

ATTACHMENT W - REQUIREMENTS MATRIX

The Requirements Matrix lists detailed requirements of a functional or technical nature.

Instructions:

This Appendix provides the requirements table for the RFP. The requirements are set forth to allow the State to determine how well any particular Solution meets the requirements and by what means. The term “ability to” is defined as the fully configured capability to perform the remainder of the requirement statement. For instance “ability to forecast multi-year budgets for 5 or more years” means that the end users will be able to create a multi-year forecast for 5 years when the system is implemented.

Weight:

If a requirement is marked as “Required”, the proposed Solution presented by the Offeror must provide the required functionality. If a requirement is marked as “Desired”, the proposed Solution does not need to provide that functionality, but it would be to the benefit of the Offeror to do so.

Compliance Code:

The Offeror is expected to insert a Compliance Code for each requirement in the table below. A Compliance Code is not required for the requirement section header. The acceptable Compliance Codes are as follows:

“Yes” - Offeror can fully meet the requirement as written with its proposed solution. If applicable, Offeror shall provide in the “Explain / Describe” column an explanation of how it will meet the requirement. This may include use of separate or add-on products from third parties. Offeror may also use the “Explain / Describe” column to provide a cross-reference to a detailed explanation included in an attachment to its proposal. Also, if a requirement prevents another requirement from being satisfied, please indicate that here (e.g. if the solution can meet requirements A or B, but not both).

"No" - Offeror cannot meet the requirement and has no firm plans to be in the position to meet this requirement before implementation. A blank or “NA” in any box in this Column will be interpreted by the State as a "No".

“Other” - Offeror can meet the requirement by customizing, modifying or otherwise altering the base product. This may also include planned functionality in a future version. The Offeror must define their “Other” codes clearly. Some examples are included below. Offeror shall provide in the “Explain / Describe” column an explanation of the complexity of this customization.

Example “Other” Codes

“Future” – This functionality is planned but is not yet available in the version proposed for this solution. Identify which future version will contain this functionality.

“Custom” – A customization is the use of a provided user exit to add functionality to existing processes and programs. User exits are maintained by the Manufacturer to be version agnostic so that a future version of the base product will contain the same user exit.

“Mod” – A modification is an alteration of the core product code. The modification may have to be redone for each future patch or upgrade.

“GUI” – This requirement requires a change in the user interface of the solution, but does not alter the core code.

Outline ID	Name	Weight	Compliance Code	Explain / Describe
1.	Budget Management	Required		
1.1.	General	Required		
1.1.1.	Ability to forecast multi-year budgets for 5 or more years	Required		
1.1.2.	Ability to have different fiscal year for specific agencies, programs or fund sources	Desired		
1.1.3.	Ability to track actual expenditures at the same level of granularity as the budget	Required		
1.1.4.	Ability to establish and enforce high-level budget targets by chart of accounts value	Required		
1.1.5.	Ability to enter budget values by month, quarter, or year	Desired		
1.1.6.	Ability to allow distribution by month while protecting annual total	Desired		
1.1.7.	The ability to differentiate one-time items from structural increases or decreases	Required		
1.1.8.	Ability to track deficiencies, amendments, Supplementals and over-the-target requests as distinct decision points	Required		
1.1.9.	Ability to support negative amounts	Required		
1.1.10.	Ability for any strategic plan element to be associated with any level of the COA hierarchy	Required		
1.1.11.	Ability to include a bi-directional link with Microsoft Excel, allowing data entry or visualization in each environment	Desired		
1.1.12.	Ability to display encumbrances (aka obligations) separate from expenditures and accruals	Desired		
1.1.13.	Ability to input notes to the budget at all levels of the COA hierarchy	Required		
1.1.14.	Ability to add keyword tags at any level of the COA hierarchy	Desired		
1.1.15.	Ability to have the data from multiple fiscal years in a single budget document or decision point (i.e. FY+1 request and FY0 deficiency)	Required		
1.1.16.	Ability to provide multiple chart of accounts hierarchies	Required		
1.1.17.	Ability to tag dollars to goals/performance measurements	Desired		
1.2.	Visualizations	Required		
1.2.1.	Ability to provide spending plan forms that permit the display of financial and position information	Required		
1.2.2.	Ability to provide user-defined spending plan forms that permit entering incremental changes as well as the replacement of existing values with new values	Required		
1.2.3.	Ability to view expenditure and revenue history at any chart of accounts level	Required		
1.2.4.	Ability to view or enter budget information by agency, unit or program and also by object or sub-object across programs, units and agencies	Required		
1.2.5.	Ability to display descriptions of codes, abbreviations, codes and acronyms	Required		
1.3.	Rules and Controls	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
1.3.1.	Ability to define formulas for calculating line items (e.g., fringe benefit budget based upon salary amount).	Required		
1.3.2.	Ability to display a warning when targets or formulaic rules are exceeded or broken	Required		
1.3.3.	Ability to create an 'over the target' decision point for values exceeding the agency target	Required		
1.3.4.	Ability to permit the override of formulaic value with explanations	Desired		
1.3.5.	Ability to "freeze" budget information during development (i.e. analyses created on September 1 should show data as of September 1, even if reviewed in October or November).	Required		
1.3.6.	Ability to adjust federal revenue estimates to reconcile with the state's fiscal year	Desired		
1.4.	Scenarios and What-If	Required		
1.4.1.	Ability to identify, estimate, and model separate versions and scenarios	Required		
1.4.2.	Ability to create scenarios and/or what-if analyses at any level of the COA hierarchy, horizontally or vertically.	Required		
1.4.3.	Ability to create budget requests priorities and rankings for scenarios, what-if analyses, decision points and over-the-targets	Required		
1.4.4.	Ability to create and maintain multiple versions of the budget during development	Required		
1.4.5.	Ability for multiple budgets/versions to be accessible and editable at the same time	Required		
1.4.6.	Ability to save budget proposals during development without applying changes to baseline budget	Required		
1.4.7.	Ability to group budget requests by multiple categories	Desired		
1.4.8.	Ability to support flexible modeling and what-if analyses where performance and statistical measures will support budget development decision-making	Desired		
1.4.9.	Ability to convert a "deficiency" to an "amendment" and vice versa	Required		
1.5.	Calculating, Forecasting and Analysis	Required		
1.5.1.	Ability to create forecasts using current actual account balances, revenues, and expenditures for the remainder of the year based on historical trends, percentages, or other specified parameters	Required		
1.5.2.	Ability to support bottom-up and top-down budget development	Required		
1.5.3.	Ability to apply inflation factors to an entire budget or any element(s) of a budget	Required		
1.5.4.	Ability to apply an escalation rate to a base budget figure to create a new budget scenario	Required		
1.5.5.	Ability to use modeling tools to leverage historical data in order to create spending plans	Required		
1.5.6.	Ability to support zero-based budgeting	Required		
1.5.7.	Ability to allocate charges based on statistical criteria in order to create revenue and expenditure budgets	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
1.5.8.	Ability to use performance measures or statistical values to allocate amounts to specific chart of accounts components	Required		
1.5.9.	Ability to allocate amounts based on the relative distribution of other data	Desired		
1.5.10.	Ability to provide a budget pool for a particular class of expenditures.	Required		
1.5.11.	Ability to adjust cash flow forecasts	Required		
1.5.12.	Ability to provide financial projection tools to forecast data based on user-defined formulas	Required		
1.6.	Reorganizations	Required		
1.6.1.	The ability to change accounting structures associated with proposed reorganizations centrally and by agency without affecting existing accounting structures	Required		
1.6.2.	Ability to make structural modifications (including name changes) to take effect on a future date	Required		
1.6.3.	Ability to automatically integrate new data keyed to original structure to the new structure after a reorganization, COA change etc.	Required		
2.	Personnel Budget Management	Required		
2.1.	Ability for multiple employees to be assigned to a single position record at the same time	Required		
2.2.	Ability to track vacant, filled, authorized, funded, and unfunded positions	Required		
2.3.	Ability to use start and end dates associated with positions to generate salary and benefit cost projections	Required		
2.4.	Ability to provide flexibility to project salary and benefit costs for new positions by pay band or by entered salary	Required		
2.5.	Ability to override individual benefit defaults by position	Required		
2.6.	Ability to calculate average salary increases for defined staff categories during budget development, including effective dates	Required		
2.7.	For each position, ability to budget hours or percent by Agency, program, sub-program, object, etc., using all levels of the CoA	Required		
2.8.	Ability to budget salaries and benefits by position description code	Required		
2.9.	Ability to provide a methodology for calculating FTE, taking into consideration starting and ending dates, funding percentages, and hours per day	Required		
2.10.	Ability to identify turnover and vacancy savings	Required		
2.11.	Ability to determine grade and step for vacancies	Required		
2.12.	Ability to provide user-defined fields to capture data associated with positions or employees	Desired		
2.13.	Ability to conduct what-if analyses with different salary and benefit costs by position	Required		
2.14.	Ability to provide workforce planning in budget development	Desired		
2.15.	Ability to project position salaries and benefits for multiple years	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
2.16.	Ability for positions (filled, vacant) to be funded by multiple combinations of chart of accounts elements (each combination to be effective dated)	Required		
2.17.	Ability to associate an unlimited number of benefits for each position	Desired		
2.18.	Ability to use effective-dated salary tables and benefit rates to generate the salary and benefit calculations	Required		
2.19.	Ability for agencies to add/delete positions within a spending plan	Required		
2.20.	Ability for agencies to complete independent salary projections	Required		
2.21.	Ability to auto calculate costs for equipment/office/travel etc. for new positions added to the budget	Desired		
3.	Fund Budget Management	Required		
3.1.	Ability to require that all budget items include a funding source	Required		
3.2.	Ability to tie budget line items to funding sources at the program level	Required		
3.3.	Ability to develop budgets for projects or programs with multiple funding sources	Required		
3.4.	Ability to create a fund allocation process that can assign selected revenue based upon revenue type and allocation rules (e.g., project fund spending order)	Required		
3.5.	Ability to limit a fund source to specific time period (valid from-to)	Desired		
3.6.	Ability to restrict a fund source to specific agencies	Desired		
3.7.	Ability to restrict a fund source to specific programs, sub-programs, objects or sub-objects	Desired		
3.8.	Ability to define a fund balance and adjust that balance by budgeted or actual expenditures	Desired		
3.9.	Ability to warn or restrict budgeting beyond a fund balance or limit	Desired		
3.10.	Ability to restrict or permit the creation of new fund sources	Desired		
4.	Forms Management	Required		
4.1.	Ability to provide templates for forms that can be modified to meet State of Maryland's specific needs	Required		
4.2.	Ability to automatically populate forms	Required		
4.3.	Ability to provide the capability to lock or unlock budget forms for data entry by budget phase and user	Required		
4.4.	Ability to support entry of a legal section symbol (§) in text fields	Desired		
4.5.	Ability to provide text fields that support spell checking with a custom dictionary	Required		
4.6.	Ability to attach documents to forms	Required		
4.7.	Ability to make notation comments to both line items and the total budget	Required		
4.8.	Ability to provide text formatting controls such as font type and size, paragraph, indentation, numbering and bulleting, bold, italics and underline	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
5.	Reporting and Publication	Required		
5.1.	Ability to design report formats without the need for computer programming expertise	Required		
5.1.1.	Ability to design report layouts to include customization of page size, page orientation, page margins, page headers, page footers, page numbering, font size, colors, inclusion of graphics, and data field labels	Required		
5.1.2.	Ability to sort or filter by any data object including but not limited to Budget Cycle Phase, Budget Scenario, Fiscal Year, Calendar Year, Agency, Unit, Program, Sub-Program, Object, Comptroller Object/Agency Object, Fund Type, Fund Source, Approval Status or any other data or calculated field within scope of the report	Required		
5.1.3.	Ability to pre-define the default data sort (ascending and descending), group and filter settings included within the report by data dimensions including but not limited to Budget Cycle Phase, Budget Scenario, Fiscal Year, Calendar Year, Agency, Unit, Program, Sub-Program, Object, Comptroller Object/Agency Object, Fund Type, Fund Source, Approval Status or any other data or calculated field within scope of the report	Required		
5.1.4.	Ability to calculate variance of any data values irrespective of budget phase, fiscal year, data source or approval status	Required		
5.1.5.	Ability to calculate trend lines for multiple years' data, including current year variance from trend	Desired		
5.1.6.	Ability to determine whether line items not included in filter are included in section totals	Desired		
5.1.7.	Ability to format individual elements on the report (font, bold, italic, size, color, currency signs, commas, etc.)	Required		
5.1.8.	Ability to specify numeric rounding by element, including decimals, whole numbers, thousands, and millions.	Required		
5.1.9.	Ability to indicate non-zero numbers below the rounding threshold	Desired		
5.1.10.	Ability to define conditional formatting (fonts, background, color) for data values included in the report	Desired		
5.1.11.	Ability to combine data fields and calculated values	Required		
5.1.12.	Ability to support drill-down where summary data is composed of detailed information	Required		
5.2.	Ability to share user-defined reports and report formats	Required		
5.2.1.	Ability to develop private report formats	Required		
5.2.2.	Ability to develop and promote report formats for shared use	Desired		
5.2.3.	Ability to share populated reports with other system users and non-system users	Required		
5.2.4.	Ability to make standard report formats available to multiple users/user groups in accordance with accepted business rules	Required		
5.2.5.	Ability to protect standard reports available to multiple users/user groups from uncontrolled changes	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
5.2.6.	Ability to define a standard reporting structure for all budgets within the purview of the defining organization	Required		
5.2.7.	Ability to easily adjust the parameters used to sort (ascending and descending), group and filter data included within the report by data dimensions including but not limited to Budget Cycle Phase, Budget Scenario, Fiscal Year, Calendar Year, Agency, Unit, Program, Sub-Program, Object, Comptroller Object/Agency Object, Fund Type, Fund Source or any other data fields within scope of the report logic	Required		
5.2.8.	Ability to view online, print to a local printer, or export a report to file in spreadsheet, word processor or .PDF formats	Required		
5.2.9.	Ability to scroll down and scroll across data on the screen	Required		
5.3.	Ability to produce pre-defined public reports for comparative analysis of data	Required		
5.3.1.	Ability to provide online budget query for multiple prior years with the ability to track reorganizations	Required		
5.3.2.	Ability to generate reports: transactions, proposals, and comparisons across FY's	Required		
5.3.3.	Ability to compare budgets and expenditures, and display remaining balances.	Required		
5.3.4.	Ability to track actual vs. budget by Department, Agency, program, sub-program, and any other level determined necessary	Required		
5.4.	Ability to format, publish, retain and print formal documents combining data from multiple sources and input formats in accordance with statutory and policy guidelines	Required		
5.4.1.	Ability to format, publish, print and retain formal documents	Required		
5.4.2.	Ability to format, publish, retain and print annual Maryland Operating Budget books	Required		
5.4.3.	Ability to format, publish, retain and print annual Budget Highlights book	Required		
5.4.4.	Ability to format, publish, retain and print annual Fiscal Digest of the State of Maryland	Required		
5.4.5.	Ability to format, publish, retain and print annual Budget Instructions	Required		
5.4.6.	Ability to format, publish, retain and print performance management data	Required		
5.4.7.	Ability to retain source data for specific publications	Desired		
5.5.	Ability to establish and support user-defined workflows for formal publication processes including but not limited to the initial draft, review, comment, revision, re-review, approval-to-publish and publish process steps	Desired		
5.6.	Ability to allow concurrent user access to the budget document publishing tool for preparation and editing purposes	Required		
5.7.	Ability to provide a graphical user interface for managing and formatting publications	Required		
5.8.	Ability to format formal documents	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
5.8.1.	Ability to establish user defined document layouts inclusive of tabular, graphical, and text information	Required		
5.8.2.	Ability to automatically generate a Table of Contents and an Index for any published document	Required		
5.8.3.	Ability to generate bookmarks to help users navigate through a report document	Required		
5.8.4.	Ability for left and right pages of published documents to have different layouts to accommodate standard document printing	Required		
5.8.5.	Ability to create documents where sections automatically start on the right page, inserting blank pages when required	Required		
5.8.6.	Ability to create a uniform published document with standardized fonts regardless of input fonts	Desired		
5.8.7.	Ability to include footnotes for published documents	Desired		
5.8.8.	Ability to provide a publishing tool with spell check	Required		
5.8.9.	Ability to provide a publishing tool with grammar check	Required		
5.9.	Ability to publish formal documents to www.maryland.gov or other designated websites	Required		
5.9.1.	Ability to provide a publishing tool that can produce Web-ready output and print output including HTML or PDF	Required		
5.10.	Ability to combine data from the Enterprise Budgeting System with multiple other sources and input formats for inclusion in a publication.	Required		
5.10.1.	Ability to integrate content from various file types including images, spreadsheets, word processing documents, organization charts, and PDF files	Required		
5.10.2.	Ability to integrate data from any open database connectivity (ODBC) and standard query language (SQL) compliant database to include all types of database fields (e.g., long text, binary large object (BLOB), character large object (CLOB), and numeric)	Desired		
5.10.3.	Ability to automatically update a budget publication based on changes to source data or files	Desired		
6.	Visualization and Dashboards	Required		
6.1.	Ability to provide data visualization capabilities such as but not limited to charts, graphs, trends, and drill-downs without the need for computer programming	Required		
6.1.1.	Ability to design chart and graph layouts to include customization of page size, page orientation, page margins, page headers, page footers, page numbering, font size, colors, inclusion of graphics, and data field labels	Required		
6.1.2.	Ability to pre-define the default data sort (ascending and descending), group and filter settings included within the visualization by data dimensions including but not limited to Budget Cycle Phase, Budget Scenario, Fiscal Year, Calendar Year, Agency, Unit, Program, Sub-Program, Object, Comptroller Object/Agency Object, Fund Type, Fund Source or any other data fields within scope of the report logic	Desired		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
6.1.3.	Ability to define conditional formatting (fonts, background, color) for data values included in the visualization	Desired		
6.1.4.	Ability to combine data fields and calculated values	Required		
6.2.	Ability to support summary or detailed visualizations with totaling at user-specified levels of detail based on the information detail contained within the visualization	Required		
6.2.1.	Ability to support drill-down where summary data is composed of detailed information	Required		
6.2.2.	Ability to provide visualizations that show trends in key performance (leading and lagging) indicators to support budget and expenditure analysis	Required		
6.3.	Ability to share user-defined visualization formats	Required		
6.3.1.	Ability to develop private visualization formats	Desired		
6.3.2.	Ability to develop and promote visualization formats for shared use	Required		
6.3.3.	Ability to share visualizations with other system users and non-system users	Desired		
6.4.	Ability to manage standard visualization formats available to multiple users/user groups	Required		
6.4.1.	Ability to make visualization formats available to multiple users/user groups in accordance with accepted business rules	Required		
6.4.2.	Ability to protect visualization formats available to multiple users/user groups from uncontrolled changes	Required		
6.5.	Ability to combine reports and visualizations into dashboard formats tuned to user roles	Required		
7.	Notifications and Workflow	Required		
7.1.	Ability to provide workflow capability to route requests for review, modification, and approval	Required		
7.2.	Ability to create sequential, parallel, required and optional workflow steps	Required		
7.3.	Ability to add <i>ad hoc</i> workflow steps without modifying existing steps	Desired		
7.4.	Ability to define service levels, time limits, deadlines and escalation procedures on workflow steps	Required		
7.5.	Ability to create workflow routing based on individuals or roles	Required		
7.6.	Ability to approve transfers, increases or decreases to the working budget	Required		
7.7.	Ability to notify stakeholders of changes to data, documents and workflow (via email)	Required		
7.8.	Ability to have distinct rules, controls, data validations and notification lists for each workflow step	Desired		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
7.9.	Ability to tailor notification messages by agency and workflow step	Desired		
7.10.	Ability to provide a visual representation of the status and required steps in a business process workflow	Required		
7.11.	Ability for alternate contacts to be assigned for workflow notifications.	Desired		
7.12.	Ability to transmit (send or submit) documents and budget data from system or user to another system or user	Required		
7.13.	Ability for agencies to define their own phases for internal review	Desired		
7.14.	Ability to create budget preparation calendar by agency for each yearly cycle	Required		
7.15.	Provide the capability to trigger real-time alerts based on user-defined thresholds	Desired		
7.16.	Ability for attachments to be included in a workflow process	Required		
7.17.	Ability to support workflow rules based on user-defined combinations of the chart of accounts	Required		
7.18.	User task list	Required		
7.18.1.	Ability to set up standard task lists for users	Required		
7.18.2.	Ability to provide task status	Required		
7.18.3.	Ability to indicate due dates for items in task lists	Required		
7.18.4.	Ability for supervisors to review the status of tasks for their employees and organizations	Required		
7.18.5.	Ability to set up standard task lists for users	Desired		
8.	User Interface	Required		
8.1.	Usability	Required		
8.1.1.	The ability to be user-friendly through modern user interface design (e.g., point and click, drag and drop, tabs, cut, copy, paste, zoom, user-settings, drop down menus, check boxes, radio buttons, hot keys etc.)	Required		
8.1.2.	Ability to provide full integration so that there is no redundant data entry and no required manual reconciliation across modules	Required		
8.1.3.	The ability to absorb data from existing Microsoft Excel spreadsheets	Required		
8.1.4.	Ability to provide a Microsoft Excel-like interface to the user for data entry	Required		
8.1.5.	Ability to provide calculation capabilities including summary and derived fields	Required		
8.1.6.	Ability to provide a full range of standard descriptive and inferential statistical functions and measures (e.g., sum, average, mean, variance, standard deviation, coefficient of variation, correlation, T test (comparison of two independent samples), distribution, regression, linear programming, minimum/maximum, range of value, and predictive modeling capabilities)	Desired		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
8.1.7.	Ability for users to specify statistical counting methods, including unique (unduplicated) counts for multiple fields	Required		
8.1.8.	Ability to provide a mass change capability that can be implemented by selecting groups of data and processing that data as a group	Desired		
8.1.9.	Ability to include user-defined attributes to further define budget components	Required		
8.1.10.	Ability to provide administrators the capability to define new flexible text and numeric fields	Required		
8.2.	User Interface Customization	Required		
8.2.1.	Ability to change user interface screens, including field labels, screen layout (field placement), field size, and tab order	Desired		
8.2.2.	Ability for individual users to establish user-specific default values (parameters) for use in pop-up lists/drop-down lists	Desired		
8.2.3.	Ability to configure user interface screens by adding constraints (beyond database constraints) such as making required fields or defining ranges of allowable values	Desired		
8.2.4.	Ability to search on any field on a given screen	Desired		
9.	Enterprise Budgeting Data	Required		
9.1.	Ability to collect, manage and access Enterprise Budgeting Data to include Operating Budget Data for all Maryland state budgeted and non-budgeted departments, agencies, and institutions	Required		
9.2.	Ability to collect, manage and access Enterprise Budgeting Data to include Capital Budget Data for those Maryland departments, agencies, and institutions that are not current users of the Capital Budget Information System (CBIS)	Required		
9.3.	Ability to collect, manage and access Enterprise Budgeting Data spanning multiple subject areas as needed to support enterprise budgeting functions	Required		
9.3.1.	Ability to manage Audit Trail Data	Required		
9.3.2.	Ability to manage Operating Budget Chart of Accounts Data (e.g., department, agency, program, sub-program, object, comptroller object/agency object or project cost allocation (PCA))	Required		
9.3.3.	Ability to manage Budget Data (e.g., time period, version, status, chart of accounts (CoA) detail, fund type(s), fund source(s), dollar amounts, supporting details)	Required		
9.3.4.	Ability to manage Budget Modification/Amendment Data (e.g., type, version, status, chart of accounts (CoA) detail, fund type(s), fund source(s), dollar amounts, supporting details)	Required		
9.3.5.	Ability to manage Budget Documentation Data	Required		
9.3.6.	Ability to manage Budget Forms Data (e.g., type, version, status, content)	Required		
9.3.7.	Ability to manage Budget Publication Data (e.g., type, version, status, content)	Required		
9.3.8.	Ability to manage Budget Time Period Data (e.g., (e.g., fiscal year, budget year, calendar year, prior year, month, user-defined time period)	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
9.3.9.	Ability to manage Budget Version and Scenario Data (e.g., request, governor's allowance, appropriated)	Required		
9.3.10.	Ability to manage Business Rules Data (e.g., rules for standard calculations, workflow rules, rules dictated by statute and policy)	Required		
9.3.11.	Ability to manage Fund Source Data	Required		
9.3.12.	Ability to manage Fund Type Data (e.g., General, Federal, Special, Reimbursable)	Required		
9.3.13.	Ability to manage Metadata (e.g., Data Dictionary)	Required		
9.3.14.	Ability to manage Notification Data (e.g., notifications, alerts, announcements)	Required		
9.3.15.	Ability to manage Performance Measurement Data (e.g., objectives, measures, target performance, actual performance)	Desired		
9.3.16.	Ability to manage Personnel Position Compensation Data (e.g., salary structure, benefits plan costs)	Required		
9.3.17.	Ability to manage Personnel Position Data (e.g., classification, status, grade, step)	Required		
9.3.18.	Ability to manage Personnel Position Vacancy Data	Required		
9.3.19.	Ability to manage Project Cost Allocation Data (e.g., date, hours worked against project)	Required		
9.3.20.	Ability to incorporate Purchase Order Data (including data on contract terms) with actual expenditures and encumbrances by sub-object, by fund, by vendor, or 25k or more by comptroller for three years (See DA 23)	Required		
9.3.21.	Ability to manage Security Role Permissions Data (e.g., role type, role authorities to create, update, read data)	Required		
9.3.22.	Ability to manage User Security Role Permissions Data (e.g., user identifier, assigned role(s))	Required		
9.3.23.	Ability to manage System Format Data (e.g., data entry screens, reports, visualizations)	Required		
9.3.24.	Ability to manage System Knowledge Base Data	Required		
9.3.25.	Ability to manage System Performance Statistics Data	Desired		
9.3.26.	Ability to manage User Access Security Roles Data	Required		
9.3.27.	Ability to manage Workflow Data	Required		
9.4.	Ability to search, retrieve and manipulate information in accordance with user parameters	Required		
9.4.1.	Ability to maintain facts about budget entries (e.g., ability to designate restricted funds in an appropriation as per the Joint Chairman's Report)	Required		
9.4.2.	Ability to manipulate positions to determine impacts to the budget (e.g., create contractual conversion (flag existing contractual with a new position identification number (PIN) and associate appropriate dollars and benefits to the new PIN) for a new budget)	Required		
9.4.3.	Ability to capture appropriations and changes to all appropriations in real time.	Required		
9.4.4.	Ability to uniquely identify budget amendments	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
9.4.5.	Ability to identify data of interest based on user-defined thresholds (e.g., a funding source of 100k or greater)	Required		
9.5.	Ability to provide data management tools (e.g., database administration, data exchange, and self-service on-demand data interrogation, analysis and reporting tools) for use with transaction, reporting and analytical data sets	Required		
9.6.	Ability to restrict access to transaction, reporting and analytical data sets in accordance with data integrity, confidentiality and availability business rules established to protect Confidential Privileged information	Required		
9.7.	Ability to convert and make accessible online both current and ten (10) years of historical Enterprise Budgeting Data	Required		
9.8.	Ability to continue to build history data for all subject areas without negatively impacting performance to include history for transactional, reporting and analytical data sets	Required		
9.8.1.	Ability to allow database point-in-time snapshots to be maintained	Required		
9.8.2.	Ability to receive, process, store, and analyze historical data for trend analysis	Required		
9.8.3.	Ability to electively save subsets of Enterprise Budgeting Data to reporting and analysis data sets	Required		
9.9.	Ability to be managed in accordance with industry-accepted database administration standards and practices that ensure the confidentiality, integrity and availability of Enterprise Budgeting Data	Required		
9.9.1.	Ability to handle data import and export operations with no interruption to database availability	Required		
9.9.2.	Ability to handle large transactions and many simultaneous transactions with little or no degradation in performance	Required		
9.9.3.	Ability to provide a database roll-back feature for failed data loads	Required		
9.9.4.	Ability to provide internal database transaction processing controls, including the capability in the event of a system failure to automatically back out of incompletely processed database transactions	Required		
9.9.5.	Ability to provide internal database transaction processing controls, including the capability in the event of a system failure to automatically restore the system to its last consistent state before the failure occurred	Required		
9.9.6.	Ability to provide internal database transaction processing controls, including the capability in the event of a system failure to automatically reapply all incomplete database transactions previously submitted by the user	Required		
9.9.7.	Ability for a database administrator to add or alter database tables under conditions that do not negatively impact the product warranty and support	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
9.10.	Ability to use integrated and authoritative, quality financial accounting, contract financial data and personnel data with budget data to support budget management processes, analysis, reporting, data visualization, scenario planning and forecasting, and publishing	Required		
9.10.1.	Ability to integrate data from disparate sources, resolving data domain, format, and precision inconsistencies (i.e. ability to support enterprise information integration (EII))	Required		
9.10.2.	Ability to enter data once and re-use it to support multiple purposes in conjunction with other enterprise data (e.g., personnel, accounting)	Required		
9.10.3.	Ability to process externally-submitted database transactions using the same business rules and program logic as when transactions are submitted through the on-line application	Required		
9.10.4.	Ability to share data for purposes of one-time data conversion or recurring updates between disparate systems through controlled extract, transformation and load (ETL) capabilities where use of data-in-place is not possible or recommended	Required		
9.10.4.1.	Ability to execute ETL jobs on a user-defined schedule or on-demand, inclusive of the ability to start, monitor, stop and restart jobs as necessary	Required		
9.10.4.2.	Ability to perform scheduled jobs based on dependencies of the successful completion of previous job steps, events, or activities	Required		
9.10.4.3.	Ability to accept successful transactions within a failed data load	Desired		
9.10.4.4.	Ability to notify, monitor, and report on ETL data transmission, transformation and load status	Required		
9.10.4.5.	Ability to ensure integrity, correctness and completeness of data in scope of ETL processes	Required		
9.10.4.6.	Ability to store and report statistical information on data transmissions, transformations and loads in a user-readable format	Desired		
10.	Interfaces	Required		
10.1.	Ability to use quality financial accounting and contracts (purchase order) data with budget data to support budget management processes and analysis of budget versus actual expenditures variance, accruals and encumbrances using data current as of the end of the previous day and to the level of detail (Agency, Unit, Program, Sub-Program, Comptroller Object/Agency Object, or PCA) as required by each user agency	Required		
10.1.1.	Ability to maintain master data from the Catalog of Federal Domestic Assistance (CFDA) for use in grants budget management processes	Required		
10.1.2.	Ability to maintain master data shared between authoritative and downstream budgeting, financial and human capital management systems (e.g., Chart of Accounts)	Required		
10.1.3.	Ability to share data between the Enterprise Budgeting System and General Accounting Division (GAD) FMIS/R*STARS and FMIS/ADPICS	Required		
10.1.4.	Ability to share data between the Enterprise Budgeting System and Maryland Department of Transportation (MDOT) financial system (also FMIS)	Required		
10.1.5.	Ability to share data between the Enterprise Budgeting System and Maryland Transit Administration (MTA) payroll system	Required		
10.1.6.	Ability to share data between the Enterprise Budgeting System and Maryland Department of Labor, Licensing and Regulation FARS	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
10.1.7.	Ability to share data between the Enterprise Budgeting System and multiple Higher Education PeopleSoft Financial Systems	Required		
10.1.8.	Ability to share data between the Enterprise Budgeting System and multiple Higher Education Quali Financial Systems	Required		
10.1.9.	Ability to share data between the Enterprise Budgeting System and Higher Education BANNER System	Required		
10.1.10.	Ability to share data between the Enterprise Budgeting System and Maryland Department of Legislative Services SAP	Required		
10.1.11.	Ability to share data between the Enterprise Budgeting System and Maryland Judiciary PeopleSoft	Required		
10.1.12.	Ability to share data between the Enterprise Budgeting System and additional Agency-specific or Higher Education Institution-specific financial or ERP systems to be determined where data is not captured or sufficiently detailed in the State's accounting system	Required		
10.1.13.	Ability to share data between the Enterprise Budgeting System and the Capital Budget Information System (CBIS) for planned out-year operating costs	Required		
10.1.14.	Ability to keep budget data maintained in the State's and State Agencies' financial systems current as of the end of the previous business day	Required		
10.1.15.	Ability to update General Accounting Division (GAD) FMIS/R*STARS immediately after an amendment is processed and approved by the Governor	Required		
10.1.16.	Ability to convert and transmit files for GAD FMIS at the lowest project cost allocation (PCA) level	Required		
10.1.17.	Ability to share data between the Enterprise Budgeting System and Maryland Department of Transportation (MDOT) MdTA Microsoft Dynamics SL financial system	Required		
10.2.	Ability to use quality position and personnel data with budget data to support personnel budgeting by job classification, individual position or employee.	Required		
10.2.1.	Ability to share data with SPS/Workday and other State agency human capital management systems to facilitate personnel budget management and personnel actions (both prospective and retroactive) requiring budgetary authorization.	Required		
10.2.2.	Ability to leverage SPS position control data for budgeting hours and costs. Should include employee splits (1 job with 2 employees) and dual employees (1 employee working in more than one Agency).	Required		
10.2.3.	Ability to share activity-based time accounting data assumptions for vacant, authorized positions to support salary cost projections to the level of detail (Agency, Unit, Program, Sub-Program, Comptroller Object/Agency Object, or PCA) as required by each user agency	Required		
10.2.4.	Ability to combine actual activity-based time data (personnel) with salary cost (accounting) to permit allocation and salary cost accruals to the level of detail (Agency, Unit, Program, Sub-Program, Comptroller Object/Agency Object, or PCA) as required by each user agency for vacant positions	Desired		
10.3.	Ability to publish data to state and federal websites in support of transparency in government initiatives	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
10.3.1.	Ability to publish data to Maryland's Open Data Portal (www.data.maryland.gov) in conformance with Open Data Act State Government Article, Chapter 69, Section 10-1401 through 10-1404	Required		
10.3.2.	Ability to publish data to Maryland's StateStat website(www.statestat.maryland.gov)	Required		
10.3.3.	Ability to publish data to www.usaspending.gov in conformance with the Digital Accountability and Transparency Act of 2014 (DATA Act)	Desired		
10.4.	Ability to integrate the budgeting application with other cross-platform applications to extend functional capabilities and support data sharing (i.e. ability to support enterprise application integration (EAI))	Required		
10.4.1.	Ability to provide live links to data from MS-Office products including Excel, Word and PowerPoint	Required		
10.4.2.	Ability to provide live links to data from formal document publication capabilities	Required		
10.4.3.	Ability to leverage email systems (Google Mail, Outlook) to send notifications and alerts from within the system to system users and non-users	Required		
10.4.4.	Ability to drill into financial and human capital management systems and/or data for additional details without the need to separately login and fully navigate the source system (e.g., ability to see individual general ledger transactions that contribute to actual expenditures)	Required		
10.4.5.	Ability to incorporate third-party data repositories relevant to the budget cycle, including Department of Information Technology (DoIT) Information Technology Advisory Council (ITAC) website, IT Master Plans (ITMPs) and IT Project Request Subsystem (ITPR), DGS Lease listings, vehicle fleet listings, etc.	Required		
10.4.6.	Ability to integrate with other application systems as determined to be necessary in the future	Required		
11.	Audit, Archive and Retention	Required		
11.1.	Audit	Required		
11.1.1.	Ability to keep track of and report each individual change	Required		
11.1.2.	Ability to include audit trail on reports	Desired		
11.1.3.	Ability to define what information will be collected in the audit trail.	Desired		
11.1.4.	Ability to browse and search all audit logs and print audit reports	Required		
11.2.	Archive and Retention	Required		
11.2.1.	Ability to archive data by user-defined retention periods for configuration changes, data updates, security events, system events and error logs.	Required		
11.2.2.	Ability to roll up and purge transaction level data by user defined retention periods	Required		
11.2.3.	Ability to roll up and purge transaction level data by agency (or exclude an agency)	Desired		
11.2.4.	Ability to restore archived data into the operational system	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
11.2.5.	Ability for authorized users to purge archived data according to user-defined criteria	Desired		
11.2.6.	Ability to maintain 10 years of historical data	Required		
12.	Security			
12.1.	Encryption	Required		
12.1.1.	Ability to encrypt data in transit	Required		
12.1.2.	Ability to encrypt data at rest – databases	Required		
12.1.3.	Ability to encrypt data at rest – interfaces	Required		
12.2.	Authentication	Required		
12.2.1.	The ability to provide single sign on capabilities with the operating system or Google Apps	Desired		
12.2.2.	Ability to require two-factor authentication	Required		
12.3.	Ability to detect unauthorized access and manage security violation incidents	Required		
12.3.1.	Ability to log and notify designated users whenever a potential security breach or violation is detected	Required		
12.4.	Authorization	Required		
12.4.1.	Ability to authorize functional and data access based on pre-defined data confidentiality, availability and integrity business rules applicable to user roles	Required		
12.4.2.	Ability to configure security using GUI screens	Required		
12.4.3.	Ability to distribute security administration to agency-level application security administrators for their personnel	Desired		
12.4.4.	Ability to restrict data views (columns and rows) based on user role, user organization (e.g., department, agency, unit, program or any relevant chart of accounts (CoA) level/value), or workflow status	Required		
12.4.5.	Ability to restrict screen permissions based on user role, user organization (e.g., department, agency, unit, program or any relevant chart of accounts (CoA) level/value), or workflow status	Required		
12.4.6.	Ability to restrict field permissions (create, read, update, delete) based on user role, user organization (e.g., department, agency, unit, program or any relevant chart of accounts (CoA) level/value), or workflow status	Required		
12.4.7.	Ability to limit or restrict access to other users' data	Required		
12.4.8.	Ability to immediately suspend access of a certain function to some or all users (e.g. usage of a function where a critical bug has been identified)	Desired		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
12.5.	Security Environment and Infrastructure	Required		
12.5.1.	Ability to provide application security integrated with operating system security	Desired		
12.5.2.	Ability to enforce password standards in accordance with Maryland IT (DoIT) password standards	Desired		
12.5.3.	Ability to secure operating systems, system software and infrastructure components separate from end-user access	Required		
12.5.4.	Ability to provide a method for users to receive their usernames and passwords	Required		
12.5.5.	Ability to provide a self-serve method for users to reset their application passwords	Desired		
12.5.6.	Ability to require users to change their initial passwords when they log in for the first time	Required		
12.5.7.	Ability to support required password changes in accordance with Maryland DoIT policy	Required		
12.5.8.	Ability to store passwords in encrypted form	Required		
12.5.8.1.	Ability to maintain security credentials between the solution and other vendors systems	Desired		
12.6.	Ability to access the system remotely with appropriate security from work or personal devices including desktops, laptops, tablets, and smartphones	Required		
12.6.1.	Ability to prevent or allow access from non-secured networks	Required		
12.6.2.	Ability to authenticate securely from mobile devices such as smartphones and tablets	Required		
12.6.3.	Ability to allow access to some portions of the application with reduced security (i.e. public access)	Desired		
12.6.4.	Ability to access the system using multiple current versions of web browsers with backward compatibility to previous browser releases (e.g. Internet Explorer, Google Chrome)	Required		
13.	Knowledge Management and Training	Required		
13.1.	Ability to provide an online knowledge base	Required		
13.1.1.	Ability to provide online end-user documentation	Required		
13.2.	Ability for users to customize supplier-delivered documentation	Required		
13.3.	Ability to load State of Maryland documents for online access within the application	Desired		
13.4.	Ability to provide and maintain a full copy of all existing technical documentation for every component of the Solution	Required		
13.5.	Ability to provide English descriptions for any metadata codes, data definitions, and reference data	Required		
13.6.	Ability to provide entity relationship diagrams for all application business data	Required		
13.7.	Ability to provide a data dictionary listing all user-visible fields	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
13.8.	Ability to provide and maintain, in the data dictionary, a history of changes to individual data element descriptions	Required		
13.9.	Ability to plan, manage and execute training	Required		
13.9.1.	Ability to provide training customized for the State of Maryland	Required		
13.9.2.	Ability to provide various types of training by level such as system administrator, end user, and developer	Required		
13.9.3.	Ability to provide a catalog of training options	Required		
13.9.4.	Ability to provide training material and reference materials	Required		
13.9.5.	Ability to provide web-based training	Desired		
13.9.6.	Ability to provide self-directed interactive training	Desired		
13.9.7.	Ability to provide interactive class sessions	Required		
13.9.8.	Ability to provide hands-on demonstrations	Required		
13.9.9.	Ability to provide train-the-trainer training	Desired		
13.10.	Ability to provide online help capabilities	Required		
13.10.1.	Ability to provide online help capabilities that include context-sensitive help	Desired		
13.10.2.	Ability to provide online help capabilities that include error message help	Required		
13.11.	Ability to provide online help capabilities that include indexed help	Desired		
13.11.1.	Ability to provide online help capabilities that include tutor capabilities	Desired		
13.11.2.	Ability to provide online help capabilities that include window and field level help	Required		
13.11.3.	Ability to provide online help capabilities that include windows hypertext help	Desired		
13.12.	Ability to provide online help customization to Maryland's implementation of the solution	Required		
14.	Implementation	Required		
14.1.	Ability to provide capabilities in alignment with overarching technical requirements	Required		
14.2.	Ability to provide functionality consistent with changing Maryland budget management laws, policies, procedures, budget structures, and presentation requirements	Required		
14.3.	Ability to provide a single entry point of user-access to data, reports, supporting documentation, dashboards and analytical tools	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
14.4.	Ability to scale solution components and services	Required		
14.4.1.	Ability to scale the solution and support as the user base changes over time (e.g. user organizations, user increases/decreases, changes to security roles)	Required		
14.4.2.	Ability to scale the solution infrastructure to accommodate data volume increases	Required		
14.4.3.	Ability to scale the solution software licenses as the user base and infrastructure change over time	Required		
14.5.	Ability to comply with Maryland DoIT policies and standards	Required		
14.5.1.	The State of Maryland System Development Life Cycle (SDLC) methodology at: www.DoIT.maryland.gov - keyword: SDLC	Required		
14.5.2.	The State of Maryland Information Technology Security Policy and Standards at: www.DoIT.maryland.gov - keyword: Security Policy	Required		
14.5.3.	The State of Maryland Information Technology Non-Visual Standards at: http://doit.maryland.gov/policies/Pages/ContractPolicies.aspx	Required		
14.5.4.	The State of Maryland Information Technology Project Oversight at: www.DoIT.maryland.gov - keyword: IT Project Oversight	Required		
14.5.5.	The State of Maryland Enterprise Architecture at www.DoIT.maryland.gov - keyword: MTAF Guiding Principles	Required		
14.5.6.	Project Management Institute (PMI) Project Management Body of Knowledge (PMBOK) at http://www.pmi.org/	Required		
14.6.	Ability to implement business continuity hardware, processes and practices	Required		
14.7.	Ability to implement the initial solution, regularly scheduled maintenance releases, and emergency bug-fix releases	Required		
14.8.	Ability to provide change management support including change request and defect management using formal change control processes	Required		
14.9.	Ability to provide data conversion support	Required		
14.10.	Ability to provide product installation and configuration support	Required		
14.11.	Ability to provide product customization support	Required		
14.12.	Ability to provide release management for solution components	Required		
14.12.1.	Ability to provide a mechanism for reverting to a previous release	Required		
14.13.	Ability to configure or develop and test all changes (e.g., patches, upgrades, enhancements, break-fixes) in non-production environments prior to promotion to the production environment	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
14.14.	Ability to provide and use all technical and productivity tools necessary to efficiently and effectively build, deploy and manage the solution	Required		
14.14.1.	Ability to provide tools for project management	Required		
14.14.2.	Ability to provide tools for requirements management and traceability	Required		
14.14.3.	Ability to provide testing tools	Required		
14.14.4.	Ability to provide COTS customization management tools (i.e., tools that support management of custom code, software builds, etc.)	Required		
14.14.5.	Ability to provide database administration tools	Desired		
14.14.6.	Ability to provide database backup and recovery tools	Required		
14.14.7.	Ability to provide upgrade and patching tools	Required		
14.14.8.	Ability to provide customization management tools (i.e., tools that support the management of customizations during upgrades, patches and fixes)	Desired		
14.14.9.	Ability to provide release management tools (i.e., tools that support identification of net differences between releases and list areas needing specific attention)	Desired		
14.15.	Ability to include an integrated development environment (IDE) or similar utility to facilitate modification of the solution	Desired		
14.16.	Ability to provide features to allow for system customizations without requiring coding changes to the base application (for example, translation codes, user permissions, views, reports, and workflow business rules)	Required		
14.17.	Ability to minimize and manage impacts to customizations by future product releases (upgrades, patches)	Required		
14.18.	Ability to recommend, implement and maintain hardware and operating system platforms/configurations to support the Solution and ensure system performance meets established service level agreements (SLAs)	Required		
14.18.1.	Ability to provide system crash tolerance, maintaining its integrity in case of power failures and abrupt shutdowns	Desired		
14.18.2.	Ability to provide system event/error logs to record executed functions, system errors, and warnings to facilitate diagnosis and reconciliation of system errors	Required		
14.18.3.	Ability to support multi-node server processing so that the server processing load can be distributed and automatically balanced across multiple physical servers. Please describe.	Desired		
14.19.	Ability to provide benchmarks for upgrade times for comparable customer environments	Required		
14.20.	Ability to configure, implement, and maintain the most current release of all components of the application and tools software	Required		
15.	Operations and Maintenance Support	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
15.1.	Ability to plan and manage operations and maintenance support services	Required		
15.1.1.	Ability to plan and manage operations and maintenance staffing (e.g., specification of required skills, team structure, team location, shared or dedicated resource model)	Required		
15.1.2.	Ability to maintain compliance with applicable Maryland DoIT policies and standards beyond the initial deployment during operations and maintenance phase	Required		
15.2.	Ability to provide corrective, adaptive and preventive maintenance services for all solution components	Required		
15.3.	Ability to incorporate aspects of Continuous Improvement	Required		
15.4.	Ability to provide on-going operations support	Required		
15.4.1.	Ability to plan, schedule, test and execute system and database monitoring capabilities to ensure system and database health	Required		
15.4.2.	Ability to plan, schedule, test and execute deployment of patches	Required		
15.4.3.	Ability to plan, schedule, test and execute deployment of upgrades	Required		
15.4.4.	Ability to plan, schedule, test and execute routine system backups	Required		
15.4.5.	Ability to plan, schedule, test and execute routine data backups	Required		
15.4.6.	Ability to plan, schedule, test and execute disaster recovery	Required		
15.4.7.	Ability to provide incident response and problem resolution in accordance with service level agreements (SLAs) for pre-defined severity levels	Required		
15.4.8.	Ability to provide root cause analysis and action plan recommendations	Required		
15.4.9.	Ability to provide and maintain a knowledge base to support operations, maintenance and support desk efforts	Required		
15.5.	Ability to provide support desk services for Tier 2 and 3 support	Required		
15.6.	Ability to provide support desk services for Tier 1 support	Desired		
15.7.	Ability to define key process indicators (KPIs) for project management, release management, operations and maintenance, and support desk services	Required		
15.8.	Ability to define service level agreements (SLAs) for project management, release management, operation and maintenance, and support desk services	Required		
15.9.	Ability to demonstrate how key process indicator (KPIs) and service level agreement (SLAs) performance measures will be used to support continuous process improvement	Required		
15.10.	Ability to meet operational requirements	Required		
15.11.	Ability to support 1000 users	Required		
15.12.	Ability to support user roles including but not limited to CFO, Budget Manager, Budget Analyst, Finance Director, Finance Analyst, Executive Manager, Unit/Division/Regional Manager, Program Manager, HR Specialist, System Administrator, Security Administrator	Required		

Outline ID	Name	Weight	Compliance Code	Explain / Describe
15.13.	Ability to ensure the system is accessible Business days (M-F) and Non-Business Days (all year) Extended hours 6:00 AM - 11:59 PM EST	Required		
15.14.	Ability to support data volumes consistent with at least ten (10) years of history and 250,000 budget line items estimated to be added annually	Required		
15.15.	Ability to support system recoverability	Required		
15.15.1.	Ability to return the system to operational status following an outage in four (4) hours during normal business conditions	Required		
15.15.2.	Ability to restore the system to operational status in one (1) hour should there be an outage during budget request preparation season (August - January)	Desired		
15.15.3.	Ability to restore the system to operational status in one (1) hour should there be an outage during fiscal year close (June-August)	Desired		
15.16.	Ability to maintain data currency (i.e., restore data to a point in time such that it is current as of the time of any system outage when an outage occurs)	Required		
15.17.	Ability to implement fault tolerance	Required		