

2002 SUDDERTH DRIVE, RUIDOSO, NM 88345 (575) 257-2368 - WWW.REC9NM.ORG

Region 9 Education Cooperative REQUEST FOR PROPOSAL 24026 Data Dashboard

Addendum #A Questions & Answers

- 1. Is the State looking for response from a COTS (Commercial-Off-The-Shelf) software vendor OR is it looking for response from System Integrators (SI) with expertise in developing, customizing and configuring data warehousing/ETL and Dashboards using COTS software?
 - The State is seeking a response from System Integrators (SI) with expertise in developing, customizing and configuring data warehousing/ETL and Dashboards using Commercial-Off-The-Shelf (COTS) software or custom developed software.
- 2. Does the State have an incumbent? If yes, can they submit a response? The State does not have an incumbent.
- 3. Can the State disclose the allocated budget for this effort?

 The State anticipates funds for this scope of work to be in excess of \$60,000.00.
- 4. Can the work be done remotely?

 The State does not have any expectations or requirements for in-person work or travel.
- 5. A review of the scope of work and RFP information makes it appear as though all, or nearly all, of the deliverables could be completed remotely. Are there any specific expectations or requirements of in-person work or travel that should be factored into our proposal? If yes, please provide anticipated # of instances of in-person travel, the type of work to be performed (ex: in-person meeting, annual presentation, in-person focus group, etc.) and approximate duration (# of days) of each instance.
 - The State does not have any expectations or requirements for in-person work or travel.



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6. What kinds of data sources should the offeror expect to interface with? For example, cloud-hosted databases, on-premises databases, web APIs, or file based exports from a system.

The offeror will interface with file-based exports from a system.

- 7. What types of relationships exist between data sourced from different systems? Are there existing mappings or business logic definitions that relate data from different systems? The State indicates there are no existing relationships between the data sources from different systems.
- 8. Are there existing GeoJSON or shape files defining any non-standard geographies such as school districts, public lands, and national/state parks?

 There are no existing files such as these in existence.
- 9. Are latitude/longitude coordinates available for the relevant data points like school locations and park locations?

This data is not available and would need to be collected.

10. How many users will be expected to interact with the dashboards? Will the dashboards be internally facing only, or will there be a publicly published component of the dashboards? How many separate groups of users do you envision needing different levels of access? The State indicates there would be four user groups - 1) Owner/Administrator, 2) Content Managers, 3) Reviewers and 4) End Users. Potential Offerors may recommend additional or different user level groups.

The dashboards will be public facing and must include a public-facing component.

- 11. Can you provide any indication on the likely volume of data? For example, roughly how many tables, rows, and columns could be included in the relevant data source systems.

 The State indicates and estimates the volume of data to be no more than 100,000 rows, no more than 30 columns, and no more than five tables.
- 12. What sort of student privacy protections will be put in place for the data prior to delivery to the contractor for cleaning and loading? Will personally identifiable information for



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students be visible to the contractor or dashboard users? Will the contractor be required to train users in student privacy laws as part of their training and user manual deliverables? No personally identifiable information from students will be visible to the selected offeror. The selected offer will not need to train users in student privacy laws.

13. Does the requirement in Appendix A apply to remote contractors not working in New Mexico?

Yes, any company awarded under this RFP must fulfill the outlined Health Coverage requirements on Appendix A.

14. Technical

a. What are the source systems that are part of the scope?

The source data is pulled from Sharepoint.

b. What is the frequency of data provided by source systems

Annually

c. What are the types of sources? Are they Flatfiles, Databases - SQL Server, Oracle, Webservices

Flat Files

d. What is the current technology landscape?

Currently, the State uses Sharepoint systems

e. What are the systems with which the new data dashboard should be compatible with.

The systems should be compatible with Sharepoint, Wordpress.org.

f. How many subject areas are available?

Only Computer Science

g. How many dashboards are expected to be built?

Two data dashboards

h. What is the size of daily data processed from sources?

The dashboard will be updated annually

i. Does the new data dashboard be hosted by the cloud?

The Potential Offerors may include data dashboards being hosted by the cloud.

j. Are data governance practices in place? Is any tool currently being used for data governance?

The State does not have data governance practices in place.



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k. Is a data lake or data warehouse available to extract data from and generate reports and create dashboards?

Yes

1. Are Master data management capabilities in place?

No

m. Are KPIs already defined? Or These are yet to be defined during the project implementation phase?

The Selected Offeror will define these with the State during the project implementation phase

15. Tools & Technologies

a. Are cloud technologies involved in the technology landscape?\

Yes

b. Are there any existing BI tools in the ecosystem? Or a new BI tool has to be procured?

No BI tools are in existence.

16. Project Management

a. Are project management services needed?

No

17. Users and Resources

a. How many users will be using the dashboards?

The data dashboards will be publicly available.

b. Is there any existing data and analytics team available?

Yes.

- c. Do you need support for the data dashboard after implementing them?
- d. How frequently should these dashboards be refreshed?

Annually

e. Can resources work remotely?

Yes

f. Should resources be available within the US?

Yes

g. Can an onshore offshore model be considered?

The Potential Offerors may include this in their proposal.



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18. The RFP does not specify whether all tasks must be performed on-site or if remote work is permissible. Could you please provide guidance on this?

The State does not have any expectations or requirements for in-person work or travel.

19. Regarding the initial setup outlined in section i-B-2-a on page 5, which mentions collaboration with the vendor to install and configure data dashboard software, Matrix Business represents major BI vendors such as Hitachi Vantara (Pentaho Suite), AWS (Quicksight), and has experience with Tableau, Power BI, and Qlik implementations. Have you determined the specific technology you wish to utilize, or are you open to open-source solutions in addition to enterprise solutions, and whether these should be cloud-based or on-premise implementations?

The Potential Offerers may include both open-source and/or enterprise solutions for cloud-based implementation.

20. In the same section on initial setup, it is required to "Define data requirements and establish data integration procedures with relevant data sources." Does your organization already possess a Data Integration tool, or should the vendor include this in their proposal?

The Potential Offerors should include this in the submitted proposals.

- 21. In page 5 the document mentions "Security and Access Control" but does not provide an estimated number of end users for the dashboard or specify if roles such as Administrator, Power User, and Common User have been differentiated. Could you provide more details on this? The State indicates there would be four user groups 1) Owner/Administrator, 2) Content Managers, 3) Reviewers and 4) End Users. Potential Offerors may recommend additional or different user level groups.
- 22. Regarding "Documentation and Training" mentioned in section i-B-2-a on page 5, is there an estimated number of PED staff who require training? Additionally, should this training be focused on the tool itself (Vendor Training) or on the ongoing implementation (Dashboard and Administration)?

The Potential Offeror should prepare a training for a dozen PED staff. The Potential Offeror should focus training on the tool itself and ongoing implementation.

23. On page 22, under F-1-a "Background and Qualification," it is noted that Matrix Business USA Corp is part of the Matrix Corp Group. Are we permitted to reference the experience of



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other companies within our group, such as Matrix CPM Solutions, Matrix Corp, etc., in our proposal?

The State indicates references may not be used from other companies within the group.

24. There seems to be a discrepancy regarding the contract term; on page 34, item 4, the end date is specified as June 20, 2024. However, part C on page 7 states, "The contract may be implemented for a term of one (1) year, and may be extended on an annual basis for up to three (3) years in one-year increments for a total of four (4) years." Could you clarify this point? All contracts will align with the State Fiscal Year beginning and ending dates. Awardee may be issued a 1 year contract, with additional yearly contracts, for up to four years from award date. The State will not issue multi-year contracts.

25. Scope of Work

a. Do you expect this to be a COTS Solution, or can it be custom-developed software that we build specifically for you?

The State is seeking a response from Potential Offerors that can be a Commercial-Off-The-Shelf (COTS) software or custom developed software.

26. References

a. Do you expect the vendor to attach the letter from the prior partnerships with the response itself?

The Potential Offeror may attach letters from prior partnerships, as specified in the RFP.

27. Data Integration and Validation

- a. Can you please list the existing data sources, size, and database types? The existing data source will be from Sharepoint. The size will be approximately 100 MB.
- b. Where are the data systems located (on-premises, cloud, hybrid)? **On-Premises**
- c. Do you expect the vendor to develop a centralized database to store the data from multiple sources?

The Potential Offeror may develop a centralized database

d. How often will the data be refreshed? (Hourly, Daily, Weekly, Monthly, Yearly) **Annually.**



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28. Visualization and User Experience

- a. Do you have any preference in terms of Visualization tools (PowerBI, Tableau)? **There is no preference**
- b. Is the vendor expected to perform data cleansing activities? \mathbf{No}
- c. Can you please mention the expected number dashboard to be developed? **At most, two dashboards**
- d. Can you please specify the number of Public/Private dashboards to be developed? **At most, two public dashboards**
- e. Do you expect to implement role-based access control? If yes, please specify the roles.

The State indicates there would be four user groups - 1) Owner/Administrator, 2) Content Managers, 3) Reviewers and 4) End Users. Potential Offerors may recommend additional or different user level groups.

29. Staff Qualification

a. Can the vendor utilize a hybrid resource model (on-site/offshore/remote)? The State does not have any expectations or requirements for in-person work or travel. Potential Offerors may propose a hybrid resource model.

30. Cost Proposal

a. What is your preferred contact type for this engagement? Fixed bid or time and materials basis?

This contract will be a Fee for Service contract

b. Do you have any budget limit associated with the project?

The State anticipates funds for this scope of work to be in excess of \$60,000.00.

31. Data Dashboard Implementation

a. What specific systems or platforms, such as SIS (Student Information Systems) or LMS (Learning Management Systems), must the data dashboard seamlessly integrate with, and are there particular data formats or APIs you prioritize for this integration? Moreover, could you detail any specific functionalities, such as real-time data syncing or user authentication protocols, that these integrations



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hould support to enhance the dashboard's functionality, usability, and compatibility within your current technological ecosystem?

The data dashboard should integrate with Sharepoint and Wordpress.org.

32. Data Accuracy and Up-to-date Information

a. How do you prioritize data formats and standards, such as CSV, JSON, or XML, for the ingestion of accurate and up-to-date CS education and outdoor learning data? Could you specify if there are any particular protocols or methodologies, like ETL processes or real-time data streaming, that you envision supporting the dashboard's capacity to maintain data integrity and timeliness?

The prioritization of data formats is not in existence and there are no protocols or methodologies in place.

33. Data Visualization Techniques

a. What specific visualization libraries or tools, such as D3.js, Highcharts, or Tableau, are currently utilized within your organization for data presentation, and how do these preferences align with the dashboard's design goals? Additionally, are there any advanced visualization techniques or interactive elements you are looking to incorporate, such as dynamic filtering, or drill-down capabilities, to enhance data exploration and user engagement in the context of CS education and outdoor learning data visualization

The State does not use any specific visualization tools. The visualization techniques and interactive elements are listed within the RFP.

34. Data Security and Privacy

a. Could you specify the compliance frameworks or standards, such as GDPR, FERPA, or HIPAA, that are critical for the dashboard to adhere to in terms of data security and privacy? Furthermore, what specific security protocols or access control mechanisms are you expecting to ensure the protection of sensitive data, considering the diverse nature of CS education and outdoor learning information? Potential Offerors should consider complying with FERPA standards. No personally identifiable information will be publicized in the data dashboard. The Potential Offerors should recommend security protocols to follow for the Administrator and Content Managers user groups.



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35. Feature Service and Online Geospatial Software

a. What GIS platforms or software, such as ESRI ArcGIS, QGIS, or Google Maps API, are preferred for integrating online geospatial software to create interactive maps within the dashboard? Could you also detail any specific functionalities or data types, like live data feeds or spatial analytics, that are essential for these geospatial features to support your objectives in CS education and outdoor learning programs?

The Potential Offerors may include in the proposal the best functionality GIS platform/software. The specific functionalities are listed in the RFP.

36. Data Integration Procedures

a. What ETL tools or services, like Apache NiFi, Talend, or Informatica, does your organization currently utilize for data integration processes? Additionally, could you specify any challenges or specific functionalities you need these tools to address, such as real-time data processing or complex data transformation, to ensure seamless integration and effective data management for the dashboard? The Potential Offerors may recommend an ETL tool as the organization does not have one to my knowledge.

37. Security and Access Control Measures

a. Could you specify the identity management systems, such as Active Directory or OAuth2 providers, that the dashboard needs to integrate with for effective security and access control? Are there specific security features or protocols, like multi-factor authentication, that are essential for safeguarding sensitive data and ensuring that user access is appropriately managed in alignment with your organizational security policies?

No personally identifiable information will be publicized in the data dashboard. The Potential Offerors should recommend security protocols to follow for the Administrator and Content Managers user groups.

38. ADA Compliance for Data Dashboard

a. Could you provide details on the guidelines or tools, like WebAIM or axe-core, that you find most effective for testing and validating the accessibility of the dashboard to ensure ADA compliance? Moreover, are there particular



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accessibility features or design considerations, such as keyboard navigation or screen reader compatibility, that are crucial for meeting these standards within the dashboard's user interface and functionalities?

The Potential Offerors should ensure the developed dashboard aligns to ADA standards and guidance, as identified by the Web Content Accessibility Guidelines and Section 508 Standards.

- 39. Collaboration with Program Staff to customize the dashboard's visual design
 - a. Could you detail the specific branding guidelines or digital assets, such as logos and color schemes, that need to be integrated into the dashboard's visual design for brand consistency? Additionally, are there any interactive elements or design features, like customizable widgets or theme options, that you envision enabling to maintain alignment with your organization's identity while ensuring the dashboard remains intuitive and user-friendly for program staff and stakeholders? The Selected Offeror will be provided branding guidelines and digital assets. At this time, the State cannot think of any interactive elements other than those described in the RFP.
- 40. Data Pipeline Setup for Latest Information
 - a. Could you indicate the preferred scheduling tools or platforms, such as Apache Airflow or Cron jobs, for automating data updates within the data pipeline setup? Furthermore, are there specific requirements or capabilities, like error handling mechanisms or support for complex workflows, that are essential for these tools to effectively manage the timely and accurate import of the latest information into the dashboard?

The Potential Offerors may recommend this in the submitted proposal.

- 41. Validation of Integrated Data Accuracy
 - a. Could you specify the data validation tools or processes, such as data profiling or checksum verification, that are critical for collaborating with data owners to ensure the accuracy of integrated data? Moreover, are there particular standards or protocols, like automated validation checks or manual review procedures, that are preferred for maintaining data integrity and reliability within the dashboard ecosystem?

The State will manual review data before submission into the platform.



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42. Ongoing Data Validation Mechanisms

a. Could you outline the practices or software, like data quality dashboards or automated anomaly detection systems, preferred for establishing mechanisms of ongoing data validation and quality assurance? Additionally, are there specific features or functionalities, such as real-time alerts or trend analysis, that are crucial for these tools to effectively monitor and maintain continuous data integrity and accuracy within the dashboard?

The Potential Offerors may suggest ongoing data validation as this would be new for the data dashboard being developed.

- 43. Analysis of User Group Requirements for Visualization
 - a. Could you detail the user research methods or tools, like surveys or focus groups, that are utilized to analyze different user group requirements for effective visualization? Furthermore, are there specific analytical techniques or feedback mechanisms, such as user journey mapping or usability testing, deemed essential for capturing comprehensive insights into user needs and preferences to guide the visualization design process?

The Potential Offerors should indicate the best method given the timeframe for this project.

- 44. Additional Features: While the RFP provides a comprehensive outline of current requirements, it does not specifically mention the exploration of some features that are covered in our existing "Intelligent Data Dashboard." Given the potential of these futuristic features to transform experiences, would the REC 9 be interested in reviewing the capabilities of our system? If yes, may we include them in our proposal by adding an additional/optional section in the proposal submission? These features are:
 - Predictive Analytics for Enrollment and Performance: Utilize machine learning to predict trends in student enrollment and performance in CS and outdoor learning programs, allowing for proactive resource allocation.
 - Natural Language Processing (NLP) for Querying: Implement NLP to enable stakeholders to make queries in natural language, enhancing usability and accessibility of the dashboard.



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- Automated Data Integrity Checks: Use AI algorithms to automatically detect and correct discrepancies in data sources, ensuring high data quality and accuracy.
- Personalized Dashboard Views: Employ AI to analyze user behavior and preferences to provide personalized dashboard views and insights, enhancing user engagement.
- AI-Driven Geospatial Mapping: Incorporate advanced AI algorithms for dynamic geospatial mapping, offering insights into educational disparities and resource distribution across different regions.
- Sentiment Analysis for Stakeholder Feedback: Utilize sentiment analysis to gauge stakeholder feedback on educational programs, aiding in the evaluation and improvement process.
- Automated Content Generation for Reports: Use AI to automatically generate insightful reports and summaries from dashboard data, saving time and enhancing decision-making.
- Real-Time Data Processing and Insights: Implement AI to process and analyze data in real-time, providing immediate insights into educational trends and anomalies.
- AI-Assisted Data Visualization Recommendations: Employ AI to recommend the most effective data visualization techniques based on the data set characteristics and user preferences, ensuring optimal data presentation.

In accordance with RFP 24026, F. Response to Organization, 3 Supplemental Information b., Offeror may submit other supporting documentation to support the Technical Proposal.