DETERMINATION AND FINDING
FOR A SOURCE PROCUREMENT

AGENCY: District of Columbia Public Schools, Office of the Chief of Staff
CAPTION: Data Architecture Consulting
PROPOSED CONTRACTOR: UPD Consulting
CONTRACT NO. RQ985268

FINDINGS

1.   AUTHORIZATION:

 D.C. Code 2-354.04 and 27 DCMR, Section 1304 and 1702.

2.   MINIMUM NEED

DC Public Schools (DCPS) seeks an experienced contractor (the "Contractor") with a proven track record of success in providing expert consulting services to large, urban K-12 school districts on education data architecture solutions to complete the following tasks:

1. Complete a **comprehensive needs assessment** of data priorities, challenges, data systems, reporting tools, and governance structures.
2. Create a **data architecture design plan** that responds to DCPS's data requirements and developed with DCPS collaboratively.
3. Present an **implementation roadmap plan** that includes required project sequencing, capacities, skills, software, hardware, high-level data architecture specifications and other anticipated costs for implementing the recommended enterprise data architecture.

3.   ESTIMATED REASONABLE PRICE

The estimated fair and reasonable price is $65,000 from date of award to September 30, 2018.

4.   FACTS WHICH JUSTIFY A SOLE SOURCE PROCUREMENT

The DCPS Office of the Chief of Staff recommends partnering with UPD Consulting to develop a data needs assessment, data architecture plan and implementation roadmap for a comprehensive data architecture solution.

The Proposed Vendor's Unique Qualifications

DCPS conducted market research for this project by assembling a potential vendor list and evaluating them against a set of defined criteria (outlined below). While several vendors met some of the desired vendor qualifications for this project, UPD Consulting is the only firm that met all the vendor qualifications.

<u>Vendor Criteria</u>

1. Vendor has a track record of supporting large K-12 school district clients (i.e. 40,000+ students) on student data architecture planning and implementation to improve systems integration and interoperability and improving educator access to data.
2. The vendor has a local client support team with experience in the following areas: change management, K-12 school district leadership, and K-12 school district data architecture planning and implementation to support the technical and change management aspects of this project.
3. Vendor has a track record of advising school district clients on implementing the Ed-Fi data standard – a set of nationally recognize data standards for school districts.
4. Vendor has knowledge of and experience with the DC education context and data landscape.
5. Vendor has experience working on data architecture for K-12 school districts that use the Aspen Student Information System (SIS).

<u>1. Experience with K-12 Data Architecture Planning</u>

DCPS is seeking a vendor that can employ a well-refined process of assessing a school district's data needs, current systems, and organizational structure and evaluate them against a set of data architecture best practices and emerging trends in K-12 school districts. UPD Consulting has directly supported many K-12 school districts on this kind of initiative. Through their extensive experience, UPD has developed and implemented a "Data Diagnostic" process that provides a structured approach to assess K-12 data systems, processes and skills needed. The Data Diagnostic is the analysis of K-12 school districts' technology architecture and the scoping of data solutions against that architecture to meet a specific goal.

UPD Consulting has conducted Data Diagnostics for many districts, states and higher education programs and is one of the only vendors identified in our market research that has an established data diagnostic process that has been tested and proven in multiple school district contexts including large urban districts and many others. Most recently, UPD has supported Cleveland Public Schools, Knoxville Public Schools, the DC Public Charter School Board, Tulsa Public Schools and K-12 state education agency clients in conducting data needs assessments. By partnering with UPD Consulting for this project, DCPS will be able to learn from the experiences of other school districts that UPD has served and leverage UPD personnel's significant knowledge of emerging technologies and best practices in K-12 data architecture.

<u>2. Vendor's Local Client Support Team and Expertise</u>

This project requires the technical expertise to make recommendations about data architecture but also the skill to help DC Public Schools change organizational practices and data governance processes. UPD offers the unique combination of management consultants, data and technical experts and former K-12 school district leaders. UPD's management consulting practice has previously advised K-12 school district on strategic planning, continuous improvement systems, and organizational transformation. In addition, UPD Consulting's edtech group has supported K-12 school districts in planning and implementing projects to achieve data interoperability using open-source technologies. In fact, UPD employs the tools of Human Centered Design and Design Thinking to build robust system and organizational solutions. UPD is one of the only firms identified in our research that has a local office in

Washington, D.C. plus extensive experience in the K-12 education sector conducting needs assessments, developing strategic plans, and implementing complex education technology reforms.

3. Experience planning and implementing the Ed-Fi data standard in large K-12 school districts

One of DCPS's goals for this project is to create a roadmap to adopting the Ed-Fi data standard. The Ed-Fi Data Standard is a widely-adopted, open-source data standard that serves as a foundation for enabling interoperability among secure data systems and contains a Unifying Data Model designed to capture the meaning and inherent structure in the most important information in K-12 education. UPD Consulting is a national leader in supporting organizations as they transition their analytic solutions to the Ed-Fi data standard and toolset, with several largescale implementations in states (OK, OH and NM) and districts (Tulsa, OK; Shelby County, TN; Portland, OR; Cleveland, OH and Charleston, SC). UPD brings a proven method to achieving the goal of interoperability via the Ed-Fi standard.

Most recently, Tulsa Public Schools (TPS) hired UPD to implement an Ed-Fi solution designed to centralize district data and power custom dashboards. The project involves several cutting-edge Ed-Fi components including the installation of a Temporal Operational Data Store (T-ODS) to capture longitudinal snapshots of district data for historical analysis, and a transition from an on-premises environment to a cloud-based infrastructure to lower the cost and burden of maintaining physical servers. All three components combined represent a national first as a model for Ed-Fi implementation in the cloud at a district level that DCPS plans to consider for its data architecture plan.

In addition, UPD was contracted by Michael and Susan Dell Foundation to develop an Ed-Fi solution for Portland Public Schools (PPS), using the 2.0 versions of the data standard, operational data store (ODS), and dashboards. UPD was asked to include knowledge-sharing activities as part of the scope of the project with the goal of training PPS staff to own and manage the solution beyond the project conclusion. UPD was one of only a few firms identified in our market research that has experience implementing the Ed-Fi data standard with many K-12 school district clients.

4. Extensive Experience in the DC Education Sector

UPD has worked with numerous DC education sector clients including the Office of the State Superintendent of Education (OSSE), the DC Public Charter School Board (PCSB), giving them unique insight into the data needs of local education agencies in Washington, D.C.

UPD recently worked with the Division of Data, Assessment and Research (DAR) at the OSSE to conduct a data diagnostic and develop strategic action plans. UPD's data diagnostic assessed the "as-is" data landscape of the agency and identified key data use, access, and management pain points for agency staff. Similar to what we've outlined for this project, UPD provided DAR with a complete inventory of the agency's business services and data collection efforts, an inventory and map of agency systems and applications, and recommendations and critical steps required to implement UPD's recommendations for how to improve operations and address agency pain points.

With PCSB, UPD also provided data diagnostic services to assess the effectiveness and efficiency of the systems and process in place for collecting, storing and reporting their data. Similar to DCPS's needs for this project, UPD engaged PCSB to understand their current data landscape and desired future state, and outlined a recommended process for implementation.

5. Experience working with K-12 clients that use the Aspen Student Information System (SIS)

UPD was the only firm identified in our market research that has developed a data needs assessment and data architecture plan for another K-12 district using the same SIS as DCPS. UPD's knowledge and experience with DCPS's Aspen SIS will greatly enhance their ability to understand Aspen's architecture and develop an implementation roadmap that accounts for its native structure and configuration. This will also minimize the cost for DCPS because less time and effort will be required for UPD to understand the Aspen SIS. Their project for Knox County Schools (KCS), another school district using the Aspen SIS, examined how well the existing operational data store (ODS) and source systems were positioned to meet KCS's goals of providing educators with up-to-date student achievement data. KCS is currently in the process of implementing many of the solutions and is making plans to overhaul their existing ODS and DCPS will benefit greatly from UPD's experience on this project.

Adverse Impact

DCPS has conducted extensive market research for this project over the course of the past year. If UPD Consulting is not selected for this project, DCPS would be prevented from utilizing industry best practices, the firm's unique experience outlined above, and their large client support team located in Washington, D.C. This would delay the investments that DCPS plans to make in next generation data architecture at a time when it is critical for DCPS to improve data quality and transparency, and would jeopardize the availability of local funding that has been set aside for this purpose.

In light of the above findings, a contract with UPD Consulting is in the best interest of DCPS to develop a data needs assessment, data architecture plan and implementation roadmap for a comprehensive data architecture solution. Their focus on both management consulting and technical tools development plus expertise managing complex education technology reforms on the ground sets them apart from other vendors. Provided the urgency of this work, a sole source award is the most efficient and cost-effective procurement method to fulfill this DCPS need.

CERTIFICATION BY THE OFFICE OF OUT-OF-SCHOOL TIME PROGRAMS:

I hereby certify that the above findings are correct and the anticipated cost to DCPS is fair and reasonable.

_____   _____
Date   Program Staff

CERTIFICATION AND DETERMINATION

Based on the above certified findings in accordance cited authority, I hereby determine that it is not feasible or practical to invoke the competitive bidding process under Section 402 or 403 of the District of Columbia Procurement Practices Reform Act of 2010 (D.C. Law 18-371; DC Code 2-354.04 and 27 DCMR 1304 and 1702.

_____   _____
Date   Chief Procurement Officer