



Memo

To: Honorable Mayor Armitage; City Council
From: City Manager LaPere, MPAP
Date: August 31, 2022
Re: Proposal from Municipal Analytics for water rate study

Background

Pursuant to City Code, Chapter 68, Article III, Sections 68-96 and 68-97, the city must annually review its water and sewer rates and fix rates which will adequately cover costs of service including the projected capital needs to maintain and improve the system. Further, the ordinance requires we base those rates on 5-year projections of costs. Periodically, it is recommended to have a third-party review the rate structure to ensure the allocation of costs is appropriate to meet the needs of a properly funded system based on the operation, maintenance, and capital costs. Accordingly, the city has budgeted \$24,000 in the FY22-23 budget to perform that independent analysis of our water and sewer rate, recommend potential updates to ordinances and rate structure, and to present their findings and recommendations to the City Council and to the general public.

The City issued an RFP to solicit proposals for this work. We received one response to our request, from Municipal Analytics, with a total bid amount of \$16,900. A copy of their proposal is attached. This project will also include providing the city with an excel rate model to use for annual rate-setting in future years. The firm has completed similar projects for a significant number of municipalities/utility operators of varying sizes and complexities. Municipal Analytics was a partner in the city's recent operational and fiscal analysis, and their familiarity with the city's finances and organizational structure will be a benefit to this project.

For future rate setting, the proposal offers two options: to have the firm create an excel model or to purchase specialized rate setting software. In discussions with the consultant, the representative outlined the benefits of the software; however, staff does not feel we have the personnel available to fully take advantage of those features to justify the ongoing expense of the software maintenance. Also, the City's Finance Director is very familiar with this type of analysis utilizing an excel model. Therefore, we are recommending we proceed with the study utilizing the excel model.

Recommendation

City Council accept the proposal from Municipal Analytics and authorize the City to enter into an agreement for the completion of a water rate study as described in the RFP and submitted proposal for a total cost not to exceed \$16,900 (\$16,400 study and \$500 project expenses estimate).

Financial Impacts

The city budgeted \$24,000 for this project. This proposal would result in the project being under budget by \$7,100. The budgeted funds for this project are in 510-610.000-746.00 (\$12,000) and 510-640.000—746.000 (\$12,000).

Suggested Motion

City Council hereby accepts the proposal from Municipal Analytics and authorizes the City to enter into an agreement for the completion of a water rate study as described in the RFP and submitted proposal for a total cost not to exceed \$16,900 (\$16,400 study and \$500 project expenses estimate).

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attachment

Proposal

for a **Water and Sanitary Sewer Rate Study**

Prepared for

**City of Charlotte,
Michigan**



Submitted

August 18, 2022

by **Municipal Analytics,**

John Kaczor, Principal
2075 West Stadium Blvd., #3895
Ann Arbor, MI 48106
734-623-8033
johnk@municipalanalytics.com



Insights and applications for better financial management

2075 West Stadium Blvd., #3895
Ann Arbor, MI 48106
734-623-8033



August 16, 2022

Erin LaPere, City Manager
Amy Gilson, Public Works Director
Eric Smith, Finance Director/Treasurer
City of Charlotte
111 East Lawrence Avenue
Charlotte, Michigan 48813

Dear City of Charlotte Selection Committee,

We are pleased to respond to your request for a proposal to assist Charlotte with an evaluation of its water and sewer rates. This proposal provides two strategies we can take to meet the City's needs. Each approach will achieve the project objectives; the difference between the methods lies with the tools we develop, and the time required at each step of the study.

Municipal Analytics has substantial experience evaluating utility finances and rates in Michigan, and we have developed dozens of rate models for small and mid-sized public utilities. We approach each project with the objective of fully understanding the utility's operations and finances to help identify the true costs of the utility and the revenue required from rates to fully fund the utility. This includes appropriate reserve levels, debt service obligations, capital investments, operations, maintenance, and replacement.

One of the strategies presented includes the use of **Waterworth** software. Waterworth can provide the City with a highly dynamic, interactive, and easy-to-use software solution to the persistent problem of cumbersome spreadsheets. By using Waterworth, we can significantly reduce the time and effort required to complete the study, and it provides the ability to quickly test multiple operating and capital investment strategies and rate options. Waterworth's data visualization makes it easy to understand immediate and long-term impacts of different rate structure and capital investment alternatives, and it provides effective tools for communicating with policymakers and the public. *See Appendix A for an overview of Waterworth.*

The strategies summarized in this proposal will provide Charlotte with rates that are appropriate for the City's needs, with a focus on equity and cost recovery sufficient to maintain sustainable utility operations.

We appreciate the opportunity to propose our services to assist you in this important project, and we are confident that we possess the expertise you require. If you have questions regarding this proposal, please do not hesitate to contact me at 734-277-4454 or johnk@municipalanalytics.com.

Very truly yours,

A handwritten signature in black ink, appearing to read "John Kaczor", is written over a light blue horizontal line.

John Kaczor, Principal
Municipal Analytics, LLC

City of Charlotte
Water and Sanitary Sewer Rate Study Proposal

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Our Understanding of the Project Objectives

The City of Charlotte owns and operates a public wastewater collection and treatment system, comprised of about 38 miles of collection mains, 8 lift stations and a wastewater treatment plant. Additionally, the City produces and distributes safe drinking water from 3 groundwater wells, 52 miles of mains and distribution lines, and 2 water towers. Charlotte's municipal water and sewer services are provided to approximately 4,400 customers.

The water and sewer utilities are operated as an enterprise fund, and rates and charges are expected to be sufficient to produce revenue sufficient to meet all financial needs of the utilities, including operations and maintenance, capital improvements, debt service, and cash reserves. The City is committed to maintaining rates as low as possible to meet the financial needs of the utilities.

Operating and maintaining public utilities requires regular investment in infrastructure and qualified employees to ensure the efficient and safe provision of utility services. As costs and operating demands change, it is essential that the utilities' rates be periodically evaluated and adjusted. Through this process, rate equity is assured, and the financial health of the enterprise fund can be monitored and maintained.

At present, the City's water and sewer rates consist of a uniform consumption charge based on metered water usage, and a base charge which varies based on the customer's water meter size. The City Ordinance requires the commodity rate produce 45% of the annual budgeted revenues of the system; the base charge should produce at least 50% of budgeted revenues. Additional charges and fees include a system equity charge (reserved for capital replacement and improvements), late fees, water turn-on fees, sewer cleaning fees, meter testing and rental charges, and other miscellaneous charges designed to recover the cost of providing services to specific customers.

In recognition of the importance of sufficient rates to fund the operations and capital needs of these vital community services, the City is interested in undertaking a water and sanitary sewer rate study to forecast longer-term operations, maintenance and replacement (OM&R) expenditures, capital and debt costs, identify cash reserve needs, and evaluate alternative rate designs. To this end, the rate study should include the following:

- Determine the true total cost of providing water and sewer services
- Evaluate the rate impacts of capital projects and financing alternatives
- Develop a long-term financial plan to ensure the utilities remain financially stable
- Develop a long-term rate track to smooth out rate adjustments and minimize rate impacts on customers
- Review and offer recommendations to improve the relevant City Ordinances that govern rate setting and utility financial management
- Evaluate alternative rate structures, in conformance with AWWA M1 manual and WEF M.O.P. #27 standards, as well as state statutes, case law and other applicable rules and best practices
- Estimate the impact of different rate designs on customers

Municipal Analytics is pleased to respond to the City's request for a cost proposal to undertake this important study.

Project Work Plan and Deliverables

In preparing this proposal, we considered two approaches we could take to meet the City's needs for this transitional study. In summary, the options are:

1. Develop a fully customized long-range rate model in **Excel** format. Upon completion of the study, the City would be provided a copy of the Excel file and oriented in its use. Future updates could be managed by City staff, or the City could engage Municipal Analytics to provide updates as needed.
2. Utilize **Waterworth** software to build a long-range financial model, test alternative rate designs, evaluate customer impacts, and provide effective data visualizations to communicate utility finances and rate impacts. Waterworth is a cloud-based subscription software that is supported by Municipal Analytics and Waterworth experts. The initial subscription is included in the project fee; future renewals would be charged annually. City staff would be trained in using the software, but they would also always have access to professional support. Waterworth enables continuous utility financial and rate monitoring and management, and is a more user-friendly application than an Excel file.

Regardless of the option selected, our approach to the project will realize each of the project objectives noted on the previous page. In all cases, **Municipal Analytics** will take the lead on project management, data collection, evaluation of rate structure alternatives, strategic analysis of utility finances, recommendation of financial policies, rate conformance with the City's ordinance, preparation of draft and final reports, and communication with City staff and City Council.

If using **Waterworth**, we will utilize their experts to support develop of the in-depth financial forecast and evaluate rate options. Each rate model option will include O&M costs, capital, debt, cash reserves, customer data and rate alternatives.

The steps involved with undertaking either of the study approaches are outlined below.

Throughout the project, we will maintain regular contact with City personnel, engineers, and other parties associated with the issues under consideration. Data requests will be submitted to the appropriate individual or organization to gather the necessary information required to successfully undertake this study. In a general sense, the tasks, which will comprise our work plan, can be summarized as follows:

TASK 1 ASSEMBLE FINANCIAL INFORMATION AND REVIEW RELEVANT REPORTS

- Meet with City staff to understand goals, needs, deliverables and timelines of the study
- Prepare and submit a request for financial and customer data and documents
 - Budgets
 - Capital plans
 - Audited financial statements
 - Debt service schedules
 - Customer data
 - Volume data related to water pumped and wastewater treated
 - Ordinances and policies related to utility rates and financial management
- Review current water and sewer rate model and methodology

- Review submitted information and reports; organize data for the project; follow-up with staff to clarify data as needed

TASK 2 DETERMINE POLICY PRIORITIES FOR UTILITY FINANCES

- Review City ordinances, resolutions, and formal and informal utility financial management policies and guidelines
- Offer suggestions to amend ordinances and expand or update financial policies governing rate calculations, equity and other components of rate setting and financial management
- Integrate policies into the rate analysis

TASK 3 REVIEW CASH RESERVES FOR WATER AND SEWER UTILITY FUNDS

- Review existing cash reserve policies and actual cash balances
- Offer suggestions to help the City comply with or improve its policies
- Ensure cash reserves comply with applicable statutory and legal requirements, as well as bond covenants and industry best practices

TASK 4 ANALYZE HISTORIC CUSTOMER BASE AND CONSUMPTION PATTERNS

- Review historic data related to the number of customers of various classes, water usage and water loss (e.g., billing records, volumes of water pumped and sold, etc.)
- Prepare a profile of customer composition, usage, and revenues generated by the various user classifications

TASK 5 DOCUMENT CURRENT DEBT REQUIREMENTS

- Document the debt service obligations of the utility funds
- Incorporate actual debt service schedules into the rate-setting model
- Identify any bond requirements governing rates, cash balances, and coverage ratios

TASK 6 REVIEW DEMOGRAPHIC AND GROWTH DATA

- Review, and incorporate within the analysis, available information concerning the future composition and population of the service area
- Develop assumptions regarding usage trends

TASK 7 IDENTIFY CAPITAL REQUIREMENTS

- Confer with City officials and engineers to determine any planned or anticipated capital outlays in the utility systems
- Establish a minimum average capital investment to ensure system integrity
- Test different levels of capital investment, funding sources, timing, and other variables
- Extend the capital planning horizon to at least 10 years to ensure large future capital investments are considered within the rate framework developed in the model

TASK 8 DEVELOP A COMPREHENSIVE FINANCIAL FORECAST AND RATE MODEL

- Include several years of historical O&M costs to identify trends
- Factor in capital needs; test various levels of investment over 10-year period
- Incorporate customer data and forecasted trends
- Option 1: fully customized new model built in Excel
- Option 2: utilize Waterworth software to create a custom model, including all budgetary, capital, debt service, customer data and rate alternatives

TASK 9 FORECAST FUTURE EXPENDITURES AND USAGE LEVELS

- We will develop assumptions to forecast future year O&M costs
- Future customer base and usage levels will also be forecasted based on the City's historical records, anticipated growth, and industry trends
- Incorporate debt service schedules and develop pro forma schedules for any potential new debt

TASK 10 ESTIMATE CASH RESERVES AND TARGET NET INCOME

- Based on existing policies and input from the City, as well as industry best practices, develop appropriate cash reserve targets for each utility
- Factor cash needs into the analysis of future revenue requirements from rates
- Determine appropriate uses of cash reserves to fund capital or smooth rate changes from year to year

TASK 11 ESTIMATE FUTURE REVENUE REQUIREMENTS FROM RATES

- Estimate future revenue potential from all sources other than rates, including late fees, current cash reserves, interest earnings, grants, connection charges, etc.
- The net difference between forecasted expenses and these other revenues will be the revenue required from rates

TASK 12 CONDUCT A SURVEY OF RATES AND CHARGES IN THE LOCAL MARKET

- Identify the public utilities that comprise the local market
- Survey the identified market for relevant rates and charges
- Convert rates and charges to a uniform basis for comparison across utilities
- Prepare a summary of market findings

TASK 13 REVIEW EXISTING RATE STRUCTURE AND EVALUATE ALTERNATIVE RATE OPTIONS

- Review the City's current rate structure and revenue generation from different customer classes
- Consider alternatives to the current rate structure, consistent with the policy priorities established in Task 2
- Evaluate different rate designs relative to equity between users, ease of administration, and conformity to the City's billing software

- Test rate alternatives to understand the impact on different user classes and customer profiles

TASK 14 DEVELOP RATE PROJECTIONS RELATED TO DIFFERING COST SCENARIOS

- Calculate the potential rate impacts of various expense levels associated with different capital improvement strategies
- Utilize the long-term rate model to smooth rate adjustments from year to year. This is particularly important within the context of commercial and industrial customers, who rely on rate predictability in business planning.

TASK 15 FORMULATE CONNECTION CHARGES FOR NEW CUSTOMERS

- Provide the City with a policy and financial framework to calculate system equity charges
- Offer ordinance language to codify the agree-upon policies related to system equity charge (in addition to ordinance recommendations noted in Task 2, above)

TASK 16 PREPARE AND SUBMIT PRELIMINARY RATE STRUCTURE

- Prepare and submit a preliminary rate structure for water and sewer, for review by the City
- Prepare a draft report summarizing the approach used in our analysis, the assumptions included in the calculations and the rationale for the selected rate structure. The report will include analysis related to the impact of the developed rates on different user classes.

TASK 17 REVIEW MULTI-YEAR RATE STRUCTURE WITH THE CITY

- Review the developed rate projection model with City staff to ensure understanding of rate calculation methodology
- Demonstrate how the model can be used on a regular basis to maintain financial and rate stability
- After reviewing the draft report and rate structure with the City, we will perform any additional research or analysis related to specific issue areas prior to development of a final report

TASK 18 PREPARE AND PRESENT FINAL REPORT DOCUMENT

- Prepare a comprehensive final report document specifying all findings and research methodologies
- Provide ten printed reports, an electronic copy of the report, and access to the developed rate calculation model
- Present the study findings and recommendations in 2-3 meetings with the City Council and public in a setting determined by the City

Time Requirements

Depending on the study approach chosen and the availability of data, we anticipate this project will require about 90-120 days to complete. Using the Waterworth model will enable us to reduce the effort and time required to build out the financial analysis and rate options for consideration by the City. Of course, timing of any project approach will be dependent upon availability of clean data and efficient communications.

Related Experience

Listed below are three recent/current client references, including two projects utilizing Waterworth software, and one using a custom Excel model.

- **City of Ithaca – Water & sewer rate study using **Waterworth** software (2021)**
Provided comprehensive rate study for this small system. Project involved redesign of three-tier water and sewer rate structures with minimum usage, to a simpler and more equitable structure. Significant effort was required to align the proposed rate structure with a 10-year service agreement with a major sewer customer. Multiple scenarios related to different levels of capital investment, grant funding, rate design and debt vs. cash funding were tested.
 - Project cost: \$11,832 (discounted Waterworth pricing for small systems)
 - Reference:
 - Barb Fandell, City Treasurer-Finance Director
 - bfandell@ithacami.com
 - (989) 875-3200 ext. 305
 - 129 W. Emerson Street, Ithaca, MI 48847-1017
- **City of Port Huron – Water & sewer rate study using **Waterworth** software (2021-2022)**
Municipal Analytics has supported Port Huron with rate analysis since 2014. In the past two years, we began using Waterworth to better manage the utilities' complex data and capital planning needs. Over the years, we have worked diligently to maintain the lowest possible rates to fund O&M, capital and a heavy debt load (due to court-ordered sewer separation projects).
 - Project cost (2022): \$10,815 (subscription renewal, plus added professional services)
 - Reference:
 - Ed Brennan, Director of Finance
 - brennane@porthuron.org
 - (810) 984-9727
 - 100 McMorran Blvd., Port Huron, MI 48060
- **City of Frankenmuth – Water & sewer rate study using **Excel** spreadsheet (2018-2022)**
This study involved integrating a previous wholesale rate model into a new retail rate model, and balancing the respective charges for city and township customers. A number of corrections and adjustments were made to the rate methodology to ensure more accurate calculations. Additionally, the rate model transitions over a ten-year period the meter differential charges from an outdated table of differentials to the standard AWWA meter ratios. Efforts were taken in developing the rate model to align the capital plan with expiring debt to minimize rate variability and ensure fiscal stability of the utility funds.
 - Project cost: \$16,500 (original 2018 study and custom rate model)
 - Reference:
 - Bridget Smith, City Manager

- bsmith@frankenmuthcity.com
- (989) 652-9901
- 240 W Genesee St, Frankenmuth, MI 48734

Local Knowledge

Municipal Analytics previously worked with the City of Charlotte as a subcontractor to Vettraino Consulting on a Management Consulting Services study of City operations and finances.

Our Firm and Qualifications

Municipal Analytics, LLC is a specialty management consulting firm incorporated as a limited liability corporation in the State of Michigan. The firm provides municipal clients with a broad range of financial analysis, fiscal forecasting, rate setting, cost allocation and feasibility study services, designed to improve local government fiscal management and understanding. As municipal specialists, we are able to provide our clients with the right information needed to make effective fiscal decisions.

Operating from our Ann Arbor office, Municipal Analytics provides professional consulting services to cities, villages, townships, counties and other public entities. Over the prior five-year period we have completed numerous projects focusing on:

- Evaluation of utility cash reserves
- Development of Cost of Service rate designs
- Financial analysis of utility capital improvement plans
- Analysis of pension funding options, including MERS and Act 345 systems
- Analysis of OPEB funding options
- Cost allocation and cost sharing models
- Operational efficiency analysis
- Multi-year financial forecasting
- Utility debt service funding
- Review of utility operations.

Waterworth is a technology solution company founded by water management and computer engineering professionals in 2012. The Waterworth software empowers users to stabilize water rates and save for infrastructure upgrades. The software is backed by live, professional support, which makes the process of updating and analyzing financial and customer data quick and easy. This approach helps users efficiently achieve financially sustainable water and wastewater systems.

Waterworth's data visualizations help to quickly evaluate different operations, maintenance, and capital expenditure scenarios. The impact on revenue requirements and rates can be seen immediately, without the need for complex and cumbersome spreadsheets. The graphical outputs of the software also enable effective communication and storytelling, so elected officials and the public can see how costs drive rates. The community's utility assets, water customer base, population, water demand forecasts and non-rate revenues are also integrated into the model and the rate analysis. *See Appendix A for more information on Waterworth. Please contact us if you would like a demonstration of the software before approving its use.*

Project Team

This project will require extensive experience and expertise in the evaluation of financial issues related to utility rate setting, as well as a familiarity with the complexities of public utilities, capital planning, debt financing and associated enterprise fund financial management. To assure the appropriate level of expertise, we propose the following personnel for this project:

John Kaczor | Principal

John will serve as project manager and lead project consultant. In this capacity he will be responsible for conducting research, evaluating data, developing assumptions, creating a custom Excel model or utilizing Waterworth software, interacting with the City, developing the final report, and making presentations as needed. Mr. Kaczor has developed numerous utility financial analyses and rate models for primarily small and medium-sized municipalities in Michigan, and he is familiar with the requirements of the *Bolt* decision, as well as the AWWA M1 manual and WEF MOP #27 standards. *See Mr. Kaczor's attached resume for more about his experience and qualifications.*

Joy Leung | Associate Consultant

Joy will conduct research, compile, and test financial data, and support the project as directed. She holds a master's degree in Urban Planning from Columbia University. Prior to joining Municipal Analytics, she worked for the New York City Department of City Planning.

JP Joly | Waterworth Co-Founder and CEO

For more than 15 years, JP has worked side-by-side with water suppliers, building models and providing expertise to help local governments with asset management, long-term financial planning and utility-rate setting. JP also has substantial experience in water conservation planning, drought management planning, and emergency management planning. JP holds an honors degree in computer engineering from the University of Waterloo. For more information about Waterworth, visit www.waterworth.net.



John F. Kaczor, MPP

Municipal Financial Strategist &
Analytics Specialist

Mr. Kaczor is a municipal management consultant with over 27 years of professional consulting experience. He is trained in utility financial management and ratemaking, public policy analysis, financial evaluation, budget forecasting model development and cost allocation, and he is experienced in working with local governments and public entities of all sizes. Motivated to find the most appropriate solution for the given problem, and to provide local managers with tools to improve analysis and decision-making on an on-going basis.

Areas of Consulting Expertise

Fiscal Management – Reviewed and recommended improvements to financial policies including budgeting, cash management, investments, financial controls and fund reserves. Evaluated and made recommendations for financial software and employee training to improve information reporting required by management and policy makers. Conducted indirect central service cost allocation studies, in compliance with Federal guidelines.

Financial Modeling – Developed numerous spreadsheet-based financial models for municipalities that simulate the interaction within and between a variety of governmental and proprietary funds. Produced comprehensive revenue and expenditure estimates for future years, and analyzed multi-year financial implications of various assumptions and economic conditions.

Utility Rate Setting – Calculated appropriate water and sewer rates for small and large utility systems. Estimated revenue requirements using the cash needs-basis and the utility-basis for ratemaking. Recommended rate structures, financial policies and implementation strategies. Created multi-year, interactive spreadsheets that simplify annual rate recalculations.

Economic and Tax Analysis – Conducted feasibility studies of local income tax and public safety funding options. Evaluated the impact of proposed major commercial developments on the local and state economies. Identified alternatives to traditional economic development approaches for municipalities. Educated elected officials and managers in the complexities of Michigan's property taxation system.

Employee Compensation and Human Resources – Performed comprehensive analyses of employee classifications and compensation systems. Evaluated the scope and value of employee benefits. Designed comprehensive compensation systems based on detailed analyses of the labor market and internal equity considerations. Developed employer-specific personnel policies manuals and workplace safety manuals.

Operational Reviews – Evaluated the structure and operations of municipal functions including public safety, human services, utility billing, motor pool, utility operations and public works. Developed recommendations for improved service provision, customer focus and operational efficiency. Researched appropriate benchmarks and measured performance of operations.

Data Collection and Analysis – Designed complex, project-specific data collection and analysis tools involving research methodology, statistical evaluation and data interpretation. Synthesized diverse information for management decision-making.

Summary of Consulting Expertise

- Financial Forecasting & Five-year Financial Models
- Utility Rate Setting Analysis
- City Income Tax Feasibility Studies
- Administrative Cost Allocation Plan Development
- Municipal Budget Analysis
- Personnel Cost Modeling & Forecasting
- Shared Services Feasibility Studies
- User Fee Studies
- Capital Improvement Planning
- Municipal Operational Analysis

Education

University of Michigan - Master of Public Policy Studies

Western Michigan University - Bachelor of Arts (Economics and Sociology)

Years of Relevant Experience: 27

Registrations and Certifications

American Water Works Association
Cost of Service Utility Ratemaking and Financial Management

Professional Affiliations

International City/County Management Association

American Water Works Association

Government Finance Officers Association

Water for People

Energy Reduction Coalition-CRM

Summary of Consulting of Expertise

- Research and analysis
- Geographic information systems data analysis and mapping
- City financial analysis; budget forecasting
- Master plan review and development support
- Planning and development studies
- Technical assistance with land use and zoning issues
- Municipal operations analysis and strategic redesign

Current Position

Joy serves as Associate Consultant with Municipal Analytics LLC.

Experience

Joy has almost ten years of experience in the public sector, in several capacities. Her primary focus is on planning, with a significant background in research, demographic analysis, geospatial mapping and quantitative analysis. She is also well versed in community outreach, public presentations, organizational analysis and survey design, administration and data synthesis.

Prior work experience includes serving as a City Planner with New York City, as a Senior Research Associate with the Institute for Children and Poverty, and as a Language Instructor in Fukushima, Japan.

Education

Joy holds a graduate degree in Urban Planning from the Columbia University Graduate School of Architecture. She also has bachelor's degrees in Architectural Design and Linguistics from the University of Toronto.

Personal Mission Statement

Joy is dedicated to understanding and improving the information needs of municipal leaders, to better serve residents, businesses, and visitors.

Summary of Relevant Experience

We have listed below a sampling of the prior experience of our proposed project manager in assisting municipalities in establishing public utility rates or other financial and service issues pertaining to municipal budget forecasting and/or utility system operations.

Utility Rate Analysis – Including Financial Forecast and Rate Development

Adrian Township	SAW Grant Financial Analysis & Rate Study
Bedford Township	SAW & SRF User Charge System Evaluation
Dalton Township	Sewer Rate Analysis
Charter Township of Pennfield	Water and Sewer Rate Study
Charter Township of Pittsfield	Water and Sewer Cost of Service Rate Study
Charter Township of Saginaw	Water and Sewer Cost of Service Rate Study
City of Buchanan	Water and Sewer Rate Study
City of Covington, LA	Water and Sewer Cost of Service Rate Study
City of Frankenmuth	Water and Sewer Cost of Service Rate Study
City of Hamtramck	Water and Sewer Cost of Service Rate Study
City of Hart	Sewer Rate Study/Evaluation of Capacity Allocation
City of Ithaca	Water and Sewer Rate Analysis
City of Marshall	Water and Sewer Cost of Service Rate Study
City of Marysville	Water and Sewer Cost of Service Rate Study
City of Port Huron	Water and Sewer Rate Analysis
City of St. Louis, MI	Water and Sewer Cost of Service Rate Study (SAW)
Kochville Township	Water and Sewer Rate Study
Muskegon County Regional Water System	Water Cost of Service Rate Study
Richland Township	SAW Grant Financial Analysis & Rate Study
South County Water-Monroe County	Evaluation of Water Rates and Capital Needs
Thomas Township	Water and Sewer Utilities Rate Study
Village of Akron	SAW Grant Financial Analysis & Rate Study
Village of Capac	SAW Grant Financial Analysis & Rate Study
Village of Dundee	Water and Sewer Rate Analysis
Village of Elkton	SAW Grant Financial Analysis & Rate Study
Village of Maple Rapids	SAW Grant Financial Analysis & Rate Study
Village of Mayville	SAW Grant Financial Analysis & Rate Study
Village of North Branch	SAW Grant Financial Analysis & Rate Study
Village of Peck	SAW Grant Financial Analysis & Rate Study
Village of Pigeon	SAW Grant Financial Analysis & Rate Study
Village of Quincy	Water and Sewer Cost of Service Rate Study
Village of Reese	SAW Grant Financial Analysis & Rate Study
Village of Romeo	Water and Sewer Rate Analysis
Village of South Rockwood	Water and Sewer Rate Analysis
Village of St. Charles	Water and Sewer Cost of Service Rate Study (SAW)
Ypsilanti Communities Utility Authority	Wholesale Rate Development using the Utility Basis Cost of Services Rate Approach

Additional Projects Focusing on Full Cost Allocation – A Vital Step in the Utility Rate Method

City of Clawson	User Fee Study and Cost Allocation
City of Dearborn	Shared Services Cost Analysis
City of Huntington Woods	User Fee Study and Cost Allocation
City of Novi	Shared Services Cost Analysis
City of Royal Oak	Full Cost Allocation Plan
Pittsfield Charter Township	Full Cost Allocation Plan
Shelby Charter Township	Full Cost Allocation Plan
Kent County Communities	Shared Services Cost Analysis
Washtenaw County	Shared Services Cost Analysis
Wayne County	Full Cost Allocation Plan

Multi-Year Financial Model Projects Involving Forecasting Revenues and Expenditures

Calhoun County	Five-year financial model
Cass County	Five-year financial model
Charter Township of Delta	Five-year financial model
Charter Township of Saginaw	20-year financial model
Charter Township of Shelby	Five-year financial model
City of Battle Creek	Five-year financial model
City of Clawson	Ten-year financial model
City of Ecorse	Seven-year financial model
City of Iron Mountain	Five-year financial model
City of Lathrup Village	Five-year financial model
City of Marysville	Five-year financial model
City of Milan	Five-year financial model
City of Montague	Five-year financial model
City of North Muskegon	Five-year financial model
City of Portage	Five-year quarterly cash flow model
City of Rochester Hills	Five-year financial model
City of Rochester	Five-year financial model
City of St. Johns	Five-year financial model
City of Sturgis	Five-year financial model
City of Wayland	Five-year financial model
City of Williamston	Five-year financial model
City of Wyoming	Five-year financial model
City of Ypsilanti	Five-year financial model
Benzie County	Five-year financial model & cash flow model
Calhoun County	Five-year financial model
Cass County	Five-year financial model
Livingston County	Five-year financial model & cash flow model
Midland County	Five-year financial model
Monroe County	Five-year financial model
Newaygo County	Five-year financial model & cash flow model
Saginaw County	Five-year financial model & cash flow model
Village of Chelsea	Five-year financial model
Village of Jonesville	Five-year financial model

Project Fees and Expenses

Professional fees to complete this study are summarized in the table below. Project-related travel expenses will be billed at actual cost, using the IRS standard rate for business travel.

Professional Services	New Excel Rate Model			Waterworth Software		
	Hours	Rate	Cost	Hours	Rate	Cost
Municipal Analytics Principal Hours	90	\$160	14,400	40	\$160	\$8,000
Municipal Analytics Associate Hours	40	\$50	2,000	30	\$50	1,500
Total Professional Hourly Fees			\$16,400			\$9,500
Waterworth Software			0			7,490
Total Professional Fees			\$16,400			\$16,990
Project Expenses (billed at actual)			\$500			\$500

The initial subscription cost for Waterworth is good for one year, and it includes the initial models for both utilities, alternative financial scenarios, training and rate analysis/recommendations. The City can renew its subscription annually to maintain the model. Included with the subscription is support from Municipal Analytics and Waterworth. The Excel model would also provide financial and rate analysis tools and training, but it does not come with support after the initial study is completed.

Note: in compliance with the requirements of the City's RFP, this offer is good for 60 days.

Additional Tasks

Should the City desire additional assistance beyond the scope of work outlined above, we would be happy to continue serving its needs related to utility rates. **The provision of services not included in the Tasks outlined above would be on an as needed basis and would be billed at a rate of \$175 per hour.**

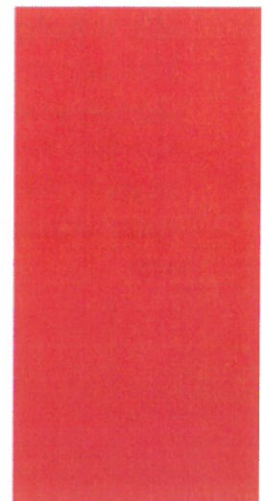
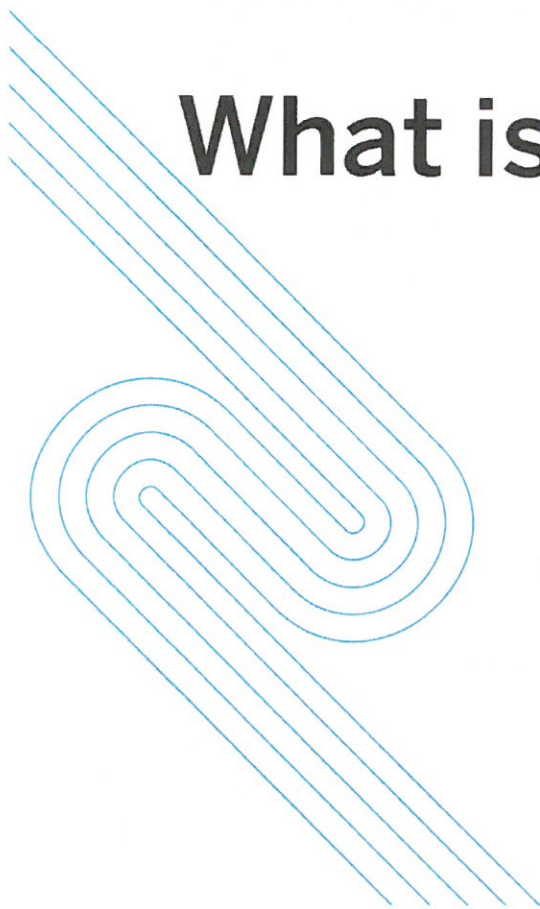
APPENDIX A: INTRODUCTION TO WATERWORTH

Waterworth is a web-based platform that empowers you to stabilize **water rates** and save for **infrastructure upgrades**, so that you can achieve **financially sustainable** water and wastewater systems.

Plus, it's backed by **professional support** when you need it.

What is Waterworth?

Water rate software



How can Waterworth help me?

Gain control of rates and meet revenue goals.

Design and test multiple rate structures to figure out which is best for your community. You can set rates based on cost-of-service, allocate them fairly among customer classes, and build your rate structures to meet long-term revenue, conservation, and community goals. No more guesswork.

Build funding — and stop borrowing — for capital expenditures.

Get a handle on capital replacement needs. Waterworth helps water and wastewater managers make a plan to ensure revenues are sufficient, rates are fair, and long-term goals - water conservation and revenue stability - are met. You'll also save money on consultants

Resolve a long-term public works impasse with a strong plan.

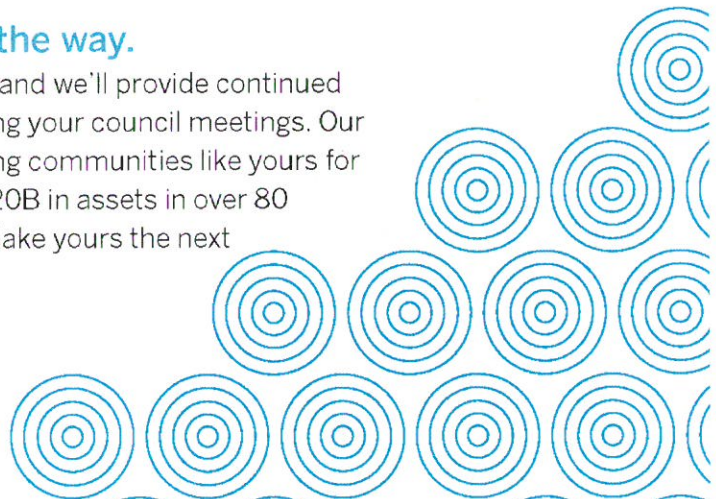
Take the drama out of rate increases while meeting your community's financial sustainability goals. Waterworth facilitates getting the entire community on board with sustainable service delivery. You'll be a hero.

Have more successful conversations with your elected officials.

Communicate capital spending, borrowing, and water rates needs to council members and the public using graphics that are easy to understand. Waterworth lets you model scenarios and create reports, then gives you the tools to present them graphically — and transparently. Everybody likes that.

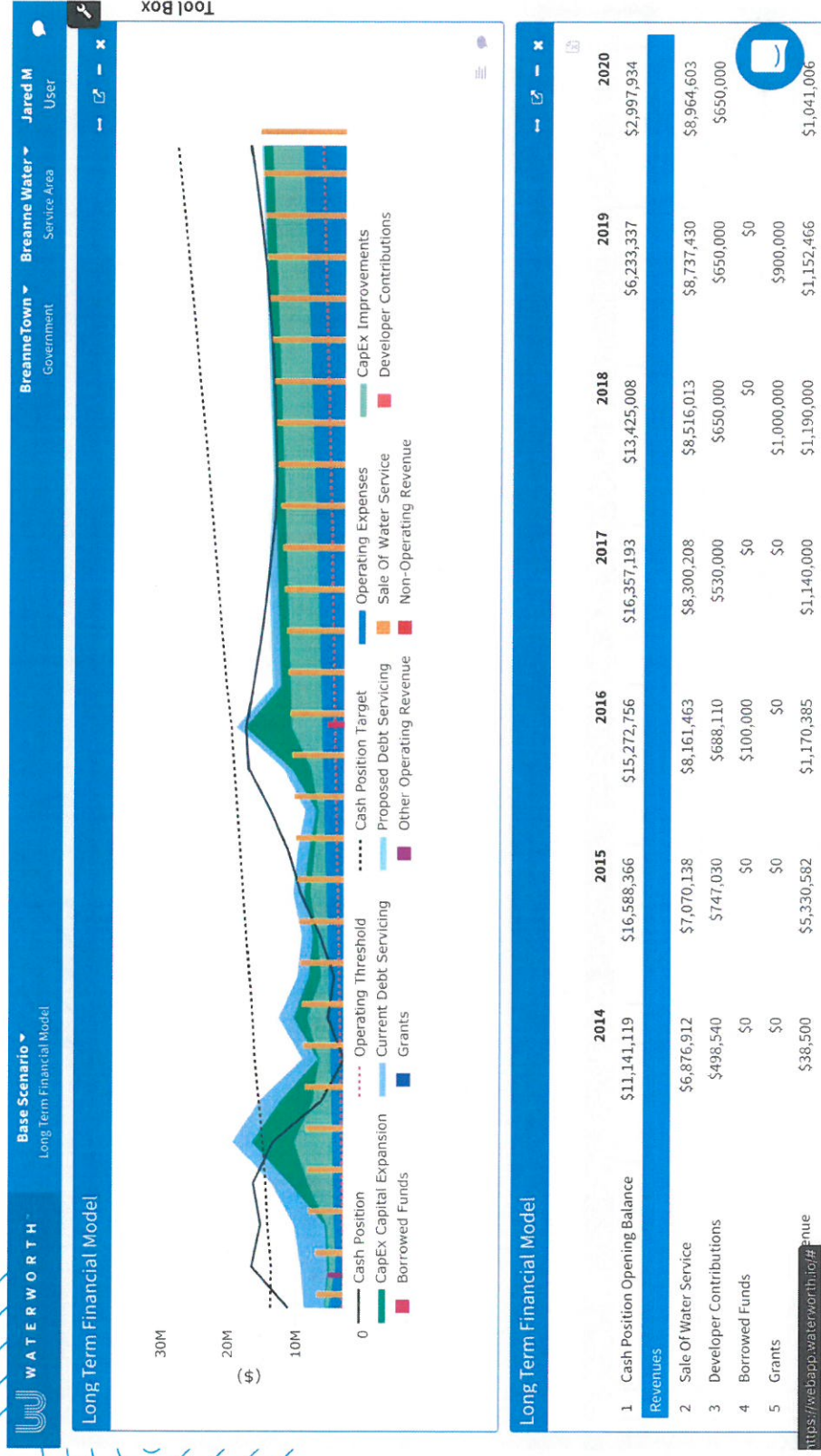
We'll help you every step of the way.

We'll help you onboard and get set up, and we'll provide continued support when you need it — even during your council meetings. Our founders, Kirk and JP, have been guiding communities like yours for 15 years. Waterworth helps manage \$20B in assets in over 80 communities across North America. Make yours the next one.



Tell a better story

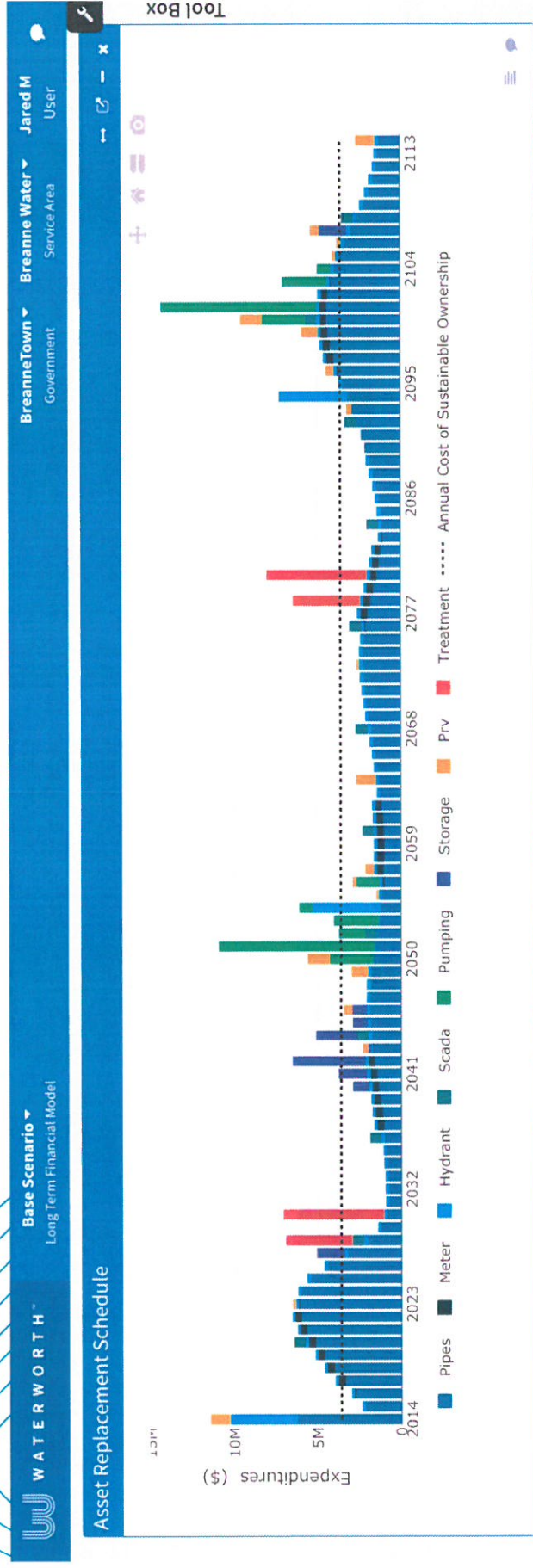
See the big picture with operating and capital costs, revenue and grants, all in one interactive dashboard.



"Waterworth was helpful in showing us what that future growth looks like and how much money needs to go into that." - Lisa Vollbrecht, Assistant Public Utilities Director, St. Cloud, MN

Use data to drive better decisions

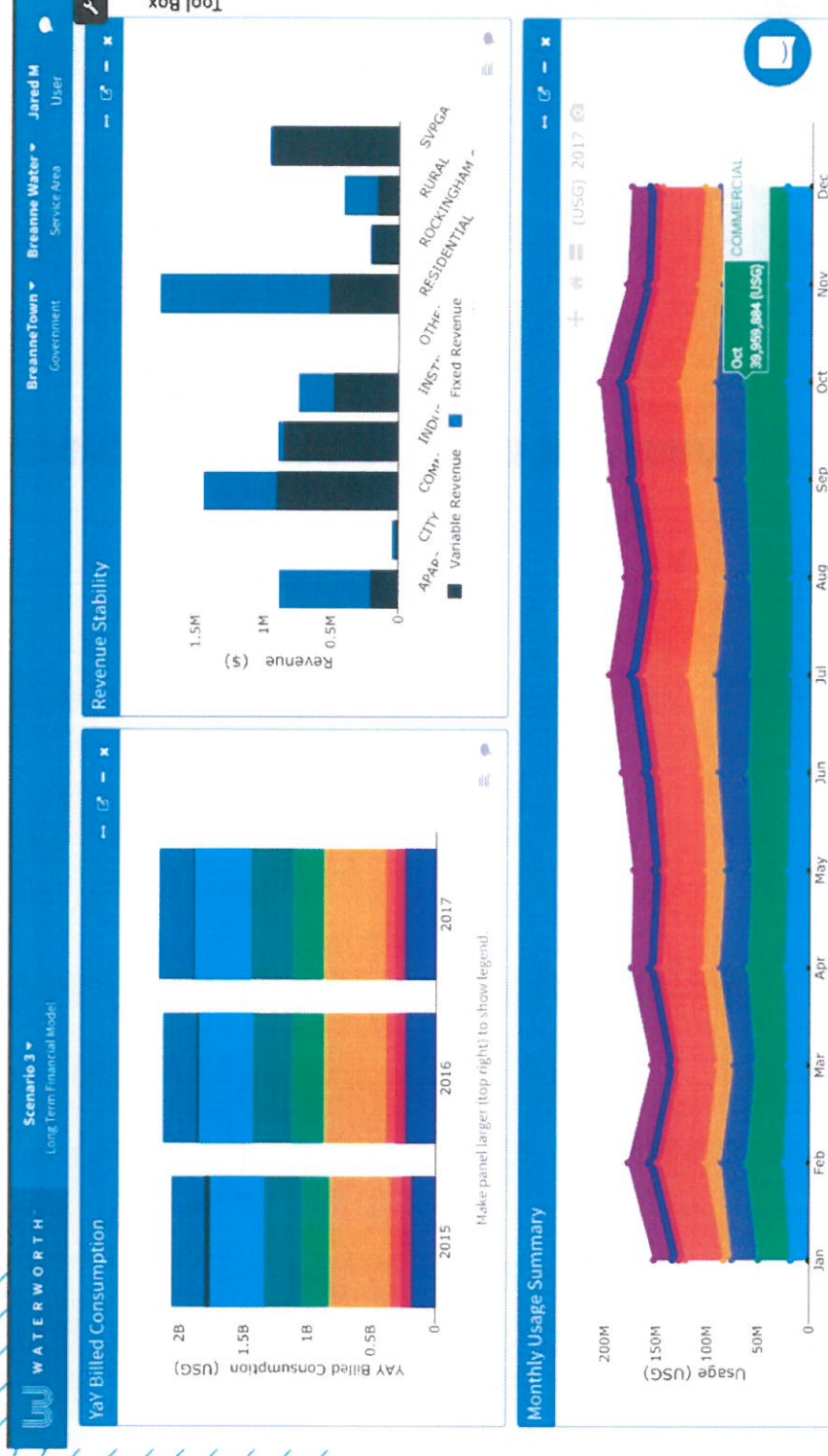
Prepare for future asset replacement today, to ensure intergenerational equity in the future.



"Because of Waterworth, we're able to more accurately account for what assets we have, what the value is, and what the replacement costs are." - Doug Bellatty, Water Superintendent, Granby, CO

Design your optimal rates

Easily model multiple rate scenarios, or see how adjustments to existing rates impact revenue.



"[Waterworth is] a financial forecasting tool rather than just a rate study tool." - Kristal Hughes, Finance Director, Madras, OR

APPENDIX B: REQUIRED CITY FORMS

BID FORM

RFP 2022-04A

Water and Sanitary Sewer Rate Study

Proposal Issued July 22, 2022

The Undersigned hereby offers and agrees to furnish the service in compliance with all terms, scope of work, conditions, specifications, and addenda in the RFP.

Addenda: The Undersigned has read and understands the RFP with all exhibits thereto, together with any written addendum issued in connection with any of the above. The Undersigned hereby acknowledges receipt of the following addenda:

N/A

(write "none" or "n/a" if none)

Company Name: MUNICIPAL ANALYTICS LLC

Street Address: 2075 W Stadium Blvd, #3895

City: ANN ARBOR State: MI Zip Code: 48106

Contact Name: JOHN KACZOR

Office Phone: 734-623-8033 Cell/Alternate Phone: 734-277-4454

Email: johnk@municipalanalytics.com

The Undersigned, by submission of this proposal, hereby agrees to be obligated, if selected to provide the stated services to the City, for the term stated herein, and to enter into an Agreement with the City in accordance with RFP and any written addenda as specified above.

The Undersigned hereby accepts all administrative requirements of the RFP and will be in compliance with these requirements, and if awarded a contract, the respondent is currently and will remain in compliance with applicable provisions of the City's Charter and Code of Ordinances.

I certify, under penalty of perjury, that I have the legal authorization to bind the firm hereunder:

Authorized Signature: John K Date: 8-16-2022

Printed Name/Title: Principal / John Kaczor

This Request for Proposals is not an offer of contract. Receipt of a proposal neither commits the City to award a contract to any party, even if all requirements stated in this proposal are met, nor limits the City's right to negotiate in its best interest. The City reserves the right to contract with a bidder whose proposal is determined to be in its best interests. The City reserves the right to reject any and all offers received. No proposals will be accepted from anyone who is in arrears for prior expenses or fees owed to the City.

Expenses incurred in the preparation of proposals in response to this Request for Proposals are the bidder's responsibility. No work performed by the selected contractor that is out of the scope as defined by the contractor's proposal will be reimbursed unless specifically authorized by the City in writing.

All proposals are subject to the Michigan Freedom of Information Act. Once bids are opened, the information contained therein becomes accessible by the public.

TAXES, TERMS, AND CONDITIONS

The City of Charlotte is exempt from Federal Excise, State Sales Tax, and Personal Property Tax.

If awarded the contract, the company will be required to perform the scope of work as described in this RFP and any written addendum, unless departure or substitution is clearly noted and described in the proposal. The City reserves the right to determine if a service being proposed is equal to the specified service requested.

In the case of default by the contractor, the City may procure services from other sources and hold the company responsible for any excess costs incurred. In case of error by the company, the City may, by discretion upon presentation of a written explanation by the company substantiating the error, reject the Contract and award to the next qualified company. Such error may be subject to default conditions.

QUESTIONS

Questions regarding this Request for Proposals shall be directed, in writing, to Erin LaPere, MPAP, City Manager, 111 East Lawrence Avenue, Charlotte MI 48813 or elapere@charlottemi.org not later than Friday, August 5th at 4:00 pm local time. All questions will be answered in writing, via email response to the sender, and posted as an addendum to the RFP.

The above insurance is not, and shall not be construed as, a limitation upon Contractor's obligation to indemnify the City.

HOLD HARMLESS

The Contractor shall, to the fullest extent permitted by law, at all times indemnify and save harmless the City of Charlotte from and against any and all claims and demands whatsoever, including costs, litigation expenses, counsel fees and liabilities in connection therewith arising out of injury to or death of any person whomsoever or damage to any property of any kind by whomsoever, to the extent caused in whole or in part, directly or indirectly, by the negligent acts or omissions of the Contractor, any person employed by the Contractor, or anyone for whom the Contractor is liable, while engaged in the work hereunder. This clause shall not be construed to limit, or otherwise impair, other rights or obligations of indemnity which exist in law, or in equity, for the benefit of the City.

IN WITNESS WHEREOF, the CONTRACTOR has set its hand this 16 day of August, 2022.



SIGNATURE

John Kaczor, Principal

PRINTED NAME & TITLE

Appendix C
NON-IRAN LINKED BUSINESS CERTIFICATION

Pursuant to Michigan law (Iran Economic Sanctions Act, Michigan PA 517 of 2012), before accepting any bid or proposal or entering into any contract for goods and services with any prospective vendor, City of Charlotte must obtain certification from the vendor that it is not an "Iran-Linked Business."

By signing below, I certify and agree on behalf of the company submitting this form and myself the following: (1) that I am duly authorized to legally bind the company submitting this proposal; (2) that the company submitting this proposal is not an "Iran-Linked Business," as that term is defined in Section 2(e) of the Iran Economic Sanctions Act, Michigan PA 517 of 2012; and (3) that I and the company submitting this proposal will immediately comply with any further certifications or information submissions requested by the county in this regard.

Company Name MUNICIPAL ANALYTICS LLC

Authorized Representative John Kaczor, Principal
(printed name and title)

Signature  Date 8-16-2022

VENDOR INFORMATION FOR THE CITY OF CHARLOTTE

Please complete the following information for the City of Charlotte to track vendor applicant information and for the City's purchasing process.

Business Name MUNICIPAL ANALYTICS LLC

Address 2075 W Stadium Blvd, #3895, Ann Arbor, MI
48106

Business Type (Sole Proprietorship, Corporation, LLC, etc.) LLC

Is your business a Disadvantaged Business Enterprise (DBE)? Yes ☒ No

Is your business a Minority and Women-Owned Business Enterprise (MWBE)? Yes ☒ No

Does your business have a small business status? ☒ Yes No

Any other business status, please provide information: N/A

Provide the name of the Certifying Entity (ties): _____

Have you conducted business with the City before? ☒ Yes No

- as a subcontractor

If the answer to the above question is NO, please provide your Federal ID Number and attach a copy of your W-9 Form. FEIN #: _____

How did you discover this Bid opportunity? email notification - BidNet

Do you use the MITN Purchasing Group Website (BidNet)?

☒ Yes No

If Yes, do you find it useful (explain) or if No, why? Yes - email notifications reduce effort to find bid opportunities

Completing the above information does not change your chances of being awarded a contract. The information collected will NOT be sold and will not be used to contact you.

Thank you.