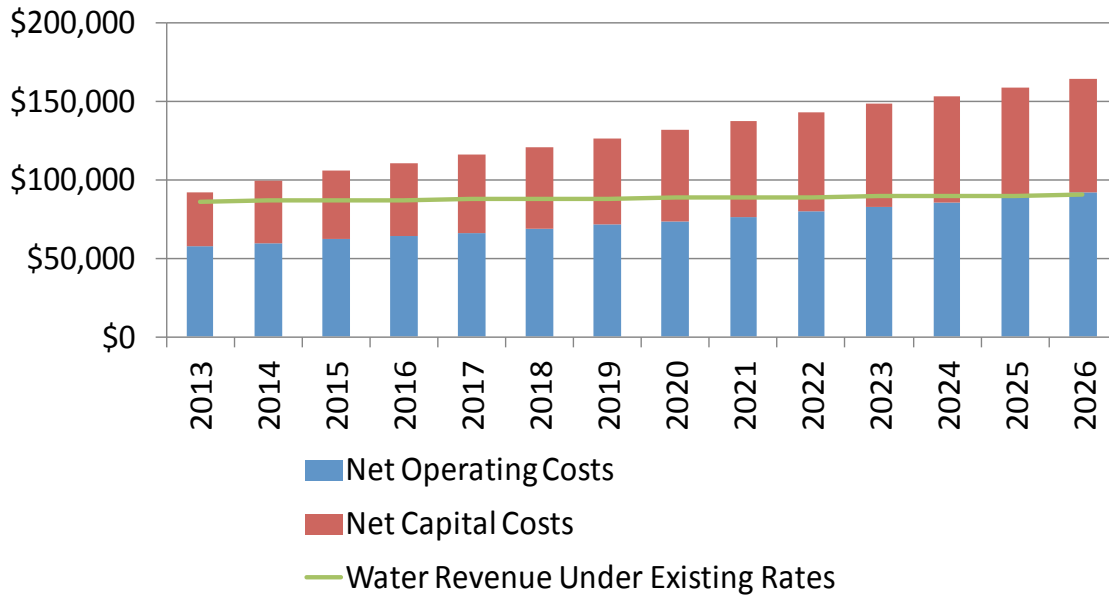
## 5.0 TMUA Financial Condition and Utility Rate Outlook

### Key Findings

**Capital improvement needs will drive rates higher:** Implementation of the capital programs identified in Task 3 will be the driving factor for future water rate changes. As demonstrated in the graph on the following page, by 2026 water revenue will need to increase by 81.4% over the 14 year period to cover debt service payments associate with the capital investment. Because of the increased capital needs associated with the consent decree, projected increases in wastewater rates are larger than for water.

**Tulsa exhibits mixed performance against its peers:** Combining both water and sewer finances, Tulsa underperforms against its peers in major financial management performance measures of high

administrative and support costs, collection costs, and personnel costs. Tulsa over performs against its peers in the financial management measures of treatment costs and operating costs.



**Tulsa underperforms on financial efficiency:** Tulsa underperforms against its peers on two important financial efficiency indicators: utility dedicated days of operating reserves and General Fund Transfer as a Percentage of Revenue. The level of operating reserves dedicated exclusively to each utility is less than a third of the level maintained by most utilities. The transfer to the City General Fund is two to three times the level typical of utilities identified in the benchmarking exercise. The effect is that Tulsa’s utilities find themselves borrowing a higher percentage of capital reinvestment than their peers.

**Compared to peers, commercial customers carry a greater share of revenue:** Tulsa gets a smaller share of its water revenue from residential customers than most water and sewer utilities while wastewater’s revenue balance is typical of other utilities.

**Water affordability is average compared to peers:** Tulsa’s water affordability is in the middle range of water utilities for similar-sized cities. As the chart on the following page shows, Atlanta and Kansas City stand out as much more expensive than Tulsa, while Omaha and Memphis are the best affordability performers.

**Sewer affordability is worse than peers:** Sewer is somewhat worse than water among peer cities, requiring residents to pay roughly twice the portion of the median income as residents of Denver and Omaha and well above even cities like Indianapolis, Louisville and Fort Worth.

The table below summarizes the key findings of the financial condition assessment. The long-term rate outlook is incorporated into the Baseline Scenario in the strategic options analysis.





**TMUA COMPREHENSIVE ASSESSMENT  
SPECIAL BRIEFING SUMMARY  
August 2012**

			Average Residential Water Customer		
City	State	Mean Household Income	Typical Bill	Percent Household Income	Persons Below Poverty Level
Omaha	NE	\$51,878	\$14.34	0.33%	13.1%
Memphis	TN	\$36,473	\$13.10	0.43%	25.4%
Denver	CO	\$45,501	\$18.74	0.49%	19.2%
Arlington	TX	\$52,094	\$21.81	0.50%	14.3%
Nashville	TN	\$45,063	\$19.72	0.53%	17.8%
Dallas	TN	\$41,682	\$19.70	0.57%	22.3%
Oklahoma City	OK	\$43,798	\$23.15	0.63%	16.6%
<b>Tulsa</b>	<b>OK</b>	<b>\$39,289</b>	<b>\$21.41</b>	<b>0.65%</b>	<b>19.3%</b>
Fort Worth	TX	\$49,530	\$27.02	0.65%	17.0%
Colorado Springs	CO	\$53,074	\$30.56	0.69%	11.8%
Louisville	KY	\$43,009	\$24.99	0.70%	17.3%
Indianapolis	IN	\$43,088	\$26.41	0.74%	17.9%
Kansas City	MO	\$44,113	\$35.29	0.96%	18.1%
Atlanta	GA	\$49,347	\$43.61	1.06%	15.7%

Key Findings	
<b>Revenue Requirement</b>	<ul style="list-style-type: none"> <li>• TMUA faces significant revenue requirement increases due to projected CIP</li> </ul>
<b>Financial Efficiency</b>	<ul style="list-style-type: none"> <li>• Tulsa underperforms its peers on most financial management performance measures</li> <li>• Higher indirect (non-core) costs, collection costs, debt service and personnel costs</li> </ul>
<b>Financial Management</b>	<ul style="list-style-type: none"> <li>• Tulsa significantly underperforms its peers on key financial efficiency indicators</li> <li>• Days of Working Capital Maintained and General Fund Transfer as Percentage of Revenue</li> </ul>
<b>Revenue Source Distribution</b>	<ul style="list-style-type: none"> <li>• Tulsa gets a smaller share of its water revenue from residential customers than most utilities</li> <li>• Wastewater's revenue balance is typical of other utilities</li> </ul>
<b>Affordability</b>	<ul style="list-style-type: none"> <li>• Revenue requirement outlook will result in a significant increase in ratepayers' projected water and wastewater bill as a percentage of gross mean income</li> </ul>

## Recommendations

The IMG Team believes that TMUA will need to take a more enterprise-like approach to managing its cash, its debt issuance, and financing its long-term asset replacement and preservation. It should increase operating reserves dedicated to utilities and focus its resources on preserving assets and extending their useful lives through improved systems, better data and reengineering business processes. Most of all, TMUA will need to govern the utilities in a cohesive, strategic and financially forward-looking fashion supported by better data and bottom-line measures of the utilities' ongoing (and ever-changing) enterprise value. These improvements will require significant cooperation and support from the City of Tulsa.

## The Bottom Line

*Tulsa's utilities have relatively low core operating costs, but compared to their industry peers they pay more for non-core support services to their city's General Fund. These factors, combined with a relatively high debt load on the wastewater side and the increasing impact of EPA regulatory requirements, hurt Tulsa when it comes to the local affordability of their water and sewer rates. Moreover, regulatory and asset replacement needs are projected to worsen affordability over the coming years.*

## 6.0 Strategic Options Analysis

TMUA faces capital requirements over the next 50 years that will result in significant rate increases for Tulsa residents (approximately 5.6% per year). However, TMUA has the capacity to pursue creative solutions that will slow the rate growth and result in lower, more reasonable utility bills for ratepayers over the period.

### Approach

IMG developed a modified utility enterprise valuation model in order to calculate the change in the utility's value; i.e., the rates paid by consumers combined with the asset value of the utility at the end of the analysis period. Overall, a higher value indicates a better deal for ratepayers.

The Baseline projection is the scenario that incorporates prevailing utility cost trends and projected capital spending under the long-term capital improvement program developed in Task 3. This was compared against the various performance improvement options, which are based on IMG's hypothetical modifications to operations and the capital program based upon its knowledge of private operator practices, with slight changes in assumptions from scenario to scenario.

Under all but the long-term lease ("Concession") options, any performance improvements are assumed to flow directly through to ratepayers in the form of lower rates and a higher utility value. Under the concession scenario, the benefit would flow to the City in the form of a large up-front lease payment, which IMG estimates could total to as much as \$1 billion or more (however, utility rates would be the same as under the Baseline scenario).

### Analysis

The comparative results are shown in the table below.



Option	Valuation	Average Annual Revenue Growth	Average Monthly Water Bill	% Change in Average Monthly Water Bill
Baseline	\$1,619.0	4.97%	\$166.0	-
Market Expansion	\$1,686.2	4.90%	\$165.6	(0.72%)
Partial Outsourcing	\$1,709.9	4.87%	\$164.6	(1.37%)
AI - Base	\$2,108.0	4.50%	\$149.4	(10.45%)
<b>AI - Management</b>	<b>\$2,394.2</b>	<b>4.33%</b>	<b>\$142.4</b>	<b>(14.63%)</b>
AI - Upside	\$2,495.6	4.28%	\$140.2	(15.95%)
O&M Contract	\$2,576.6	4.24%	\$138.2	(17.17%)
Lease	\$2,785.7	4.09%	\$132.4	(20.64%)
Concession	\$3,056.5	3.96%	\$127.7	(23.47%)

Although the Concession Option appears to show the greatest total benefit, there are two related caveats in comparing that option with the others in the table.

- First, the values shown do not consider the higher cost of capital faced by the concessionaire. If, as seems likely, the current tax-exempt debt of the utility would have to be “defeased” and replaced with taxable financing (a mix of debt and equity), and if all future financing of improvements must be done with taxable financing, then the reduction in rates compared to the Baseline scenario will be roughly the same as for the O&M Contracting Option (assuming that the City uses 100% of the lump sum payment or lease payments to hold down rates).
- Second, compared to the other options, the Concession Option has the highest level of uncertainty with regard to its impact on ratepayers. It is likely that ratemaking for the utility would drastically change and could even fall under the authority of state regulators. Finally, most of the benefit of the Concession Option lies in restructuring of the long-term capital improvement program. Of all of the changes assumed in these hypothetical options, these types of changes are the most speculative.

## 7.0 Comparison of Options

IMG therefore concludes that three options could significantly reduce water and sewer rates in the future:

- contract operation,
- long-term lease concession, and
- an internal aggressive improvement option.

IMG’s experience is that internal improvement initiatives usually wane after the threat of privatization abates, and the utility eventually returns to something like its old performance level after a few years. However, the TMUA-City relationship is relatively unique among municipal utilities because it utilizes an asset lease and operating contract, one that could readily emulate a government – contractor performance relationship.

No major City has ever privatized its existing water or sewer utility via a long-term lease-type concession. IMG believes that this is because the politics of relinquishing direct control of water or sewer are so daunting, not because the economics are unappealing. We doubt Tulsa could overcome the many hurdles in the path of a concession. This is unfortunate because we believe that the utility’s best opportunity for

reducing its costs (and rates) like in better management of its assets, reduction of unit costs for support services, and the optimization of its internal capital-operations relationship; i.e., exactly the costs that a long-term concessionaire is likely to reduce most.

As for operations and maintenance contracting, this is the right solution for many cities but not, we think, the City of Tulsa. Unlike most systems that have privatized their operations, Tulsa has relatively low unit costs, low hourly labor rates and reasonably good labor productivity *for its core water and sewer operations services* (not including support services like human resources, customer service, purchasing, engineering services, etc.). While it is possible that this is a temporary phenomenon reflecting the City's broad pay and hiring freezes and cost cutting, IMG believes that the operating savings from contract operation would be in the 10-15 percent range rather than the 20-30 percent range routinely associated with privatization.

As noted before, we believe that most of the utility's cost reduction opportunity lie with reducing unit support costs, improving its asset and capital improvement management programs, and in optimizing the interface between capital and operations. This is not what an operations and maintenance contract is designed to do.

This leaves the Aggressive Improvement Option. This option would utilize the unique City-TMUA/TUB contractual relationship to capture the benefits of privatization without the associated transaction costs and the loss of public control over water and sewer; that is, improved internal performance becomes a *contractual* matter rather than simply an internal service goal. Performance tracking and enforcement is made possible – and durable -- by new performance management systems, asset management systems, and support service contracts.

## 8.0 Recommendations

This Utility Enterprise Initiative (“the Initiative”), as we describe it here, is designed to cause the utility to incorporate the most publicly-valuable aspects of private contract operation and capital investment, along with the best practices of the water and sewer industries, to reduce future rate increases by at least 20 to 30 percent compared to current projections. Future performance improvements would be implemented in accordance with a long-term business strategy, measured against a long-term baseline from year to year, and enforced through specific annual action plans agreements between the City and the TMUA.

The components of the Initiative would unify and enhance the utility's management, operations, capital programming and support services, all to the benefit of Tulsa's ratepayers. They would do so by amending selected utility business processes and by implementing new performance reporting, asset management and executive information systems.

Internal improvement would not ordinarily offer the contract-based certainty of the Operations & Maintenance Contracting Option or even the Concession Option: the constant pressure to improve performance is difficult for a municipal operator to sustain over time, especially after the threat of privatization is gone. However, unlike most water and sewer utilities, TMUA (and TUB) contracts with the City of Tulsa for operations and support services. This contracting structure places TMUA in a similar position to what a city might be if it contracted out its operations to a private operator. Accordingly, by relying upon this contract and TMUA's governance position, IMG believes the utility can – with appropriate new performance management and governance systems – achieve performance and cost-efficiency similar to a private contractor with less risk and with lower transaction costs.

IMG recommends that TMUA take the following actions:

1. **Greater Budget Input:** More formal and direct input by Utility in the creation, deliberations and approval of the annual utility operating budgets and work of the Water and Sewer Department.
2. **Greater Executive Consultation:** TMUA should have formal, consistent and direct means for input into the selection, hiring, firing, evaluation and compensation of the most senior executives in the Water and Sewer Department. For the senior-most executives, the selection, hiring, firing, evaluation and compensation would require the TMUA's consensus.
3. **Utility Strategic Business Plan:** TMUA should develop a Strategic Business Plan that includes specific, long-range and measureable goals for consistently improving the performance of the utility, along with a roster of related action items and milestones suitable for routine reference and regular updating by the Utility. An Annual Utility Performance Agreement (described below) should be developed in accordance with and in support of this Strategic Business Plan.
4. **Annual Utility Performance Agreement:** TMUA should develop and – in consultation with the Water and Sewer Department – update annually thereafter a Utility Service Performance Agreement (USPA) proscribing the performance expectations, goals and major action items to be achieved by the Water and Sewer Department during the year. The USPA should be referenced in the amended City-Utility lease and contract agreements cited in Section 3e above. The performance expectations and major action items embodied in the USPA should be based upon the Utility Strategic Business Plan (see above).
5. **Arms-length, Businesslike Support Contracts:** TMUA should create enforceable, demonstrably-competitive, unit-priced, and terminable contracts for support services provided to the utility by City departments, including but not limited to IT, finance, human resources, purchasing, customer service and engineering services. These contracts should mirror those with private vendors in nearly all respects.
6. **A Full-Time Board Coordinator:** TMUA should hire – via direct TUB or TMUA employment or a professional service contract – a full-time coordinator, and perhaps additional administrative support for the coordinator, to consolidate and interpret the information generated by the performance and asset management systems. The coordinator would also implement and monitor the new support service contracts, prepare relevant briefing materials (including consolidation of materials provided by City departments), and to provide routine administrative support.
7. **Privatized-Like Operational Improvements:** TMUA should identify which operations and maintenance practices of global private contract operators could be implemented in its plants and field operations, and what would be the cost and time required to implement those practices. It should also evaluate the risks and benefits of implementation. In cooperation with utility staff, it should review the roster of identified opportunities and make its selections, and then begin working to implement the changes (along with the appropriate new technology and risk management systems) over the appropriate time frames.
8. **Performance-Optimized Capital Program:** In consultation with utility staff, TMUA should revisit the recently-developed CIPs and the roster of possible changes identified in Task 6 of the Assessment. The Task 6 roster of hypothesized improvements should be expanded, detailed and refined in light of the other performance improvement initiatives – particularly the operational improvements and asset management system – included in the Initiative. This will be used to modify the prevailing CIPs as appropriate.

9. **Improved Asset Management System:** TMUA, the Water and Sewer Department, and the Department of Engineering Services should cooperate to establish a best-in-class utility asset management system. This system would provide the functions necessary to maximize the utilities' value to the public, minimize future rate increases, and contain long-term liabilities.
10. **Implement a Utility Performance Reporting System:** TMUA and the City should implement a utility-wide performance measurement and reporting system, including performance data for core water and sewer services and the utility support services provided by other City departments. The system should provide timely, accurate and useful performance information that is readily shared with senior utility management and staff, City administrators, and TMUA. It should also satisfy the information requirements of the Utility Strategic Business Plan, the Annual Utility Performance Agreement, and the support service contracts.
11. **Instrument for Long-Term Rate Stability:** The City and Utility should cooperate in seeking from the Tulsa City Council a formulaic means or other means that provide the Utility with greater long-term rate and revenue predictability, thereby allowing the Utility to act strategically to reduce long-term rates, assure quality service and preserve utility assets.
12. **Clear Reserves Management Authority:** In order to permit more timely investment, reduced capital financing costs, and greater flexibility to make investments that will help reduce long-term rates and improve TMUA's financial condition, the City and TMUA should cooperate in developing a new policy for the accumulation of, and TMUA control of, capital funding reserves.
13. **New Bottom-Line Performance Tools:** TMUA should create and make routine use of long-term (25 to 50 year) water and sewer rate models for water and wastewater. It should also create and implement a new Enterprise Value Model so that TMUA and the City can regularly track and forecast the economic value of the utility (which for infrastructure enterprises is a function of asset condition, long-term liabilities, and customer rates) resulting from its on-going capital investment and operating decisions. The latter will create a private-sector-like bottom-line indicator of the utility's performance.
14. **Governance Information:** TMUA should implement real-time, past-and-forward-looking governance information reporting that (1) consolidates the performance data from the new systems described herein, (2) tracks utility issues and goals across and between meetings, (3) is readily understandable to its users, and (4) allows TMUA to monitor progress and take informed actions toward the utilities' strategic business goals.

## The Bottom Line

*Tulsa has a unique institutional structure that might ordinarily be considered a weakness were it not for the lease and service contract structure that defines the TMUA-City relationship. These instruments provide the conduits for an arms-length contractual relationship that can emulate a city-contractor relationship. IMG recommends that TMUA implement a roster of new tools for doing so, and that its actions be guided by a long-term service and pricing strategy that ensures that water and sewer rates will be substantially lower than forecast under a status quo scenario.*

## 7.0 KPMG Report Evaluation

### Overview

The KPMG study has already yielded changes to the City's governance processes, and the establishment of the Mayor's Management Review Office portends more to come. Many have had a positive effect on the City's operational performance. However, the consolidation of support services and the isolation of engineering services have placed the utility in a dependent position without direct control over processes that are critical to its performance. Moreover, the study did not consider TMUA as a source of unified management or as a driver of performance improvement.

KPMG's line-item approach listed numerous opportunities for utility improvement, but the sole material recommendation for improvement was the utility-wide long-term privatization option. This appears to be based upon KPMG's initial conclusion that utility services are not core to the Tulsa City government's goals, and therefore those services should logically be left to the private sector. IMG concludes that, however valid that recommendation may or may not be, it is not sufficiently supported by the line item analyses in the report, especially in light of the study's inattention to other systemic performance improvement alternatives.

### Key Findings

The study's coverage was impressive in light of its budget. It covered over 1,500 city services, of which roughly 120 were related to core water and sewer utility functions and another 200 to utility-related support services such as finance, human resources and purchasing. Its greatest benefit to the City was in providing a high-level guidebook for reducing costs, while also motivating the City to make major institutional changes and establish a permanent performance improvement structure. It accurately identified the lack of performance management systems as a major impediment to utility performance improvement.

Unfortunately, the analyses appear not to have considered the specific regulatory requirements, service processes or industry standards of water and sewer utility operations. This limited the insightfulness of the study with regard to TMUA and the utility. Moreover, the study's overarching recommendation for the core water and sewer service was to privatize it via a long-term lease. While potentially plausible, the report did not tie this recommendation to the cost and FTE analysis (or any other part of the utility analysis).

IMG's primary concern about the study is that it utilized a quantitative approach that did not yield quantified results (except for the few services targeted for elimination); that is, it cited the current budgets and FTE's associated with each service but gave no indication of how much the budget or FTE count could be reduced by the recommendation. Moreover, for many services the budget and FTE allocation appears to have been sliced so finely (or aggregated so thoroughly) that packaging the services into suitable-for-outsourcing bundles would be quite challenging.

### The Bottom Line

*The clear expectation of the KPMG report is that the City would conduct additional analyses for high-cost services, and would bundle those and other services in a way that would attract private sector bids, or at least a measure of process reengineering. However, the report provides little guidance in that regard. In nearly all cases the reader is left wondering about the next step and the potential value of taking it.*

### END OF DOCUMENT