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TO: The Honorable Detroit City Council
FROM: David Whitaker, Director
Legislative Policy Division (LPD) Staff

DATE: July 19, 2019

RE: **Water, Sewer and Drainage Policy and Finance Discussion**

Introduction

Council President Jones directed the Legislative Policy Division to review financial implications for the City of Detroit involving the Great Lakes Water Authority (GLWA) lease of the Detroit Water and Sewerage Department (DWSD).

As Council will recall, the Legislative Policy Division (LPD) has issued numerous reports regarding the City's and the region's water and sewer systems. The Great Lakes Water Authority (GLWA) was formed between 2014 and 2016, and initiated by and through emergency management, coming out of the City's municipal bankruptcy. Its bifurcated relationship with the Detroit Water and Sewerage Department (DWSD) continues in the present.

The importance and complexity of these ongoing developments are hard to overstate. Residential flooding during heavy rains; chronic mass water insecurity leading to shut offs; the fiscal implications of infrastructure funding for City government; public health; recent implementation of increased drainage fees; these and many other quality of life issues demand and receive major public attention.

Certain ongoing regional measures under the auspices of the GLWA make this an opportune time for a more thorough policy and financial review. We must work within the existing structure of the GLWA documents (e.g., the water and sewer systems leases, Master Bond Ordinance, regional "One Water" outreach meetings, the DWSD Board of Water Commissioners (BOWCs), the GLWA Board of Directors, and other forums), in ways that work to Detroit's advantage.

In this regard, LPD calls Council's attention at this time to three (3) current fields of regional policymaking:

1. Recent development of a truly integrated regional Wastewater Master Plan;
2. The ongoing Sewer Cost of Service Methodology Review, regarding how the dozens of Southeastern Michigan communities served by the regional sewer system will divide up their individual funding contributions for maintaining the costs of the system as a whole; and
3. GLWA's development of their new brand awareness campaign of intentional public relations, framing the regional "One Water" initiatives as building "trust in a post-Flint world".

This report will begin by briefly summarizing and discussing each of these three (3) framing initiatives. Then it will proceed to a more detailed discussion of key issues in the GLWA/DWSD financial relationship.

Wastewater Master Plan

Council Members may be aware of the high costs of the region's wastewater system's compliance with the federal Clean Water Act. These costs were the initial impetus, and a continuing bone of contention, in the long running federal court oversight action involving DWSD between 1977 and 2013. Recent flooding of low lying and riverside areas on the east side of Detroit underline the continuing significance of all this infrastructure and work. The creation of the GLWA represented a step toward more robust regional collaboration around our water and sewer systems.

It is hoped that their new Wastewater Master Plan, based on collaborative regional management of regional infrastructure, designed to deal with a regional problem of continuing Combined Sewer Overflow (CSO) discharges into the Great Lakes, will achieve better results at less cost. Before the system's governance was regionalized, DWSD spent over \$1 billion to eliminate 98% of CSO discharges.

In pursuing its long-range regional objective in 2019, GLWA has made rapid technical progress. In their words, they are "focusing on return on investment for the region, minimizing the number of assets across the system and optimizing its operation over the next 40 years." (One Water Partnership Executive Summary 6/20/19) The 40 year time period evokes the federal court rate settlement imposed on DWSD in 1979. At that time the City was ordered to pursue maximum debt financing for the continued suburban build out and other operational and capital needs of these systems. That directive resulted in a debt load of 40% of the entire DWSD budget some 40 years later. That was a major part of the management challenges that formation of the GLWA was intended, in part, to deal with. Participants in the current "One Water Partnership" regional collaboration now ask: What consequences will we face 40 years from now as a result of management and policy decisions we make today to address major, costly capital infrastructure needs of the core assets of the system that are not really optional?

The new comprehensive regional Wastewater Master Plan is expected to be completed in early 2020. It should be integrated with the Capital Improvement Plan (CIP) so that CIP investments robustly support the plan. Making rapid progress toward this ambitious goal, GLWA has reportedly already updated and combined what were more than 15 municipal, GLWA and DWSD computer models into a single regional model for universal use in the region. They can now comprehensively represent the entire region's physical infrastructure and operations to model how the system's drainage and sewer features will work under various circumstances. When southeastern Michigan receives heavy rain fall, existing Combined Sewer Overflow (CSO) storage facilities hold up to 500 million gallons of wet weather flow water. GLWA is continuing to develop regional operating plans for municipal operators throughout the region to collaborate on the timing of "dewatering" flows at all these facilities to optimize the system's performance during wet weather. It has been noted that this work is already providing current value to the region, pending finalization of the comprehensive Wastewater Master Plan.

The regional public health, fiscal and development implications of the anticipated Wastewater Master Plan would be difficult to overstate. Council Members may wish to seek more information from DWSD and GLWA regarding the implications of this work for the City of Detroit and its residents.

Sewer Cost of Service Methodology Review

Related to the above development of a truly regional, collaborative management system is the current effort to revise, simplify and update the way GLWA allocates the costs of these systems' wastewater operations among the 78 communities they serve. In this regard the attached Interim Draft Report on the Sewer Cost of Service Methodology Review dated June 21, 2019, is both very informative and, especially to novice observers, probably extremely confusing.¹ The process cries out for simplification by water experts who are admittedly more knowledgeable about this complex subject matter than Council staff; however, LPD endeavors to explain: One of 11 "Key Concerns"

¹ The Interim Draft Report is the initial publicly available work product of Raftelis Financial Consultants, Inc. Raftelis is GLWA's new rates consultant. In that capacity they replace Bart Foster of Foster & Associates, who served in that critical role for many years for DWSD, and then for GLWA. It is LPD's understanding that Mr. Foster remains in a part-time advisory role during the transition to Raftelis. LPD reads Raftelis' Interim Draft Report describing the Sewer Cost of Service Methodology Review as in effect (although he is not named in it) Mr. Foster's "exit interview", summarizing institutional knowledge of this complex process. There is strong consensus among GLWA member communities that the process should be simplified. Mr. Foster has described the complexity of the process as "crazy". A simple review of the attached Raftelis Interim Draft Report should conclusively confirm that judgment for any fair minded reader. This is a regional cost-sharing methodology that needs to be simplified and updated, as opposed to 'the way things have always been done'. How it should be simplified, based on what particular criteria and objectives, and with what local and regional fiscal obligations to whom, is the critical area of public policy decision making at issue.

identified by GLWA's wholesale charges methodology review is affordability, an issue involved in Detroit's experiences with controversial water shut offs in recent years.²

The Interim Draft Report, dated June 21, 2019, a key document in the ongoing review process for allocating the costs of these services, states "The methodology used to allocate wholesale service costs in the greater Detroit area has been continually evolving for the past half century." In essence: "The current process distributes costs between wholesale customers³ of [GLWA] based on their estimated use of the system, measured by estimates of flow volume and amount of pollutants contributed [to the system]".

The difficulties with this general concept arise in the extraordinary complexity of its implementation. How these high costs for critical public services are allocated among the 78 member partner wholesale communities in southeastern Michigan served by the GLWA wastewater systems, ends up involving a range of data and analytical steps that defies clear comprehension, the more one studies it:⁴

- The first step is to allocate the total GLWA budget (or "revenue requirement") to 14 specific functions of the Water Resources Recovery Facility (WRRF)⁵ and Wastewater Collections, 7 departments of Operations & Maintenance, 37 categories of operations under those departments, lift stations, CSO facilities, Industrial Waste Control, administrative costs, Centralized Services, Administrative Services and Capital Expenses;
- The second step of the process "is to allocate functionalized costs to cost drivers. The current allocation factors are based on the 1979 and 1980 [rates] Settlement Agreements." There are 10 cost drivers, each representing a particular aspect of wastewater treatment services, the tenth being "Detroit Only". The Interim Draft Report appends 2 charts (Figures 2 and 3, attached) that show the current Operations

² LPD recognizes that the sewer cost shares issue relates to sewerage services, while water shut offs interrupt fresh water service by another division of the systems. However, as water affordability expert Roger Colton has observed in a recent report, retail customers receive one unified bill for sewerage and fresh water services. It is therefore appropriate to analyze affordability in terms of the total burden of both water and sewerage (including drainage) charges. It would be inappropriate to separate these charges for purposes of analyzing and calculating affordability, where customers are not offered an option to pay part of the bill to keep the service turned on.

³ The "wholesale customers" are the communities in southeastern Michigan served by the GLWA. (including the City of Detroit, their largest single wholesale customer; Detroit and DWSD also have a dual role as, in essence, GLWA's junior partner)

⁴ The attached power point presentation on this process seems clearer and simpler, but omits the detail that reveals the complexity.

⁵ Formerly known as the Wastewater Treatment Plant (WWTP)

& Maintenance and capital cost allocation factors (Figure 2), and final cost pools to allocate all budget elements (Figure 3);

- The Interim Draft Report goes on to describe the “SHARES process” as “a simplified method of distribut[ing] costs among all customers.” It focuses on “what ‘share’ of common to all costs each customer should be responsible for based on a four-year average (currently FY13 to FY16) of contributed volume and estimated pollution strengths”.⁶ Developing the SHARES involves the following steps:
 - Conduct a flow balance to determine total flows for suburban customers, the Detroit+ group⁷, and common inflow and infiltration;
 - Error-corrected meter readings for each of the suburban customers;
 - This total is then corrected for known factors, the amount of inflow and infiltration from GLWA water mains is estimated;
 - Historic suburban flows are then corrected for the Oakland-Macomb Interceptor (OMIDD) diversion in 2016 and “WTUA flows being sent to YCUA beginning in FY 2018”⁸;
 - 11% of excess CSO volume discharged directly into surface waters is deleted from suburban flows in proportion to each of their individual cost allocations, and the remaining 88.7% of this excess CSO volume is deleted from Detroit+ allocation;
 - Sanitary, drainage water and wastewater flows are estimated⁹;

⁶ LPD notes the existence of a “**Detroit only**” functional cost driver, in a regional methodology that states it determines **cost SHARES based on “common to all costs”**. Without being able to fully explain or quantify the impact of this distinction in the context of these complex processes, **the comparison is noted because it would apparently lie at or near the heart of any water equity, affordability and security analysis of southeastern Michigan communities, and Council Members may wish to ask DWSD and GLWA representatives about this and other structural fiscal aspects of the overall GLWA/DWSD, regional/city relationship**. There are almost certainly other specific aspects of these relationships (which this report and these footnotes seek to identify for Council’s information) and their fiscal consequences, as further discussed below in this report that Council Members may wish to pursue with the water systems’ leadership.

⁷ “Detroit+” is said to involve Detroit, Hamtramck, Highland Park “and a few small parts of other communities.”

⁸ LPD does not know what the acronym-dominated phrase “WTUA flows being sent to YCUA” means.

⁹ There is tension between “estimated” flows and those based on “data”, and between use of either/both strength of flow and/or pollutant loads to calculate cost SHARES, that runs throughout this process. Council Members may wish to explore the limits of the data and the implications for fiscal decision making and policy making going forward with DWSD and GLWA leadership.

- The second step in the SHARES process involves estimating the amounts of 4 specified pollutants each customer contributes to the system: BOD (Biological Oxygen Demand), TSS (Total Suspended Solids), Phosphorus, and FOG (Fats, Oil and Grease);
- Use estimated pollutant strengths and previously estimated drainage and wastewater flows to calculate pounds of pollutants for each customer (Figures 4 and 5 attached document strength of flow calculations);
- “Now that the volume and pollutant totals have been developed for each [suburban] customer and [Detroit+], total flow volumes and pounds of each pollutant are converted to percentages for each customer.”;
- Suburban only SHARES are based on each suburban customer’s portion of total suburban flow;
- 83% of CSO shares are distributed to Detroit, 17% are distributed among suburban customers (see further discussion of this artifact of the 1979 rates settlement below); and
- Relevant costs as determined above are allocated to a single common to all cost pool. This total is then multiplied by each individual customer’s common-to-all SHARE, the same process is performed with suburban only costs and SHARES, OMID (Oakland Macomb Interceptor District) only costs and SHARES, and CSO costs and SHARES. The sum of these costs for each customer is their share of GLWA’s revenue requirement, or total budget (see attached Figure 7); and
- The final step is to account for Detroit’s equity in the system and suburban bad debt. Each of these costs is distributed to suburban customers using Suburban Only SHARES, and the equity amount is subtracted from Detroit’s total charge. The final annual total is billed to each customer on a fixed monthly basis.”¹⁰

The bewildering complexity of GLWA’s existing methodology for determining individual communities’ shares of these costs is apparent. Discussions of all this could get very lengthy, detailed and potentially contentious. At this time, LPD’s primary questions for framing the conversation are **1) whether or not we are using the most appropriate metrics, factors, and cost allocation drivers to make this process what its proponents claim it to be: a true regional “win” that benefits everyone; and 2) whether or not these calculations and funding criteria treat Detroit ratepayers fairly?**

The Draft Interim Report concludes with about a page and a half of “Areas for Consideration”. It identifies “several areas that warrant consideration for change.” This portion of the report mostly

¹⁰ See note 6 above for questions raised by this.

speaks for itself, and represents only a “preliminary review” of what is likely to be a very interesting, significant and complicated discussion in the coming year. In particular, this preliminary discussion recognizes: 1) the inherent limitations of available data that can be cost effectively gathered and analyzed, and 2) the strong consensus desire for rate share simplification.

More discussion on these charge approaches will occur on July 26, 2019. LPD will keep Council informed of developments and the eventual outcome.

“One Water” Brand Awareness Campaign

In light of the above activities moving with significant speed to develop a real regional Wastewater Master Plan and collaborative operational coordination of sewage and drainage flows, as well as active work to recalculate and establish simplified and hopefully appropriate regional cost sharing for these vital wastewater services, the contemporaneous initiation of GLWA’s first formal brand awareness program may represent an opening for enhanced regional dialog. Greater awareness in Detroit, among both elected officials and residents, of how GLWA (and DWSD) are approaching these issues, is an important goal that upgraded and professionalized brand awareness may serve or undermine, depending on the content.

The general objectives of this campaign are said to be to increase name recognition and positive associations with GLWA. The campaign began on May 13, 2019 and will run until October 15, 2019. GLWA partnered with On Demand featuring actor Rob Lowe to create two videos for member partners to use on their web sites, social media feeds and closed-circuit television broadcasts. **The core idea articulated by GLWA’s public information director is to establish “the trust factor in a post-Flint world”. This key insight speaks volumes.**

Between the spring of 2014 and the fall of 2015, Flint’s water infrastructure was severely damaged by Flint’s emergency managers’ mismanagement. Those blunders led to widespread lead, legionella bacteria, and other serious water contamination for about 18 months. During that same time period, Detroit’s emergency manager initiated widespread water shut offs and simultaneously pursued the confidential, mediated negotiations that culminated in establishing the GLWA. Local activists, the United Nations and others denounced shut offs as a violation of the human right to water and sanitation, to the extent they denied water to residents who cannot afford to pay the full rates. These earth shaking developments in local communities’ water security have indeed sensitized and even inflamed public perceptions around water and sewer services and their costs and benefits. What was once taken for granted as the effective functioning of faucets, toilets, spigots and drains, is now a cause for widespread public alarm virtually every time anything goes wrong with these far-flung, expensive and technically sophisticated infrastructure systems. LPD concurs wholeheartedly with the objective of building trust around water issues via transparency, repeated iterative explanation of the basics of water and wastewater management, and honest, open communication about current issues.

In that regard, considering together the Wastewater Master Plan, the Sewer Cost of Service Methodology Review, and the Brand Awareness campaign, suggests the possibility of productive regional policy making conversation to which Detroit City Council should be a party, along with representatives of the other member partner communities in GLWA.

In essence, GLWA's oft-announced intention to pursue complete transparency, organizational excellence, increased regional integration, and maximum water quality requires incorporation of issues of water affordability, equity, security and infrastructure funding as they affect the urban core. GLWA's record on this score, especially insofar as the City of Detroit is deemed DWSD's territory, so that critical human rights issues arising from water shut offs and lack of equitable funding across all communities in the region lead to critical disconnects, has been decidedly mixed in GLWA's few short years of operation so far. The timeliness of the current GLWA initiatives discussed here offer an opportunity to address these issues with a new sense of urgency and significance for needed policy reforms.

The balance of this report will itemize certain individual fiscal issues that should inform this dialog.¹¹ We will address the following fiscal issues:

- 1) What are the financial results of DWSD since January 1, 2016?
- 2) What can we do about water affordability for Detroit residents?

What are the financial results of DWSD since January 1, 2016?

Since the inception of GLWA, there have been three separate Comprehensive Annual Financial Reports (CAFRs) issued by GLWA and DWSD. The first CAFR for the City for the 6-month period that ended June 30, 2016, contained financial statements of DWSD. It was reported that the 6-month period was a difficult period as there were still negotiations regarding the specific provisions relating to the transition of assets and liabilities. This June 30, 2016 CAFR recognized that the amounts included in the 2016 CAFR may change in the following years. DWSD did report excess revenues over expenses in the Water Fund and the Sewage Disposal Fund, and incurred a large gain due to the bifurcation agreement between DWSD and GLWA. The large gain was a result of the initial splitting of the assets and liabilities of DWSD with GLWA. The DWSD Water Fund reported a gain of \$776.5 million, and the DWSD Sewage Disposal Fund reported a gain of \$808.9 million.

In the June 30, 2016 Audited Financial Statements of the City of Detroit Sewage Disposal Fund it was stated that these large bifurcation gains were a result of the lease of the regional water and sewage disposal systems. In fiscal year 2016, the Water Fund reported a gain of \$776.5 million, and the Sewage Disposal Fund reported a gain of \$808.9 million, which are the differences between the consideration receivable and the net position allocated to GLWA in each fund. The consideration receivable is the net present value of the \$50 million to be received over 40 years, assuming a discount rate of 3.677%.¹²

¹¹ LPD notes, without further discussing at this time, the outstanding dispute resolution process provided for in the City Charter, regarding the refusal of the administration and DWSD to seek Council's approval of their annual budget and retail rates in the City. Corporation Counsel is the official identified by the Charter as responsible for moving forward with dispute resolution on this issue, which has been the subject of multiple previous reports and discussions, including appointment of independent counsel for City Council, if necessary.

¹² Page 121 of the City of Detroit 2016 CAFR

In the 2016 Audited Financial Statements for DWSD, for both the Water Fund and the Sewage Disposal Fund, it was noted that DWSD finance made certain assumptions regarding the discount rate (3.677%) and methodology used when valuing the consideration receivable from GLWA. Variation in the assumptions from the rate considered by GLWA could cause a material variation from the consideration payable recorded by GLWA.¹³ There was a material variation between the two CAFRs, as DWSD used 3.677%, while GLWA used 4.17%. These different rates used resulted in DWSD stating their receivable from GLWA \$39.0 million higher than the payable recorded by GLWA for the water fund, and \$32.0 million higher in the sewage disposal fund. There also could have been an incentive for DWSD to use the lower percentage, as using a lower discount percentage results in a higher receivable balance, thus showing a higher net position. These different rates have been discussed with DWSD and GLWA representatives, and perhaps could be discussed with DWSD's auditors.

The details of the bifurcation gain in fiscal year 2016:

| | <u>Water</u> | <u>Sewage</u> |
|---|-----------------------|-----------------------|
| Present value of consideration receivable | \$ 484,313,371 | \$ 591,938,565 |
| Cash, cash equivalents, and investments at 12-31-2015 | (349,833,408) | (462,833,499) |
| Receivables assumed by GLWA | (67,167,538) | (248,776,115) |
| Assets leased to GLWA | (1,386,073,421) | (2,295,028,738) |
| Bonds assumed by GLWA | 2,020,221,695 | 3,093,035,814 |
| Other liabilities assumed by GLWA | 66,233,037 | 121,715,649 |
| Day one cash | <u>8,839,000</u> | <u>8,911,500</u> |
| Total | <u>\$ 776,532,736</u> | <u>\$ 808,963,176</u> |

The CAFR for the City for the first full year of DWSD's operations under the split with GLWA, the period ending June 30, 2017, again stated that some issues still needed to be worked out.

DWSD continued to negotiate some of the final issues concerning the bifurcation, including the portion of the debt assumed by GLWA that was utilized for local system improvements, whose debt will continue to be funded by DWSD. As a result of these negotiations during fiscal year 2017, DWSD has reduced the recognition of the gain previously recognized in fiscal year 2016 from the bifurcation by \$85.9 million in the Water Fund and \$72.1 million in the Sewage Disposal Fund. There was also an accounting adjustment for pension costs because of the City's bankruptcy, and the Water Fund reported an Operating Net Income of \$12.5 million, while the Sewer Fund reported a Net Operating Loss of \$20.2 million.

The City should closely observe the financial performance of the Water and Sewage Disposal Funds after the bifurcation. The large operating loss of the Sewage Disposal Fund in fiscal year 2017 is of concern, and should be discussed further with DWSD representatives, as cash receipts have been less than required disbursements since June 30, 2016.

¹³ Page 34 of the DWSD Sewer Fund Financial Report FY 2016

In the most recent City CAFR, for the period ending June 30, 2018, DWSD reported a gain due to the bifurcation, and both funds reported \$8.8 million in net operating income.

The following shows the gains and the losses from the bifurcation for three fiscal years:

| | <u>Water</u> | <u>Sewer</u> | <u>Total</u> |
|------|-----------------------|-----------------------|-------------------------|
| 2016 | \$ 776,532,736 | \$ 808,913,176 | \$ 1,585,445,912 |
| 2017 | (85,895,242) | (72,059,278) | (157,954,520) |
| 2018 | <u>35,482,690</u> | <u>66,377,234</u> | <u>101,859,924</u> |
| | <u>\$ 726,120,184</u> | <u>\$ 803,231,132</u> | <u>\$ 1,529,351,316</u> |

GLWA, per the Master Bond Ordinance, receives and disburses all cash for both DWSD and GLWA. Included in the agreement with GLWA, is the requirement of the Reconciliation Committee to address any “cumulative negative variance” of more than two percent (2%) of the total budget for either Local System (Water or Sewage Disposal).

At June 30, 2018, GLWA reported a negative balance of \$47.8 million of required trust receipts and disbursements for the DWSD sewer fund, which exceeds the two percent variance threshold. This \$47.8 million figure (for the first three fiscal years, 2016 – 2018) was adjusted up to \$53.6 million (after adding \$5.8 million for the first five months of fiscal year 2019), and is shown as – Due to Great Lakes Water Authority in the Sewer fund in the 2018 City CAFR. This amount is due to the fact that DWSD received a “loan” from GLWA to meet their cash needs. As this is a loan, it must be paid back and future shortages of receipts over disbursements should be avoided. There are no details provided in the City CAFR or the DWSD audited financial report explaining this amount. We met with GLWA representatives to analyze this amount. Some of it was explained in GLWA’s 2018 CAFR, and some of it was included in GLWA’s monthly reports to its Finance Committee and Board. GLWA provides a highly detailed report each month (130 – 140 pages) to its Finance Committee. Included in this report is a sheet detailing DWSD - Net Cash Receipts and Disbursements as GLWA controls all DWSD cash.¹⁴ This sheet identifies that GLWA paid more in expenditures than DWSD receipted in each year since 2016. DWSD must pay this amount back with interest based on the three-year U.S. Treasury rate (2.63%), plus 150 basis points. This interest rate of 4.13% equates to \$1,900,500 in interest expense which will have to be built into future rate increases.

Since July 1, 2018, DWSD has been making monthly payments (\$866,000) to GLWA on a portion of this loan to GLWA, but will end fiscal year 2019 with a balance due of approximately \$43.2 million, all of which goes back to the period 2016 – 2018. DWSD would have added to this debt balance in fiscal year 2019, had they not transferred \$11.6 million from the operating & maintenance budget for May and June 2019 to reduce their debt. Thus, the sewer fund will end fiscal year 2019 with a positive net cash flow with this transfer, but the balance from 2016 – 2018 still is there, and we must continually verify that future receipts exceed disbursements.

¹⁴ Attachment – Table 2 - DWSD Net Cash Receipts and Disbursements – January 31, 2019

The unaudited finances of DWSD since July 1, 2018 are shown in documents presented to the Board of Water Commissioners (BOWC) at their monthly meetings.¹⁵ These reports do not show DWSD's actual revenues and expenditures compared to budgeted revenues and expenditures. Such a report is shown only for the General Fund in the annual CAFR reports for the City. We believe that such a report would be highly desirable to all.

One area of financial concern is the Accounts Receivable of DWSD. Recently dated reports show that of the total receivables for all active accounts for both the water fund and the sewage disposal fund - \$163.8 million, 55.6% (\$91.1 million) is over 180 days past due, and 18.9% (\$31.0 million) is over 60 days past due. All of these past due accounts are not just residential accounts, but are commercial, industrial, tax-exempt, and governmental entities. All have about 50% in the over 180-day category. Of the total customer accounts of 590,594, 259,464, or 43.9% are inactive accounts. These 259,494 inactive accounts total \$19,605,640, or 10.7% of total receivables. DWSD receivables have been an ongoing problem over the years, and should be thoroughly analyzed. We must realize that if a customer does not pay its bills, these costs must be spread to the ones who do pay.

One customer identified, Michigan Department of Transportation (MDOT) is billed for 714 acres of state highways whose water run-off drains into sewers that feed into the downriver Water Resource Recovery Facility (WRRF). They have an estimated balance due of \$2.8 million. Since the date of transition to DWSD's revised drainage charge methodology, MDOT has disputed the amount of acreage and phase-in rate on their monthly bill, and continues to pay the amount they were billed prior to the transition. DWSD contends the amount of acreage and billable rate should increase. DWSD have been engaged in pre-litigation discussions with the Attorney General and MDOT. These negotiations have been ongoing for almost two years, and were interrupted by a "lame duck" administration and the change in the Governor's office. Due to the dispute, MDOT's phase-in rate to the revised methodology is currently frozen at \$93 per impervious acre, which appears to be a drastic reduction in the amount they are charged compared to other customers. MDOT is paying only about one-half of the amount they are currently billed. According to a consent judgment from 1989, MDOT is to be charged for 714 acres, yet DWSD has been charging MDOT for 2,094 acres based upon updated engineering studies. Given the confidentiality of negotiations, we are not privy to the full details regarding the dispute and potential resolutions; however, we will request monthly updates from DWSD. Additionally, the Michigan Department of Corrections and Department of Natural Resources dispute their bills and have balances due for the Ryan Correctional Facility and Belle Isle. Total debt owed by the State is over \$5 million. We remain concerned about rate affordability when a major ratepayer is not paying the full amount for water, sewer and drainage charges as are other customers, and we challenge DWSD to be more diligent in collecting these revenues.

The BOWC (Board of Water Commissioners) has requested details of the 50 customers with the highest balances due, and what DWSD plans to do about collecting the balances due. This information was provided to the BOWC on July 9, 2019, and was discussed. DWSD staff has been working diligently on collecting these balances, but the vast majority of the balances due are

¹⁵ Attachment – DWSD March 2019 Review, Finance Committee.

because of the recently implemented drainage fees. The changes to the way drainage fees were implemented and the amounts due because of this change merits discussion with DWSD staff.

What can we do about water affordability for Detroit residents?

After numerous meetings and discussions with DWSD staff, LPD representatives and DWSD staff are exploring whether an income-based water affordability program could work for Detroit. The goal is developing approaches that would hopefully overcome the issues and limitations of the Headlee Amendment and the decision in *Bolt vs. Lansing*, toward the desired result of universal, affordable access to necessary water and sewer services for all, including the City's poorest residents. This program could be modeled after Philadelphia's Tiered Assistance Program or Baltimore's newly proposed program. More about this will be coming soon. DWSD's affordability programs remain primarily focused on payment assistance, but DWSD staff appear amenable to looking all options and are reviewing programs and literature from around the country.

As a preliminary, data-gathering measure toward these ends, DWSD has initiated a joint pilot project with the City Health Department, identifying 70 water insecure Detroit residential accounts for in-depth study and intervention, including rate relief and wraparound social services to help lift these residents out of their water-related predicament. Such a focused initiative targeting relief for Detroit's most vulnerable water customers is a welcome development, and will hopefully lead to longer term system-wide reforms. DWSD will keep LPD informed of progress on the pilot project.

Conclusion

Council members may wish to seek more information from DWSD and GLWA regarding:

- Recent development of a truly integrated regional Wastewater Master Plan;
- The ongoing Sewer Cost of Service Methodology Review (especially the historical splitting of CSO costs with 83% being charged to the City of Detroit, as well as other regional financial settlements that affect the City);
- GLWA's development of their new brand awareness campaign of intentional public relations, framing the regional "One Water" initiatives as building "trust in a post-Flint world";
- The financial results of DWSD since January 1, 2016, especially the fact that DWSD's sewerage cash receipts have been less than their disbursements, creating a loan from GLWA, and the ongoing issues with their accounts receivable (A/R) balances, including increases in A/R since the implementation of the changes implemented by drainage fees; and

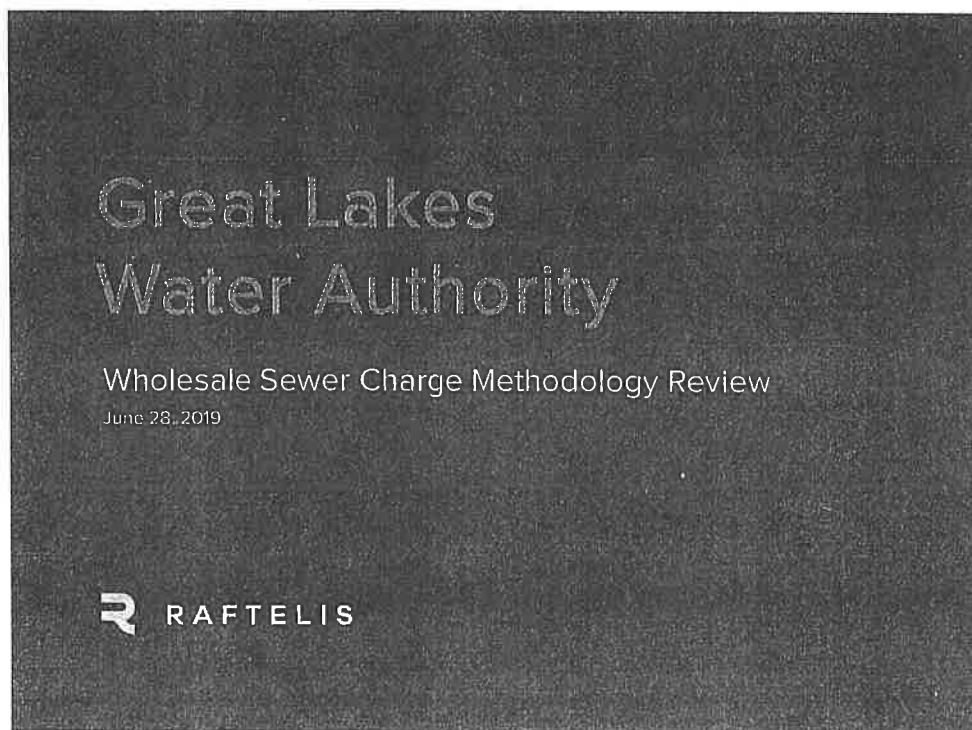
- More information will be coming on pursuing how an income-based water affordability program could work for Detroit.

As we are all aware of the complexities involved with the issues of providing clean, safe and affordable water, sewerage and drainage services to the residents of Detroit, there will be several more reports informing your Honorable Body on these subjects.

We thank the DWSD Director, Gary Brown and his staff, the GLWA CEO, Sue McCormick and her staff, for their assistance as we prepared this report. We must especially commend the DWSD Director, Gary Brown and his staff for the excellent work that they have accomplished over the past three and a half years in several areas. They took a system with billions of dollars in debt, survived through a difficult bankruptcy, a bifurcation with GLWA, and continued providing clean water and safe disposal of sewage.

One of our long-range objectives in providing this report is to make every effort to ensure that our grandchildren and their grandchildren have access to safe, clean and affordable water and safe disposal of waste water including drainage.

If Council has any other questions or concerns regarding this subject, LPD will be happy to provide further research and analysis upon request.



1

Overview of Process

- ✓ Early May – Meetings with 13 Member Partners
- ✓ May 31 – Review of Prioritized Key Concerns with GLWA Staff
- ✓ June 13 – Draft Report delivered to GLWA
- ✓ June 21 – Draft Report distributed to SHAREs Work Group
- **June 28 – Presentation to and Workshop with SHAREs Work Group on Potential Approaches**
- July 17 – Updated Draft Report with Recommendations
- July 31 – Final Report due to GLWA
- August 15 – Presentation of Final Recommendations to SHAREs Work Group

2

2

Key Concerns from Member Partners

3

Key Concerns

1. Stability in Charges **Unanimous Concerns**
2. Simplification and Understanding of Methodology and Data
3. Incentives to Remove / Reduce Flows
4. Phase-In / Grace Period on any Changes Implemented
5. Recognition of Peak Flows and how it relates to existing 83/17 CSO Methodology
6. Recognition of Investments in Local Systems that benefit the GLWA Regional System

4

Key Concerns (continued)

7. Recognition of Contract Capacities
8. Minimize changes in distribution among communities
9. Affordability
10. Impact of New Development / Impact Fees
11. Accuracy of existing Cost / Asset Allocations

Are there critical issues that
have been missed?

5

5

Cost of Service in a
Nut Shell

6

6

Cost of Service in a Nut Shell

- Determination of Revenue Requirement (i.e., How much money)
- Functionalization of Costs (i.e., Putting the dollars in cost pools)
- Allocation of Costs (i.e., Levels of Service)
- Distribution of Costs to Customers based on Units of Service

7

7

Potential Charge Approaches

8

Average Total Volume (Current)

Total volumetric contribution to the GLWA Regional System (including wet weather volume and dry weather I/I).

Plus

- Simple and understandable

Minus

- Significant assumptions needed to determine some customers volume (D+)
- Lacks recognition of historic nature of system

Cost Pool – Approximately 42% of current revenue requirement

Units of Service – Measured and estimated flow from Member Partner Communities

9

9

Pollutants (Current)

Cost of treating pollutants by GLWA treatment facilities (BOD, TSS, P, and FOG).

Plus

- Consistent with industry standards
- Differentiates different components of Average Volume (e.g., sanitary vs. I/I)

Minus

- Significant assumptions necessary for different types of flow
- Complex and difficult to understand

Cost Pool – Approximately 42% of current revenue requirement

Units of Service – Measured and assumed contributed pollutants in pounds

10

10

CSO Facilities (Current)

| | |
|--|---|
| Capital and O&M costs of dedicated CSO facilities | |
| Plus <ul style="list-style-type: none"> ◦ Established by 1999 settlement agreements and memorialized in contracts ◦ Intended to assign CSO cost responsibility to communities based on CSO impact | Minus <ul style="list-style-type: none"> ◦ 83/17 split not strictly based on cost of service ◦ Disagreement over what assets should be considered CSO facilities |
| Cost Pool – Approximately 13% of current revenue requirement | |
| Units of Service – Based on negotiated settlement | |

11

OMID Specific (Current)

| | |
|---|---|
| Allocation directly to OMID for debt service, O&M, and share of other costs based on amended contracts | |
| Plus <ul style="list-style-type: none"> ◦ Consistent with existing contract ◦ Costs have been agreed upon and identified | Minus <ul style="list-style-type: none"> ◦ None significant |
| Cost Pool – Approximately 2% of current revenue requirement | |
| Units of Service – Not applicable, direct allocation of identified costs to a single customer entity | |

12

Suburban Only (Current)

Allocation to suburban customers primarily related to cost of measuring their volumes

| | |
|---|--|
| <p>Plus</p> <ul style="list-style-type: none"> • Aligns with cost causation | <p>Minus</p> <ul style="list-style-type: none"> • Added complexity for small share of costs • Doesn't align with D+ cost allocation |
|---|--|

Cost Pool – Approximately 2% of current revenue requirement

Units of Service – Average volume

13

13

Sanitary Volume

Contributed sanitary volumes from each Member Partner Community

| | |
|---|--|
| <p>Plus</p> <ul style="list-style-type: none"> • Ties to retail billing of each Member Partner Community • Recognition of historical development of combined and separated areas | <p>Minus</p> <ul style="list-style-type: none"> • Does not recognize differences in wet weather volume and dry weather I/I |
|---|--|

Cost Pool – Potential cost pool could be GLWA regional treatment facilities

Units of Service – Contributed retail sanitary volume

14

14

Peak Volume

Peak volume conveyed to GLWA regional system by each Member Partner Community

| | |
|--|--|
| Plus <ul style="list-style-type: none">◦ Recognition of capacity used in GLWA regional system◦ Price signal to reduce peak contributions | Minus <ul style="list-style-type: none">◦ Difficult to accurately measure peak volume |
|--|--|

Cost Pool – Potential cost pool could be GLWA regional collection and conveyance assets

Units of Service – Peak volume

15

15

Population

Population of service area in each Member Partner community

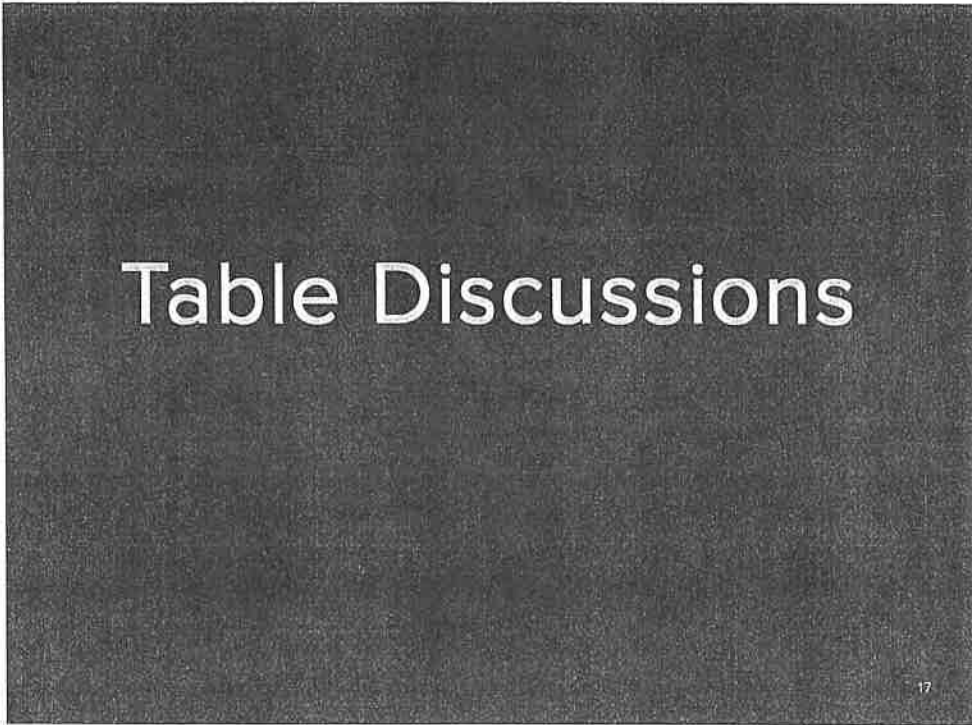
| | |
|---|---|
| Plus <ul style="list-style-type: none">◦ Recognition of benefits provided by regional system | Minus <ul style="list-style-type: none">◦ Not commonly used to distribute wastewater costs◦ Concern over data sources |
|---|---|

Cost Pool – Potentially use simplified single cost pool

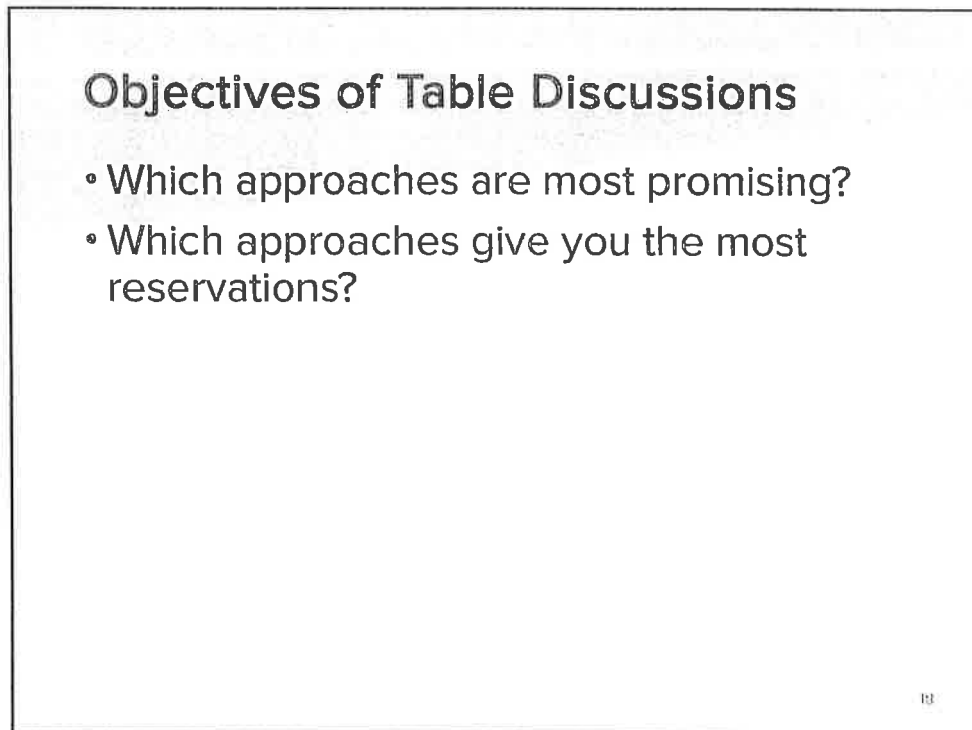
Units of Service – Residential population and/or work force population

15

16



17



18

Next Steps

- July 17 – Updated Draft Report with Recommendations
- July 31 – Final Report due to GLWA
- August 15 – Presentation of Final Recommendations to SHAREs Work Group

19



Great Lakes Water Authority

Sewer Cost of Service Methodology Review

Interim Draft Report / June 21, 2019

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INTRODUCTION

The methodology used to allocate wholesale service costs in the greater Detroit area has been continually evolving for the past half century. A series of agreements between the City of Detroit and surrounding suburbs in the late 1970's laid the groundwork for today's rates. The current process distributes costs between wholesale customers of the Great Lakes Water Authority (GLWA) based on their estimated use of the system, measured by estimates of flow volume and amount of pollutants contributed.

The process of determining charges begins with a total revenue requirement. Each component of the requirement is allocated to a function of providing service, and each function is allocated to a cost driver as a way of distributing those costs to customers based on their unique usage characteristics.

GLWA has engaged Raftelis, in conjunction with HDR, to assist both GLWA and the Member Partner Communities in review the existing methodology for recovering costs, provide expertise and assistance in proposing potential changes to the methodology, and determine the steps necessary to move forward with such proposed changes.

This report summarizes our findings to date as part of this engagement. The major sections of this report are in chronological order as they have been developed through this engagement, we began by reviewing and documenting the existing methodology and provided our perspective on areas for consideration based on preliminary direction from GLWA staff. We next conducted member interviews with Member Partner Communities and have documented the feedback we received in those meetings. We then discuss potential rate approaches that currently are or could be incorporated into the sewer rate methodology for GLWA moving forward. This report then discusses how the proposed 'Path Forward' that was recently presented may address our findings so far.

REVENUE REQUIREMENT

At a basic level, the total revenue requirement includes operating expenses, debt service, and rate financed capital. After GLWA develops a detailed financial plan forecasting these expenses, they conduct a cost of service study to determine how much each customer pays for service.

ALLOCATION OF REVENUE REQUIREMENT TO FUNCTIONS

The first step in the cost of service process is to allocate the revenue requirement to functions. The WRRF functions currently used by GLWA are:

WRRF:

1. Primary Pumping
2. Rack and Grit
3. Primary Treatment
4. Aeration
5. Secondary Treatment
6. Dewatering

7. Sludge Disposal
8. WRRF General

Wastewater Collections:

9. Lift Stations
10. CSO Facilities
11. Interceptors
12. Industrial Waste Control
13. Master Meters
14. GLWA Sewer General

Operations and Maintenance Expense

The O&M revenue requirement is divided into seven departments:

1. Wastewater Operations
2. Wastewater Process Control
3. Wastewater Primary Processing
4. Wastewater Secondary Processing
5. Wastewater Dewatering Process
6. Wastewater Incinerations Process
7. Biosolids Dryer Facility

Each of these departments are subdivided into Personnel, Electricity, Chemicals, Other Utilities, and Other. The resulting 35 categories plus Wastewater Engineering and Analytical Laboratory costs are allocated to the functions listed above based on judgement and experience. Figure 1 presents an example allocation of FY 2019 Personnel Costs¹. In addition, costs associated with lift stations, CSO facilities, and Industrial Waste Control, are separated from the seven departments and allocated 100% to their respective functions.

Administrative costs are allocated proportionally based on the results of functionalized personnel costs. 54% of the total GLWA budgets for Centralized Services and Administrative Services are allocated to the sewer utility. The sewer portion of Centralized Services is allocated between WRRF General and Wastewater Collection functions, while administrative services are allocated 100% to GLWA Sewer General. Costs allocated to WRRF General are allocated to the other seven WRRF functions based on the proportions of directly allocated non-commodity costs (Personnel, Other, Support Services). GLWA Sewer General costs are allocated among the other 12 functions based on the proportions of all previously allocated non-commodity costs.

Capital Expenses

GLWA Debt Service, transfers to I&E and R&R, and non-rate revenues are allocated to functions in the same proportion as existing assets plus CWIP. Once all assets are allocated to functions, total annual depreciation and current net book value for each function are used to determine a utility basis capital revenue

¹ All cost allocation examples based on FY 2019 Cost of Service Study and may no longer be applicable to the FY 2020 Study. Figures may be different than published TFG figures due to rounding.

requirement. A 60% adjustment factor is applied to depreciation to approximate “pre-valuation” depreciation expense, and all costs not covered by depreciation are considered return on rate base and are allocated to functions in proportion to current net book value. The return and depreciation components are added to obtain a total capital revenue requirement by function.

ALLOCATION OF FUNCTIONAL COSTS TO COST DRIVERS

The second step in the Cost of Service is to allocate functionalized costs to cost drivers.

The current allocation factors are based on the 1979 and 1980 Settlement Agreements. The functions are allocated to ten cost drivers:

1. Flow
2. BOD
3. TSS
4. PHOS
5. FOG
6. Suburban
7. OMID
8. CSO
9. Industrial Waste Control
10. Detroit Only

Figure 2 shows the current O&M cost allocation factors in use. Different factors are used for O&M and capital.

Final cost pools are determined using the proportions of each cost driver developed in this step (for total O&M, non-commodity O&M, and capital) to allocate all budget elements as shown in Figure 3.

- » O&M and Contribution to Operating Reserves are allocated on the O&M basis.
- » Pension Obligations are allocated on the non-commodity O&M basis
- » Debt Service and transfers to I&E and R&R are allocated on the capital basis
- » WRAP, Lease Payment, and non-rate revenues are allocated proportionally to everything else.

UNITS OF SERVICE

The SHARES process introduced a simplified method of distribution costs among all customers. At a basic level, it determines what “share” of common to all costs each customer should be responsible for based on a four-year average (currently FY13 to FY16) of contributed volume and estimated pollutant strengths. This average is then used for distributing costs in the next three fiscal years.

FLOW BALANCE

The first step of developing SHARES is conducting a flow balance to determine total flows for suburban customers (M), the Detroit+ (D+) group, and common inflow and infiltration (Z).

Suburban Customers

The process begins with error-corrected meter readings for each of the suburban customers to measure their total volume contribution. This total is then corrected for known factors; the amount of I&I from GLWA water mains (NNNW) is estimated based on known non-revenue water from the system and proportionally subtracted from M customers based on inch-miles of GLWA water mains within their sewer service area. Historic M flows for appropriate customers are also corrected for the OMIDDD diversion in 2016 and WTUA flows being sent to YCUA beginning in FY 2018. The net amount for each customer represents their total flows into the Water Resource Reclamation Facility (WWRF).

Detroit+

The D+ area includes Detroit, Hamtramck, Highland Park, and a few small parts of other communities. Flow from D+ is not directly metered, however there are 13 system meters covering areas referred to as D+ Direct. Data from these meters are used to estimate total flows from the Direct districts in a similar manner as the M customers.

Districts within the D+ area that do not contain a system meter are referred to as D+ Incremental. Total flows in the D+ Incremental area are built up from three components: sanitary (discussed below), DWII, and WWII. DWII and WWII are estimated through a process that considers WWII or DWII per unit of impervious area within the D+ Direct areas relative to impervious area in D+ Incremental areas, an estimate of interceptor DWII, and an estimate of DWII related to non-revenue water.

D+ Direct and D+ incremental are added for a total estimate of D+ flow, which is then adjusted for NNNW.

CSO Discharges

During extreme wet weather events, WW flows can exceed WWRF treatment capacity and CSO basin storage capacity. The excess amount is discharged into the Detroit River and is not treated. 11.3% of this excess is subtracted from M flows in proportion to their CSO cost allocation, and the remaining 88.7% is subtracted from D+ flows. The sum of the final M and D+ flows are referred to as Total Wastewater Toward Treatment.

Common Flow

However, total WWRF influent (after historic OMID and WTUA adjustments) is not equal to Total Wastewater Towards Treatment. The portion of this difference that is not attributable to recycled flows used in the treatment process is considered common flow. These are not allocable units to which costs can be distributed, effectively making the cost to treat this common flow shared proportionally among all customers.

Determination of Sanitary, DWII, WWII Flows

In the D+ area, sanitary flows are assumed to be 95% of retail and industrial winter water sales; in the M areas, sanitary flows are 90% of winter water sales. DWII is estimated by subtracting the sanitary flows from total flows on "dry" days. WWII is estimated by subtracting total flow on dry days from total flow on wet days.

POLLUTANTS

The second step is estimating the amount of BOD, TSS, Phosphorus, and Fats, Oils, and Greases each customer contributes to the system.

Pollutant Strengths

Due to the infeasibility of measuring each customer's strength of flow, the current process assumes that all customers have the same strengths for each category of flow. Using published national data, the Strength of Flow Subcommittee estimated DWII and WWII strengths as a proportion of sanitary flow strengths for each pollutant and used weighted WRRF loadings and volumes to estimate strengths for each type of flow. See Figure 4 for currently used strengths and ratios, and Figure 5 for the development of these strengths. Total pounds of pollutants for each customer are calculated using these estimated strengths and the sanitary, DWII, and WWII flows previously estimated.

SHARES

Now that volume and pollutant totals have been developed for each M customer and D+, total flow volumes and pounds of each pollutant are converted to percentages for each customer. Common to All SHARES are calculated with a weighted average, currently set to 50%/50%, of the volume SHARE and pollutant SHARE. Figure 6 contains an example of SHARE development using FY 2018 units of service.

Suburban only SHARES are based on each M customer's portion of total M flow.

CSO SHARES are based on the 1999 Settlement Agreement. 83% of CSO costs are distributed to Detroit. The remaining 17% is distributed among suburban customers based upon an agreed upon methodology by those customers.

CUSTOMER CHARGES

Industrial surcharges revenues are netted out of the total customer revenue requirement. Remaining flow, BOD, TSS, PHOS, and FOG costs are combined to create a single common to all cost pool. This total is then multiplied by each customer's CTA SHARE. The same process is performed with suburban only costs and SHARES, OMID only costs and SHARES, and CSO costs and SHARES. The sum of these costs for each customer represents their share of GLWA's revenue requirement. See Figure 7 for an example of the development of customer charges.

The final step is to account for Detroit's equity in the system and suburban bad debt. Each of these costs is distributed to suburban customers using Suburban Only SHARES, and the equity amount is subtracted from Detroit's total charge. The final annual total is billed to each customer on a fixed monthly basis.

AREAS FOR CONSIDERATION

Based on our preliminary review of the existing methodology and our experience assisting wastewater utilities with examination and development of cost of service methodologies, we have identified several

areas that warrant consideration for change. The existing methodology is more complicated than typical, even for a utility like GLWA that provides service to its numerous member communities on solely a wholesale basis. The desire expressed by GLWA and Member Partner Communities to simplify further is consistent with the views of other wastewater utilities.

The preliminary areas we have identified are described below. It is important to note that these are preliminary and subject to further refinement and addition as our work on this assignment continues.

One area that warrants consideration for simplification is the use of strength of flow in the existing methodology. It is important that pollutant strength and the costs associated with the treatment and disposal of regulated pollutants be considered for purposes of determining excess strength surcharges for industrial customers to meet EPA requirements. In some cases utilities analyze wastewater samples from wholesale customers, however, this is less common due to recognition of the difficulty of securing representative samples and the associated costs of such sampling and analysis as well as the variability in the results. GLWA's existing methodology that considers the strength of flow for sanitary discharges dry weather I/I, river induced I/I and wet weather related flows is a level of complexity not typically seen. Great effort has been made to estimate the strength of these different flows in the GLWA system, but ultimately, they remain to be estimates with a limited level of accuracy. While additional effort and resources could be expended to improve the accuracy of these estimates, the results would remain relatively inaccurate compared to the other units of service used to allocate and distribute costs to customers.

However, it should be noted that removal of strength of flow without consideration of other facets of the cost of service methodology would not be consistent with the overriding objective of achieving a fair distribution of costs. The existing methodology that accounts for the volume of wet weather and dry weather I/I somewhat necessitates consideration of strength of flow to reasonably allocate costs to those customers with high wet weather volumes and dry weather I/I. Some utilities with similar service areas, for instance, Northeast Ohio Regional Sewer District (NEORS) in the metropolitan Cleveland area, charge their customers based primarily on sanitary flow, so all customers share in wet weather and dry weather I/I costs proportional to their sanitary flow.

Another area of consideration is the split of costs for the CSO facilities that are currently allocated 83% to DWSD and 17% to other Member Partner Communities. While we understand that these numbers are based on many years of technical discussions, hydraulic modeling and negotiation and as such may be a reasonable estimate of DWSD's use of CSO facilities at that time, such an allocation may not appropriately recognize the historic nature of the development of the system with relation to regulation of combined sewer systems. For example, as mentioned previously, NEORS recovers cost in proportion to sanitary flow of all communities, even though some areas are combined and others are separated.

Some consideration should be given to distributing costs to Member Partner Communities based on peak flow. Peak flow is a driver of many sewer utility's capital and operating costs; facilities must be sized to meet peak flow and some regulatory requirements are driven by peak flow impacts. By recognizing peak flow as a factor in cost of service, there is a price signal to customers that reducing peak flow will reduce their share of costs of the utility.

Based on our preliminary discussion with the Member Partner Communities, the impact of facilities constructed, funded, and operated by Member Partner Communities that can benefit the entire regional system may need to be recognized. As GLWA begins its next round of negotiations with MDEQ for its NPDES permit renewal, optimization of the collections system, including the components of the networks within the Member Partner Communities could achieve desired levels of environmental quality at a lower cost than would otherwise be required.

Finally, some consideration will need to be given to the timing of any changes and future updates. We understand that GLWA and the Member Partner Communities appreciate the consistency of the current approach where the distribution of costs is only updated every three years. To mitigate impacts on customers, GLWA might consider determining the impact of proposed changes in advance of implementation so that the Member Partner Communities can prepare and react, and then the changes may also be phased in over multiple years.

MEMBER PARTNER MEETINGS

An important aspect of this engagement is input from the Member Partner Communities. To that end the Raftelis Project Team, in conjunction with GLWA's Member Outreach Consultant, Bridgeport Consulting, conducted meetings with most of the Tier 1 Member Partner Communities over the course of several weeks. The Member Partner Communities that met with us, in order of their meeting were:

- » Macomb County (OMID)
- » Detroit Water and Sewerage Department
- » Oakland County (OMID and Oakland GWK)
- » Melvindale
- » Highland Park
- » Grosse Pointe Park
- » SEMSD and Harper Woods
- » Dearborn
- » Allen Park
- » Grosse Pointe Farms
- » Farmington (including Evergreen Farmington)
- » Wayne County (Rouge Valley)

The Member Partner Communities were encouraged to provide their honest and frank feedback concerning their perspective and concerns regarding GLWA's methodology for recovering sewer costs from all Member Partner Communities.

MEMBER PARTNER KEY CONCERNS

Based on the meetings with the Member Partner Communities, the Raftelis Project Team compiled a list of Key Concerns about the sewer rate methodology. These concerns are general in nature, not necessarily

directed at only the existing methodology, but meant to provide guidance on consideration of changes to the methodology.

Issues are ranked by the number of Member Partner Communities that expressed their concern with that issue, in descending order. Communities were unanimous in their concern with stability and simplification.

1. Stability in charges – Minimize each Member Partner Community's change in charges from GLWA.
2. Simplification of methodology / Understanding of methodology – Simplify rate methodology so it can be easily understood and explained to others (e.g., elected officials)
3. Incentives to remove / reduce flows – Provide pricing signal for Member Partner Communities that reduce contributions to the regional GLWA system.
4. Phase-In / Grace period on any changes implemented – Allow Member Partner Communities an opportunity to respond to changes in the rate methodology before they are implemented or fully implemented.
5. Recognition of peak flows and how it relates to existing 83/17 CSO allocation – How does any new methodology supplement or supplant the existing 83/17 CSO allocation.
6. Recognition of investments in local systems that benefit the GLWA regional system – Member Partner Communities that reduce peaks for the benefit of the regional system through storage or other operational measures would like to know how it benefits them from a rate perspective.
7. Recognition of contract capacities – How does the rate methodology recognize contract capacities for customers.
8. Minimize change in distribution among communities – Some Member Partner Communities expressed concern how changes would disproportionately impact other communities in the region.²
9. Affordability – Address affordability considerations for Member Partner Communities retail customers.
10. Impact of new development / Impact fees – Should there be recognition for new retail customers that are benefitting from the GLWA regional system.
11. Accuracy of existing cost / asset allocations – Are the existing cost and asset allocations suitable for any proposed new rate methodology.

POTENTIAL RATE APPROACHES

Based on the concerns of the Member Partner Communities and the understanding that the existing GLWA sewer rate methodology accounts for basically five factors in allocating and distributing costs (Average Volume, Pollutants, CSO facilities, OMID Specific, and Suburban Only), we will examine how the existing and other factors may be considered and used as part of the GLWA sewer rate methodology moving forward.

² This differs from item 1 in that this item indicates concern about shifting costs to communities other than themselves. Even if their share of costs were unchanged under a new methodology, they are concerned about the share of costs being shifted to other Member Partner Communities.

AVERAGE VOLUME

Average volume in effect recognizes each Member Partner Communities' total volumetric contributions to the GLWA regional system for the year. The average volume includes sanitary volume, dry weather I/I, and wet weather volume. While some of GLWA's costs relate to total volume treated, electricity and chemicals for example, many of GLWA's costs are driven by other factors besides total volume treated. Under the current methodology approximately 42% of the GLWA revenue requirement is recovered from Member Partner Communities based on average volume.

While average volume certainly accomplishes the objective of being simple and understandable, due to the nature of the GLWA regional system and the D+ customers, some assumptions need to be made to determine the share of average volumes among customers, so there may be some concern over the accuracy of that allocation.

The primary concern we have with average volume is that it does not differentiate the historic development of the system and recognize the average volumes from combined areas differently from separated areas on its own. Under the existing methodology, this is accomplished through the strength of flow allocation of costs associated with pollutants, which will be discussed separately.

Some other utilities with both older inner-city combined areas as well as newer suburban separated areas do not consider average volume or similar measures because of the burden it would place on those customers with combined systems.

POLLUTANTS

Pollutants recognizes the cost of treating extra strength surcharge pollutants by the GLWA treatment facilities, specifically BOD, TSS, Phosphorous, and FOG. Philosophical arguments can be made that if not for the pollutants in the wastewater we would not need any treatment facilities, but generally accepted allocation approaches recognize that treatment is driven by the volume of wastewater as well as pollutant loadings.

Under the current methodology approximately 42% of the GLWA revenue requirement is recovered from Member Partner Communities as well as retail surcharge customers. This share of costs allocated to pollutants is based on the 50/50 allocation of costs between volume and pollutants that was established during the previous rate simplification process. Based on our experience, this is a very high allocation of costs to pollutants for a large regional wastewater utility.

In the context of the GLWA rate methodology, the use of pollutants as a cost allocation factor, especially when considering the strength of each component of flow, is important because of the use of average volume. If only average volume were considered, those customers with combined systems would pay a much greater share of the GLWA regional costs due to their high levels of rain dependent I/I.

Throughout our customer meetings in discussing potential simplification, the strength of flow is one area that Member Partner Communities universally had concern about because of the number of assumptions needed to arrive at a determination.

No matter what is ultimately decided there will always need to be a consideration of pollutants in determining excess strength surcharges, but there is a desire among the Member Partner Communities to simplify this aspect of the rate methodology. Any adjustment must be considered carefully due to its impact on costs of different types of flow (i.e., sanitary volume, dry weather I/I, and wet weather volume).

CSO FACILITIES

Costs are allocated to CSO facilities and those facilities are allocated based on the 83/17 split between the City of Detroit and other customers. The 83/17 split was negotiated about 20 years ago and has been in place since while the allocation of the 17% split among the non-Detroit customers was based on an analysis performed around the same time. The share of the revenue requirement allocated to CSO facilities is approximately 13% under the current methodology.

There are concerns about what costs are included in this pool, with some Member Partner Communities believing more should be included in the cost pool while the City of Detroit thinks some costs should be excluded.

There are also concerns related to the 83/17 split and whether it is representative of the cost of service.

Given the concern over this specific cost pool, both what is included and how it is allocated, it may be desirable to move to another cost allocation approach to accomplish the same pricing objectives in the rate structure. One approach may be to use wet weather volume in place of the 83/17 split for some cost pools.

OMID SPECIFIC

Certain debt service and O&M costs as well as shares in GLWA's other costs are allocated directly to OMID in addition to their share of other costs. This allocation would most likely remain in place regardless of any proposed change in methodology for the remainder of the GLWA's revenue requirement under the existing contractual agreements. There was no mention of concerns about this cost allocation during our meetings with the Member Partner Communities. This represents approximately 2% of GLWA's total revenue requirement.

SUBURBAN ONLY

There is an allocation of costs to suburban only customers, related primarily to the cost of measuring their volumes. There was no mention of concerns about this cost allocation during our meetings with the Member Partner Communities. This accounts for approximately 2% of the total GLWA revenue requirement.

These costs are allocated proportionally based on average volume excluding the City of Detroit. Given the minimal share of the total revenue requirement, any simplification may consider the elimination of this cost pool and allocation.

SANITARY VOLUME

A common methodology to allocating costs for sewer utilities is the use of sanitary volume. Sanitary volumes are typically estimated based on metered water usage, especially in regions like Michigan where winter average water usage should provide a reasonable estimate of sanitary volumes for most retail customers.

Some other large regional sewer utilities that serve both combined and separated areas use sanitary volume as a key component of their rate methodology. In effect this results in customers throughout their service area paying for combined areas in proportion to their sanitary volume. The rationale for this approach is often based on a historical perspective that the combined areas were the nucleus of the larger metropolitan area and they were built to accepted standards at the time, which allowed for combined sewers and the overflow of those sewers during rain events.

It may be appropriate to consider allocation of some of GLWA's revenue requirement on the basis of sanitary flow. A potential approach would be to have to primary cost pools, conveyance and treatment, with the treatment cost pool being allocated based on sanitary flows. However, there may still be challenges with such an approach in how some future CSO facilities are allocated between conveyance and treatment.

PEAK VOLUME

Many facilities and operations in the GLWA system are constructed to meet peak volume demands, yet it is not a component of the existing GLWA rate methodology. One potential challenge is the difficulty of determining peak volume by Member Partner Community. An attempt has been made for some recent discussions, but that estimate is for peak month, while ideally such a determination would be for a shorter period of time, such as a peak day or possibly a longer period to encompass a peak event over more than a 24 hour period.

Peak volume may be a good approach for allocating some costs of the GLWA regional system, and in particular it may make the most sense to allocate the cost of conveyance facilities that need to be sized to meet potential peak volumes.

POPULATION

There has been discussion that population may be a factor used to allocate some portion of GLWA's revenue requirements. In our discussions with Member Partner Communities there is some concern over how population is measured (e.g., permanent residents, daytime workforce, etc.). There is also a concern that population and another proposed factor, sanitary volume, are closely correlated and may provide the appearance of a more precise approach than is really being delivered.

It is not common to use population as a cost allocation methodology (though it is common for utilities to allocate some costs based on number of customers, which may also correlate with population).

PATH FORWARD

A potential option for a 'Path Forward' with regards to the sewer SHARES and rate simplification was presented at a recent meeting. This approach would use sanitary volume, peak volume, and population to allocate a simplified cost pool that includes everything but industrial surcharge revenues and OMID specific costs.

Each of the three factors was discussed in the previous section of this report. The largest concern from the Member Partner Communities related to population, how it would be measured and whether it was significantly different from sanitary volume.

Combining all costs into a single cost pool may be a little too extreme for cost simplification, as mentioned in the previous section it may make sense for some cost pools to still be used such as conveyance and treatment, depending on the units of service ultimately decided upon to allocate costs.

Figure 1: Personnel Cost Allocation

| Personnel Costs | Revenue Requirement | WRRF | | | | | | | | | | | Wastewater Collection Facilities | | | |
|----------------------------------|---------------------|-------------------|-------------------|---------------------|---------------------|---------------------|---------------------|---------------------|--------------|---------------|----------------|-------------------|----------------------------------|---------------|---------|--|
| | | Primary Pumping | Rack and Grit | Primary Treatment | Aeration | Secondary Treatment | Dewatering | Sludge Disposal | WRRF General | Lift Stations | CSO Facilities | Interceptors | Industrial Waste Control | Master Meters | General | |
| Wastewater Operations | 1,257,900 | 7.50% | 4.00% | 8.00% | 16.00% | 12.00% | 10.00% | 37.50% | | | | | | | | |
| Wastewater Process Control | 2,318,500 | 7.50% | 4.00% | 8.00% | 16.00% | 12.00% | 25.00% | 25.00% | | | | 5.00% | | | | |
| Wastewater Primary Processing | 3,701,800 | 10.00% | 15.00% | 75.00% | | | | | | | | 2.50% | | | | |
| Wastewater Secondary Processing | 3,997,200 | | | | 50.00% | 50.00% | 100.00% | | | | | | | | | |
| Wastewater Dewatering Process | 3,723,300 | | | | | | 100.00% | 100.00% | | | | | | | | |
| Wastewater Incinerations Process | 3,953,700 | | | | | | 100.00% | 100.00% | | | | | | | | |
| Biosolids Dryer Facility | 806,100 | | | | | | | | | | | | | | | |
| Total: Personnel Costs | \$19,758,500 | \$ 638,410 | \$ 698,326 | \$ 3,062,462 | \$ 2,570,824 | \$ 2,427,768 | \$ 4,428,715 | \$ 5,811,138 | \$ - | \$ - | \$ - | \$ 120,858 | \$ - | \$ - | | |

Figure 2: Allocation of O&M Functions to Cost Drivers

Common to All

| Function | Revenue Requirement | Flow | BOD | TSS | PHOS | FOG | Suburban | OMID | CSO | IWC | Detroit |
|---------------------------|-----------------------|----------------------|----------------------|----------------------|---------------------|---------------------|---------------------|---------------------|----------------------|---------------------|-------------|
| Primary Pumping | 6,369,710 | 100.00% | | | | | | | | | |
| Rack and Grit | 4,069,013 | 100.00% | | | | | | | | | |
| Primary Chemical Addition | 2,103,000 | | | 100.00% | | | | | | | |
| Primary Sedimentation | 10,615,000 | | 100.00% | 70.00% | 20.00% | 10.00% | | | | | |
| Aeration | 17,140,010 | | 25.00% | 65.00% | 10.00% | | | | | | |
| Secondary Clarification | 11,000,100 | | 15.00% | 70.00% | 15.00% | | | | | | |
| Chlorination | 2,639,900 | | 100.00% | | | | | | | | |
| Dewatering | 18,098,439 | | | | | | | | | | |
| Sludge Treatment | 56,791,383 | | | | | | | | | | |
| Process Water and Outfall | - | | | | | | | | | | |
| Lift Stations | 22,533,175 | | 75.00% | | | | | 25.00% | | | |
| CSO Facilities | 18,781,675 | | | | | | | 3.50% | 100.00% | | |
| Interceptors | 11,814,478 | | 96.50% | | | | | | | 100.00% | |
| Industrial Waste Control | 7,239,484 | | | | | | 100.00% | | | | |
| Master Meters | 3,926,133 | | | | | | | | | | |
| Total: O&M | \$ 193,121,500 | \$ 41,379,475 | \$ 79,396,184 | \$ 27,249,472 | \$ 8,040,776 | \$ 1,061,500 | \$ 3,926,133 | \$ 6,046,800 | \$ 18,781,675 | \$ 7,239,484 | \$ - |
| | | 21.43% | 41.11% | 14.11% | 4.16% | 0.55% | 2.03% | 3.13% | 9.73% | 3.75% | 0.00% |

Figure 3: Total Revenue Requirement Allocation

| | | Common to All | | | | | | | | | |
|------------------------------|---|----------------|-------------|------------|------------|-----------|-----------|------------|------------|-----------|---------|
| | | Flow | BOD | TSS | PHOS | FOG | Suburban | OMID | CSO | IWC | Detroit |
| Allocation Proportion | | | | | | | | | | | |
| O&M Total | 1 | 21.43% | 41.11% | 14.11% | 4.16% | 0.55% | 2.03% | 3.13% | 9.73% | 3.75% | 0.00% |
| O&M Non-Commodity | 2 | 20.81% | 38.86% | 14.02% | 3.08% | 0.60% | 2.47% | 3.80% | 11.80% | 4.55% | 0.00% |
| Capital | 3 | 47.92% | 10.73% | 18.28% | 3.71% | 0.48% | 2.05% | 1.31% | 15.37% | 0.14% | 0.00% |
| Indirect | 4 | 34.99% | 25.42% | 16.24% | 3.88% | 0.52% | 2.06% | 2.23% | 12.73% | 1.94% | 0.00% |
| Budget Elements | | | | | | | | | | | |
| O&M | 1 | 41,379,582 | 79,396,390 | 27,249,543 | 8,040,797 | 1,061,503 | 3,976,143 | 6,046,816 | 18,781,724 | 7,239,503 | - |
| Operating Pension | 2 | 2,252,796 | 4,206,322 | 1,517,956 | 333,383 | 65,240 | 267,054 | 411,301 | 1,277,521 | 492,427 | - |
| Debt Service | 3 | 103,033,504 | 23,075,582 | 39,296,791 | 7,981,223 | 1,025,543 | 4,407,728 | 2,817,116 | 33,042,669 | 310,845 | - |
| Non Operating Pension | 2 | 2,418,612 | 4,515,929 | 1,629,685 | 357,922 | 70,042 | 286,710 | 441,574 | 1,371,553 | 528,672 | - |
| WRAP | 4 | 791,052 | 574,657 | 367,269 | 87,663 | 11,646 | 46,663 | 50,445 | 287,726 | 43,879 | - |
| R&R | 3 | 300,487 | 67,298 | 114,605 | 23,276 | 2,991 | 12,855 | 8,216 | 96,366 | 907 | - |
| Detroit I&E | 4 | 9,621,372 | 6,989,412 | 4,467,008 | 1,066,226 | 141,649 | 567,554 | 613,555 | 3,499,537 | 533,686 | - |
| I&E | 3 | 5,756,028 | 1,289,131 | 2,195,339 | 445,876 | 57,293 | 246,240 | 157,380 | 1,845,948 | 17,366 | - |
| Operating Reserves | 1 | 397,207 | 762,135 | 261,571 | 77,185 | 10,189 | 37,687 | 58,044 | 180,288 | 69,493 | - |
| Non Operating Revenue | 4 | (1,599,212) | (1,161,742) | (742,482) | (177,222) | (23,544) | (94,336) | (101,982) | (581,674) | (88,706) | - |
| Total: Revenue Requirement | | \$ 470,239,200 | 119,715,114 | 76,357,286 | 18,236,328 | 2,422,552 | 9,704,300 | 10,502,466 | 59,801,657 | 9,148,068 | \$ - |

Figure 4: Current Strength of Flow

| Strengths (mg/l) | BOD | | TSS | | PHOS | | FOG | |
|------------------|--------|---------|--------|---------|-------|---------|-------|---------|
| | Value | % | Value | % | Value | % | Value | % |
| Sanitary | 274.45 | 100.00% | 322.94 | 100.00% | 7.62 | 100.00% | 34.82 | 100.00% |
| DWII | 6.59 | 2.40% | 6.78 | 2.10% | 0.30 | 4.00% | - | 0.00% |
| WWII | 14.55 | 5.30% | 125.95 | 39.00% | 0.19 | 2.50% | 13.96 | 40.10% |

Figure 5: Strength of Flow Calculation

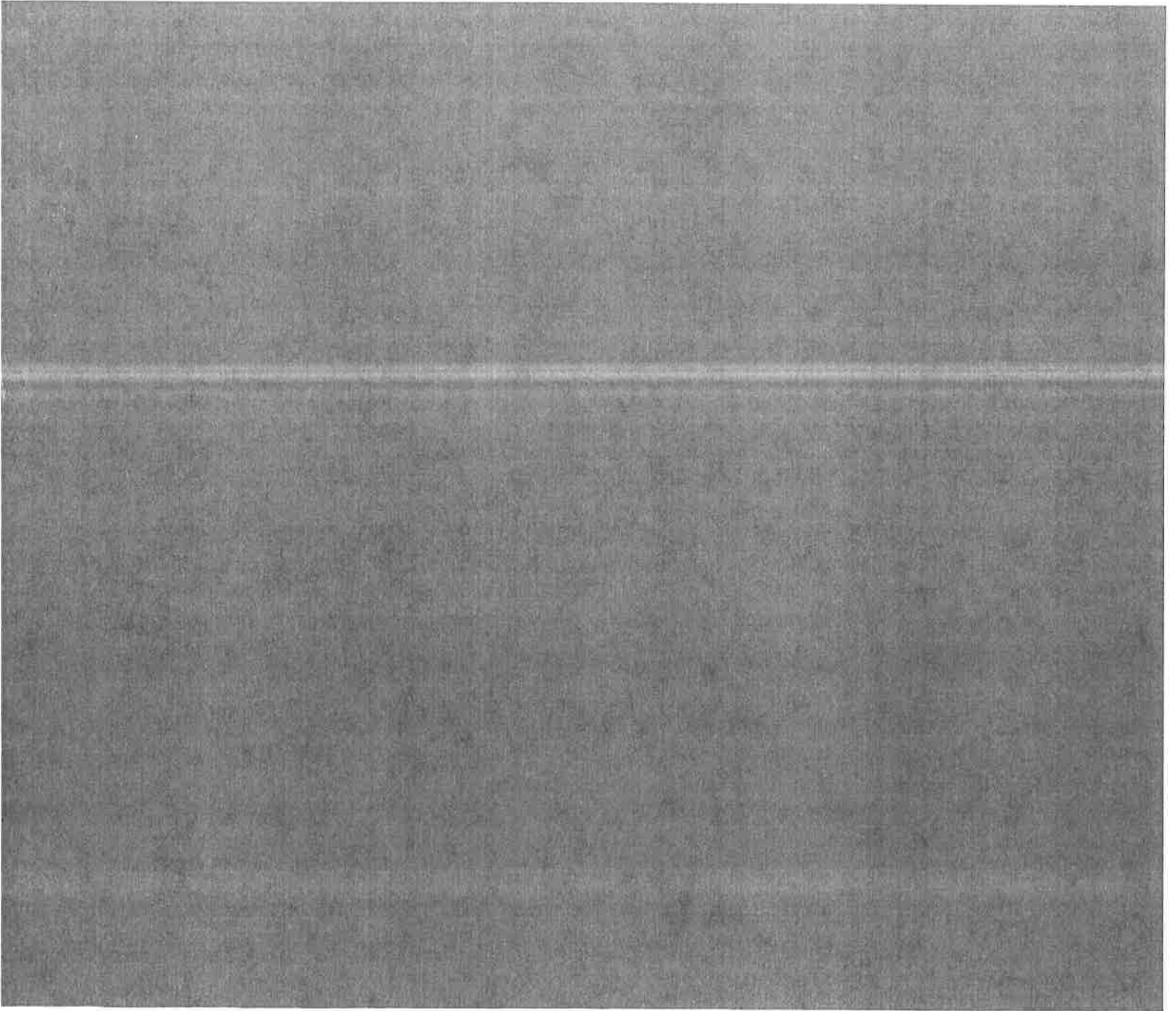
| <u>Item</u> | <u>Item Description</u> | <u>BOD</u> | <u>TSS</u> | <u>PHOS</u> | <u>FOG</u> | |
|--|---------------------------------|-------------------------|-------------|-------------|------------|------------|
| 1 | Total: WRRF Loadings (lbs) | 4-year average | 176,697,300 | 255,289,900 | 4,910,400 | 27,112,600 |
| 2 | DWII SoF - Sanitary % | SoF Work Group | 2.40% | 2.10% | 4.00% | 0.00% |
| 3 | WWII SoF - Sanitary % | SoF Work Group | 5.30% | 39.00% | 2.50% | 40.10% |
| <u>Total Influent Volumes</u> | | | | | | |
| 4 | Sanitary | 4-year average | 9,634,000 | 9,634,000 | 9,634,000 | 9,634,000 |
| 5 | DWII | 4-year average | 12,822,200 | 12,822,200 | 12,822,200 | 12,822,200 |
| 6 | WWII | 4-year average | 7,090,300 | 7,090,300 | 7,090,300 | 7,090,300 |
| 7 | Total: Flows | | 29,546,500 | 29,546,500 | 29,546,500 | 29,546,500 |
| <u>Weighted Influent Split</u> | | | | | | |
| 8 | Sanitary | = (4) | 9,634,000 | 9,634,000 | 9,634,000 | 9,634,000 |
| 9 | DWII | = (2) * (5) | 307,733 | 269,266 | 512,888 | - |
| 10 | WWII | = (3) * (6) | 375,786 | 2,765,217 | 177,258 | 2,843,210 |
| 11 | Total: Weighted Influent | | 10,317,519 | 12,668,483 | 10,324,146 | 12,477,210 |
| <u>Loading Allocation Factors</u> | | | | | | |
| 12 | Sanitary | = (8) / (11) | 93.4% | 76.0% | 93.3% | 77.2% |
| 13 | DWII | = (9) / (11) | 3.0% | 2.1% | 5.0% | 0.0% |
| 14 | WWII | = (10) / (11) | 3.6% | 21.8% | 1.7% | 22.8% |
| <u>Allocated Loadings</u> | | | | | | |
| 15 | Sanitary | = (1) * (12) | 164,991,394 | 194,140,282 | 4,582,151 | 20,934,390 |
| 16 | DWII | = (1) * (13) | 5,270,216 | 5,426,138 | 243,941 | - |
| 17 | WWII | = (1) * (14) | 6,435,690 | 55,723,480 | 84,308 | 6,178,210 |
| <u>Strengths (mg/l)</u> | | | | | | |
| 18 | Sanitary | = (15) / (4), converted | 274.45 | 322.94 | 7.62 | 34.82 |
| 19 | DWII | = (16) / (5), converted | 6.59 | 6.78 | 0.30 | - |
| 20 | WWII | = (17) / (6), converted | 14.55 | 125.95 | 0.19 | 13.96 |

Figure 6: Development of SHARES

| Customer | Sanitary mcf | DWII mcf | WWII mcf | Total mcf | BOD lbs | TSS lbs | PHOS lbs | FOG lbs | Volume | BOD | TSS | PHOS | FOG | Volume Share | Pollutant Share | CTA SHARE |
|------------------------------|-----------------|-------------|-------------|--------------|-------------|-------------|-------------|------------|---------|---------|---------|---------|---------|-----------------|--------------------|--------------|
| 1 OVID | 2,181,200 | 524,900 | 244,900 | 2,951,000 | 37,793,156 | 46,101,443 | 1,050,327 | 4,953,078 | 12.46% | 21.80% | 19.34% | 21.82% | 19.48% | 12.46% | 20.42% | 16.44% |
| 2 Rouge Valley | 1,449,200 | 751,500 | 506,200 | 2,706,900 | 25,587,274 | 33,499,970 | 709,589 | 3,590,151 | 11.43% | 14.76% | 14.05% | 14.74% | 14.12% | 11.43% | 14.36% | 12.89% |
| 3 Oakland GWK | 1,011,100 | 645,800 | 820,900 | 2,477,800 | 18,326,596 | 27,100,097 | 502,950 | 2,912,390 | 10.46% | 10.57% | 11.37% | 10.45% | 11.46% | 10.46% | 11.01% | 10.73% |
| 4 Evergreen Farmington | 997,400 | 472,500 | 222,100 | 1,692,000 | 17,477,225 | 22,044,645 | 486,016 | 2,360,849 | 7.14% | 10.08% | 9.25% | 10.10% | 9.29% | 7.14% | 9.61% | 8.38% |
| 5 NE Wayne Co | 571,600 | 306,500 | 454,900 | 1,333,000 | 10,328,072 | 15,223,458 | 283,106 | 1,638,452 | 5.63% | 5.96% | 6.39% | 5.88% | 6.45% | 5.63% | 6.19% | 5.91% |
| 6 Allen Park | 23,300 | 8,600 | 10,100 | 42,000 | 411,737 | 552,548 | 11,366 | 59,431 | 0.18% | 0.24% | 0.23% | 0.24% | 0.23% | 0.18% | 0.23% | 0.21% |
| 7 Center Line | 28,700 | 7,800 | 12,400 | 48,900 | 505,976 | 679,104 | 13,946 | 73,169 | 0.21% | 0.29% | 0.28% | 0.29% | 0.29% | 0.21% | 0.29% | 0.25% |
| 8 Farmington | 30,400 | 18,700 | 10,100 | 59,200 | 537,482 | 699,898 | 14,935 | 74,859 | 0.25% | 0.31% | 0.29% | 0.31% | 0.29% | 0.25% | 0.30% | 0.28% |
| 9 Grosse Pointe Park | 41,700 | 25,200 | 32,300 | 99,200 | 753,828 | 1,104,834 | 20,697 | 118,758 | 0.42% | 0.43% | 0.46% | 0.43% | 0.47% | 0.42% | 0.45% | 0.43% |
| 10 Melvindale | 41,800 | 18,600 | 15,200 | 75,600 | 737,306 | 969,666 | 20,416 | 104,075 | 0.32% | 0.43% | 0.41% | 0.42% | 0.41% | 0.32% | 0.41% | 0.37% |
| 11 Grosse Pointe Farms | 53,100 | 43,100 | 46,800 | 143,000 | 969,582 | 1,456,094 | 26,632 | 156,164 | 0.60% | 0.56% | 0.61% | 0.55% | 0.61% | 0.60% | 0.59% | 0.60% |
| 12 Dearborn | 420,200 | 286,700 | 346,200 | 1,053,100 | 7,628,401 | 11,309,844 | 209,428 | 1,214,747 | 4.45% | 4.40% | 4.74% | 4.35% | 4.78% | 4.45% | 4.59% | 4.52% |
| 13 Hamtramck | 51,200 | 106,500 | 44,600 | 202,300 | 961,105 | 1,427,346 | 26,908 | 150,119 | 0.85% | 0.55% | 0.60% | 0.56% | 0.59% | 0.85% | 0.58% | 0.72% |
| 14 Grosse Pointe | 12,800 | 26,700 | 11,200 | 50,700 | 240,352 | 357,261 | 6,729 | 37,573 | 0.21% | 0.14% | 0.15% | 0.14% | 0.15% | 0.21% | 0.15% | 0.18% |
| 15 Harper Woods | 3,600 | 7,500 | 3,200 | 14,300 | 67,641 | 100,869 | 1,893 | 10,611 | 0.06% | 0.04% | 0.04% | 0.04% | 0.04% | 0.06% | 0.04% | 0.05% |
| 16 Highland Park | 76,000 | 158,300 | 66,200 | 300,500 | 1,426,725 | 2,118,783 | 39,946 | 222,830 | 1.27% | 0.82% | 0.89% | 0.83% | 0.88% | 1.27% | 0.86% | 1.06% |
| 17 Redford Township | 3,200 | 6,600 | 2,800 | 12,600 | 60,057 | 89,284 | 1,681 | 9,393 | 0.05% | 0.03% | 0.04% | 0.03% | 0.04% | 0.05% | 0.04% | 0.04% |
| 18 Wayne County #3 | 500 | 1,000 | 400 | 1,900 | 9,337 | 13,643 | 262 | 1,435 | 0.01% | 0.01% | 0.01% | 0.01% | 0.01% | 0.01% | 0.01% | 0.01% |
| 19 Total: Suburban Customers | 6,997,000 | 3,416,500 | 2,850,500 | 13,264,000 | 123,821,854 | 164,848,787 | 3,426,826 | 17,688,083 | 55.99% | 71.44% | 69.15% | 71.20% | 69.58% | 55.99% | 70.13% | 63.06% |
| 20 Detroit | 2,637,000 | 5,491,200 | 2,298,600 | 10,426,800 | 49,504,518 | 73,528,449 | 1,386,019 | 7,733,031 | 44.01% | 28.56% | 30.85% | 28.80% | 30.42% | 44.01% | 29.87% | 36.94% |
| 21 Total: Allocable Units | 9,634,000 | 8,907,700 | 5,149,100 | 23,690,800 | 173,326,372 | 238,377,237 | 4,812,845 | 25,421,114 | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% | 100.00% |

Figure 7: Customer Charge Development

| | <u>CTA</u> | <u>Suburban</u> | <u>OMID</u> | <u>CSO</u> | <u>IWC</u> | <u>Total</u> | | |
|------------------------------|------------------|-----------------|-------------|------------|------------|------------------|-------------|-------------------|
| Budget From Charges | | | | | | | | |
| Total Revenue Requirement | 381,082,708 | 9,704,300 | 10,502,466 | 59,801,657 | 9,148,068 | 470,239,200 | | |
| Allocated to Industrial | 5,115,100 | | | | 9,148,068 | \$ 14,263,168 | | |
| Net Budget from Charges | 375,967,608 | 9,704,300 | 10,502,466 | 59,801,657 | - | 455,976,032 | | |
| | | | | | | Ownership | | |
| <u>Customer</u> | <u>CTA</u> | <u>Suburban</u> | <u>OMID</u> | <u>CSO</u> | <u>IWC</u> | <u>Total</u> | <u>Adj.</u> | <u>Adj. Total</u> |
| OMID | 61,792,156 | 2,152,556 | 10,502,466 | 1,585,342 | - | 76,032,520 | 1,223,529 | 77,256,050 |
| Rouge Valley | 48,475,384 | 1,974,558 | - | 1,767,737 | - | 52,217,679 | 1,122,354 | 53,340,033 |
| Oakland GWK | 40,360,123 | 1,807,449 | - | 1,349,125 | - | 43,516,697 | 1,027,368 | 44,544,065 |
| Evergreen Farmington | 31,496,686 | 1,234,229 | - | 888,055 | - | 33,618,970 | 701,545 | 34,320,515 |
| SE Macomb San District | 22,219,686 | 972,417 | - | 702,071 | - | 23,894,174 | 552,730 | 24,446,904 |
| Dearborn | 17,138,483 | 781,114 | - | 975,365 | - | 18,894,962 | 443,991 | 19,338,953 |
| Grosse Pointe Farms | 2,240,767 | 104,379 | - | 301,400 | - | 2,646,546 | 59,330 | 2,705,876 |
| Grosse Pointe Park | 1,635,459 | 72,409 | - | 37,077 | - | 1,744,945 | 41,158 | 1,786,102 |
| Melvindale | 1,379,801 | 55,127 | - | 44,253 | - | 1,479,182 | 31,335 | 1,510,516 |
| Farmington | 1,035,791 | 43,203 | - | 31,097 | - | 1,110,091 | 24,557 | 1,134,648 |
| Center Line | 928,640 | 35,599 | - | 33,489 | - | 997,728 | 20,235 | 1,017,963 |
| Allen Park | 772,613 | 30,588 | - | 18,539 | - | 821,740 | 17,386 | 839,126 |
| Highland Park | 3,908,183 | 209,967 | - | 1,234,904 | - | 5,353,055 | 119,347 | 5,472,402 |
| Hamtramck | 3,088,574 | 171,257 | - | 953,836 | - | 4,213,668 | 97,344 | 4,311,012 |
| Grosse Pointe | 751,935 | 40,438 | - | 136,348 | - | 928,721 | 22,985 | 951,707 |
| Harper Woods | 208,662 | 10,887 | - | 7,774 | - | 227,323 | 6,188 | 233,512 |
| Redford Township | 137,228 | 7,085 | - | 79,536 | - | 223,850 | 4,027 | 227,877 |
| Wayne County #3 | 20,678 | 1,037 | - | 20,931 | - | 42,646 | 589 | 43,235 |
| Subtotal: Suburban Wholesale | 237,590,850 | 9,704,300 | 10,502,466 | 10,166,880 | - | 267,964,496 | 5,516,000 | 273,480,496 |
| City of Detroit | 138,380,518 | - | - | 49,635,375 | - | 188,015,893 | (5,516,000) | 182,499,893 |
| Total: | 375,971,368 | 9,704,300 | 10,502,466 | 59,802,255 | - | 455,980,389 | - | 455,980,389 |





MAY 2019 REVIEW

FINANCE COMMITTEE

July 9, 2019

Summary Financial Metrics



DETROIT
Water & Sewerage
Department

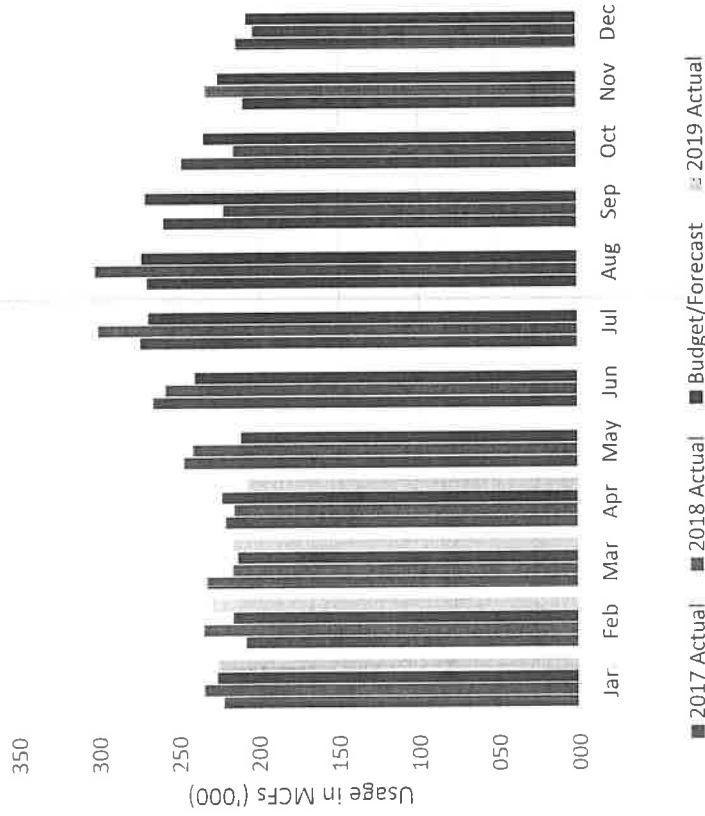
| Month Ended Fiscal Quarter | Jul-18 2019,Q1 | Aug-18 2019,Q1 | Sep-18 2019,Q1 | Oct-18 2019,Q2 | Nov-18 2019,Q2 | Dec-18 2019,Q2 | Jan-19 20-9,Q3 | Feb-19 2019,Q3 | Mar-19 2019,Q3 | Apr-19 2019,Q4 | May-19 2019,Q4 | Jun-19 2019,Q4 |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Water Volumes | Target | 269,000 | 273,100 | 270,500 | 233,800 | 224,500 | 206,500 | 226,600 | 213,300 | 223,100 | 211,000 | 240,200 |
| | Actual | 372,613 | 302,476 | 221,531 | 215,105 | 232,770 | 202,686 | 227,697 | 218,435 | 208,812 | | |
| | Status | | | | | | | | | | | |
| Total Active Meters | Target | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 |
| | Actual | 177,027 | 176,729 | 176,573 | 176,594 | 176,538 | 176,379 | 177,094 | 178,805 | 179,400 | 178,905 | |
| | Status | | | | | | | | | | | |
| Billable Impervious Acreage | Target | 28,475 | 28,475 | 28,475 | 28,475 | 28,475 | 28,475 | 28,475 | 28,475 | 28,475 | 28,475 | 28,475 |
| | Actual | 27,842 | 27,796 | 27,802 | 27,722 | 27,688 | 27,686 | 27,699 | 27,512 | 27,495 | | |
| | Status | | | | | | | | | | | |
| Days in Accounts Receivable - Residential | Target | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 | 190 |
| | Actual | 186 | 184 | 183 | 184 | 186 | 188 | 190 | 192 | 194 | 196 | 199 |
| | Status | | | | | | | | | | | |
| 3-Month Rolling Average Collection Rate | Target | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% |
| | Actual | 106% | 93% | 91% | 91% | 89% | 87% | 87% | 90% | 92% | 90% | 91% |
| | Status | | | | | | | | | | | |
| 12-Month Rolling Average Collection Rate | Target | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% |
| | Actual | 92% | 91% | 91% | 91% | 92% | 92% | 92% | 93% | 93% | 91% | 91% |
| | Status | | | | | | | | | | | |
| Operating Cash Days on Hand | Target | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| | Actual | 188 | 219 | 235 | 233 | 229 | 227 | 223 | 234 | 230 | 237 | 151 |
| | Status | | | | | | | | | | | |
| Days Payable Outstanding | Target | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 |
| | Actual | 50 | 31 | 61 | 30 | 42 | 29 | 58 | 66 | 38 | 58 | 31 |
| | Status | | | | | | | | | | | |
| Headcount | Target | 611 | 611 | 611 | 611 | 611 | 611 | 611 | 611 | 611 | 611 | 611 |
| | Actual | 537 | 526 | 526 | 524 | 545 | 550 | 547 | 547 | 543 | 543 | 541 |
| | Status | | | | | | | | | | | |
| O&M Spending | Target | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 |
| | Actual | 7,534,065 | 4,458,249 | 11,680,248 | 9,400,983 | 10,544,595 | 15,052,971 | 5,839,015 | 10,133,568 | 5,104,907 | 9,024,517 | 6,841,727 |
| | Status | | | | | | | | | | | |



Account Receivable Aging - Combined

| Sales Class | # of Accounts | Avg. Balance | Current | > 30 Days | > 60 Days | > 180 Days | Accounts Receivable | |
|-----------------------------------|----------------|------------------|----------------------|----------------------|----------------------|-----------------------|-----------------------|---------|
| | | | | | | | Balance | Balance |
| Residential | 287,131 | \$ 348.12 | \$ 13,421,822 | \$ 7,293,580 | \$ 19,483,008 | \$ 59,758,480 | \$ 99,956,890 | 100.0% |
| | | | 13.4% | 7.3% | 19.5% | 59.8% | | |
| Commercial | 28,189 | 1,254.98 | 8,191,882 | 2,596,370 | 6,775,449 | 17,812,997 | 35,376,698 | 100.0% |
| | | | 23.2% | 7.3% | 19.2% | 50.4% | | |
| Industrial | 4,804 | 3,332.65 | 4,095,039 | 1,438,226 | 2,713,151 | 7,763,646 | 16,010,061 | 100.0% |
| | | | 25.6% | 9.0% | 16.9% | 48.5% | | |
| Tax Exempt Entities | 8,147 | 1,852.66 | 1,989,066 | 1,475,626 | 3,109,733 | 8,519,213 | 15,093,639 | 100.0% |
| | | | 13.2% | 9.8% | 20.6% | 56.4% | | |
| Government Entities | 2,797 | 1,381.36 | 975,803 | 207,475 | 846,990 | 1,833,396 | 3,863,664 | 100.0% |
| | | | 25.3% | 5.4% | 21.9% | 47.5% | | |
| Subtotal - Active Accounts | 331,068 | \$ 514.40 | \$ 28,673,612 | \$ 13,011,276 | \$ 32,928,330 | \$ 95,687,732 | \$ 170,300,951 | |
| | | | 16.8% | 7.6% | 19.3% | 56.2% | | |
| Inactive Accounts | 262,013 | 82.64 | 180,654 | 194,870 | 1,193,659 | 20,082,923 | 21,652,106 | 100.0% |
| | | | 0.8% | 0.9% | 5.5% | 92.8% | | |
| Total | 593,081 | \$ 323.65 | \$ 28,854,267 | \$ 13,206,146 | \$ 34,121,990 | \$ 115,770,655 | \$ 191,953,058 | |
| % of Total A/R | | | 15.0% | 5.9% | 17.8% | 60.3% | | |
| Water Fund | 224,090 | 183.56 | 6,806,902 | 2,562,253 | 5,962,517 | 25,801,842 | 41,133,513 | |
| Sewer Fund | 284,106 | 530.86 | 22,047,365 | 10,643,893 | 28,159,473 | 89,968,813 | 150,819,545 | |
| Total | 593,081 | 323.65 | 28,854,267 | 13,206,146 | 34,121,990 | 115,770,655 | 191,953,058 | |

Retail Water Customers – Volumes

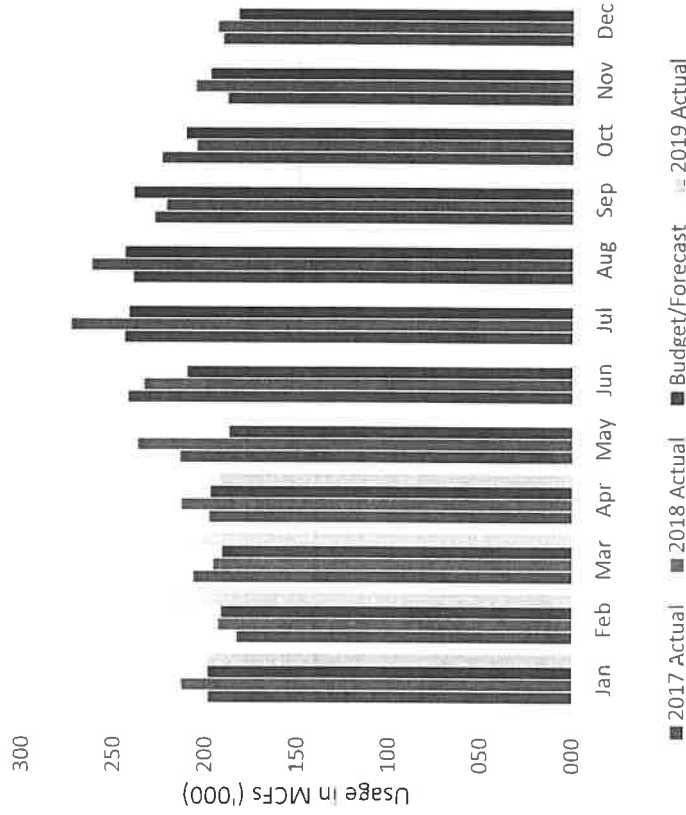


| Month | Volume (Mcf) | | | | Variance (%) |
|----------------------|------------------|---------------------|------------------|--------------|--------------|
| | Prior Year | Budget Current Year | Variance (Mcf) | Variance (%) | |
| July | 274,267 | 269,000 | 31,613 | 11.8% | |
| August | 269,802 | 273,100 | 29,376 | 10.8% | |
| September | 259,341 | 270,500 | (48,969) | (18.1%) | |
| October | 247,700 | 233,800 | 215,105 | (8.0%) | |
| November | 208,783 | 224,500 | 232,770 | 3.7% | |
| December | 213,026 | 206,500 | 202,686 | (1.8%) | |
| January | 235,142 | 226,600 | 227,697 | 0.5% | |
| February | 235,436 | 216,400 | 232,094 | 7.3% | |
| March | 216,866 | 213,300 | 218,435 | 2.4% | |
| April | 215,643 | 223,100 | 208,812 | (6.4%) | |
| May | 241,641 | 211,000 | | | |
| June | 258,608 | 240,200 | | | |
| Totals | 2,876,255 | 2,808,000 | 2,362,218 | 0.2% | |
| Subtotals YTD | 2,376,006 | 2,356,800 | 2,362,218 | 0.2% | |



Retail Sewer Customers - Volumes

| Month | Volume (Mcf) | | | | Variance (%) |
|----------------------|------------------|---------------------|------------------|----------------|--------------|
| | Prior Year | Budget Current Year | Current Year | Variance (Mcf) | |
| July | 244,512 | 242,100 | 273,862 | 31,762 | 13.1% |
| August | 239,911 | 244,200 | 262,525 | 18,325 | 7.5% |
| September | 228,122 | 239,600 | 221,660 | (17,940) | (7.5%) |
| October | 224,159 | 211,000 | 205,267 | (5,733) | (2.7%) |
| November | 188,312 | 197,600 | 205,806 | 8,206 | 4.2% |
| December | 190,811 | 182,400 | 193,791 | 11,391 | 6.2% |
| January | 213,373 | 198,600 | 201,171 | 2,571 | 1.3% |
| February | 193,452 | 191,600 | 220,021 | 28,421 | 14.8% |
| March | 196,148 | 191,000 | 205,424 | 14,424 | 7.6% |
| April | 213,393 | 197,300 | 193,725 | (3,575) | (1.8%) |
| May | 237,626 | 187,300 | | | |
| June | 234,144 | 210,300 | | | |
| Totals | 2,603,964 | 2,493,000 | 2,183,253 | 87,853 | 3.5% |
| Subtotals YTD | 2,132,194 | 2,095,400 | 2,183,253 | 87,853 | 4.2% |



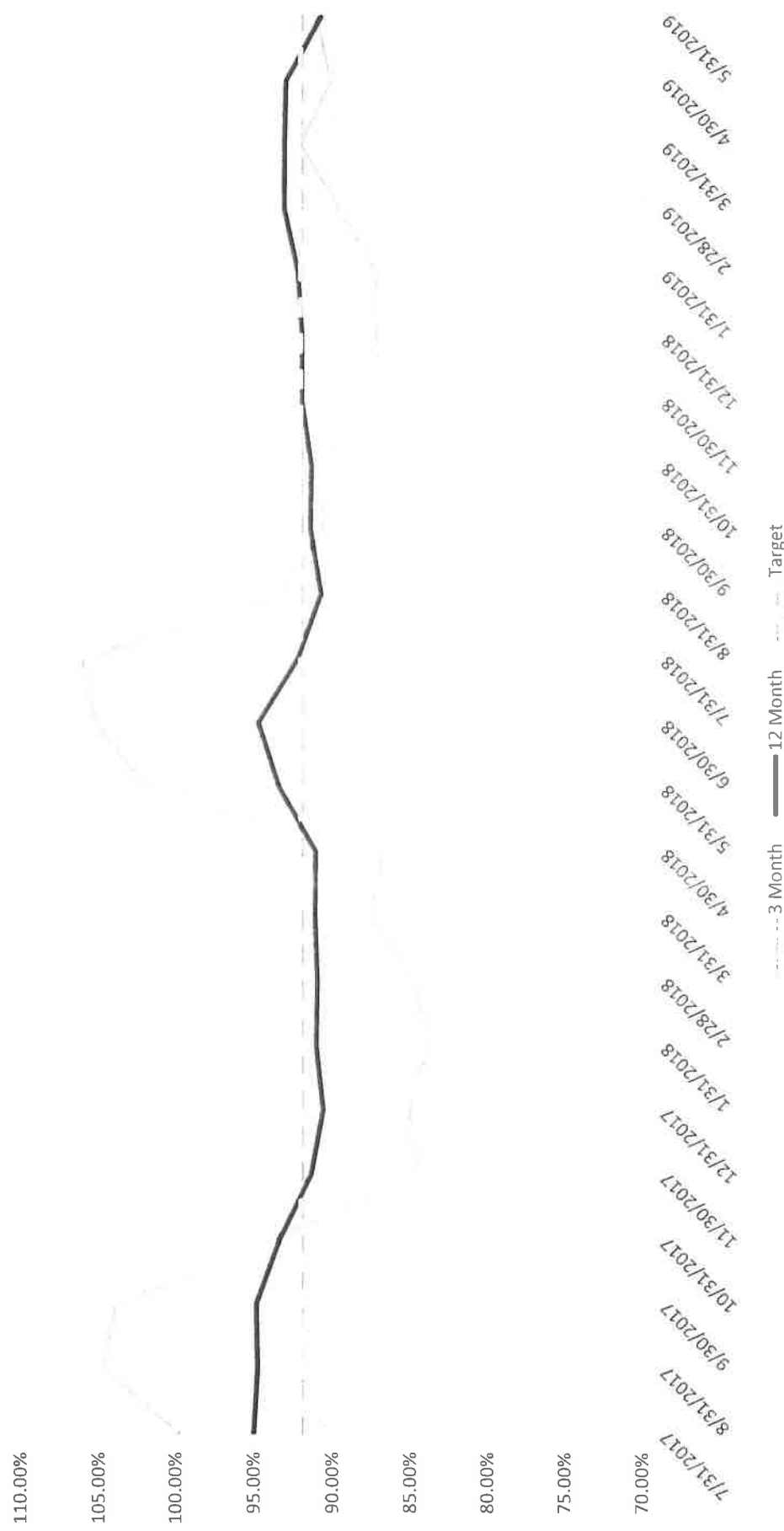
Retail Customers - Revenue



| Month | Revenue (\$) | | | | Revenue (\$) | | | | |
|---------------|----------------------|-----------------------|----------------------|--------------|---------------|-----------------------|-----------------------|-----------------------|---------------|
| | Prior Year | Budget | Current Year | Variance (%) | Month | Prior Year | Budget | Current Year | Variance (%) |
| July | \$ 9,060,075 | \$ 9,424,500 | \$ 10,203,409 | 8.3% | July | \$ 24,994,676 | \$ 27,423,400 | \$ 27,851,140 | 1.6% |
| August | 8,904,085 | 9,377,700 | 9,833,149 | 4.9% | August | 24,760,250 | 27,232,200 | 27,401,816 | 0.6% |
| September | 8,985,289 | 8,494,300 | 8,996,692 | 5.9% | September | 23,983,587 | 25,367,500 | 25,552,254 | 0.7% |
| October | 8,137,675 | 8,165,900 | 8,010,524 | (1.9%) | October | 23,936,728 | 25,177,200 | 24,230,273 | (3.8%) |
| November | 7,473,555 | 7,750,100 | 8,325,013 | 7.4% | November | 22,627,682 | 23,861,000 | 24,314,979 | 1.9% |
| December | 7,523,827 | 8,224,900 | 7,659,930 | (6.9%) | December | 22,405,515 | 25,293,500 | 23,925,500 | (5.4%) |
| January | 8,067,860 | 7,978,800 | 8,250,078 | 3.4% | January | 23,250,935 | 24,852,800 | 24,407,247 | (1.8%) |
| February | 8,054,769 | 7,980,200 | 8,649,072 | 8.4% | February | 22,291,876 | 25,329,400 | 25,593,281 | 1.0% |
| March | 7,527,076 | 8,163,900 | 8,165,904 | 0.0% | March | 22,184,361 | 25,474,500 | 24,648,366 | (3.2%) |
| April | 7,744,106 | 7,856,900 | 8,014,291 | 2.0% | April | 22,288,-32 | 24,789,700 | 23,882,510 | (3.7%) |
| May | 8,380,467 | 9,109,200 | | | May | 24,665,214 | 26,205,200 | | |
| June | 8,865,874 | 9,063,600 | | | June | 24,439,888 | 26,730,700 | | |
| Totals | \$ 98,724,659 | \$ 101,590,000 | \$ 86,108,061 | 2.6% | Totals | \$ 281,828,843 | \$ 307,737,100 | \$ 251,807,365 | (1.0%) |
| Subtotals YTD | \$ 81,478,318 | \$ 83,417,200 | \$ 86,108,061 | 3.2% | Subtotals YTD | \$ 232,723,742 | \$ 254,801,200 | \$ 251,807,365 | (1.2%) |



Collection Rates



Cash Balance Summary



| | Water Fund | | Sewer Fund | |
|---------------------------|--------------------|-------------------|-------------------|--------------------|
| | 6/30/2018 | 5/31/2019 | 6/30/2018 | 5/31/2019 |
| Unrestricted | | | | |
| Operating | 15,266,537 | 15,535,869 | 44,694,855 | 31,989,187 |
| Improvement and Extension | 42,994,009 | 46,989,022 | 35,059,899 | 34,161,171 |
| Pension | 9,073,472 | 3,021,285 | 181 | 2,553,285 |
| | <u>67,334,019</u> | <u>65,546,176</u> | <u>79,754,935</u> | <u>68,703,642</u> |
| Restricted | | | | |
| Bond | 36,346,022 | 12,425,536 | - | 92,063,610 |
| Affordability | 1,184,871 | 1,320,935 | - | - |
| Retainage | 2,699,459 | 4,263,523 | 654,839 | 3,200,190 |
| Construction | 3,464,524 | 953,035 | 519,787 | 500,711 |
| | <u>43,694,876</u> | <u>18,963,029</u> | <u>1,174,626</u> | <u>95,764,511</u> |
| Total Cash | 111,028,895 | 84,509,205 | 80,929,561 | 164,468,153 |



Appendix:

Financial Statements

Eleven Months Ended May 31, 2019

| City of Detroit Water Fund | | Statement of Net Position | |
|--|----------------------------|----------------------------------|---------------|
| | June 30, 2018 (Audited) | May 31, 2019 | |
| Assets | | | |
| Cash and cash equivalents | \$ 67,327,735 | \$ | 65,546,176 |
| Restricted - Cash and investments | 45,800,588 | | 20,963,029 |
| Accounts receivable - Net of Allowance | 18,884,376 | | 23,787,041 |
| Due from other funds | 34,674,582 | | 28,572,977 |
| Inventory | 3,380,693 | | 3,380,693 |
| Prepaid expenses | 452,491 | | 275,381 |
| Receivables from Great Lakes Water Authority | 477,230,749 | | 473,039,574 |
| Capital assets - net | 525,909,122 | | 540,838,862 |
| Total assets | 1,173,660,336 | | 1,156,403,733 |
| Deferred Outflows of Resources - Pensions | 14,359,284 | | 14,359,284 |

| City of Detroit Water Fund | | Statement of Net Position (Continued) | |
|--|----------------------------|--|--|
| | June 30, 2018 (Audited) | May 31, 2019 | |
| Liabilities | | | |
| Current liabilities: | | | |
| Accounts and contracts payable | \$ 5,887,060 | \$ 8,141,907 | |
| Due to other funds | 44,482,592 | 35,265,461 | |
| Due to Great Lakes Water Authority | (8,446,945) | (2,545,393) | |
| Accrued interest | 1,941,491 | 1,941,491 | |
| Other liabilities | 40,790,929 | 36,658,752 | |
| Accrued compensated absences | 1,675,525 | 1,675,525 | |
| Current portion debt | - | - | |
| Long-term debt | 520,056,143 | 501,341,546 | |
| Net pension liability | 46,948,714 | 46,948,714 | |
| Total liabilities | 653,335,509 | 629,428,003 | |
| Deferred Inflows of Resources -Pensions | 7,119,846 | 7,119,846 | |
| Net Position | | | |
| Fund Balance - End of year | 527,564,263 | 534,215,169 | |
| Total net position | \$ 527,564,263 | \$ 534,215,169 | |

City of Detroit Water Fund

Statement of Revenue, Expenses, and Changes in Fund Net Position

| | Eleven Months Ended May 31, 2019 | | |
|--|-------------------------------------|----------------|---------------|
| | Accrual Basis | Contract Basis | |
| Operating Revenue | | | |
| Retail sales - Detroit | \$ 87,906,720 | | \$ 87,906,720 |
| Other fees | 5,056,127 | | 5,056,127 |
| Other revenue | 2,460,757 | | 2,460,757 |
| Total operating revenue | 95,423,604 | | 95,423,604 |
| Operating Expenses | | | |
| Salaries, wages and benefits | 25,460,530 | | 25,460,530 |
| Contractual Services | 12,866,443 | | 12,866,443 |
| Other operating expense | 9,230,006 | | 9,230,006 |
| Wholesale Charges | 18,535,792 | | 18,535,792 |
| Depreciation | 15,547,691 | | - |
| Total operating expenses | 81,640,462 | | 66,092,771 |
| Operating Income | 13,783,143 | | 29,330,833 |
| Nonoperating Revenue (Expenses) | | | |
| Investment income | 995,929 | | 995,929 |
| Capital Lease | 15,294,717 | | 20,625,000 |
| Capital Outlay/Acquisitions | (19,094) | | (19,094) |
| Debt Service | (21,743,196) | | (35,189,289) |
| Gain (loss) on sale of assets | (1,660,593) | | - |
| Total nonoperating expenses - Net | (7,132,237) | | (13,587,454) |
| Change in Net Position | \$ 6,650,906 | | \$ 15,743,380 |

| City of Detroit Sewage Disposal Fund | | Statement of Net Position | |
|--|----------------------------|----------------------------------|--|
| | June 30, 2018 (Audited) | May 31, 2019 | |
| Assets | | | |
| Cash and cash equivalents | \$ 79,749,584 | \$ 68,703,642 | |
| Restricted - Cash and investments | 6,674,626 | 101,264,511 | |
| Accounts receivable - Net of Allowance | 73,437,178 | 87,865,365 | |
| Due from other funds | 49,382,322 | 46,189,487 | |
| Inventory | 848,085 | 848,085 | |
| Prepaid expenses | 433,558 | 433,558 | |
| Receivables from Great Lakes Water Authority | 606,549,558 | 602,883,167 | |
| Capital assets - net | 491,981,714 | 509,039,641 | |
| Total assets | 1,309,056,625 | 1,417,227,456 | |
| Deferred Outflows of Resources - Pensions | 10,392,771 | 10,924,542 | |

City of Detroit Sewage Disposal Fund

Statement of Net Position (Continued)

| | June 30, 2018 (Audited) | May 31, 2019 |
|---|----------------------------|-----------------------|
| Liabilities | | |
| Current liabilities: | | |
| Accounts and contracts payable | \$ 8,871,455 | \$ 7,829,736 |
| Due to other funds | 53,931,165 | 69,576,593 |
| Due to Great Lakes Authority | 53,639,106 | 57,489,008 |
| Accrued interest | 3,169,374 | 3,169,374 |
| Other liabilities | 54,935,846 | 47,979,825 |
| Accrued compensated absences | 2,513,288 | 2,513,288 |
| Current portion debt | - | - |
| Long-term debt | 395,922,651 | 463,203,992 |
| Net pension liability | 32,618,179 | 32,618,179 |
| Total liabilities | 605,601,064 | 684,379,995 |
| Deferred Inflows of Resources - Pensions | 6,258,922 | 6,258,922 |
| Net Position | | |
| Fund Balance - End of year | 707,589,412 | 737,513,082 |
| Total net position | \$ 707,589,412 | \$ 737,513,082 |

City of Detroit Sewage Disposal Fund

Statement of Revenue, Expenses, and Changes in Fund Net Position

| | Eleven Months Ended May 31, 2019 | |
|--|-------------------------------------|----------------------|
| | Accrual Basis | Contract Basis |
| Operating Revenue | | |
| Retail sales - Detroit | \$ 249,236,675 | \$ 249,236,675 |
| Other fees | 3,827,161 | 3,827,161 |
| Other revenue | 9,694,948 | 9,694,948 |
| Total operating revenue | 262,758,785 | 262,758,785 |
| Operating Expenses | | |
| Salaries, wages and benefits | 32,531,352 | 32,531,352 |
| Contractual Services | 11,616,898 | 11,616,898 |
| Other operating expense | 13,386,747 | 13,386,747 |
| Wholesale Charges | 166,524,765 | 166,524,765 |
| Depreciation | 10,960,174 | - |
| Total operating expenses | 235,019,935 | 224,059,762 |
| Operating Income | 27,738,849 | 38,699,023 |
| Nonoperating Revenue (Expenses) | | |
| Investment earnings | 1,857,833 | 1,857,833 |
| Capital Lease | 18,693,539 | 25,208,333 |
| Capital Outlay/Acquisitions | 6,105 | 6,105 |
| Debt Service | (17,619,085) | (27,391,864) |
| Gain (loss) on sale of assets | (753,571) | - |
| Total nonoperating expenses - Net | 2,184,821 | (319,592) |
| Change in Net Position | \$ 29,923,670 | \$ 38,379,431 |

Thank You



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[@detroitwatersewerage](https://www.instagram.com/detroitwatersewerage)

Table 2 – DWSD Net Cash Flows from Trust Receipts & Disbursements

| | FY 2016 | FY 2017 | FY 2018 | FY 2019-to-Date | Life-to-Date Total |
|---------------------------------------|----------------|--------------|--------------|-----------------|--------------------|
| Water | | | | | |
| 1 Receipts | \$ 26,201,881 | 96,451,105 | 101,716,017 | 58,280,950 | 282,649,953 |
| 2 MOU Adjustments | 18,446,100 | - | - | - | 18,446,100 |
| 3 Adjusted Receipts | 44,647,981 | 96,451,105 | 101,716,017 | 58,280,950 | 301,096,053 |
| 4 Disbursements | 47,809,552 | 93,066,144 | 93,049,457 | 56,988,575 | 290,913,728 |
| 5 Net Receipts | \$ (3,161,571) | 3,384,961 | 8,666,560 | 1,292,375 | 10,182,325 |
| 6 Ratio of Receipts to Disbursements | 93% | 104% | 109% | 102% | 104% |
| Sewer | | | | | |
| 7 Receipts | \$ 65,256,734 | 233,723,367 | 247,975,470 | 152,417,265 | 699,372,836 |
| 8 MOU Adjustments | 55,755,100 | - | - | 6,527,200 | 62,282,300 |
| 9 Adjusted Receipts | 121,011,834 | 233,723,367 | 247,975,470 | 158,944,465 | 761,655,136 |
| 10 Disbursements | 122,297,300 | 261,963,973 | 266,217,825 | 164,788,461 | 815,267,559 |
| 11 Net Receipts | \$ (1,285,466) | (28,240,606) | (18,242,355) | (5,843,996) | (53,612,423) |
| 12 Ratio of Receipts to Disbursements | 99% | 89% | 93% | 96% | 93% |
| 13 Receipts | \$ 91,458,615 | 330,174,472 | 349,691,487 | 210,698,215 | 982,022,789 |
| 14 MOU Adjustments | 74,201,200 | - | - | 6,527,200 | 80,728,400 |
| 15 Adjusted Receipts | 165,659,815 | 330,174,472 | 349,691,487 | 217,225,415 | 1,062,751,189 |
| 16 Disbursements | 170,106,852 | 355,030,117 | 359,267,282 | 221,777,036 | 1,106,181,287 |
| 17 Net Receipts | \$ (4,447,037) | (24,855,645) | (9,575,795) | (4,551,621) | (43,430,098) |
| 18 Ratio of Receipts to Disbursements | 97% | 93% | 97% | 98% | 96% |

Note 1: The \$29,300,000 for the DWSD loan receivable balance is calculated as follows.

| | |
|--------------|-----------------------------|
| (1,285,466) | FY 2016 Shortfall |
| (28,240,606) | FY 2017 Shortfall |
| (29,526,072) | Subtotal |
| 238,264 | June IWC not due until July |
| (29,287,808) | FY 2017 Shortfall-to-Date |

29,300,000 FY 2017 Shortfall-to-Date, Rounded

Note 2: During the preparation of this report DWSD made payments totaling approximately \$7 million in principal towards this loan receivable balance. This payment activity will be reflected in the February 2019 TRD report.



MARCH 2019 REVIEW

FINANCE COMMITTEE

May 1, 2019

Summary Financial Metrics



Detroit
Water & Sewerage
Department

| Month Ended Fiscal Quarter | Jul-18 2019,Q1 | Aug-18 2019,Q1 | Sep-18 2019,Q1 | Oct-18 2019,Q2 | Nov-18 2019,Q2 | Dec-18 2019,Q2 | Jan-19 2019,Q3 | Feb-19 2019,Q3 | Mar-19 2019,Q3 | Apr-19 2019,Q4 | May-19 2019,Q4 | Jun-19 2019,Q4 |
|---|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Water Volumes | Target | 269,000 | 273,100 | 270,500 | 233,800 | 224,500 | 226,600 | 216,400 | 213,300 | 223,100 | 211,000 | 240,200 |
| | Actual | 372,613 | 302,476 | 221,531 | 215,105 | 232,770 | 227,697 | 232,094 | | | | |
| | Status | | | | | | | | | | | |
| Total Active Meters | Target | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 | 178,000 |
| | Actual | 178,435 | 178,222 | 178,318 | 178,219 | 178,114 | 179,249 | 180,292 | | | | |
| | Status | | | | | | | | | | | |
| Billable Impervious Acreage | Target | 28,000 | 28,000 | 28,000 | 28,000 | 28,000 | 28,000 | 28,000 | 28,000 | 28,000 | 28,000 | 28,000 |
| | Actual | 27,842 | 27,796 | 27,802 | 27,722 | 27,688 | 27,686 | 27,702 | | | | |
| | Status | | | | | | | | | | | |
| Days in Accounts Receivable - Residential | Target | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 | 140 |
| | Actual | 186 | 184 | 183 | 184 | 186 | 188 | 190 | 192 | 194 | | |
| | Status | | | | | | | | | | | |
| 3-Month Rolling Average Collection Rate | Target | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% |
| | Actual | 106% | 93% | 91% | 91% | 89% | 87% | 87% | 90% | 92% | | |
| | Status | | | | | | | | | | | |
| 12-Month Rolling Average Collection Rate | Target | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% | 92% |
| | Actual | 92% | 91% | 91% | 91% | 92% | 92% | 93% | 93% | 92% | | |
| | Status | | | | | | | | | | | |
| Operating Cash Days on Hand | Target | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 | 120 |
| | Actual | 188 | 219 | 235 | 233 | 229 | 227 | 223 | 234 | 230 | | |
| | Status | | | | | | | | | | | |
| Days Payable Outstanding | Target | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 | 45 |
| | Actual | 113 | 65 | 64 | 75 | 50 | 32 | 80 | 86 | 43 | | |
| | Status | | | | | | | | | | | |
| Headcount | Target | 611 | 611 | 611 | 611 | 611 | 611 | 611 | 611 | 611 | 611 | 611 |
| | Actual | 537 | 526 | 526 | 524 | 545 | 550 | 547 | 547 | 543 | | |
| | Status | | | | | | | | | | | |
| O&M Spending | Target | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 | 9,592,255 |
| | Actual | 7,534,065 | 4,458,249 | 11,680,248 | 9,400,983 | 10,544,595 | 15,052,971 | 5,839,015 | 10,133,568 | 5,104,907 | | |
| | Status | | | | | | | | | | | |

Account Receivable Aging - Combined

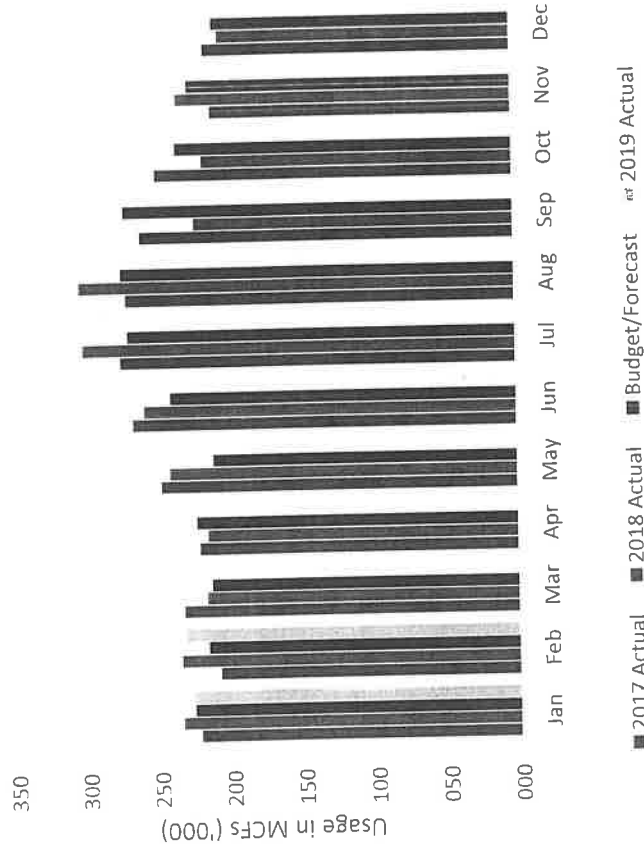


| Sales Class | # of Accounts | Avg. Balance | Current | > 30 Days | > 60 Days | > 180 Days | Accounts Receivable | |
|-----------------------------------|----------------|------------------|-------------------------------|------------------------------|-------------------------------|--------------------------------|---------------------------------|---------|
| | | | | | | | Balance | Balance |
| Residential | 287,163 | \$ 333.95 | \$ 13,086,411 13.6% | \$ 6,964,191 7.3% | \$ 18,014,716 18.8% | \$ 57,832,050 60.3% | \$ 95,897,368 100.0% | |
| Commercial | 28,170 | 1,214.26 | 8,200,196 24.0% | 2,645,743 7.7% | 6,774,295 19.8% | 16,585,500 48.5% | 34,205,734 100.0% | |
| Industrial | 4,797 | 3,213.76 | 5,017,496 32.5% | 1,075,617 7.0% | 2,635,108 17.1% | 6,688,180 43.4% | 15,416,401 100.0% | |
| Tax Exempt Entities | 8,396 | 1,535.14 | 2,289,341 17.8% | 1,162,767 9.0% | 2,514,012 19.5% | 6,922,887 53.7% | 12,889,006 100.0% | |
| Government Entities | 2,604 | 2,072.27 | 720,956 13.4% | 511,113 9.5% | 1,043,297 19.3% | 3,120,816 57.8% | 5,396,181 100.0% | |
| Subtotal - Active Accounts | 331,130 | \$ 494.68 | \$ 29,314,400 17.9% | \$ 12,359,431 7.5% | \$ 30,981,428 18.9% | \$ 91,149,432 55.6% | \$ 163,804,691 100.0% | |
| Inactive Accounts | 259,464 | 75.56 | 326,341 1.7% | 160,039 0.8% | 981,602 5.0% | 18,137,657 92.5% | 19,605,640 100.0% | |
| Total | 590,594 | \$ 310.55 | \$ 29,640,741 16.2% | \$ 12,519,470 6.8% | \$ 31,963,031 17.4% | \$ 109,287,089 59.6% | \$ 183,410,331 100.0% | |
| % of Total A/R | | | | | | | | |
| Water Fund | 211,500 | 188.63 | 7,040,579 | 2,461,937 | 5,717,160 | 24,675,493 | 39,895,169 | |
| Sewer Fund | 268,019 | 535.47 | 22,600,163 | 10,057,533 | 26,245,871 | 84,611,596 | 143,515,162 | |
| Total | 590,594 | 310.55 | 29,640,741 | 12,519,470 | 31,963,031 | 109,287,089 | 183,410,331 | |



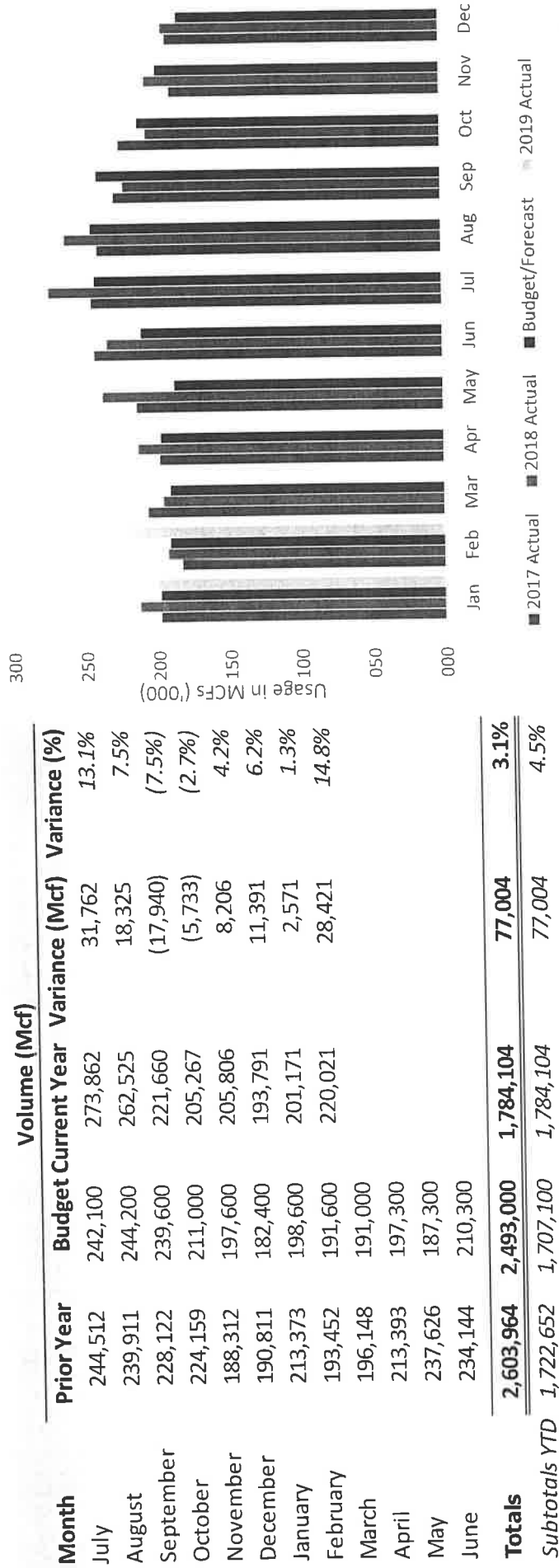
Retail Water Customers – Volumes

| Month | Volume (Mcf) | | | | Variance (%) |
|---------------|------------------|------------------|------------------|----------------|--------------|
| | Prior Year | Budget | Current Year | Variance (Mcf) | |
| July | 274,267 | 269,000 | 300,613 | 31,613 | 11.8% |
| August | 269,802 | 273,100 | 302,476 | 29,376 | 10.8% |
| September | 259,341 | 270,500 | 221,531 | (48,969) | (18.1%) |
| October | 247,700 | 233,800 | 215,105 | (18,695) | (8.0%) |
| November | 208,783 | 224,500 | 232,770 | 8,270 | 3.7% |
| December | 213,026 | 206,500 | 202,686 | (3,814) | (1.8%) |
| January | 235,142 | 226,600 | 227,697 | 1,097 | 0.5% |
| February | 235,436 | 216,400 | 232,094 | 15,694 | 7.3% |
| March | 216,866 | 213,300 | | | |
| April | 215,643 | 223,100 | | | |
| May | 241,641 | 211,000 | | | |
| June | 258,608 | 240,200 | | | |
| Totals | 2,876,255 | 2,808,000 | 1,934,971 | 14,571 | 0.5% |
| Subtotals YTD | 1,943,498 | 1,920,400 | 1,934,971 | 14,571 | 0.8% |





Retail Sewer Customers - Volumes



Retail Customers - Revenue

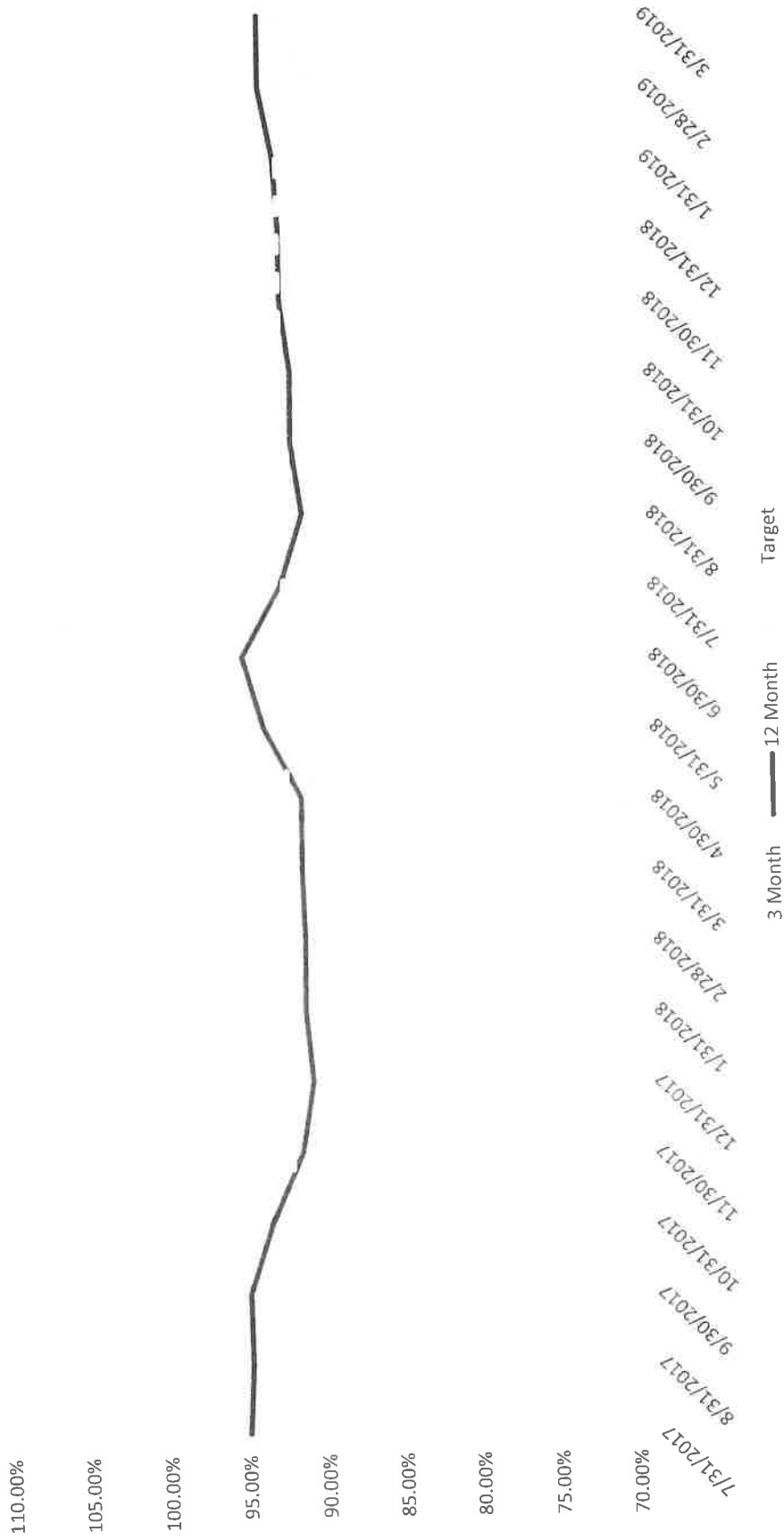


| Month | Revenue (\$) | | | | Variance (%) |
|---------------|----------------------|-----------------------|----------------------|---------------------|--------------|
| | Prior Year | Budget | Current Year | Variance (\$) | |
| July | \$ 9,060,075 | \$ 9,424,500 | \$ 10,203,409 | \$ 778,909 | 8.3% |
| August | 8,904,085 | 9,377,700 | 9,833,149 | 455,449 | 4.9% |
| September | 8,985,289 | 8,494,300 | 8,996,692 | 502,392 | 5.9% |
| October | 8,137,675 | 8,165,900 | 8,010,524 | (155,376) | (1.9%) |
| November | 7,473,555 | 7,750,100 | 8,325,013 | 574,913 | 7.4% |
| December | 7,523,827 | 8,224,900 | 7,659,930 | (564,970) | (6.9%) |
| January | 8,067,860 | 7,978,800 | 8,250,078 | 271,278 | 3.4% |
| February | 8,054,769 | 7,980,200 | 8,649,072 | 668,872 | 8.4% |
| March | 7,527,076 | 8,163,900 | | | |
| April | 7,744,106 | 7,856,900 | | | |
| May | 8,380,467 | 9,109,200 | | | |
| June | 8,865,874 | 9,063,600 | | | |
| Totals | \$ 98,724,659 | \$ 101,590,000 | \$ 69,927,867 | \$ 2,531,467 | 2.5% |
| Subtotals YTD | \$ 66,207,136 | \$ 67,396,400 | \$ 69,927,867 | \$ 2,531,467 | 3.8% |

| Month | Revenue (\$) | | | | Variance (%) |
|---------------|-----------------------|-----------------------|-----------------------|-----------------------|---------------|
| | Prior Year | Budget | Current Year | Variance (\$) | |
| July | \$ 24,994,676 | \$ 27,423,400 | \$ 27,851,140 | \$ 427,740 | 1.6% |
| August | 24,760,250 | 27,232,200 | 27,401,816 | 169,616 | 0.6% |
| September | 23,983,587 | 25,367,500 | 25,552,254 | 184,754 | 0.7% |
| October | 23,936,728 | 25,177,200 | 24,230,273 | (946,927) | (3.8%) |
| November | 22,627,682 | 23,861,000 | 24,314,979 | 453,979 | 1.9% |
| December | 22,405,515 | 25,293,500 | 23,925,500 | (1,368,000) | (5.4%) |
| January | 23,250,935 | 24,852,800 | 24,407,247 | (445,553) | (1.8%) |
| February | 22,291,876 | 25,329,400 | 25,593,281 | 263,881 | 1.0% |
| March | 22,184,361 | 25,474,500 | | | |
| April | 22,288,132 | 24,789,700 | | | |
| May | 24,665,214 | 26,205,200 | | | |
| June | 24,439,888 | 26,730,700 | | | |
| Totals | \$ 281,828,843 | \$ 307,737,100 | \$ 203,276,489 | \$ (1,260,511) | (0.4%) |
| Subtotals YTD | \$ 188,251,249 | \$ 204,537,000 | \$ 203,276,489 | \$ (1,260,511) | (0.6%) |



Collection Rates





Appendix:

Financial Statements

Nine Months Ended March 31, 2019

| City of Detroit Water Fund | | Statement of Net Position | |
|--|----------------------|----------------------------------|--|
| | June 30, 2018 | March 31, 2019 | |
| | (Audited) | | |
| Assets | | | |
| Cash and cash equivalents | \$ 67,327,735 | \$ 68,279,357 | |
| Restricted - Cash and investments | 45,800,588 | 29,604,968 | |
| Accounts receivable - Net of Allowance | 18,884,376 | 24,383,568 | |
| Due from other funds | 34,674,582 | 48,637,983 | |
| Inventory | 3,380,693 | 3,380,693 | |
| Prepaid expenses | 452,491 | 452,491 | |
| Receivables from Great Lakes Water Authority | 477,230,749 | 473,309,275 | |
| Capital assets - net | 525,909,122 | 539,388,176 | |
| Total assets | <u>1,173,660,336</u> | <u>1,187,436,511</u> | |
| Deferred Outflows of Resources - Pensions | 14,359,284 | 14,359,284 | |

City of Detroit Water Fund

Statement of Net Position (Continued)

| | June 30, 2018 (Audited) | March 31, 2019 |
|---|----------------------------|-----------------------|
| Liabilities | | |
| Current liabilities: | | |
| Accounts and contracts payable | \$ 5,887,060 | \$ 7,983,736 |
| Due to other funds | 44,482,592 | 55,465,402 |
| Due to Great Lakes Water Authority | (8,446,945) | (6,889,944) |
| Accrued interest | 1,941,491 | 1,941,491 |
| Other liabilities | 40,790,929 | 39,909,979 |
| Accrued compensated absences | 1,675,525 | 1,675,525 |
| Current portion debt | 520,056,143 | 511,671,286 |
| Long-term debt | 46,948,714 | 46,948,714 |
| Net pension liability | | |
| Total liabilities | 653,335,509 | 658,706,189 |
| Deferred Inflows of Resources - Pensions | 7,119,846 | 7,119,846 |
| Net Position | | |
| Fund Balance - End of year | 527,564,263 | 535,969,760 |
| Total net position | \$ 527,564,263 | \$ 535,969,760 |

City of Detroit Water Fund

Statement of Revenue, Expenses, and Changes in Fund Net Position

| | Nine Months Ended March 31, 2019 | |
|--|-------------------------------------|----------------------|
| | Accrual Basis | Contract Basis |
| Operating Revenue | | |
| Retail sales - Detroit | \$ 73,092,886 | \$ 73,092,886 |
| Other fees | 4,352,708 | 4,352,708 |
| Other revenue | 2,576,570 | 2,576,570 |
| Total operating revenue | 80,022,164 | 80,022,164 |
| Operating Expenses | | |
| Salaries, wages and benefits | 21,088,208 | 21,088,208 |
| Contractual Services | 10,686,255 | 10,686,255 |
| Other operating expense | 7,277,963 | 7,277,963 |
| Wholesale Charges | 15,244,578 | 15,244,578 |
| Depreciation | 12,699,687 | - |
| Total operating expenses | 66,996,691 | 54,297,004 |
| Operating Income | 13,025,473 | 25,725,160 |
| Nonoperating Revenue (Expenses) | | |
| Investment income | 322,435 | 322,435 |
| Capital Lease | 12,527,350 | 16,875,000 |
| Capital Outlay/Acquisitions | (85) | (85) |
| Debt Service | (17,469,675) | (28,791,236) |
| Gain (loss) on sale of assets | - | - |
| Total nonoperating expenses - Net | (4,619,976) | (11,593,887) |
| Change in Net Position | \$ 8,405,497 | \$ 14,131,273 |

City of Detroit Sewage Disposal Fund

Statement of Net Position

| | June 30, 2018 (Audited) | March 31, 2019 |
|--|----------------------------|----------------|
| Assets | | |
| Cash and cash equivalents | \$ 79,749,584 | \$ 67,981,836 |
| Restricted - Cash and investments | 6,674,626 | 100,049,342 |
| Accounts receivable - Net of Allowance | 73,437,178 | 89,238,625 |
| Due from other funds | 49,382,322 | 86,086,039 |
| Inventory | 848,085 | 848,085 |
| Prepaid expenses | 433,558 | 433,558 |
| Receivables from Great Lakes Water Authority | 606,549,558 | 601,372,835 |
| Capital assets - net | 491,981,714 | 503,771,745 |
| Total assets | 1,309,056,625 | 1,449,782,065 |
| Deferred Outflows of Resources - Pensions | 10,392,771 | 10,924,542 |

City of Detroit Sewage Disposal Fund

Statement of Net Position (Continued)

| | June 30, 2018 (Audited) | March 31, 2019 |
|---|----------------------------|-----------------------|
| Liabilities | | |
| Current liabilities: | | |
| Accounts and contracts payable | \$ 8,871,455 | \$ 6,665,668 |
| Due to other funds | 53,931,165 | 87,219,080 |
| Due to Great Lakes Authority | 53,639,106 | 52,081,064 |
| Accrued interest | 3,169,374 | 3,169,374 |
| Other liabilities | 54,935,846 | 53,628,808 |
| Accrued compensated absences | 2,513,288 | 2,513,288 |
| Current portion debt | - | - |
| Long-term debt | 395,922,651 | 478,924,072 |
| Net pension liability | 32,618,179 | 32,618,179 |
| Total liabilities | 605,601,064 | 716,819,533 |
| Deferred Inflows of Resources - Pensions | 6,258,922 | 6,258,922 |
| Net Position | | |
| Fund Balance - End of year | 707,589,412 | 737,628,152 |
| Total net position | \$ 707,589,412 | \$ 737,628,152 |

City of Detroit Sewage Disposal Fund

Statement of Revenue, Expenses, and Changes in Fund Net Position

| | Nine Months Ended March 31, 2019 | |
|--|-------------------------------------|----------------------|
| | Accrual Basis | Contract Basis |
| Operating Revenue | | |
| Retail sales - Detroit | \$ 206,626,937 | \$ 206,626,937 |
| Other fees | 2,895,099 | 2,895,099 |
| Other revenue | 11,102,282 | 11,102,282 |
| Total operating revenue | 220,624,318 | 220,624,318 |
| Operating Expenses | | |
| Salaries, wages and benefits | 26,650,743 | 26,650,743 |
| Contractual Services | 8,925,117 | 8,925,117 |
| Other operating expense | 10,175,058 | 10,175,058 |
| Wholesale Charges | 137,255,697 | 137,255,697 |
| Depreciation | 8,951,346 | - |
| Total operating expenses | 191,957,959 | 183,006,614 |
| Operating Income | 28,666,359 | 37,617,705 |
| Nonoperating Revenue (Expenses) | | |
| Investment earnings | - | - |
| Capital Lease | 15,311,202 | 20,625,000 |
| Capital Outlay/Acquisitions | (6,756) | (6,756) |
| Debt Service | (13,932,064) | (22,411,525) |
| Gain (loss) on sale of assets | - | - |
| Total nonoperating expenses - Net | 1,372,381 | (1,793,281) |
| Change in Net Position | \$ 30,038,740 | \$ 35,824,424 |



Treasury Update

March 31, 2019

Nikole Howard-Whitsett

Cash Balance Summary



| | Water Fund | | Sewer Fund | |
|---------------------------|-----------------------|----------------------|----------------------|-----------------------|
| | 6/30/2018 | 3/31/2019 | 6/30/2018 | 3/31/2019 |
| Unrestricted | | | | |
| Operating | \$ 15,266,537 | \$ 21,446,914 | \$ 44,694,855 | \$ 51,183,374 |
| Improvement and Extension | 42,994,009 | 44,527,028 | 35,059,899 | 14,722,301 |
| Pension | <u>9,073,472</u> | <u>\$ 2,308,015</u> | <u>181</u> | <u>\$ 2,076,165</u> |
| | \$ 67,334,019 | \$ 68,281,956 | \$ 79,754,935 | \$ 67,981,840 |
| Restricted | | | | |
| Bond | 36,346,022 | 19,389,092 | - | 91,760,425 |
| Affordability | 1,184,871 | 1,297,321 | - | - |
| Retainage | 2,699,459 | 3,923,627 | 654,839 | 2,736,015 |
| Construction | <u>3,464,524</u> | <u>2,994,923</u> | <u>519,787</u> | <u>52,914</u> |
| | 43,694,876 | 27,604,962 | 1,174,626 | 94,549,355 |
| Total Cash | \$ 111,028,895 | \$ 95,886,919 | \$ 80,929,561 | \$ 162,531,194 |



Insured Balance Summary

| Banking Institution | Insured | Uninsured | Total |
|----------------------------|-----------------------|---------------------|-----------------------|
| Comerica | \$ 93,954,360 | \$91,760,425 | \$ 185,714,785 |
| First Independence | 67,242,932 | 1,575,867 | 68,818,800 |
| JP Morgan Chase | 297,048 | 1,047,321 | 1,344,368 |
| US Bank | 500,000 | 2,040,123 | 2,540,123 |
| Total Cash | \$ 161,994,340 | \$96,423,736 | \$ 258,418,076 |

Thank You



[facebook.com/DWSDDetroit](https://www.facebook.com/DWSDDetroit)



[@DetroitWaterDep](https://twitter.com/DetroitWaterDep)



[@detroitwatersewerage](https://www.instagram.com/detroitwatersewerage)



CITY OF DETROIT
OFFICE OF THE CHIEF FINANCIAL OFFICER
OFFICE OF DEVELOPMENT AND GRANTS

COLEMAN A. YOUNG MUNICIPAL CENTER
2 WOODWARD AVENUE, SUITE 1026
DETROIT, MICHIGAN 48226
PHONE: 313 • 628-2158
FAX: 313 • 224 • 0542
WWW.DETROITMI.GOV

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July 11, 2019

The Honorable Detroit City Council
ATTN: City Clerk Office
200 Coleman A. Young Municipal Center
Detroit MI 48226

RE: Authorization to submit a grant application to the U.S. Department of Transportation for the FY 2019 Better Utilizing Investments to Leverage Development (BUILD) Grant

The City of Detroit Department of Public Works, in partnership with the Michigan Department of Transportation, is hereby requesting authorization from Detroit City Council to submit a grant application to the U.S. Department of Transportation for the FY 2019 Better Utilizing Investments to Leverage Development (BUILD) Grant. The amount being sought is \$25,000,000.00. The Federal share is \$25,000,000.00 of the approved amount, and there is a total cash match of \$14,989,875.00. The Department of Public Works will provide \$9,959,500.00 in match funding and the Michigan Department of Transportation will provide \$5,030,375.00 in match funding. The total project cost is \$39,989,875.00.

The FY 2019 Better Utilizing Investments to Leverage Development (BUILD) Grant will enable the department to:

- Create robust and integrated road improvements to channel surface truck traffic from the planned Gordie Howe International Bridge (GHIB) to Fort Street and mitigate traffic congestion for the surrounding community
- Reconstruct Jefferson Avenue from the GHIB to downtown and provide a safer and easy to navigate non-motorized route

If the application is approved, a cash match will be provided from appropriation 20453 and appropriation 04189.

We respectfully request your approval to submit the grant application by adopting the attached resolution.

Sincerely,

Ryan Friedrichs
Director, Office of Development and Grants
CC:
Kateri Bounds, Deputy Director, Grants
Sajjiah Parker, Assistant Director, Grants

This Request has been approved by the Office of Budget

CITY CLERK 2019 JUL 19 PM 0:59

RESOLUTION

Council Member _____

WHEREAS, the Department of Public Works has requested authorization from City Council to submit a grant application to the U.S. Department of Transportation, for the FY 2019 Better Utilizing Investments to Leverage Development (BUILD) Grant, in the amount of \$25,000,000.00, to mitigate traffic congestion coming off of the planned Gordie Howe International Bridge (GHIB); and

WHEREAS, the Department of Public Works is partnering with the Michigan Department of Transportation to submit this application, and the Michigan Department of Transportation will provide match funds in the amount of \$5,030,375.00; and

WHEREAS, the Department of Public Works has \$3,319,833.33 available in its bond funds Departmental allocation in appropriation 20453. In addition, the department has committed \$2,319,833.33 from its FY 2020-2021 Departmental allocation, and committed \$4,319,833.34 from its FY 2021-2022 Departmental allocation, in its Major Street Funds in appropriation 04189, in order to provide funds for the total City match requirement, in the amount of \$ 9,959,500.00, for the FY 2019 Better Utilizing Investments to Leverage Development (BUILD) Grant; and

WHEREAS, this request has been approved by the Office of Budget; now

THEREFORE BE IT RESOLVED, the Department of Public Works is hereby authorized to submit a grant application to the U.S. Department of Transportation for the FY 2019 Better Utilizing Investments to Leverage Development (BUILD) Grant.



CITY OF DETROIT
OFFICE OF THE CHIEF FINANCIAL OFFICER
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Grant Application Request Form (GARF)

In order to secure the Office of Development and Grants (ODG) approval required under Section 18-4-2 of the Detroit City Charter, this form is to be filled out by City Departments as soon as possible upon learning of an opportunity that the Department would like to pursue. This form must be signed and submitted not later than 20 business days prior to the application deadline.

Please submit this form to the following ODG staff: Sajjiah Parker, Assistant Director, parkersa@detroitmi.gov and Greg Andrews, Program Analyst IV, andrewsgr@detroitmi.gov

| | |
|---|---|
| City Department | DPW |
| Date | 7/9 |
| Department Contact Name | Caitlin Marcon |
| Department Contact Phone | 313-224-3906 |
| Department Contact Email | marconc@detroitmi.gov |
| Grant Opportunity Title | FY 2019 BUILD Transportation grants program |
| Grant Opportunity Funding Agency | US DOT |
| Web Link to Opportunity Information | https://www.transportation.gov/sites/dot.gov/files/docs/subdoc/391/fy-2019-build-info-fr.pdf |
| Award Amount (that Department will apply for) | \$25,000,000 |
| Application Due Date | 7/15/2019 |
| Anticipated Proposed Budget Amount | \$39,989,875 |
| City Match Contribution Amount | \$9,989,500 |
| Source of City Match (include Appropriation Number, Cost Center, and Object Code) | Act 51 /Bonds (See note below) |
| List of programs/services/activities to be funded and the Budget for each Sample: - ABC Afterschool program: \$150,000 - XYZ Youth leadership program: \$100,000 - Salary/Benefits: \$95,000 - Supplies: \$5,000 | Reconstruct W Jefferson from Sieve Yzerman to West Grand, including the addition of parking adjacent to Centennial Park; add multi-modal connection on West Grand from Jefferson to Fort St; resurface Fort St from West Grand to Miller Road, and Clark Street from Fort to West Jefferson, and add protected cycletrack; Reconstruct W Jefferson from Clark St to Campbell St and add protected cycletrack. |
| Brief Statement of Priorities/Purpose for the Application Sample: To support expansion of promising youth development programs in MNO neighborhood. | To create robust and integrated road improvements to channel surface truck traffic from GHIB to Fort St, mitigate congestion, and reconstruct Jefferson from GHIB to downtown to provide a safer easy to navigate non-motorized route |
| Key Performance Indicators to be Used to Measure the Programs/Services/Activities Sample: # of kids newly enrolled in ABC and XYZ % of kids from ABC who demonstrate improved educational performance | # of miles reconstructed # of miles resurfaced # miles of non-motorized supports added |

Caitlin Malloy-Marcon
Director's Name (Please Print)

Caitlin Malloy-Marcon
Director's Signature

7/10/19
Date

| Match Source | Amount | Account String |
|--------------|-----------------|--------------------------|
| Bond Funds | \$ 3,319,833.33 | 3301-20453-193337-632100 |
| FY 2020-2021 | \$ 2,319,833.33 | 3301-04189-193871-632100 |
| FY 2021-2022 | \$ 4,319,833.34 | 3301-04189-193871-632100 |
| Total: | \$ 9,959,500.00 | |



DRAFT BUDGET

| PARTNER | BUILD ASK | MATCH | TOTAL |
|-----------------|-----------------------|-----------------------|--------------|
| CITY OF DETROIT | \$14,939,250 | \$9,959,500 | \$24,898,750 |
| MDOT | UP TO \$10,060,750 | \$5,030,375 | \$15,091,125 |
| PROJECT TOTAL | UP TO \$25,000,000 | 37.5% \$14,989,875 | \$39,989,875 |





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July 11, 2019

The Honorable Detroit City Council
ATTN: City Clerk Office
200 Coleman A. Young Municipal Center
Detroit MI 48226

RE: Authorization to submit a grant application to the U.S. Department of Justice for the FY 2019 Innovations in Community-Based Crime Reduction Program

The Detroit Police Department is hereby requesting authorization from Detroit City Council to submit a grant application to the U.S. Department of Justice for the FY 2019 Innovations in Community-Based Crime Reduction Program. The amount being sought is \$1,000,000.00. There is no match requirement. The total project cost is \$1,000,000.00.

The FY 2019 Innovations in Community-Based Crime Reduction Program will enable the department to:

- Convene a cross sector partnership to develop and implement a place-based, data-driven strategy to address violent crime.

We respectfully request your approval to submit the grant application by adopting the attached resolution.

Sincerely,

Ryan Friedrichs
Director, Office of Development and Grants

CC:
Katerli Bounds, Deputy Director, Grants
Sajjish Parker, Assistant Director, Grants

This Request has been approved by the Office of the Budget.

CITY CLERK 2019 JUL 15 PM 2:59

RESOLUTION

Council Member _____

WHEREAS, the Detroit Police Department has requested authorization from City Council to submit a grant application to the U.S. Department of Justice, for the FY 2019 Innovations in Community-Based Crime Reduction Program, in the amount of \$1,000,000.00, to convene a cross sector partnership to develop and implement a place-based, data-driven strategy to address violent crime; now

THEREFORE BE IT RESOLVED, the Detroit Police Department is hereby authorized to submit a grant application to the U.S. Department of Justice for the FY 2019 Innovations in Community-Based Crime Reduction Program.



CITY OF DETROIT
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Grant Application Request Form (GARF)

In order to secure the Office of Development and Grants (ODG) approval required under Section 18-4-2 of the Detroit City Charter, this form is to be filled out by City Departments as soon as possible upon learning of an opportunity that the Department would like to pursue. This form must be signed and submitted not later than 20 business days prior to the application deadline.

Please submit this form to the following ODG staff: Sajjiah Parker, Assistant Director, parkersa@detroitmi.gov and Greg Andrews, Program Analyst IV, andrewsgr@detroitmi.gov

| | |
|---|--|
| City Department | Detroit Police Department (DP) |
| Date | 8/17/19 |
| Department Contact Name | Trisha Stein |
| Department Contact Phone | 313-598-2918 |
| Department Contact Email | steintr@detroitmi.gov |
| Grant Opportunity Title | Innovations in Community Based Crime Reduction |
| Grant Opportunity Funding Agency | DOJ-OJP |
| Web Link to Opportunity Information | https://ojp.gov/funding/Explore/CurrentFundingOpportunities.htm |
| Award Amount (that Department will apply for) | \$1,000,000 (48 months) |
| Application Due Date | July 15, 2019 |
| Anticipated Proposed Budget Amount | \$1,000,000 |
| City Match Contribution Amount | 0 |
| Source of City Match (Include Appropriation Number, Cost Center, and Object Code) | N/A |
| List of programs/services/activities to be funded and the Budget for each <i>Sample:</i> - ABC Afterschool program: \$150,000 - XYZ Youth leadership program: \$100,000 - Salary/Benefits: \$95,000 - Supplies: \$5,000 | Convene a cross sector partnership to develop and implement a place-base, data-driven strategy to address violent crime in squad car areas 9-10 and 5-01 |
| Brief Statement of Priorities/Purpose for the Application <i>Sample: To support expansion of promising youth development programs in MNO neighborhood.</i> | Reduce gun-related violent and drug crime in areas targeted for demolition of vacant properties and redevelopment. |
| Key Performance Indicators to be Used to Measure the Programs/Services/Activities <i>Sample:</i> # of kids newly enrolled in ABC and XYZ % of kids from ABC who demonstrate improved educational performance | Completion of place-based plan to reduce gun and drug-related violence plan in targeted area. Reduced amount of gun and drug violence Early action project completed |

Trisha Stein
Director's Name (Please Print)

[Signature]
Director's Signature

6/17/19
Date



CITY OF DETROIT
OFFICE OF THE CHIEF FINANCIAL OFFICER
OFFICE OF DEVELOPMENT AND GRANTS

COLEMAN A. YOUNG MUNICIPAL CENTER
2 WOODWARD AVENUE, SUITE 1026
DETROIT, MICHIGAN 48226
PHONE: 313 • 628-2158
FAX: 313 • 224 • 0542
WWW.DETROITMI.GOV

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June 14, 2019

The Honorable Detroit City Council
ATTN: City Clerk Office
200 Coleman A. Young Municipal Center
Detroit MI 48226

RE: Authorization to submit a grant application to the Federal Transit Administration for the FY 2019 Bus and Bus Facilities Grant

The Detroit Department of Transportation (DDOT) is hereby requesting authorization from Detroit City Council to submit a grant application to the Federal Transit Administration for the FY 2019 Bus and Bus Facilities Grant. The amount being sought is \$10,618,515.00. If awarded, the Michigan Department of Transportation will provide a match award, in the amount of \$2,123,703.00, to support this project. There is no City match requirement.

The FY 2019 Bus and Bus Facilities Grant will enable the department to:

- Purchase new fare boxes for DDOT buses
- Acquire hardware, software and other equipment to support improvements to DDOT fare boxes

We respectfully request your approval to submit the grant application by adopting the attached resolution.

Sincerely,

Ryan Friedrichs
Director, Office of Development and Grants

CC:
Katerli Bounds, Deputy Director, Grants
Sajjiah Parker, Assistant Director, Grants

CITY CLERK 2019 JUL 18 PM 2:59

RESOLUTION

Council Member _____

WHEREAS, the Detroit Department of Transportation (DDOT) has requested authorization from City Council to submit a grant application to the Federal Transit Administration, for the FY 2019 Bus and Bus Facilities Grant, in the amount of \$10,618,515.00, to Purchase new fare boxes for DDOT buses; and

WHEREAS, if the department is awarded, the Michigan Department of Transportation will provide a match award, in the amount of \$2,123,703.00, to support this project; now

THEREFORE BE IT RESOLVED, the Detroit Department of Transportation (DDOT) is hereby authorized to submit a grant application to the Federal Transit Administration for FY 2019 Bus and Bus Facilities Grant.



CITY OF DETROIT
OFFICE OF THE CHIEF FINANCIAL OFFICER
OFFICE OF DEVELOPMENT AND GRANTS

COLEMAN A. YOUNG MUNICIPAL CENTER
2 WOODWARD AVENUE, SUITE 1026
DETROIT, MICHIGAN 48226
PHONE: 313 • 628-2158
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Grant Application Request Form (GARF)

In order to secure the Office of Development and Grants (ODG) approval required under Section 18-4-2 of the Detroit City Charter, this form is to be filled out by City Departments as soon as possible upon learning of an opportunity that the Department would like to pursue. This form must be signed and submitted not later than 20 business days prior to the application deadline.

Please submit this form to the following ODG staff: Sajjiah Parker, Assistant Director, parkersa@detroitmi.gov and Greg Andrews, Program Analyst IV, andrewsgr@detroitmi.gov

| | |
|---|---|
| City Department | Department of Transportation (DDOT) |
| Date | June 11, 2019 |
| Department Contact Name | Elias Fischer |
| Department Contact Phone | 313-833-3681 |
| Department Contact Email | efits@detroitmi.gov |
| Grant Opportunity Title | FY 2019 Grants for Buses and Bus Facilities Program |
| Grant Opportunity Funding Agency | Federal Transit Administration (FTA) |
| Web Link to Opportunity Information | https://www.govinfo.gov/content/pkg/FR-2019-05-15/pdf/2019-09439.pdf |
| Award Amount (that Department will apply for) | \$10,618,515 |
| Application Due Date | June 21, 2019 |
| Anticipated Proposed Budget Amount | \$14,989,120 (includes FY 2019 Section 5307 funding) |
| City Match Contribution Amount | N/A |
| Source of City Match (include Appropriation Number, Cost Center, and Object Code) | Match to be provided by MDOT - \$2,123,703 |
| List of programs/services/activities to be funded and the Budget for each Sample: - ABC Afterschool program: \$150,000 - XYZ Youth leadership program: \$100,000 - Salary/Benefits: \$95,000 - Supplies: \$5,000 | - Fareboxes: \$5,500,000 - Hardware, software and equipment: \$9,489,120 |
| Brief Statement of Priorities/Purpose for the Application Sample: To support expansion of promising youth development programs in MNO neighborhood. | To support the replacement of the current fare collection system on all transit buses. This will include new fareboxes, software, hardware and support equipment. |
| Key Performance Indicators to be Used to Measure the Programs/Services/Activities Sample: # of kids newly enrolled in ABC and XYZ % of kids from ABC who demonstrate improved educational performance | N/A |

Angelica Jones

Director's Name (Please Print)


Director's Signature

6/13/19
Date

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MEMORANDUM

TO: Mr. David Whitaker, Director
Legislative Policy Division
City of Detroit

FROM: Roy McCalister, Jr., Councilman 
City of Detroit

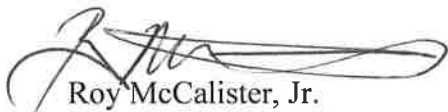
DATE: July 17, 2019

RE: **How can we create a (Parking) “Kiosk Free Zone” prohibiting installation on specific thorough fares within the City of Detroit?**

1. Requesting to have a “Kiosk Free Zone” on Livernois Avenue between Eight Mile Road to the North and Lodge Freeway to the south, on both the east and west sides of the street?
2. Do we have to create an ordinance or some sort of a “Kiosk Free Zone” petition process?
3. Can City Council as a body vote on “Kiosk Free Zone” requests or sectors?
4. If there is a way to keep parking kiosks from specific areas can you please advise this body on the best practice to enact?

This is an effort to assist the current and future businesses along the above described Livernois corridor in building their customer base. This measure would also further the efforts in customer appreciation during the various stages of streetscapes, construction and other renovations.

Sincerely,



Roy McCalister, Jr.
Detroit City Council

CC: Esteemed Colleagues
City Clerk

CITY CLERK 2019 JUL 18 4:05:59

to PHS

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City of Detroit

CITY COUNCIL

MARY SHEFFIELD
COUNCIL PRESIDENT PRO TEM
DISTRICT 5

MEMORANDUM

TO: James E. Craig, Chief of Police, Detroit Police Department

FROM: Council President Pro Tem Mary Sheffield *MS*

DATE: July 16, 2019

RE: Detroit Police Department Surveillance Technology Questions

- 1) Since the approval of the Data Works contract in 2017, how many times has the facial recognition software been used?
- 2) How many times has the facial recognition software been used, as the deciding factor, when bringing a case to a close?
- 3) What camera locations have been utilized in order to screen shot images for the use of the Data Works facial recognition software?
- 4) How many times has the facial recognition software falsely identified persons who were processed by the software?

CC: Honorable Colleagues
City Clerk

CITY CLERK 2019 JUL 16 PM 1:28

Coleman A. Young Municipal Center 2 Woodward Ave., Suite 1340 Detroit, Michigan 48226
(313) 224-4505 Fax (313) 224-0367
CouncilMemberSheffield@detroitmi.gov

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City of Detroit

CITY COUNCIL

MARY SHEFFIELD
COUNCIL PRESIDENT PRO TEM
DISTRICT 5

MEMORANDUM

TO: Lawrence Garcia, Corporation Counsel, Law Department
FROM: Council President Pro Tem Mary Sheffield
THRU: Council Member Benson, Chair, Public Health & Safety Standing Committee
DATE: July 18, 2019
RE: Community Input Over Government Surveillance (CIOGS) Ordinance

Please see the attached ordinance for Community Input Over Government Surveillance (CIOGS) and approve as to form.

CC: Honorable Colleagues
City Clerk

Coleman A. Young Municipal Center 2 Woodward Ave., Suite 1340 Detroit, Michigan 48226
(313) 224-4505 Fax (313) 224-0367
CouncilMemberSheffield@detroitmi.gov

1 **SUMMARY**

2 This proposed ordinance amends Chapter 18 of the 1984 Detroit City Code, *Finance and*
3 *Taxation*, by amending Article V, *Purchase and Supplies*, to add Division 12, *Community Input*
4 *Over Government Surveillance*; Sections 18-12-191 through 18-12-200; to define essential terms,
5 to require City Council approval of all surveillance technology procurements, to require a public
City Council hearing prior to any City Council surveillance technology procurement approvals, to
require submission of a Surveillance Technology Specification Report with procurement
6 requests to City Council, to require an annual Surveillance Technology Procurement Report from
7 relevant municipal agencies to City Council of all new acquisitions of surveillance technology, to
8 require an Annual Surveillance Use Report from relevant municipal agencies to City Council of
9 government surveillance activities, to require a public engagement meeting regarding the Annual
10 Surveillance Use Report, to establish a public reporting system for government surveillance
11 procurements, to provide for use of unapproved surveillance technology in exigent circumstances,
12 to prohibit certain problematic contractual provisions, and to establish whistleblower protections.

1 **BY COUNCIL MEMBER _____ :**

2 **AN ORDINANCE** to amend Chapter 18 of the 1984 Detroit City Code, *Finance and*
3 *Taxation*, by amending Article V, *Purchase and Supplies*, to add Division 12, *Community Input*
4 *Over Government Surveillance*; Sections 18-12-191 through 18-12-200; to define essential terms,
5 to require City Council approval of all surveillance technology procurements, to require a public
City Council hearing prior to any City Council surveillance technology procurement approvals, to
require submission of a Surveillance Technology Specification Report with procurement
6 requests to City Council, to require an annual Surveillance Technology Procurement Report from
7 relevant municipal agencies to City Council of all new acquisitions of surveillance technology, to
8 require an Annual Surveillance Use Report from relevant municipal agencies to City Council of
9 government surveillance activities, to require a public engagement meeting regarding the Annual
10 Surveillance Use Report, to establish a public reporting system for government surveillance
11 procurements, to provide for use of unapproved surveillance technology in exigent circumstances,
12 to prohibit certain problematic contractual provisions, and to establish whistleblower protections.

13 **IT IS HEREBY ORDAINED BY THE PEOPLE OF THE CITY OF DETROIT**

14 **THAT:**

15 **Section 1:** That Chapter 18 of the 1984 Detroit City Code, *Finance and Taxation*, Article
16 *V, Purchases and Supplies*, Division 12, *Community Input Over Government Surveillance*,
17 Sections 18-12-191 through 18-12-200 be added to read as follows:

18 **CHAPTER 18. FINANCE AND TAXATION**

19 **ARTICLE V. PURCHASE AND SUPPLIES**

20 **DIVISION 12. COMMUNITY INPUT OVER GOVERNMENT SURVEILLANCE**

21 **Sec. 18-12-191. Definitions.**

22 For the purpose of this division, the following words and phrases shall have the meanings
23 respectively ascribed to them by this section:

1 Surveillance data means any electronic data collected, captured, recorded, retained,
2 processed, intercepted, analyzed, or shared by surveillance technology.

3 Surveillance technology means any electronic surveillance device, hardware, or software
4 that is capable of collecting, capturing, recording, retaining, processing, intercepting, analyzing,
5 monitoring, or sharing audio, visual, digital, location, thermal, biometric, or similar information
6 or communications specifically associated with, or capable of being associated with, any specific
7 individual or group; or any system, device, or vehicle that is equipped with an electronic
8 surveillance device, hardware, or software.

9 (1) Surveillance technology includes, but is not limited to:

- 10 a. International mobile subscriber identity (IMSI) catchers and other cell site
11 simulators;
- 12 b. Automatic license plate readers;
- 13 c. Electronic toll readers;
- 14 d. Closed-circuit television cameras;
- 15 e. Biometric surveillance technology, including facial, voice, iris, and gait-
16 recognition software and databases;
- 17 f. Mobile DNA capture technology;
- 18 g. Gunshot detection and location hardware and services;
- 19 h. X-ray vans;
- 20 i. Video and audio monitoring and/or recording technology, such as
21 surveillance cameras, wide-angle cameras, and wearable body cameras;
- 22 j. Surveillance enabled or capable lightbulbs or light fixtures;

1 k. Tools, including software and hardware, used to gain unauthorized access
2 to a computer, computer service, or computer network;

3 l. Social media monitoring software;

4 m. Through-the-wall radar or similar imaging technology,

5 n. Passive scanners of radio networks,

6 o. Long-range Bluetooth and other wireless-scanning devices,

7 p. Radio-frequency I.D. (RFID) scanners, and

8 q. Software designed to integrate or analyze data from Surveillance
9 Technology, including but not limited to remote video and/or audio
10 monitoring, social media monitoring, surveillance target tracking, and
11 predictive policing software.

12 (2) Surveillance technology does not include the following devices or hardware, unless
13 they have been equipped with, or are modified to become or include, a surveillance
14 technology as defined in this section:

15 a. Routine office hardware, such as televisions, computers, and printers, that
16 is in widespread public use and will not be used for any surveillance or
17 surveillance-related functions;

18 b. Parking Ticket Devices (PTDs);

19 c. Cell phones;

20 d. Manually-operated, non-wearable, handheld digital cameras, audio
21 recorders, and video recorders that are not designed to be used
22 surreptitiously and whose functionality is limited to manually capturing and
23 manually downloading video and/or audio recordings;

1 e. Surveillance devices that cannot record or transmit audio or video or be
2 remotely accessed, such as image stabilizing binoculars or night vision
3 goggles;

4 f. Municipal agency databases that do not and will not contain any data or
5 other information collected, captured, recorded, retained, processed,
6 intercepted, or analyzed by surveillance technology; and

7 g. Manually-operated technological devices that are used primarily for internal
8 municipal agency communications and are not designed to surreptitiously
9 collect surveillance data, such as radios and email systems.

10 **Sec. 18-12-192. City Council approval of all surveillance technology procurements;**
11 **submission of, and reliance upon, Surveillance Technology Specification Reports.**

12 (a) Pursuant to Section 4-122 of the Charter, all municipal agencies must obtain City
13 Council approval, subsequent to a properly-noticed public City Council hearing, before
14 engaging in any of the

15 following procurements:

16 (1) Seeking or accepting non-City Council approved funds for the
17 procurement of a surveillance technology not previously
18 approved by the City Council, including but not limited to applying for a grant,
19 soliciting or accepting other local, state, or federal funding for new surveillance
20 technology, or soliciting or accepting in-kind or other donations of or for new
21 surveillance technology;

(2) Acquiring or borrowing a surveillance technology not previously approved by the
City Council, whether or not that procurement is made through the exchange of
monies or other consideration or at no cost; or

1 (3) Using new or previously procured surveillance technology for a purpose or in a
2 manner not previously enumerated in a Surveillance Technology Specification
3 Report that was submitted pursuant to Subsection (c) of this section; or

4 (b) The public City Council hearing required by Subsection (a) of this section may be foregone,
with respect to a specific procurement request, pursuant to a vote by a two thirds (2/3) majority of
City Council members serving.

5 (c) All applicable Surveillance Technology Specification Reports associated with a
6 surveillance technology, as well as any other applicable policies, standards, and procedures, shall be
7 submitted to the City Council
8 by the requesting agency or, in the case of the Police Department, in conjunction with the Police
9 Board of Commissioners, concurrently with any request for the approval of the procurement of a
10 surveillance technology. In the case of a procurement request by the Police Department, the
11 Council shall be provided a copy of the applicable governing policy approved by the Board of
12 Police Commissioners at the time the request is submitted.

13 (d) Surveillance Technology Specification Reports submitted for procurement of new
14 surveillance technology shall be made available to the public, at a designated page on the City
15 website and, where a public City Council hearing is required pursuant to Subsections (a) and (b) of this
16 section, it shall be posted at least 30 days prior to the City Council hearing.

17 Any Surveillance Technology Specification Report that is submitted with a
18 surveillance technology procurement approval request approved by City Council shall be made
19 available to the public for as long as the related surveillance technology remains in use by or in
20 the possession of the municipal agency.

 (e) The City Council shall only approve a procurement request for a surveillance
technology under this section if it determines the benefits of the surveillance technology outweigh
its costs, that the proposal will safeguard civil liberties and civil rights, and that the uses and
deployments of the surveillance technology will not be based upon discriminatory or viewpoint-

21 based factors or have a disparate impact on any community or group.

1 (f) Any granting of permission to procure a surveillance technology
2 made pursuant to this

3 division shall be pre-conditioned and done in reliance upon the information, obligations, and
4 limitations set forth in the Surveillance Technology Specification Report provided to the City
5 Council pursuant to Subsection (c) of this section.

6 (1) Any non-trivial inaccuracies contained in the information provided in a
7 Surveillance Technology Specification Report or any non trivial violations of the
8 obligations or limitations set forth in a Surveillance Technology Specification
9 Report provided to the City Council pursuant to Subsection (c) of this section shall
10 be deemed grounds for the City Council to revoke its procurement authorization for
11 the related surveillance technology.

12 (2) Upon a vote of the City Council to revoke its surveillance technology procurement
13 authorization, pursuant to Subsection (f)(1) of this section, all uses of the
14 previously authorized surveillance technology shall cease until such time as they
15 are approved in accordance with Subsection (a) of this section.

16 (g) Permission to acquire or use a new make or model of a surveillance technology
17 does not have to be sought where its functionality and capabilities do not differ in any significant
18 way from a previously approved version of the same surveillance technology.

19 **Sec. 18-12-193. Surveillance Technology Specification Reports.**

20 A Surveillance Technology Specification Report, the contents of which shall constitute
an enumeration of preconditions for the City Council's approval of the procurement and
ongoing use of any surveillance technology, shall be a publicly-released report,

written by the requesting agency or, in the case of the Police Department, in conjunction with the

21 Police Board of Commissioners, that includes, at a minimum, the following:

22 (1) Description: Information describing the surveillance technology and its
23 capabilities;

1 (2) Purpose: What specific purpose(s) the surveillance technology is intended to
2 advance.

3 (3) Deployment: If the surveillance technology will not be uniformly deployed or
4 targeted throughout the City, what factors will be used to determine where the
5 technology is deployed or targeted;

6 (4) Fiscal Impact: The fiscal impact of the surveillance technology; and

7 (5) Civil Rights/Liberties Impacts: An assessment identifying with specificity:

8 a. Any potential adverse impacts the surveillance technology, if deployed,
9 might have on civil liberties and civil rights; and

10 b. What specific, affirmative measures will be implemented to safeguard the
11 public from the potential adverse impacts identified in Subsection 5(a) of
this section.

12 (6) Authorized Use: For what specific capabilities and uses of the surveillance
13 technology is authorization being sought, and

14 a. What legal and procedural rules will govern each authorized use;

15 b. What potential uses of the surveillance technology will be expressly
16 prohibited;

17 c. Who, by employment category or position, will be authorized to operate the
18 technology and/or access its data; and

19 d. How and under what circumstances will surveillance data that was
20 collected, captured, recorded, or intercepted by the surveillance technology

21 be analyzed and reviewed.

22 (7) Data Collection:

1 a. What types of surveillance data will be collected, captured, recorded,
2 intercepted, or retained by the surveillance technology;

3 b. What surveillance data may be inadvertently collected during the authorized
4 uses of the surveillance technology, and what measures will be taken to
5 minimize the inadvertent collection of data; and

6 c. How inadvertently collected surveillance data will be expeditiously
7 identified and deleted.

8 (8) Data Protection: What safeguards will be used to protect surveillance data from
9 unauthorized access, including encryption and access control mechanisms.

10 (9) Data Retention: Insofar as the privacy of the public can be severely compromised
11 by the long-term storage of mass surveillance data, what rules and procedures will
12 govern the retention of surveillance data, including those governing:

13 a. The limited time period, if any, surveillance data will be retained. Such
14 information shall include a statement explaining why the designated
15 retention period is no greater than that which is absolutely necessary to
16 achieve the specific purpose(s) enumerated in the Surveillance Technology
17 Specification Report;

18 b. The specific conditions that must be met to retain surveillance data beyond
19 the retention period identified pursuant to Subsection (9)(a) of this section;

20 c. The process utilized to regularly delete surveillance data after the retention
21 period stated in Subsection (9)(a) of this section has elapsed and the auditing
22 procedures that will be implemented to ensure data is not improperly
retained;

1 (10) Surveillance Data Sharing: If a municipal agency is seeking authorization to share
2 access to surveillance technology or surveillance data with any other governmental
3 agencies, departments, bureaus, divisions, or units, or non-governmental persons or
4 entities in the absence of a judicial warrant or other legal mandate, it shall detail:

5 a. Which governmental agencies, departments, bureaus, divisions, or units, or
6 non-governmental persons or entities will be approved for (i) surveillance
7 technology sharing, and for (ii) surveillance data sharing;

8 b. How such sharing is necessary for the stated purpose and use of the
9 surveillance technology;

10 c. How it will ensure any entity sharing access to the surveillance technology
11 or surveillance data complies with the applicable Surveillance Technology
12 Specification Report and does not further disclose the surveillance data to
13 unauthorized persons and entities; and

14 d. What processes will be used to seek City Council approval of future
15 surveillance technology or surveillance data sharing agreements.

16 (11) Demands for Access to Surveillance Data: What legal standard must be met by
17 government entities or third parties seeking or demanding access to surveillance
18 data.

19 (12) Auditing and Oversight: What mechanisms will be implemented to ensure the
20 Surveillance Technology Specification Report is followed, including what
21 independent persons or entities will be given oversight authority, if and how regular
22 audits will be conducted, and in the case of the Detroit Police Department, also how

1 the Board of Police Commissioners will be involved in the auditing and oversight
2 process.

3 (13) Training: What training requirements will be required in connection with the use of
4 the surveillance technology. What qualifications and special skills will be required
5 of persons authorized to use the surveillance technology.

6 (14) Complaints: What procedures will allow members of the public to register
7 complaints or concerns, or submit questions about the deployment or use of a
8 specific surveillance technology, and how the municipal agency will ensure each
9 question and complaint is responded to in a timely manner.

10 **Sec. 18-12-194. Annual Surveillance Technology Procurement Report.**

11 (a) Not later than March 31st of each year, any municipal agency using a surveillance
12 technology must submit to City Council and, in the case of the Detroit Police Department also to
13 the Board of Police Commissioners, and make available on its public website, an Annual
14 Surveillance Technology Procurement Report.

15 (b) The Annual Surveillance Technology Procurement Report shall include the
16 following information for the previous calendar year:

17 (1) The total dollar value of all contracts associated with procurement of new
18 surveillance technology;

19 (2) The total number of contracts entered into for the procurement of new surveillance
20 technology;

21 (3) The number of occasions where surveillance technology was acquired temporarily
22 from other jurisdictions or entities, as well as the name(s) of the applicable
23 jurisdiction(s) or entity(s).

1 **Sec. 18-12-195. Annual Surveillance Use Report.**

2 (a) Not later than March 31st of each year, any municipal agency using a surveillance
3 technology must submit to the City Council and, in the case of the Detroit Police Department also
4 to the Board of Police Commissioners, and make available on its public website, an Annual
5 Surveillance Use Report for each specific surveillance technology used at any time during the
6 previous calendar year.

7 (b) The Annual Surveillance Use Report shall include the following information for
8 the previous calendar year:

9 (1) A brief overview of how the surveillance technology collected data;

10 (2) The total number of hours the surveillance technology was used;

11 (3) The total number of incidents for which the surveillance technology was used;

12 (4) The number of times surveillance data from the surveillance technology was shared
13 with external entities, the name(s) of all recipient entities, the type(s) of data
14 disclosed, and the general reason for the disclosure(s), unless disclosing such
15 information would disrupt the operation of a valid, confidential agreement between
16 or among law enforcement agencies;

17 (5) The number of times surveillance data was acquired from external entities the
18 name(s) of all entities sharing surveillance data, the type(s) of data acquired, and
19 the general reason for acquisition.

20 (6) The geographic deployment of surveillance technology, by individual census tract
21 as defined in the relevant year by the United States Census Bureau. For each census
22 tract, the municipal agency shall report how many individual days the surveillance
23 technology was deployed.

1 (7) The length of time surveillance technology was used to monitor internet activity,
2 as well as the number of specifically targeted people who were monitored.

3 (8) A summary of complaints or concerns that were received about the surveillance
4 technology;

5 (9) The results of any internal audits, any information about violations of the applicable
6 Surveillance Technology Specification Reports, and any actions taken in response;
7 and

8 (10) Total annual costs for the surveillance technology, including personnel and other
9 ongoing costs, and the sources of funding for the technology in the next fiscal year.

10 (c) For purposes of this section, "external entities" shall not include persons acting in
11 their individual capacities.

12 **Sec. 18-12-196. Public engagement meeting.**

13 Not later than 45 days of submission of the Annual Surveillance Use Report to City Council
14 in accordance with Subsection 18-12-195(a) of this code, any municipal agency using a
15 surveillance technology approved pursuant to this ordinance, and in the case of the Detroit Police
16 Department in coordination with the Board of Police Commissioners, shall hold one or more well-
17 publicized and conveniently located community engagement meetings at which the general public
18 is invited to discuss and ask questions regarding the Annual Surveillance Use Report and the
19 municipal
20 agency's use of surveillance technologies.

20 **Sec. 18-12-197. Public report of government surveillance authorizations.**

21 Not later than April 30th of each year, the City Council or its appointed designee, shall
22 release an annual public report, in print and on the City website, containing the following
23 information for the proceeding calendar year:

- 1 (1) The number of requests for approval submitted to the City Council for the (a)
2 funding, (b) acquisition, and (c) new uses of surveillance technology;
- 3 (2) The number of times the City Council approved requests submitted for the (a)
4 funding, (b) acquisition, and (c) new uses of surveillance technology;
- 5 (3) The number of times the City Council rejected requests submitted for the (a)
6 funding, (b) acquisition, and (c) new uses of surveillance technology;
- 7 (4) All Annual Surveillance Use Reports issued within the previous year.

8 **Sec. 18-12-198. Use of unapproved surveillance technology in exigent circumstances**

9 (a) A municipal agency may temporarily acquire, or temporarily use, surveillance
10 technology in exigent circumstances without following the provisions of this ordinance provided
11 that the municipal agency does all of the following:

- 12 (1) Use the surveillance technology to solely respond to the exigent circumstances;
- 13 (2) Cease using the surveillance technology within seven calendar days, or when the
14 exigent circumstances end, whichever is sooner;
- 15 (3) Keep and maintain only data related to the exigent circumstances and dispose
16 of any
17 data that is not relevant to an ongoing investigation, unless its retention is (a)
18 authorized by a court based on a finding of probable cause to believe the
19 information constitutes evidence of a crime; or (b) otherwise required by law;
- 20 (4) Not disclose to any third party any information acquired during exigent
21 circumstances unless such disclosure is (a) authorized by a court based on a finding
22 of probable cause to believe the information constitutes evidence of a crime; or (b)
 otherwise required by law;

1 (5) Within 45 days of the initiation of the exigent circumstances submit a written report
2 to the City Council summarizing that acquisition and/or use;

3 (b) Any technology temporarily acquired in exigent circumstances shall be returned
4 within seven days following its acquisition, or when the exigent circumstances end, whichever is
5 sooner.

6 **Sec. 18-12-199. Certain contracts prohibited.**

7 (a) It shall be unlawful for any municipal agency to enter into any contract or
8 agreement that conflicts with the provisions of this ordinance, including but not limited to contracts
9 or agreements containing non-disclosure agreements.

10 (b) It shall be unlawful for any municipal agency to enter into any contract or
11 agreement that facilitates the exchange of surveillance data in return for monetary or any other
12 form of consideration, including the assessment of additional fees or surcharges on unpaid fines
13 or debts.

14 **Sec. 18-12-200. Prohibitions; whistleblower protections.**

15 (a) It shall be unlawful for any municipal agency to violate any provision of this
16 ordinance, including but not limited to, funding, acquiring, or using a surveillance technology that
17 has not been approved pursuant to this ordinance or utilizing a surveillance technology in a manner
18 or for a purpose that has not been enumerated in a Surveillance Technology Specification Report
19 that accompanied an approved surveillance technology procurement request submitted pursuant to
20 Section 18-12-192 of this code.

21 (b) Municipal employees or agents shall not use any surveillance technology in a
22 manner that is inconsistent with or exceeds the terms of the Surveillance Technology Specification
23 Report that accompanied an approved surveillance technology procurement pursuant to Subsection

1 18-12-192(c) of this section, or pursuant to Section 18-12-197 of this code, and may in no
2 circumstances utilize surveillance technology in a manner which is discriminatory, viewpoint-
3 based, or violates the Charter, State Constitution, or United States Constitution.

4 (c) Any municipal employee or agent who violates this ordinance shall be subject to
5 appropriate disciplinary measures.

6 (d) No municipal agency or anyone acting on behalf of a municipal agency may take
7 or fail to take, or threaten to take or fail to take, a personnel action with respect to any employee
8 or applicant for employment, including but not limited to discrimination with respect to
9 compensation, terms, conditions, access to information, restrictions on due process rights,
10 privileges of employment, or civil or criminal liability, because the employee or applicant was
11 perceived to, about to, or assisted in, any lawful disclosure of information concerning the funding,
12 acquisition, or use of a surveillance technology or surveillance data, to any relevant municipal
13 agency, municipal law enforcement, prosecutorial, or investigatory office, or City Council
14 Member, based upon a good faith belief that the disclosure evidenced a violation of this ordinance.

15 **Section 2.** All ordinances, parts of ordinances, that conflict with this ordinance are
16 repealed.

17 **Section 3.** The provisions in this ordinance are severable. If any part or provision of
this ordinance, or the application of this ordinance to any person, entity, or circumstance,
is held invalid, the remainder of this ordinance, including the application of such part or
provision to other persons, entities, or circumstances, shall not be affected by such
holding and shall continue to have force and effect.

18 **Section 4.** This ordinance is hereby declared necessary for the preservation of the public
19 peace, health, safety, and welfare of the People of the City of Detroit.

20 **Section 5.** Where this ordinance is passed by two thirds (2/3) majority of City
Council

21 Members serving, it shall be given immediate effect and shall become effective upon publication

22 in accordance with Section 4-118(1) of the 2012 Detroit City Charter. Where this ordinance is
23 passed by less than two thirds (2/3) majority of City Council members serving, it shall become
1 effective thirty (30) days after publication in accordance with Section 4-118(2) of the 2012 Detroit
2 City Charter.

3 Approved as to form:

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Lawrence T. García
Corporation Counsel

DRAFT



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City of Detroit

CITY COUNCIL

JAMES E. TATE, Jr.
COUNCIL MEMBER

MEMORANDUM

TO: David Whitaker
Director, Legislative Policy Division

FROM: Councilman James E. Tate, Jr. *S.T.*

DATE: July 18, 2017

RE: Hospital Parking Standards

It has come to my attention that while many hospitals within the City of Detroit currently charge patients and visitors for off-street parking, many hospitals elsewhere provide on-site off-street parking free of charge. Understanding the difficulty associated with being hospitalized or caring for a loved one who is hospitalized, the additional burden of having to pay for parking appears to be an unnecessary one that should at the very least be minimized to the extent possible.

Therefore, I am requesting that the Legislative Policy Division provide a report outlining which hospitals in the metro-Detroit area currently require patients and visitors to pay for on-site off-street parking on their respective campuses and which hospitals provide such parking free of charge. In addition, please identify what legislative remedies, if any, may be available for the City of Detroit to encourage hospitals located within the City to provide free parking for patients and visitors. Lastly, please also identify any legislation that has been adopted by other governmental entities across the country to do the same.

If you have any questions or concerns, please feel free to contact DeAndree Watson of my office at (313) 224-0278. Thank you in advance for your prompt attention to this matter.

CC: Honorable Colleagues
Louise Jones, City Clerk's Office
Stephanie Washington, Mayor's Office

CITY CLERK 2019 JUL 18 PM 4:19