From: CASTRO, CLAUDIA
Sent: Thursday, August 06, 2015 8:50 AM
To: BELLO, FRANK
Subject: Noviant Expression of Interest
Attachment(s): "NYPD_Deck.pdf", "Jonathan Farley letter.docx"

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Claudia Castro, Adm. P.A.
NYPD Contract Administration Unit
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From: Eric McFadden [mailto:emcfadden@noviant.com]
Sent: Tuesday, July 07, 2015 12:30 PM
To: CASTRO, CLAUDIA
Subject: Response to Solicitation PIN#05615SD0001 - Hunchlabs Predictive Policing Application
Importance: High

Dear Ms. Castro,

I am writing to you because we would like to opportunity to participate in this demonstration project – potentially as a **sub-contractor**.

We notice there is no Local Law 1 compliance required for these services.

The requirements are not specified in the City Record solicitation.

The NYPD intends to enter into a pilot program with Azavea to evaluate the efficacy of their predictive analytic software to generate robust forecasts for crime. The Demonstration Project will allow Azavea to custom design for the NYPD crime models, using historic crime data and other variables that will be implemented in up to three precincts. The configuration phase will allow the settings to be tailored to reflect the priorities of the Department and to measure the initial accuracy of the system. The operational phase of the Hunchlab application will be delivered in a secure cloud subscription for a two-year period which will enable the Department to evaluate its functionality as a tool for crime reduction. Vendors may express an interest by contacting Claudia Castro, Administrative Procurement Analyst, at the address stated in this notice by the Due Date 7/17/2015.

A Demonstration Project will allow the NYPD to evaluate the functionality of the Hunchlab Application as a tool for crime reduction and explore incorporating distinct data sets to determine the most accurate forecasts. The Department will be able to test the predictive policing software as a cloud based solution to leverage multiple types of data to arrive at a single picture of criminal risk.

I am writing because starting about 18 months ago I started trying to work with NYPD around Crime Statistics, Predictive Analytics, Lattice Theory Data applications in Predictive Analytics for both Crime Prevention and Counter Terrorism. Because we were unable to identify one person to focus our efforts towards – we were advised by the Mayor's Office to forward our unsolicited proposal to the Commissioner's Office. In addition we reached out to Dr. Jonathan Farley – world renown mathematician (lattice theory). Dr. Farley also identified resources he had worked with inside the NYPD – I have attached his email.

The bottom line is there are qualified M/WBE firms who could assist the Azavea/Hunchlab team as sub-contractors. While we don't know much about Azavea – looking at their website seems to show a pretty homogenous workforce – little racial diversity. **Creating successful mathematical models would be enhanced by including people of color (elite trained minority mathematicians and statisticians)– particularly in a city with as many cultural considerations as NYC.**

The combination of skills available through Keystats and Dr. Jonathan Farley offer the NYPD very experienced and knowledge MWBE resources who could participate and make a positive impact.

Here is some additional information about Keystats:

Keystats Inc, is a boutique analytic shop w/ advanced capabilities and experience in the areas of 1) Statistics (i.e., Predicative Modeling, Risk Assessment, Segmentation, etc.), 2) Data Management -- the ability to incorporate various types of data (structured & unstructured) and integrate data for the purposes of analysis, and 3) BI Tools - incorporating front-end tools for analytic and management reporting and tying the BI Tool to the back-end (whether cloud based or not).

Keystats, Inc's has vast experience in the Private Sector, having clients such as: Bloomberg, American Express, McDonald's. Our sector experience include Financial Services, Publishing, Telecom, Pharma, Retail, Non-Profit, and several others. Keystats is well-versed in the current state of predictive policing and other aspects criminal justice beyond just predictive policing (.e. Probation & Parole) . Keystats is familiar w/ the current issues facing agencies involved in the Crime Management area (i.e, constrained resources, various trends in offenses by crime type, pending legislative issues, and the relationships these agencies have w/ the judicial and court system.

Keystats Inc, brings to the table, their knowledge in Advanced Statistical Analysis inclusive of 1) Machine Learning, 2) SEM (structural equation modeling), as well as the more traditional exercises of Predictive Analysis, Segmentation, etc. In addition, Keystats, also has experience in Econometric analysis, thereby providing a learning as to what efforts work and don't work and to what degree -- and the associated costs/ resources to impact the KPI (in this case, crime rate by various types of crimes). Keystats is well-versed in Experimental Design techniques to test competitive sets of models in an effort to determine which works the best, as well.

Keystats, by virtue, of their experience in the analytics' space, has substantial Data Management experience from Sourcing to ETL, to Design & Production of Data Repositories (a.k.a., databases) whether Cloud-based or not. They have experience in using BI applications such Tableau, Micro strategy, IBM, Spotfire and databases such as MS SQLServer, IBM DB2, Oracle, MySQL, and others. Many of the BI and DB applications are powered through Web-based solutions, as well.

Keystats can:

1. We are well versed in the area of quantitative analysis/ statistics/ forecasting which includes:
a) *Developing Models*
b) *Setting Up Experimental Designs*

2. We are also capable of evaluating Applications from a functionality & robustness perspective. By robustness, I mean the ability to:
a) *Import data quickly*
b) *Have some functionality to clean up data (ETL for modeling)*
c) *Ability to produce Risk Scores for various crimes by geography, time period (seasonality) -- it goes back to Type of Offense and Severity of Offense*
d) *Most importantly, produce actionable reports indicating what type of crime will occur, when it will occur, and level of resources to handle it.*

Now these "actionable" results/ recommendations should be presented at various resource levels -- i.e.,

under different constraints that can be changed depending on the budget, # of available police officer, # of patrol cars, etc.

Ms. Castro – we want an opportunity to be considered as a sub-contractor or possibly Quality Assurance sub-contractor. Please let me know how we can participate in this critically important police application.

Thanks,

Eric McFadden
VP – Business Development
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917-338-8822 (desk)
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