

## REQUEST FOR QUALIFICATION

### DATA ANALYTICS SERVICES

The City is inviting Consultants to conduct consulting in a broad range of work for data analysis, work process optimization, as well as innovation implementation.

The Water Services Department requires greater agility and additional analytics to address current and future administration and operations challenges. The selected vendor will translate new and existing data into useful information for improved decision-making. This work will also provide a broader, system-wide view of operations, improve efficiency, and identify potential opportunities to streamline processes.

#### **PROPOSED TYPES OF WORK**

##### **A. Operational Projects:**

A.1. Analytics to improve the visibility of operational issues, create logical business cases, improve decision-making, plan strategic initiatives, gain new insights, and solve business challenges.

A.2. Provide data insights that increase situational awareness of operations challenges.

A.3. Rework and improve existing reporting; including those reports utilized to support investment decisions.

##### **B. Procurement Projects:**

B.1. Utilize spend, contract and supplier data to produce supply chain optimization strategies.

B.2. Measure savings and spending trends to get more accurate insight.

B.3. Help to quickly identify the anomalies in utility data, and investigate issues with utility suppliers using audit trails and source documentation.

##### **C. Facility Projects:**

C.1. Understand the needs of built environment and physical workplaces – energy management, space utilization and how to use it to reduce overhead.

C.2. Identify key trends, patterns, and insights within facility data for ongoing optimization.

##### **D. Utility Billing Projects:**

D.1. Rework existing data sets and reporting to provide additional insight into customer behavior and improve customer service outcomes.

D.2. Assist in the selection of new data analytics tools/platforms for COP WSD – consolidate and manage call center data, call center processes, and call center workforce management to update and improve on the customer experience.

D.3. Support targeted customer communication, payment methods and associated analytics.

### **E. Financial Projects:**

E.1. Research and evaluate the effects of utility rates in a large urban community. Advise and support City staff with utility rate modelling efforts.

E.2. Model water utility rate elasticity of demand and evaluating financial impacts, as well as developing projections of various types of residential and commercial development, as well as demographic and economic variables like migration, birth rates, and household formation that will have an impact on water use and wastewater generation.

E.3. Prepare strategies to address financial shortfalls and windfalls as well as prepare risk management profiles for a large, urban, public utility provider.

E.4. Integrate financial data and data modelling for the purposes of analysis and strategy.

E.5. Deliverables may also include the development of analytical tools for:

E.5.1 Tracking trends in costs, cost drivers, and service pricing variability contracting parties with a standard set of reports.

E.5.2 Ongoing monitoring of operational cost growth, quality, and spending.

E.5.3 Statistical modelling of financial initiatives across the department. Identifying cost stratified by social risk factors including income, race/ethnicity, geographic region, and language.

E.5.4 Ad hoc analyses to support other data use strategies for regulatory, policy, and program objectives and decision-making.

E.5.5 Web-based reports and dashboards including a cost estimator, online consumer services, and asset management practices.

E.5.6 Leveraging cloud-based, enterprise-grade solutions, platforms and services that have widespread adoption, scale easily and are cost-effective to acquire, implement and maintain.

### **F. Water Meter Projects:**

F.1. Provide ways to monitor water meters, determine meter health and accuracy, collect usage data, perform data analyses, identify issues for corrective action and/or provide other analytics.

### **G. Engineering:**

G.1 Forecast the anticipated asset's end-of-life based on asset attributes such as age, condition, maximum potential life, maintenance cost, type, environmental condition, etc.

G.2 Forecast the anticipated asset's replacement cost

G.3 Forecast the anticipated asset's rehabilitation cost

G.4 Forecast the asset's risk for failure based on the probability and consequence of failure.

G.5 Prioritize and group the replacement or rehabilitation of various assets into logical capital improvement program or project budget planning

**Potential list of work projects includes but is not limited to the following:**

- Strategy development and Master Planning
- Business Process Optimization
- Safety Management Systems
- Risk Based Cost Optimization
- Generating Assets Strategy
- Support Function Review
- Advanced Metering Project Management
- Federal Regulatory Compliance Framework
- Operations and Performance Improvement/Optimization
- Utility Asset/Portfolio Management
- Treatment Plant Performance
- Utility Storm Water
- Fleet Safety Management System
- Treatment Plant Major Outage Management
- Risk for Work Management
- Demand Forecasting Benchmark
- Water and Sewer Leak Detection
- Controls and Regulatory Compliance
- Operations Based Water Distribution
- Regulatory Compliance Framework
- Operational Review of Environmental Compliance
- Risk Based Internal Audit Planning
- Operational Readiness Review
- Billing, Metering, and Estimation
- Business Metrics, Risk Management and Decision Making
- Water Reliability
- Data Analytics
- Distribution Asset Management Value Modeling
- Service Delivery Optimization
- Customer Satisfaction
- Demand Forecasting Improvement
- Treatment Plant Asset Management Value Modeling
- Billing Estimation Methodology
- Non-Revenue Water Loss Monitoring
- Geographical Information System (GIS) Integration and optimization
- Water Conservation Activity

**Costs and Payments**

**A. General:** Any prompt payment terms offered must be clearly noted by the Contractor on all invoices submitted to the City for the payment of goods or services received. The City will make every effort to process payment for the purchase of material or services within

thirty to forty-five calendar days after receipt of a correct invoice unless a good faith dispute exists to any obligation to pay all or a portion of the account. Payment terms are specified in the Offer.

**B. Payment Deduction Offset Provision:** Contractor acknowledges that the City Charter requires that no payment be made to any Contractor as long as there is an outstanding obligation due to the City. Contractor agrees that any obligation it owes to the City will be offset against any payment due to the Contractor from the City.

**C. Late Submission of Claim by Contactor:** The City will not honor any invoices or claims which are tendered one (1) year after the last item of the account accrued.

**D. Discounts:** Payment discounts will be computed from the date of receiving acceptable products, materials and/or services or correct invoice, whichever is later to the date payment is mailed.

**E. No Advance Payments:** Advance payments are not authorized. Payment will be made only for actual services or commodities that have been received, unless addressed specifically in the Scope of Work for subscription services.

**F. Fund appropriation Contingency:** The Vendor recognizes that any agreement entered into will commence upon the day first provided and continue in full force and effect until termination in accordance with its provisions. The Vendor and the City herein recognize that the continuation of any contract after the close of any given fiscal year of the City, which ends on June 30th of each year, will be subject to the approval of the budget of the City providing for or covering such contract item as an expenditure therein. The City does not represent that said budget item will be actually adopted, said determination being the determination of the City Council at the time of the adoption of the budget.

**G. Maximum Prices:** The City will not be invoiced at prices higher than those stated in any contract resulting from this Offer. Contractor certifies, by signing this Offer that the prices offered are no higher than the lowest price the Contractor charges other buyers for similar quantities under similar conditions, as applicable and shown by quotes for like services and goods. Contractor further agrees that any reductions in the price of the goods or services covered by this Offer and occurring after award will apply to the undelivered balance. The Contractor will promptly notify the City of such price Reductions.

**H. F.O.B. Point:** All prices are to be quoted F.O.B. destination unless specified elsewhere in this solicitation.