



Request for Information No. IV

RFP No. 15/16-0003IT, Business Intelligence and Analytics Solution

February 19, 2016

Response to Vendors' Questions

- 4.1 Question: Can we offer two price proposals – one that is a fixed price proposal for services and one that provides an hourly rate for services?

Answer: IUSD will accept only one (1) response per Provider/Vendor. However, if a vendor is interested in proposing a la cart services, the vendor should propose a base price and provide a unit cost for those services in Optional Services and Costs. For Optional Services, vendors should substantiate their fixed and hourly fees based on typical effort estimate for a similar project, report or element.

- 4.2 Question: Would the district be interested in loading its data into the enterprise data warehouse if the vendor provides training and documentation or is the district seeking a proposal where the vendor would be responsible for at least the initial data load? Would the district be interested in a proposal that offers both options?

Answer: The district is primarily interested in loading the data into the enterprise data warehouse itself with training and documentation. If a vendor would like to provide an ETL development proposal, it should be included under "Optional Services and Costs."

- 4.3 Question: Where we source assessment results from? Aeries? Directly from the test publisher files? Does the district load the results from assessments into Aeries?

Answer: Assessment data will be sourced from both vendor-provided files and from Aeries, depending on the vendor.

- 4.4 Question: Reports: Please describe desired reports in order of priority. Some key metrics would include:

- a. Report Name: e.g. HR Staff Count
- b. Brief Description: e.g. Faculty and Staff Counts
- c. Categories/Dimensions: e.g. Faculty, Staff, College, Department
- d. Measures: e.g. Unique count per Faculty or Staff
- e. Complexity (High/Med/Low):
- f. Report Type (Table/Chart):
- g. Drillable (Yes/No):
- h. Security (High/Med/Low):
- i. Update Frequency:
- j. Source Tables:

Answer: As IUSD will be developing most reports itself, most dashboards are not yet defined. Three representative "Quick Wins" are that existed in the proof of concept systems are available, though.



1. Enrollment and student registration dashboard. This dashboard's goal is to provide principals with a real-time (< 15 minute update rate) look at the students that will be attending their schools in the next week, as well as provide district personnel an overview of where any schools have reached maximum capacity. The sole input at this time is from the Aeries SIS. The dashboard needs to track the state that the students are in, their grade and their school. Data should be available as both a grid and bar charts, and needs start at the school level and be able to drill down.
2. Employee Forward Vacation Balance – This report should receive near real time data and contextualize it for the viewer. The report will draw data from the IUSD HRIS and IUSD's substitute management system. It should show a list of a manager's employees, their total vacation time for the year and their remaining "forward" vacation. Due to the nature of the report, security is important.
3. Canvas Usage Dashboard – This dashboard is built off of a prebuilt data warehouse provided by our learning management system vendor. The data warehouse is provided as csv tables and the new data arrives every night. The dashboard should show counts of unique users on a month to month (drilling down to the day to day) level for schools. This section of the data warehouse is currently 133GB in size and grows at 150MB/day.

4.5 Question: Data: Number of source systems and tables?

Answer: This is undetermined at this time. Vendors should expect 5-10 source systems and 25-100 source tables.

4.6 Question: Data: Number of target tables?

Answer: This is undetermined at this time. Vendors should expect 25-75 tables.

4.7 Question: Data: Complexity of the ETL?

Answer: The ETL complexity is expected to be moderate.

4.8 Question: Data: How much DQ work is involved?

Answer: Data quality work will be handled by the District as part of a separate process.

4.9 Question: Analytics: What are your goals regarding analytics for the short term (by the end of 2016)? Long term (beyond 2016)?

Answer: IUSD's goals regarding analytics are to allow faculty and staff to make better, data driven decisions and support the district's continuous improvement efforts. Specific short term items are to establish a "Leadership Dashboard" that allows principal's and other leadership team members to have a "one stop shop" for information about their departments. Long term goals are to enable the use of high-end analytics to support various district programs, such as text analysis and complex multiple regression predictive analytics.

4.10 Question: How many "District Trainers" and "Core IT Staff" does the District have that would need to be trained?



Answer: The district has a total of 5 trainers and 10 core IT staff that will need training.

4.11 Question: *Section 4.1 Part 3.* Does IUSD use virtual servers for their on-premise deployments? What Virtual Server technology do you use?

Answer: IUSD currently uses Microsoft Hyper-V for virtualization.

4.12 Question: *Section 4.1 Part 3.* Does IUSD have a standard or preferred database server product (i.e. Oracle, MS SQL Server...)? What version are you currently using?

Answer: IUSD uses MS SQL Server as its standard OLTP Platform. See Section 1.2 (Current Environment) for versions.

4.13 Question: *Section 4.1 Part 3.* There are a variety of questions that appear to be focusing on hosted solutions. If our solution recommendation is on-premise, is it appropriate to simply indicate, for those questions, that our solution is on-premise and the question does not apply?

Answer: For requirements P3.16-P3.30, providers offering an on-premise solution should indicate that the solution is an on-premise solution and the requirement does not apply.

4.14 Question: How many total users?

Answer: See answer 2.6 in RFI No. II.

4.15 Question: How many total concurrent users (typical number of users at the same time)?

Answer: Average concurrent users will be 100-150, but during high use times this may be exceeded.

4.16 Question: How many content consumers (open, read, refresh)?

Answer: See answer 2.6 in RFI No. II.

4.17 Question: How many content authors (Create ad-hoc reports, visualizations)?

Answer: See answer 2.6 in RFI No. II.

4.18 Question: How many power users?

Answer: See answer 2.30 in RFI No. II.

4.19 Question: How many Developers?

Answer: See answer 2.30 in RFI No. II.

4.20 Question: *4.1 Part 3 3.9.* Do you need both LDAP and AD authentication or just one of those?



Answer: One or the other is sufficient.

4.21 Question: Does IUSD prefer on-premise or Hosted?

Answer: See answer 2.5 in RFI No. II.

4.22 Question: *Part 6.* Does IUSD have data scientists?

Answer: IUSD has data scientists on staff.

4.23 Question: On the subject of data migration, how many prior years of legacy data will need to be moved into the data warehouse?

Answer: See answer 2.10 in RFI No. II.

4.24 Question: What is the approximate size (in bytes) of the SchoolNet Data Warehouse? To what extent does IUSD uses this data warehouse?

Answer: The SchoolNet data warehouse currently primarily houses data related to the district's assessment and professional development systems. Non-assessment data is not believed to be over 75GB in size. This system is currently used to provide student overview reports as well as to provide classroom level business intelligence for teachers and administrators. In addition, SchoolNet is used to administer pencil and paper as well as online assessments.

4.25 Question: Is there any data warehouse/data marts built in the system already? (If yes, please provide some details.)

Answer: IUSD has built several proof of concept/development data warehouses, but expects to redevelop those for this project.

4.26 Question: Regarding size and capacity, how many tables / files (approximately) are in the source system that needs to be mapped into ETL process?

Answer: See Answer 4.5 in RFI No. IV.

4.27 Question: What is the estimated rate of data growth (per day or per month)?

Answer: IUSD's proof of concept data warehouse grew at a rate of 20GB per month. This should be expected to be a minimum number.

4.28 Question: Can you provide an estimate for the number of reports and dashboards to be developed on an annual basis as part of this proposal?

Answer: IUSD expects to develop reports and dashboards as needed on the platform. If vendors wish to provide report and dashboard development quotes, they should do so under Optional Services and Costs.



4.29 Question: Are there any other required file formats not specified in the RFP that are used by the source system?

Answer: The district does not anticipate any additional file formats.

4.30 Question: Is there a blueprint or landscape of IUSD's current hardware and software platforms and interfaces available for bidders?

Answer: See section 1.2 of the RFP. This is the best information available at this time.

4.31 Question: What is the expected total number of Users?

Answer: See answer 2.6 in RFI No. II.

4.32 Question: What is the expected number of concurrent users?

Answer: See answer 4.15 in RFI No. IV

4.33 Question: What is the expected size of Data to be hosted?

Answer: IUSD's proof of concept data warehouse was approximately 700GB. This should be considered a minimum.

4.34 Question: What is the size of the largest table to be hosted?

Answer: The largest table in the proof of concept (and what should be the largest table in the final design) was 171 GB in January 2016. It was growing at roughly 10 GB a month. IUSD's current data warehouse design also includes a 126GB table that grows at 150MB a day.

4.35 Question: Will this be a public facing site?

Answer: No. If vendors would like to propose pricing for a public facing version, they should specify it under Optional Services and Costs.

4.36 Question: *Reference Question P3.14: The solution must be capable of displaying dashboard items as a view or web-part in Microsoft SharePoint or other content management system.* The proposed solution integrates with SharePoint but the "other content management system" is very broad. Does IUSD have a specific content management system in mind or some other mechanism by which you want to render VA reports?

Answer: IUSD is currently in the process of acquiring a new Web CMS. The ability to display dashboards in a window without "chrome" or menus will be sufficient.

4.37 Question: *Reference P3.8: Access to all system data that can be exported into a CSV file format, including event log data (i.e. login times and actions performed).* Can a clarification be provided as to the goal of exporting the system data into CSV format? Is it a matter of simply wanting a way to display system information or is there another goal in mind?



Answer: This data is desired for security and analytics usage.

- 4.38 Question: *Reference P3.9: Active Directory/LDAP integration for authentication/authorization.* The system must be capable of transparent single sign-on with Microsoft SharePoint through Active Directory. What does IUSD mean by transparent single sign on with SharePoint – from SharePoint to the proposed solution via Active Directory without reentering credentials or are they looking for something else?

Answer: IUSD would like transparent single-sign on with Active Directory or Sharepoint.

- 4.39 Question: Database - The RFP mentions IUSD has a production SQL Server environment but no enterprise data warehouse. Does IUSD consider the current databases to be source systems for a future EDW, or would these ideally be replaced by the future data platform?

Answer: IUSD expects that the current SQL Server environment will be maintained.

- 4.40 Question: Dashboard/Report - Is there a specific number of interactive dashboards and static reports which are deemed to be in scope for the implementation of business intelligence and analytics solution?

Answer: There is no minimum number of dashboards that are in scope. Development services should be specified in the Optional Services and Costs section.

- 4.41 Question: Report - Which % of these reports currently exist in the current platforms, and have well defined requirements, including data sources, ETL rules and calculations?

Answer: Currently IUSD has fully specified 3 reports. Details are in answer 4.4 in RFI No. IV.

- 4.42 Question: Organization Challenges - What are the key challenges for Classroom/School and District/Enterprise?

Answer: The key challenges for the District/Enterprise are (1) providing data from multiple sources in a single easy to understand format and location and (2) providing advanced analytics capabilities to IUSD's staff and faculty so that they can make better, more data driven decisions. The key challenges for the classroom/school analytics solution are providing an easy to use platform to teachers that synthesizes information from multiple sources to allow teachers to better understand how the students in their classes are performing. Teachers need to be able to work together in professional learning communities to share their data and make decisions as well.

- 4.43 Question: Organization Priority - Are the classroom/district requirements prioritized (or is it one of many competing priorities)?

Answer: The BI/Analytics Project is one of the top new development priorities for the Information Services department.

- 4.44 Question: Change Management - Has the level of change to the organization been assessed? What is felt to be the level of impact of the change and are their concerns on readiness?



Answer: No formal change management assessment has been performed, but a moderate level of organizational change should be assumed. IUSD's staff can be presumed to be familiar with but not expert at formalized change management.

- 4.45 Question: Resources - How many education Subject Matter Experts or product owner(s) will be assigned to this project from IUSD? What is the availability and commitment of these resources?

Answer: These answers will vary based on the specific sub-projects being addressed. IUSD's project lead will be responsible for marshalling these resources.

- 4.46 Question: Resources - Will education Subject Matter Experts define/provide indicators that will be used to configure predictive analytics and formulas that will flag at-risk students?

Answer: Yes. IUSD is also open to hearing about any existing research based systems that the provider has documented, but the provider should also be able to implement an existing set of indicators.

- 4.47 Question: Documentation - Are there existing architecture/systems documentation that the IUSD can share?

Answer: Existing documentation related to proof of concept systems can be shared with the winning vendor. These proof of concepts systems are not 100% documented, and IUSD anticipates heavy redevelopment on a new platform.

- 4.48 Question: Roll-out - Is there a sunset strategy on existing classroom and district reports/dashboards?

Answer: As replacement reports become available on the new system, cutover will be performed for those reports to pilot users. Once a sufficient mass of dashboards and reports are available so as to make the system usable, the system will be placed into production and all users will be trained.

- 4.49 Question: Scope - In replicating the existing classroom reports onto the new platform, will there be net new features/metrics required?

Answer: No net new features are defined yet, but integrations (via CSV) with new systems are desired.

- 4.50 Question: Roll-out - What type of roll-out approach does the district envision? Is there a preference for big-bang vs. phased approach?

Answer: IUSD would prefer a phased approach to the roll-out, focusing on timely usage of the system.

- 4.51 Question: Change Management - Are IUSD staff/power users going to provide communication/messaging and conduct district/classroom training? Or is that a separate work stream to be owned by the vendor?



Answer: IUSD Staff normally provides end user training and support. The vendor is only responsible for providing train the trainer trainings to IUSD's IT Staff.

- 4.52 Question: Tableau - How has IUSD attempted to solicit teacher use of Tableau? Simply using dashboards (design/training issue)? Creating dashboards (training/data prep issue)?

Answer: IUSD's current usage of data exploration tools is at the proof of concept stage. Comments were solicited from end users. IUSD should not have been considered to have attempted a true roll out of any tool. See also answer 4.68 in RFI No. IV.

- 4.53 Question: Users - How does IUSD see the role of power users? What would be their typical responsibilities? Do you foresee multiple power users in each school?

Answer: Power users will be primarily self-selected. They will be the users that have both the need and the time to develop expertise in using provided data exploration tools to perform self-service business intelligence.

- 4.54 Question: RFP - We assume that the in Appendix A (CONSULTANT AGREEMENT and DATA PRIVACY AMENDMENT TO AGREEMENT) are to be completed after the award. Is our understanding correct or should these be completed and included with the submittal?

Answer: That is correct, the Agreements will be negotiated and executed with the selected providers after the award; the Agreement and Data Privacy to Agreement are the District's standard Agreements. Reference section 3.4 *Contract and Warranties* for further details.

- 4.55 Question: Are you open to using open source technologies in areas where Microsoft/Tableau does not satisfy the full requirements of the RFP?

Answer: Yes

- 4.56 Question: Any ETA on when the list of quick wins/early dashboards for this project will be published?

Answer: The quick wins are specified in answer 4.4 of RFI No. IV.

- 4.57 Question: Could you provide details on the license around SAS, R, and SPSS? Also confirm if this is used as a standalone or integrated with the application today?

Answer: Providers should assume that they will need to provide full licensing. Existing licensing is project specific.

- 4.58 Question: Help us understand the current limitations around Schoolnet that you would like to overcome if a new system is proposed?

Answer: Schoolnet's KPIs and reports require the end user to have an in-depth knowledge of the system. Teachers need an intuitive system that requires a minimal click path to generate reports.



4.59 Question: Can we assume majority of your users other than IT, developers as non-technology users? E.g. How much % of the 1,200- 1,700 teacher and administrators, Enterprise analytics – approximately 300-500 administrators and support staff will fall under technology users and non-technology users?

Answer: All IUSD users should be considered technology users. IUSD has a highly developed professional development program around technology, and IUSD staff are heavy technology users. It should be assumed that all users will access the system through technology and that very few will be using exclusively printed reports.

4.60 Question: We have locations at LA, and prefer requirement planning and periodic check-ins onsite at Irvine location. Are you ok with regards to have those meetings. We can also support over online and 100% offshore capabilities as well.

Answer: This is acceptable.

4.61 Question: Are the data from the following sources readily consumable in any place or do you expect us to integrate and create custom ETL to conform to a specific standard as part of our Data warehouse development?

The sources we are referring in the above question relate to SIS – Aeries, State-Testing- CAASPP, CEDLT, Other Assessment – STAR Renaissance, Renaissance STAR, EasyCBM, ST Math, and ExamView, Schoolnet (Pearson), HR- In-house developed (MS SQL), Financials- BusinessPlus (formerly Bitech), Additional- Custom MS SQL databases.

Answer: IUSD will develop any custom ETL needed.

4.62 Question: Please confirm all your 1,200- 1,700 teacher and administrators, Enterprise analytics – approximately 300-500 administrators and support staff have Active Directory/LDAP logins for authentication/authorization.

Answer: All IUSD Users have Active Directory Logins.

4.63 Question: Could you provide the current SIS provider/s or vendors involved?

Answer: IUSD's current SIS is Eagle Software's Aeries.

4.64 Question: Could you confirm if we can leverage any of the 5 developers that will be building reports and developing advanced dashboards and models as part of this platform development?

Answer: Providers should assume that all advanced dashboards and models will be developed in-house by IUSD. If providers wish to provide development, they should specify these costs under Optional Services and costs.

4.65 Question: Can the one electronic copy be delivered via email or is it primarily restricted to CD, flash drive? Any specific regulation you would like us to comply in case of cloud based private hosting? We will follow the standard guidelines and practices along with industry specific security controls.



Answer: No, the District will not accept delivery via email. Reference section *2.1 Proposal Deadline and Submission* and *2.2 Delivery to District*. All laws and regulations that involve student and/or client data must be followed, i.e. FERPA, SOPIPA.

4.66 Question: Is there any possibility that this RFP can be extended for one more week?

Answer: All deadlines are being extended one week. Please see Addendum No. III.

4.67 Question: IUSD expressed a need to extract information via ETL from Google Docs documents. Do the documents that IUSD wish to extract from contain unstructured or primarily structured data types? Please provide an end-state example of the need for Google Docs data to be extracted and transformed to structured data formats.

Answer: Data coming from google docs will be in the form of spreadsheets.

4.68 Question: R, SAS and Tableau provide the most advanced predictive analytics modeling functionalities in the market today. Please provide the functional and technical gaps or business requirements that these packages fail to address that IUSD wishes vendors to address in the new system.

Answer: IUSD does not currently have an organization-wide predictive analytics or data exploration standard. The current usage is individual to specific projects or development. Part of the goal of this RFP is to select this organization-wide standard.

4.69 Question: We have extensive experience with Data Analytics, and with large organizations like E-bay for example, but may not have several references from Education accounts, how hard is the rule that we have 3 references that are from Education vertical?

Answer: Section 4.1 Part 2 only requires two references from the education vertical. If two references are not available, public sector references can be substituted, but provider should also detail any special procedures it uses when it enters a new vertical. If provider does not have the requisite education references that substantiate providers ability to deliver similar analytics to similar organizations.